

Community Development Department
Planning Division
14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413-3206
FAX: 951.413-3210

NOTICE OF PREPARATION

Program Environmental Impact Report

MoVal 2040: Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

Date: March 9, 2020

To: Reviewing Agencies, Interested Parties, and Organizations

Subject: Notice of Preparation of a Program Environmental Impact Report for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

Scoping Meeting: Saturday, March 14, 2020, 2:00 p.m. – 4:00 p.m.
City Hall – Council Chambers
14177 Frederick Street, Moreno Valley, CA

(The scoping meeting is being held in conjunction with one of five public workshops on the General plan update.)

Comment Period: March 9, 2020 to April 9, 2020

The City of Moreno Valley (City) is updating its General Plan and Housing Element and preparing a Climate Action Plan (Project) to address communitywide greenhouse gas (GHG) emissions. The City as the lead agency has determined that the Project, also known as MoVal 2040, will require the preparation of a Program Environmental Impact Report (Program EIR) in compliance with the California Environmental Quality Act (CEQA; California Public Resources Code, Section 21000 et seq.), and Title 14 of the California Code of Regulations (CCR; hereafter CEQA Guidelines, 14 CCR 15000 et seq.). The City has prepared this Notice of Preparation (NOP) in accordance with CEQA Guidelines Sections 15082(a) and 15375.

We need to know your views or the views of your agency or organization as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the Project. If applicable, your agency will need to use the Program EIR prepared by our agency when considering your permit(s) or other approval(s) for the Project. The project description, location, and the potential environmental effects are contained in the attached materials. Since the City has determined that a Program EIR is required for the Project, pursuant to Section 15060(d) of the CEQA Guidelines (14 CCR 15000 et seq.), preparation of an Initial Study is not

required and, therefore, one has not been prepared. Due to time limits mandated by state law, your response to this NOP must be submitted at the earliest possible date but no later than the close of the NOP review period, which runs as follows: March 9, 2020 – April 9, 2020. Written comments should be addressed to:

Chris Ormsby, AICP, Senior Planner
Community Development Department
City of Moreno Valley
14177 Frederick Street, Moreno Valley, CA 92553
chriso@moval.org

Project Title: MoVal 2040: Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

Project Applicant: City of Moreno Valley

PROJECT SETTING

Moreno Valley is located within the northwestern portion of Riverside County in the southern, Inland Empire portion of the state of California. Moreno Valley is located approximately 63 miles east of downtown Los Angeles, 49 miles east of Irvine, and 43 miles west of Palm Springs. State Route 60, which runs through the northern portion of Moreno Valley (east and west direction), and Interstate 215, which runs in proximity to the westerly city limits (north and south direction), serve to connect the city to other communities throughout the region. The city is accessible via public transportation by rail, through Metrolink located approximately one-half mile west of the City limits, and aircraft at the March Inland Port located at the March Air Reserve Base, which is south and west of the City limits.

The Planning Area for the Project includes the approximately 50 square miles within the City limits, and its approximately 18-square-mile Sphere of Influence, which includes land outside but adjacent to the City limit that represents the probable future boundary of the City as determined by the Riverside County Local Agency Formation Commission (LAFCO). (see Figure 1) The city's picturesque valley setting is bounded to the north by the Box Springs Mountains, the Badlands to the east, and the mountains of the Lake Perris Recreation Area, Mystic Lake floodplain, and San Jacinto Wildlife Area to the south. March Air Reserve Base to the southwest, and the City of Riverside to the west of the city.

Moreno Valley is a diverse and growing community of approximately 207,000 people. It has a majority Latino population and a relatively young and dynamic population. The city has seen significant employment growth in recent years, having created 20,000 new jobs locally since 2013, the City looks forward to continued growth. Today, the city is home to 4,500 businesses, including many Fortune 500 and international companies such as Amazon, Proctor & Gamble, Skechers USA, and Karma Automotive. Other important institutions established in the City include the Riverside University Health System – Medical Center, a public teaching hospital, the Kaiser Permanente Hospital, and Moreno Valley College.

PROJECT DESCRIPTION

In February 2020, the City Council approved the key elements of a vision for the future of the community to guide the Project that include:

- Sustaining a dynamic local economy, building on the clusters of medical and education institutions to provide more jobs locally and reduce the need for residents to commute long distances to jobs outside Moreno Valley. This will involve creating a flexible land use framework that facilitates job growth over time and ensures a high quality of life in the community. It will also involve a focus on education, training, and workforce development to ensure that local residents can access new jobs created in the community.
- Fostering vibrant gathering places that serve as focal points in the community and inviting gateways that announce entry into Moreno Valley. A town center is envisioned as a place where residents and visitors can come together to shop, dine, do business, and enjoy leisure time. Additional cultural, sports, recreational, and leisure facilities and programming is also envisioned. Future gathering places should reflect the cultural diversity of Moreno Valley.
- Promoting healthy, livable neighborhoods with a range of housing options suitable to people of all ages and stages of life and with safe, accessible parks, community gardens, and other opportunities for neighbors to interact with one another on a daily basis. This will also involve enhancing roadway safety, particularly near schools and along bicycle routes, while also ensuring roads are maintained in good condition and circulation is facilitated for a range of travel modes.
- Strengthening community identity, building community bonds, and enhancing local sense of pride. Attractive development at key gateways into the city, neighborhood beautification efforts, preserving and enhancing the natural elements that contribute to the character of the city, and promoting a range of festivals and events that bring people together throughout the year will all build local pride in Moreno Valley as a complete live-work-play community.

The Project will involve a comprehensive update to all elements of the General Plan, and the addition of two new elements, Economic Development and Healthy Communities, to incorporate strategies for achieving the vision, complying with new State law that has come into force since the Moreno Valley General Plan was last comprehensively updated, and addressing emerging trends and new technologies. The Housing Element will be updated to accommodate the City's 6th Cycle Regional Housing Need Assessment (RHNA) allocation. Additionally, a Climate Action Plan will be prepared that includes a community-wide inventory of GHG emissions and a strategy for reducing them to achieve State-mandated targets.

PROBABLE ENVIRONMENTAL EFFECTS

The Program EIR will address the following resources categories: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, wildfire, cumulative impacts, and growth-inducing impacts.

Given the local context of Moreno Valley, it is anticipated that the following issues will be central to the environmental analysis:

- Given the extent of air pollution in the South Coast Air Basin and the projected growth of the logistics industry in the region, a careful examination of potential impacts to air quality from implementation of the Project will be required.
- Moreno Valley is located in a seismically active region and three branches of the San Jacinto Fault run through the eastern portion of the planning area. Additionally, other active faults exist in the region, including the San Andreas Fault, located approximately 15 miles northeast, and the Elsinore Fault, located approximately 17 miles southwest that could also generate ground shaking within the city. The Program EIR will closely consider potential impacts related to seismicity in this context.
- Wildfire is a growing concern throughout California, and while the risk of wildfire within most of the city is considered minimal given the extent of urban development, areas within and adjacent to the southern, eastern, and northern portions of the planning area are classified as having Extreme risk. The Program EIR will carefully consider impacts from the Project on wildfire risk.
- Moreno Valley has a long history of flooding, sustaining damage in 2012 and 2015. The City's Master Drainage Plan proposes the construction of detention basins, debris basins, open channels and a network of underground storm drains to provides flood protection from the 100-year storm event. The Program EIR will carefully consider impacts from buildout of the Project on flooding risk.
- Potential cumulative effects related to GHG emissions and traffic and transportation will also be quantified and assessed.

SCOPING MEETING

Pursuant to Section 21083.9(a)(2) of CEQA (California Public Resources Code, Section 21000 et seq.), scoping meetings are required for projects that may have statewide, regional, or area-wide environmental impacts. The City has determined that this project meets this threshold. A public scoping meeting has been scheduled and will be held on Saturday, March 14, 2020, from 2:00 to 4:00 p.m., at 14177 Frederick Street, in the City Hall Council Chambers. Verbal and written comments regarding the scope of the proposed Program EIR will be accepted at the meeting. Written comments can also

be mailed to the above-mentioned address, addressed to Chris Ormsby, before the close of the NOP public comment period.

Please contact Chris Ormsby at 951.413.3229 or chriso@moval.org with any questions regarding this notice or the scoping meeting.

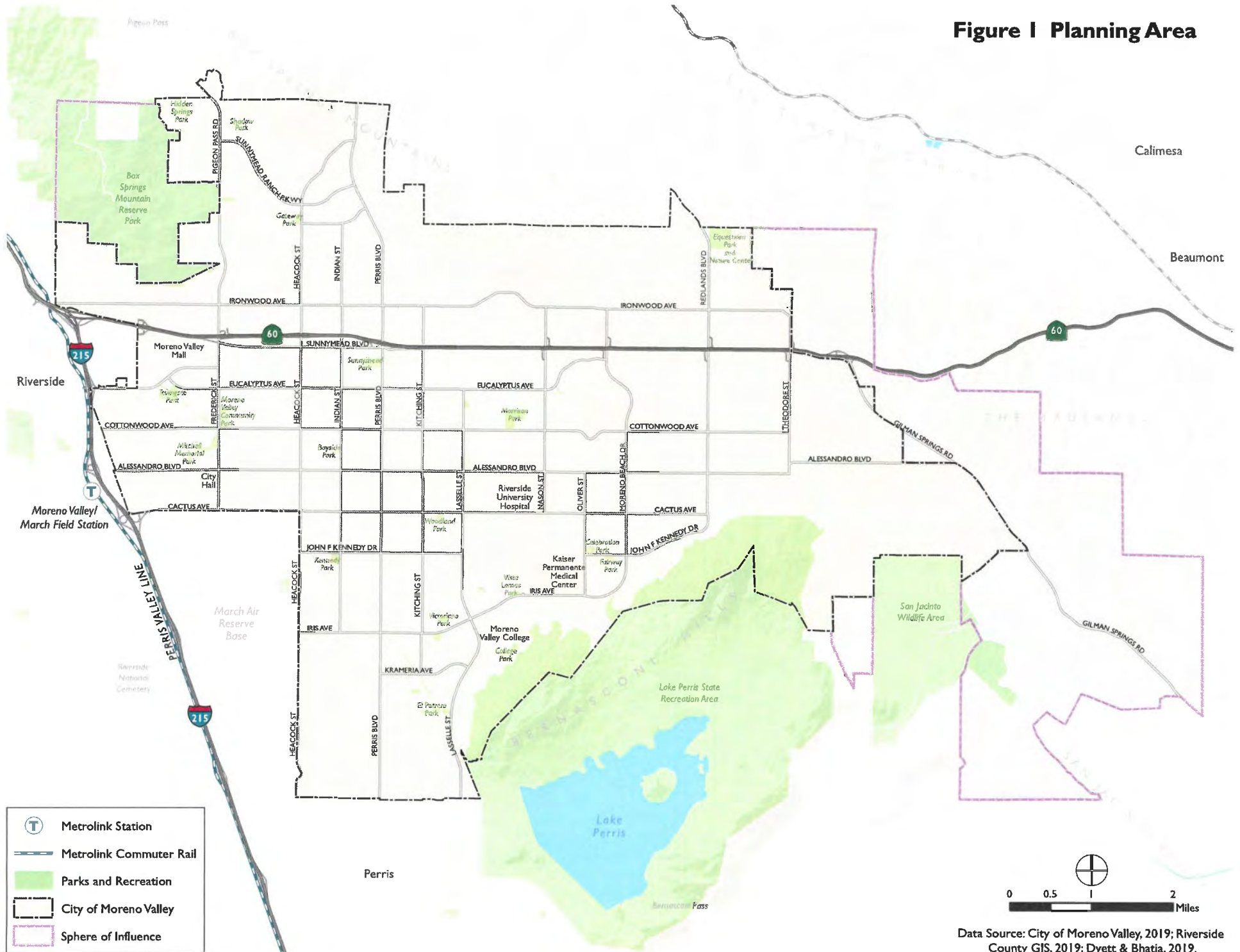
Patty Nevins

Patty Nevins
Planning Official

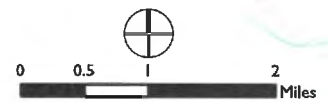
3.5.2020

Date

Figure I Planning Area



- Metrolink Station
- Metrolink Commuter Rail
- Parks and Recreation
- City of Moreno Valley
- Sphere of Influence



Data Source: City of Moreno Valley, 2019; Riverside County GIS, 2019; Dyett & Bhatia, 2019.

From: [Ann McKibben](#)
To: [Chris Ormsby](#)
Subject: Resubmitting NOP Comments, MoVal 2040: Comprehensive GPU, HE & CAP, Ann McKibben
Date: Thursday, April 9, 2020 1:56:56 PM
Attachments: [Moreno Valley Cover Letter Bob Sydnor July 29, 2005.pdf](#)
[Moreno Valley Geologic Review Bob Sydnor 29July2005.pdf](#)
[Moreno Valley Geology Biblio Bob Sydnor 29July2005.pdf](#)
[Moreno Valley PGA & II, Bob Sydnor July 2005.pdf](#)
[Moreno Valley Spectra Values Table Bob Sydnor 2005.pdf](#)
[WorldLogisticsCenterNOPCommentsMichaelMcKibbenMarch262012.pdf](#)
[MorenoValleyGeneralPlanUpdate2020 Ann McKibben Comment Letter 9 April 2020 2nd.pdf](#)

Warning: External Email – Watch for Email Red Flags!

Dear Mr. Ormsby –

I apologize but I attached 8 files to my previous email so I am RESUBMITTING my emailed comments on the NOP for the MoVal 2040: Comprehensive GPU, HE & CAP to reflect that I submitted eight (8) attachments.

Please update what I have submitted previously.

Thank you!

Ann McKibben

Dear Mr. Ormsby –

I am submitting comments on the Notice of Preparation (NOP) for the MoVal 2040: Comprehensive GPU, HE & CAP.

I have attached eight (8) PDF files to this email:

- Moreno Valley Cover Letter Bob Sydnor July 29, 2005
- Moreno Valley Geological Review Bob Sydnor 29 July 2005
- Moreno Valley Geology Bibliography 29 July 2005
- Moreno Valley PGA & II, Bob Sydnor July 2005
- Moreno Valley Spectra Values Table Bob Sydnor 2005
- Moreno Valley Earthquake Spectra Bob Sydnor 2005
- WorldLogisticsCenterNOPComments Michael McKibbenMarch262012

All letters are related to the Geological and Geotechnical Issues in Moreno Valley.

Please include all of the attached letters into the public record for the review of the NOP for the general plan update.

Can you please confirm you have received all the information/all files that I have described?

Thank you for the opportunity to comment.

Sincerely,

Ann McKibben

23296 Sonnet Drive
Moreno Valley, CA 92557
(951) 924-8150
atmckibben@roadrunner.com

9 April 2020

Via email: chriso@moval.org

Chris Ormsby, Senior Planner
Community Development Department
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

Dear Mr. Ormsby:

**Re: Notice of Preparation (NOP) of a Program Environmental Impact Report for MoVal 2040:
Comprehensive General Plan Update, Housing Element, and Climate Action Plan**

I am submitting the following comment letters regarding the Notice of Preparation (NOP) of a Program Environmental Impact Report for the MoVal 2040: Comprehensive General Plan Update, Housing Element and Climate Action Plan.

Their focus is the geological and geotechnical issues in Moreno Valley.

Attached:

Moreno Valley Cover Letter Bob Sydnor July 29, 2005
Moreno Valley Geological Review Bob Sydnor 29 July 2005
Moreno Valley Geology Bibliography 29 July 2005
Moreno Valley PGA & II, Bob Sydnor July 2005
Moreno Valley Spectra Values Table Bob Sydnor 2005
Moreno Valley Earthquake Spectra Bob Sydnor 2005
WorldLogisticsCenterNOPComments Michael McKibbenMarch262012

The following is a quote from the McKibben letter:

“Geological and Seismic Hazards

Seismic, liquefaction, subsidence and flood hazards in the project area will have significant impacts and must be evaluated and mitigated in the project EIR. These evaluations must go beyond simple compilations of state Alquist-Priolo zone maps for seismic hazards and simple compilations of the FEMA flood zone maps, many of which are more than a decade out of date. More recent literature data must be incorporated.

Public health and safety, especially with regard to the planned construction of infrastructure, cannot be achieved (mitigated to a reasonable level) by hazard maps that are incomplete, inaccurate and seriously out of date. Scientific advances in our knowledge of geotechnical hazards occur quickly, and the information in the EIR must be kept up to date with such advances.

Alquist-Priolo guidelines and legislation require that plans by lead agencies include sufficient analysis based not only on the existing hazard map zones, but also on all other relevant published information on faults and hazards inside and *outside* of those map zones. This is because many recent deadly seismic events have occurred on faults that were not yet officially zoned by the state, or were not recognized to be active (Hart, 1992). The recent Landers, Northridge, Hector Mine and Napa Valley earthquakes are good examples.

Specific geologic hazards that should be evaluated and mitigated are:

- 1) seismic shaking and liquefaction/collapse potential in relation to uniform building codes.
- 2) seismic slumping and ground rupture potential caused by proximity to the active San Andreas, Casa Loma, San Jacinto, and Farm Road faults.
- 3) landslides and slow-motion creep related to active faulting along the project's boundary.
- 4) rupture-induced explosion and fire potential for two major regional natural gas pipelines that cross active faults within or adjacent to the project (see attachment from Topozada et al., 1993).
- 5) any other hazards identified by the state's existing emergency response plan for a major earthquake on the San Jacinto fault in the inland empire.
- 6) flooding, inundation, and hydrocompaction resulting from the increase in the area of Mystic Lake since 1938 and the projection of its areal extent to 2023 (see attachment from Morton et al., 2006)."

Please include all of the six attached letters into the public record for the review of the Notice of Preparation for the general plan update.

Please incorporate all references cited (and their contained references) into Notice of Preparation review process.

Thank you for considering my comments and for the opportunity to comment.

Sincerely,



Ann McKibben
23296 Sonnet Drive
Moreno Valley, CA 92557
(951) 924-8150
Email: atmckibben@roadrunner.com

Six Attachments to letter.



Department of Conservation
CALIFORNIA GEOLOGICAL SURVEY

801 K Street • Mail Stop 12-32 • Sacramento, CA 95814-3531
 telephone 916-323-4399 • TDD 916-324-2555 • Web Site: conservation.ca.gov/cgs

Ms. Cynthia S. Kinser, *Principal Planner*
 Community Development Department
 City of Moreno Valley
 14177 Frederick Street
 Moreno Valley, CA 92553

cynthiak@moval.org
 ☎ 951-413-3222

July 29, 2005

**Subject: Geology & Seismology Review of draft Safety Element
 within the draft General Plan & its draft Environmental Impact Report
 City of Moreno Valley State Clearinghouse #2000-091075**

Dear Ms. Kinser:

The California Geological Survey has performed a review of the draft Safety Element within the proposed update of the General Plan for Moreno Valley, Riverside County. This is in accordance with §65302g of the Government Code, which instructs the California Geological Survey to review draft Safety Elements of local governments.

There are several significant difficulties with the geologic hazards section within the draft Safety Element. Basically, this draft does *not* reflect current seismology and geology work that has been published in the past two decades years by the California Geological Survey and the U.S. Geological Survey (with offices on the UC Riverside campus). This draft should *not* go forward to final edition; there are many scientific errors.

It is understood that Moreno Valley is undergoing rapid growth of residential tracts, with perhaps 10,000 future homes. However, the geologic hazards in Moreno Valley are among the highest of the 476 cities in California. These geologic hazards include: active faulting, severe to violent earthquake shaking, landslides, liquefaction, subsidence, and coseismic deformation of the ground during earthquakes.

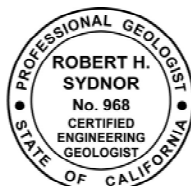
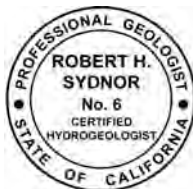
In 1993, the California Geological Survey prepared CGS Special Publication 102, an earthquake planning scenario for the Moreno Valley –Riverside-San Bernardino area. We are concerned that this 219-page publication was not even used or referenced by your consulting planning firm.

On the attached pages, please find a complete geology and seismology bibliography for Moreno Valley, the computation of the earthquake ground motion for Moreno Valley, and detailed commentary why the draft Safety Element does not currently meet minimum state standards. Because Moreno Valley has significant geologic hazards, it is recommended to be prepared by a professional geologist (a California Certified Engineering Geologist).

The California Geological Survey is available to review the second edition of the City's Safety Element. We will provide useful scientific counsel within the seismic-safety planning process.

Please telephone me at 916-323-4399 for further assistance. We look forward to working with you and other officials of the City of Moreno Valley for seismic safety planning.

Respectfully submitted,



attachments

Robert H. Sydnor, PG 3267, CHG 6, CPG 4496, CEG 968
 LM-AEG, LM-AGU, M-EERI, LM-SSA, M-ASCE, M-GSA, LM-AGI
Senior Engineering Geologist
California Geological Survey

**Geologic Review Comments and Suggestions
by the California Geological Survey**
California Department of Conservation, The Resources Agency
regarding the draft Safety Element
within the draft General Plan for the City of Moreno Valley
July 29, 2005
State Clearinghouse # 2000-091075

Lack of citation and use of CGS Special Publication 102.

In 1993, the California Geological Survey prepared a comprehensive 219-page seismic-safety planning document for the Inland Empire (Riverside-San Bernardino greater metropolitan area). The fast-growing Inland Empire has significant geologic hazards that adversely affect all of the infrastructure. This comprehensive earthquake planning scenario was publicly released to all the cities and county governments. We previously sent you copies of SP-102 in 1993. Your sub-consulting planners can purchase additional copies from our website www.conservation.ca.gov/cgs

In the past 12 years, it has been widely used by dozens of cities in the Inland Empire for seismic-safety planning within their respective Safety Elements. It contains extensive colored plates and a good bibliography of geology and seismology.

CGS Recommendation: Moreno Valley extract and adapt as much information as possible from CGS Special Publication 102.

Lack of Geology and Seismology Bibliography for Moreno Valley

The current draft documents lack proper references to published seismology and geology reports and maps. Citizens of Moreno Valley, city officials, consulting planners for various future EIRs, developers, and consulting geologists: all of these rely on comprehensive and up-to-date geologic maps regarding seismic hazards. The USGS geologic map of the Sunnymead Quadrangle (Morton, 2001, USGS OFR 01-450) was not used or referenced. The page-sized geologic map that was provided has numerous graphic errors and cannot be read or used.

CGS Recommendation: a comprehensive 14-page bibliography has been prepared by this reviewer to assist the City of Moreno Valley. It is meant to be used unchanged in the Appendix of the Safety Element (not retyped, not parsed, not edited for brevity by sub-consultants).

The new 14-page bibliography is divided into convenient sections: ① Regional Geology of Moreno Valley; ② Landslides; ③ Seismic Safety, Land-Use Planning, Building Codes; ④ Homeowner Information on Seismic Safety; ⑤ Seismology & Earthquake Engineering; ⑥ Geotechnical Engineering (including liquefaction) & ASTM tests for earthwork, and ⑦ Lifelines.

The purpose of a comprehensive bibliography is to convey this body of scientific knowledge to a wide spectrum of users, to keep the Safety Element in a concise format, and lastly, to set a minimum threshold for “adequacy” of future planning documents and consulting geologic reports for subsequent residential tract development.

Lack of Description of Geologic Units

The geologic units and formations of Moreno Valley are entirely omitted. Instead the planning documents confuse agricultural soils with geologic formations. Future earthquakes will shake the granitic rocks of the Lakeview Pluton much differently from sedimentary rocks of the San Timoteo Badlands, and the deep soft alluvium of the San Jacinto graben. Agricultural soils maps should be used for farmland mapping, not seismic safety.

CGS Recommendations: The text of the Safety Element should use the geologic formations shown in Morton (2001, Sunnymead Quadrangle); and Morton (1999, Santa Ana 30×60 minute Quadrangle, a beautiful regional geologic map at 1:100,000-scale. Dr. Douglas Morton, USGS emeritus, can be occasionally reached at his US Geological Survey offices in the Department of Earth Sciences, University of California at Riverside. He is honorably retired after 40 years of dedicated service, but still visits his USGS office from time-to-time. His USGS geologic maps can be freely downloaded from the Internet www.usgs.gov and consultants are expected to obtain their own digital versions, which then can be printed on-demand by a local vendor. Reference copies can be viewed at the Physical Sciences Library of the University of California, Riverside.

Improper Evaluation of Earthquake Ground-Motion

Moreno Valley is situated astride the active San Jacinto Fault, and nearby active seismogenic faults include the San Andreas Fault and the Elsinore Fault. The Safety Element and the draft EIR dismiss the exposure to earthquake shaking. Modern comprehensive maps, such as CGS Map Sheet 48, are not even referenced or extracted. The draft EIR (written by unqualified persons; not professional geologists or seismologists) is greatly mistaken that earthquake shaking is “not significant.” On the contrary, the earthquake shaking for Moreno Valley is among the highest in California.

To correct this misinformation, the California Geological Survey has performed a complete seismology calculation of the earthquake ground motion for Moreno Valley. We selected an arbitrary centroid of the city at the corner of Alessandro Boulevard and Redlands Boulevard. This intersection of two major boulevards is well-known to residents of Moreno Valley. The calculated ground motion will be higher in the eastward direction towards the San Jacinto Fault, and slightly lower in the westward direction (towards March Air Force Base).

The results of our CGS seismology calculations are attached in three pages: a spectral diagram, a table of spectral values, and a table that shows Moreno Valley in relation to other levels of shaking, acceleration, and intensity. These pages are suggested to be included in the text of the Safety Element.

If ordinary default values from the Building Code are used, then the ground motion is taken at Peak Ground Acceleration, **PGA 0.55g** at this location. If Moreno Valley is like other California cities in Seismic Zone 4, it can be inferred that the City Building Official is possibly accepting these low default values --- without realizing that the *computed* earthquake ground-motion is actually *much higher*: **PGA ≈ 0.86g** for the Design Basis Earthquake ground-motion. It is a “significant” difference for the Structural Engineer to design buildings (such as residential tract homes) to $PGA \approx 0.86g$. In the northeastern area of Moreno Valley, the ground-motion near the San Jacinto Fault zone is even higher.

CGS Recommendations: Include the 3 pages of calculated ground motion in the Safety Element. Change the CEQA finding in the EIR for earthquake shaking to “significant.” It is recommended that the City retain a consulting Certified Engineering Geologist who is experienced in seismic hazards to plan-check the in-coming geologic reports for various residential and commercial structures. This would be a “significant” new cost for the city — hiring additional technical staff — but the costs would be passed through from incoming building-permit fees. Ten-thousand new homes should not be built in a city with high exposure to severe geologic hazards — without adequate oversight and scrutiny from a California Certified Engineering

Geologist retained by the city. The city plan-check counter is “where-the-rubber-meets-the-road” for seismic safety planning and effective Code enforcement.

Note that earthquake ground-motion can also be readily calculated for a dozen other locations in Moreno Valley that would be representative of different geologic subgrade. This new seismology information could then be used for smaller projects (such as a garage or patio), and voluntary seismic retrofit upgrades for existing older homes.

Alquist-Priolo Earthquake Fault Zoning Act

The existing draft Safety Element and draft EIR mistakenly uses the older name of this act. The name was changed 11 years ago in 1994 by Senator Alfred Alquist. Your consulting planners have evidently not kept abreast in the past decade. Dozens of references to the “special studies” zones should be editorially changed to the new legal name. Extracts of the Alquist-Priolo Earthquake Fault Zones should be shown at full scale 1:24,000 (as a strip map) in the text of the Safety Element, not reduced or stylized. The three official quadrangles are Sunnymead (1974), El Casco (revised 1995), and Lakeview (revised 1988). It is recommended that the Safety Element state that citizens can obtain ozalid copies of the official quadrangles from the City of Moreno Community Planning Department. The California Geological Survey has not yet zoned the “Farm Road strand” of Park and others (1995) as an active fault. As an interim measure, the Safety Element of Moreno Valley can emulate the work of Riverside County and show this secondary fault on the city planning map. Consulting Engineering Geologists for various residential developers should continue to evaluate the “Farm Road strand” because there is reported evidence from Dr. Douglas M. Morton, USGS @ UCR, of tectonic bulging (uplift) on Alessandro Boulevard.

Liquefaction and Seismic Settlement

The draft Safety Element and the draft EIR dismisses any potential for seismically-induced liquefaction in the City of Moreno Valley and its extended sphere of influence. This is not correct. The California Geological Survey has zoned about 120+ quadrangles for seismically-induced liquefaction in southern California and the Bay Area. Unfortunately, we were restricted by provisions of the Stafford Act to use the FEMA funding only in counties that had suffered damage from the 1994 Northridge Earthquake and the 1989 Loma Prieta Earthquake. We have recently begun work in the Inland Empire and are presently zoning liquefaction potential along the nearby Elsinore Fault.

CGS Recommendations: The Moreno Valley Safety Element should cite and reference Special Publication 117 and 118 (see attached bibliography). Historic-high water table will be used for zonation purposes. The city should follow the liquefaction zoning that is outlined in the Riverside County Safety Element. A complete list of current liquefaction references is provided in the attached bibliography (under Geotechnical Engineering). The city should begin requiring calculations for seismic settlement for all alluvial sites, regardless of the depth of the water table.

Lack of congruence with the new 2003 General Plan of Riverside County.

The new Safety Element for Moreno Valley is significantly different from the new Safety Element for Riverside County (legally adopted October 7, 2003). The new County Safety Element took a professional consulting geology firm several years to compile using GIS mapping for geologic hazards. It is a wealth of reliable scientific information regarding active faults, basic geologic mapping, landslides, liquefaction, and earthquake shaking. The geologic consulting firm who prepared the suite of geologic hazard maps for Riverside County Planning Department was Earth Consultants International, Tustin (Tania Gonzalez, CEG 1859, ☎714-412-2654).

CGS Recommendation: It is recommended that the consulting planners for Moreno Valley obtain the new 2003 Riverside County General Plan. Much of this can be readily adapted for Moreno Valley, with the same format and the same analysis for the city's Safety Element.

Subsidence and Fissuring in the San Jacinto Graben

Mapping by USGS geologist Dr. Douglas Morton indicates a zone of fissuring and surface deformation. He first published this in 1977, with subsequent mapping in 1999 (see attached references). This subsidence and fissuring is apparently due to a combination of ground-water conditions and tectonic faulting. This information should be faithfully copied to the base maps of the City of Moreno Valley, and incorporated into the planning process as a geologic hazard

CGS Recommendation: Prudent city zoning would create a green-belt along this zone of subsidence and fissuring, with emphasis on parks, open-space, athletic fields, hiking trails, and equestrian stables. This deformation zone would also have required investigations by the consulting Certified Engineering Geologist for residential tract developers. The City Building Official might inspect existing homes and confer with homeowners for a voluntary seismic retrofit and strengthening (underpinning) of structural foundations.

Landslides

Landslides are abundant in the San Timoteo Badlands in the northeastern sector of the sphere of influence of the City of Moreno Valley. Refer to extensive landslide publications in the attached bibliography. The landslide hazard in Moreno Valley includes both debris-flows and mudslides (particularly after wildfires and intense rains), and seismically-induced landslides. The current draft of the Safety Element incorrectly downplays the hazard of landslides. They are significant, but can be mitigated — provided a Certified Engineering Geologist and Registered Geotechnical Engineer utilizes procedures outlined in CGS Special Publication 117; and Blake, Hollingsworth, and Stewart (2002) as shown in attached references.

CGS Recommendation: The Safety Element should show existing landslides and designate areas of steep terrain within weak sedimentary rocks that are susceptible to landslides.

Lifelines

Moreno Valley is highly unusual inasmuch as numerous lifelines cross the San Jacinto Fault in an east-west direction (roughly parallel to Highway 60) and bisect the city. These lifelines include high-pressure natural gas transmission lines that are expected to explode and burn from 3 to 4 meters of direct rupture on the plane of the San Jacinto Fault. Natural gas-transmission lines have automatic shut-off valves planned for these fault crossings, but it is important for the fault crossing area to be a permanent green-belt. Green belts only happen if adroit planning is undertaken by the City of Moreno Valley.

A relevant example of a fault-crossing is the Questar Southern Trails natural gas-transmission line that brings gas from the Four-Corners area across Utah and Arizona, and then into California. It cuts across the San Jacinto Fault south of Highway 60, through Moreno Valley, north of March AFB, then through Santa Ana Canyon where it crosses the active Elsinore-Whittier Fault. The western terminus of Questar Southern Trails pipeline is Long Beach. For further information, refer to Map Sheets 6 and 7 of the Questar Southern Trails pipeline atlas; this is found in FERC Docket CP99-163-00 and California State Clearinghouse # 99041103. The Final EIR was certified by the State Lands Commission in July 2000 after extensive hearings. There were adverse geologic review comments by the California Geological Survey regarding crossings of active faults. To resolve the impasse, Utah-based Questar subsequently hired an excellent Tustin-based consulting engineering geology firm (with California Certified Engineering Geologists) to re-evaluate their pipeline where it crossed active faults 17 times through Southern California.

CGS Recommendation: The Moreno Valley Safety Element should have a special map atlas of all lifelines in relation to known geologic hazards (fault crossings, landslides, co-seismic deformation, fissuring, subsidence). Appropriate prudent zoning should be undertaken by the city (depending on the type of lifeline). City planners should confer with the major utilities; then using GIS methods, convert utility lifeline atlas pages to the city basemap. Underground Service Alert (USA) signs should be posted along sensitive lifelines (such as natural-gas transmission lines).

Please note that CCR Title 5, Education Code, §17213 prohibits the acquisition of a school site by a school district if the site "contains one or more pipelines, situated underground or above ground, which carried hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood." The California Public Resources Code §21151.8 uses the same language about gas pipelines with reference to approval of environmental impact reports or negative declarations. (See CCR Title 5, §14010h.). Natural gas transmission lines (with >80 psi) should not be within a 1,500 foot radius of any public school campus. Prudent advance zoning by the City of Moreno Valley can preclude these kinds of predicaments. It is suggested that both the school district and the utility companies work with the Moreno Valley planners for appropriate zonation of lifeline corridors.

City Geologist for the City of Moreno Valley

The current draft Safety Element and the remainder of the General Plan does not consider the full impact of the addition of ±10,000 homes to the workload of the staff of the city. Moreno Valley has significant geologic hazards. It is inferred that current plan-check officials within the Building Department and the Community Development Department do not have a scientific background in seismology, engineering geology, and geotechnical engineering.

CGS Recommendation: The City of Moreno Valley should plan for the internal addition of a California Certified Engineering Geologist to be part of the plan-check process for grading permits and residential development of extensive new tracts. This could either be a part-time consultant, and evolve gradually into a full-time civil servant position (depending on the growth rate of the city). The City Geologist would be in close professional contact with the Riverside County Geologist, the California Geological Survey, the U.S. Geological Survey, and the geology department at the University of California, Riverside. It would be a win-win situation for both the citizens of Moreno Valley and the developers — effective implementation of prudent seismic safety planning, with proper earthwork and grading.

Seismic Retrofit for Homeowners

The draft Safety Element does not adequately address the problem of existing older structures in Moreno Valley. Many of these probably need seismic retrofit for the coming earthquake, and prudent owners would voluntarily do so — if they only knew the specifics.

CGS Recommendation: Our bibliography provides the new retrofit booklet for homeowners written by the California Seismic Safety Commission. Copies can be made available in Moreno City offices, and at local building suppliers and public libraries. Citizens can freely download this from the internet. www.seismic.ca.gov

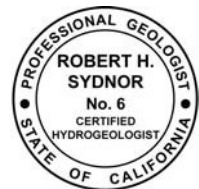
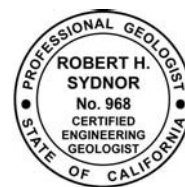
Closure

The California Geological Survey appreciates this opportunity to comment on the draft Safety Element within the draft General Plan for the City of Moreno Valley. We have performed this review under authority of §65302g of the Government Code. The current draft does not meet minimum standards, but we are optimistic that it can be properly rewritten by a professional geologist. When you have prepared the subsequent draft of the Safety Element, please send it directly to us at the address below. There is a substantial time-delay if it is sent through the State Clearinghouse.

The trend in Safety Elements is to provide a concise summary of geologic hazards, then lead the reader to the proper geologic maps, appropriate Code sections, and hyperlinks to technical engineering geology and seismology information (often free or low-cost).

The California Geological Survey is pleased to provide assistance to the 476 cities and 58 counties in California to achieve our mutual goal of seismic safety planning and reduction of losses due to earthquakes and related geologic hazards. Please call me if there are any questions about this geologic review.

Respectfully submitted,



Robert H. Sydnor

Senior Engineering Geologist

PG 3267, CHG 6, CPG 4496, CEG 968

LM-AEG, LM-AGU, LM-AAAS, LM-SSA, LM-CAS, LM-AGI

M-EERI, M-GSA, M-ASCE, M-ASTM, M-NAGT, M-NGWA, M-IAEG

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Engineering Geology and Seismic Safety Bibliography for the City of Moreno Valley

Riverside County, California

Compilation on July 29, 2005 by the

California Geological Survey

California Department of Conservation, The Resources Agency of California

in cooperation with the City of Moreno Valley

for use within the Safety Element of the General Plan

This is an abbreviated list with concise focus on newer publications in engineering geology, seismology, geotechnical engineering, and seismic safety planning for the City of Moreno Valley. This bibliography has been parsed and adapted for the geology of City of Moreno Valley, so it is not appropriate to extrapolate it for other cities in Riverside County that have different geologic conditions.

It is recommended to use GeoRef and GeoScience World bibliographic search engines for a comprehensive bibliography, including unpublished thesis work from the University of California at Riverside. Numerous unpublished consulting geology reports for individual parcels and residences cannot be included since they have never been submitted to GeoRef for formal indexing in library science and are not publicly available. Refer to archives of city building permits for geological reports on specific projects.

Especially useful published references are marked with a star ★ symbol to assist the reader. Inclusion within this bibliography does not imply official endorsement, and omission from this concise list does not imply lack of suitability. This abbreviated list will need to be updated periodically to include new publications in engineering geology and seismic safety for the City of Moreno Valley.

Regional Geology for Moreno Valley

★ Albright, L. Barry, 1997, Magnetostratigraphy and biochronology of the San Timoteo badlands, southern California, with implications for local Pliocene–Pleistocene tectonic and depositional patterns: *Geological Society of America Bulletin*, vol. 111, p. 1265–1293.

This geologic mapping is within the sphere of influence for the City of Moreno Valley, so it is considered an essential reference. Dr. Albright received his PhD on the geology and paleontology of the San Timoteo badlands from the University of California at Riverside.

Albright, L. Barry, 1999, Biostratigraphy and vertebrate paleontology of the San Timoteo Badlands, Southern California: *University of California Publications in the Geological Sciences*, vol. 144, 121 p. *This is the northeastern portion of the City of Moreno Valley sphere of influence on the El Casco Quadrangle.*

Anderson, Megan, Matti, Jonathan C., and Jachens, Robert, 2004, Structural model of the San Bernardino basin, California, from analysis of gravity, aeromagnetic, and seismicity data: *AGU Journal of Geophysical Research*, vol. 109, B04404, published on-line April 6, 2004.

Apoian, Mark D., 1997 Spatial variability in hydrochemistry in the Moreno, Perris, and San Jacinto valleys, western Riverside County, California: University of California, Riverside, unpublished Master of Science thesis, 110 p.

Bennett, Richard A., Friedrich, Anke M., and Furlong, Kevin P., 2004, Codependent histories of the San Andreas and San Jacinto fault zones from inversion of fault displacement rates: *Geology*, vol. 32, no. 11, November 2004 issue, p. 961-964.

Bent, Allison L., and Helmberger, Donald V., 1991, A reexamination of historic earthquakes in the San Jacinto fault zone, California: *Bulletin of the Seismological Society of America*, vol. 81, no. 6, p. 2289-2309.

Biasi, Glenn P., Weldon, Ray J., Fumal, Thomas E., and Seitz, Gordon G., 2002, Paleoseismic event dating and the conditional probability of large earthquakes on the southern San Andreas Fault, California: *Bulletin of the Seismological Society of America*, vol. 92, no. 7, October 2002 issue.

- Blythe, Ann E., House, Martha A., and Spotila, James A., 2002, Low-temperature thermochronology of the San Gabriel and San Bernardino Mountains, southern California: constraining structural evolution, *in* Barth, Andrew, *editor*, Contributions to Crustal Evolution of the Southwestern United States – the Perry Lawrence Ehlig memorial volume: Geological Society of America, Special Paper 365, p. 231–250.
- Cao, Tianqing, Bryant, William A., Rowshandel, B., Brnum, David, and Wills, Christopher J., 2003, The revised 2002 California probabilistic seismic hazards maps: California Geological Survey, posted as .pdf on CGS website, June 2003: www.conservation.ca.gov/cgs/rghm/psha
- ◆ Report, 11 p., with Appendix A (Type A, B, C faults):
 - ◆ Table of Type A Faults, 2 p.
 - ◆ Table of Type B Faults, 15 p.
 - ◆ Table of Type C Faults (= area sources), 1 p.
 - ◆ References for 2002 California Fault Parameters, 9 p.
- This is the new 2002 statewide seismotectonic model used in probabilistic seismic hazard analysis by the California Geological Survey. CCR Title 24 projects (hospitals and schools) will be measured and evaluated against this PSHA model and its fault data-base that reflects a broad consensus of the seismology and engineering geology profession. This report updates and supersedes Petersen and others, CGS Open-File Report 96-08, which was the 1996 statewide consensus model. CGS OFR 96-08 contains 33 pages of text that remains as a pertinent explanation of PSHA methodology for California. The notable upgrade from 1996 to 2002 is the revised database of seismogenic faults (particularly slip-rates, Mmax, recurrence intervals, and fault segmentation).*
- Cotton, William R., Dickey, Robert H., and Edwards, S., 1973, Activity of the Reiche Canyon Fault, Moreno Valley, Riverside County: Association of Engineering Geologists, *AEG Bulletin*, vol. 16, p. 30 (annual meeting abstract).
- Eppes, Martha C., McFadden, Leslie D., Matti, Jonathan C., and Powell, Robert, 2002, Influence of soil development on the geomorphic evolution of landscapes — an example from the Transverse Ranges of California: *Geology*, vol. 30, p. 195-198.
- Fumal, Thomas E., and Tinsley, John C., III, 1985, Mapping Quaternary sedimentary deposits for areal variations in shaking response, *in* Ziony, J.I., *editor*, 1985, Evaluating earthquake hazards in the Los Angeles region: U. S. Geological Survey Professional Paper 1360, 505 p. Refer to p. 111 for Moreno Valley
- Harden, Jennifer W., and Matti, Jonathan C., 1989, Holocene and Pleistocene slip-rates on the San Andreas Fault in Yucaipa, California using displaced alluvial-fan deposits and soil chronology: *Geological Society of American Bulletin*, vol. 101, no. 9, p. 1107–1117.
- Hart, Earl W., and Bryant, William A., 1997, Fault-rupture hazard zones in California: California Geological Survey, Special Publication 42, 1997 edition with 1999 supplements, 38 p. *The active San Jacinto Fault has been legally zoned under the Alquist-Priolo Earthquake Fault Zoning Act. SP-42 is the definitive official CGS publication to cite for the Sunnymead, El Casco, and Lakeview Quadrangles that are covered by the City of Moreno Valley and its sphere of influence. Do not confuse Alquist-Priolo Earthquake Fault Zoning Act with the Seismic Hazards Zoning Act (landslides and liquefaction).*
- Jennings, C.W., 1994, Fault activity map of California and adjacent areas: California Division of Mines and Geology, Geologic Data Map No. 6, scale 1:750,000.
- Kendrick, Katherine J., and McFadden, Leslie D., 1996, Comparison and contrast of processes of soil formation in the San Timoteo Badlands with chronosequences in California: *Quaternary Research*, vol. 46, no. 2, p. 149-160.
- ★Kendrick, Katherine J., and Graham, Robert C., 2004, Pedogenic silica accumulation in chronosequence soils, southern California: *Soil Science Society of America Journal*, vol. 68, p. 1295-1303. *The field localities are the San Timoteo Badlands and Cajon Pass. These geologists are at the US Geological Survey and University of California Riverside.*
- ★Kendrick, Katherine J., Morton, Douglas M., Wells, Stephen G., and Simpson, Robert W., 2002, Spatial and temporal deformation along the northern San Jacinto Fault, southern California: implications for slip rates: *Bulletin of the Seismological Society of America*, vol. 92, no. 7, October 2002 issue, p. 2782–2802.
- Kendrick, Kathryn J., McFadden, Les, and Morton, D.M., 1994, Soils and slip rates along the northern San Jacinto Fault, *in* McGill, Sally F., and Ross, Timothy M., *editors*, Geological Investigations of an Active Margin: Geological Society of America, Cordilleran Section Guidebook, 27th Annual Meeting, San Bernardino, pages 146-151.
- Magistrale, Harold, and Sanders, C., 1996, Evidence from precise earthquake hypocenters for segmentation of the San Andreas Fault in San Gorgonio Pass: *Journal of Geophysical Research*, vol. 101, p. 3031–3044.

- Marquis, Samuel A., Jr., and Stewart, Edward, 1994, The delineation of wellhead protection areas in fractured bedrock terrains using groundwater flow models: Proceedings of the 8th National Outdoor Action Conference & Exposition, *Ground Water Management*, vol. 18, p. 327-343. *The study area is the Moreno Valley.*
- Matti, Jonathan C., Morton, Douglas M., Cox, Brett F., Carson, Scott E., and Yetter, T.J., 2003, Geologic map and digital database of the Yucaipa 7½-minute quadrangle, San Bernardino and Riverside Counties, California: U.S. Geological Survey, Open File Report 03-301, map scale 1:24,000.
- Matti, Jonathan C., Morton, Douglas M. and Cox, Brett F., 1992, The San Andreas fault system in the vicinity of the central Transverse Ranges province, southern California: U.S. Geological Survey Open-File Report 92-354, 62 p.
- May, Steven R., and Repenning, Charles A., 1982, New evidence for the age of the Mount Eden fauna, southern California: *Journal of Vertebrate Paleontology*, vol. 2, no. 1, p. 109-113.
- Merrifield, Paul M., and Lamar, Donald L., 1984, Possible strain events reflected in water-levels in wells along the San Jacinto Fault zone, southern California: *Pure and Applied Geophysics*, vol. 122, no. 2-4, p. 245-254. *Dr. Merrifield and Dr. Lamar spent many years in the late 1970s and early 1980s carefully monitoring water wells in the Moreno Valley-San Jacinto graben. They prepared annual reports of their studies (as Open-File Reports by the USGS). This published journal article conveniently summarizes their entire project.*
- ★Morton, Douglas M., 2001, Geologic map of the **Sunnymead 7½-minute Quadrangle**, Riverside County, California: U.S. Geological Survey Open-File Report 01-450, map scale 1:24,000. www.usgs.gov
- ★Morton, Douglas M., 1999, Preliminary digital geologic map of the Santa Ana 30×60-minute quadrangle, southern California: U.S. Geological Survey Open-File Report 99-172, map scale 1:100,000. *Covers the City of Moreno Valley — this geologic map should be used for a page-sized regional planning map that is then keyed to the Sunnymead Quadrangle at 1:24,000-scale.*
- ★Morton, Douglas M., 1977, Surface deformation in part of the San Jacinto Valley, southern California: *Journal of Research of the U.S. Geological Survey*, vol. 5, no. 1, p. 117-124.
- ★Morton, Douglas M., and Matti, Jonathan C., 1993, Extension and contraction within an evolving divergent strike-slip fault complex: the San Andreas and San Jacinto fault zones at their convergence in southern California, in Powell, R.E., Weldon, R.J.II, and Matti, J.C., *editors*, The San Andreas fault system: displacement, palinspastic reconstruction, and geologic evolution: Geological Society of America, *Memoir 178*, p. 217-230.
- Morton, Douglas M., and Matti, Jonathan C., 1989, A vanished late Pliocene to early Pleistocene alluvial-fan complex in the northern Perris Block, southern California, in Colburn, I.P., Abbott, P.L., and Minch, J.A., *editors*, Conglomerates in Basin Analysis, the A.O. Woodford memorial volume: Society of Economic Paleontologists and Mineralogists, Pacific Section SEPM, vol. 62, p. 73-80.
- Morton, Douglas M., Alvarez, R.M., and Campbell, Russell H., 2003, Preliminary soil-slip susceptibility maps, southwestern California: U.S. Geological Survey, Open-File Report 03-17.
- Nicholson, C., Seeber, L., Williams, P., and Sykes, L.R., 1986, Seismicity and fault kinematics through the eastern Transverse Ranges, California: block rotation, strike-slip faulting, and low-angle thrusting: *Journal of Geophysical Research*, v. 91, p. 4891-4908.
- Norton-Hehn, Victoria, MacFadden, Bruce J., Albright, L. Barry, and Woodburne, Michael O., 1996, Magnetic polarity, stratigraphy, and possible differential tectonic rotation of the Miocene-Pliocene mammal-bearing San Timoteo Badlands, southern California: *Earth & Planetary Science Letters*, vol. 141, no. 1-4, p. 35-49.
- ★Park, Stephen K., Pendergraft, Darin, Stephenson, William J., Shedlock, Kaye M., and Lee, Tien Chang, 1995, Delineation of intrabasin structure in a dilational jog of the San Jacinto Fault Zone, southern California: *Journal of Geophysical Research*, vol. 100, no. B-1, p. 691-702.
- ★Petersen, Mark D., Beeby, D.J., Bryant, W.A., Cao, C., Cramer, C.H., Davis, J.F., Reichle, M., Saucedo, G., Tan, S., Taylor, G., Topozada, T., Treiman, J., and Wills, C.J., 1999, Seismic shaking hazard maps of California: California Geological Survey, Map Sheet 48, published July 1, 1999, approximate scale \cong 1:2,127,600 www.conservation.ca.gov/cgs
This statewide shaking map is recommended for use by the Moreno Valley Planning Department. It shows that the ground-motion within Moreno Valley is among the highest in California.
- Powell, Robert E., Weldon, Ray J., II, and Matti, Jonathan C., *editors*, 1993, The San Andreas fault system: displacement, palinspastic reconstruction, and geologic evolution: Geological Society of America, *Memoir 178*, 10 papers, 8 plates in map case, 332 p.

- Proctor, Richard James, Geologic features of a section across the Casa Loma Fault (a branch of the San Jacinto Fault), exposed in an aqueduct trench near San Jacinto, California: *Bulletin of the Geological Society of America*, vol. 73, no. 10, p. 1293-1295.
- Reynolds, Robert E., and Reeder, Wessly A., 1986, Age and fossil assemblages of the San Timoteo Formation, Riverside County, California, in Kooser, M.A., and Reynolds, R.E., editors, *Geology around the Margins of the eastern San Bernardino Mountains: Publications of the Inland Geological Society*, vol. 1, p. 51-56. *The San Timoteo Badlands on the northeastern side of Moreno Valley contain a rich faunal assemblage. Also refer to the paleontology report by Albright (1999). Because the fossils may affect land-use development, they need to be discussed and evaluated in the General Plan for the City of Moreno Valley.*
- Sadler, Peter M., Kooser, Marilyn A., Renfrew, James M., Hillenbrand, John M., 1989, Conglomerates and the reconstruction of strike-slip fault zones; lessons from the Transverse Ranges, southern California, in Colburn, I.P., Abbott, P.L., and Minch, J.A., editors, *Conglomerates in Basin Analysis, the A.O. Woodford memorial volume: Society of Economic Paleontologists and Mineralogists, Pacific Section SEPM*, vol. 62, p. 33-52.
- ★ Sadler, Peter M., and Morton, Douglas M., editors, 1989, Landslides in a semi-arid environment, with emphasis on the inland valleys of southern California: University of California, Riverside, *Publications of the Inland Geological Society*, vol. 2, 386 pages.
- ★ Sanders, Christopher, and Magistrale, Harold, 1997, Segmentation of the northern San Jacinto fault zone, southern California: *Journal of Geophysical Research*, v. 102, no. B-12, p. 27,453 - 27,467.
- Schlehuber, Michael J., Lee, Tien Chang, and Hall, Bradley S., 1989, Groundwater level and hydrochemistry in the San Jacinto Basin, Riverside County, California: *Journal of Hydrology*, vol. 106, no. 1-2, p. 79-98.
- Seeber, Leonardo and Armbruster, J.G., 1995, The San Andreas Fault system through the Transverse Ranges as illuminated by earthquakes: *Journal of Geophysical Research*, v. 100, no. B5, p. 8285–8310.
- Sharp, Robert Victor, 1967, San Jacinto fault zone in the Peninsular Ranges of southern California: *Bulletin of the Geological Society of America*, vol. 78, no. 6, p. 705-729. *This Caltech PhD dissertation is the seminal work on the San Jacinto Fault.*
- Sieh, Kerry E., 1996, The repetition of large-earthquake ruptures, in Knopoff, L., Aki, K., Allen, C.R., Rice, J.R., and Sykes, L.R., *convenors*, Earthquake Prediction – the scientific challenge: *Proceedings of the National Academy of Sciences*, v. 93, p. 3764-3771, April 1996.
- Sieh, Kerry E., and Matti, Jonathan C., 1992, Earthquake geology, San Andreas Fault System, Palm Springs to Palmdale: Association of Engineering Geologists, 35th Annual Mtg. in Long Beach, field trip guidebook & reprint volume published by So. Calif. Section of AEG, 165 pages of reprinted papers.
- Spotila, James A. and Sieh, Kerry E., 2000, Architecture of transpressional thrust faulting in the San Bernardino Mountains, southern California, from deformation of a deeply weathered surface: *Tectonics*, vol. 19, no. 4, p. 589–615.
- Spotila, James A., House, Martha A., Blythe, Ann E., Niemi, Nathan A., and Bank, Gregory C., 2002, Controls on the erosion and geomorphic evolution of the San Bernardino and San Gabriel Mountains, southern California, in Barth, Andrew, editor, *Contributions to Crustal Evolution of the Southwestern United States — the Perry Lawrence Ehlig memorial volume: Geological Society of America, Special Paper 365*, p. 205–230.
- Spotila, James A., Farley, Kenneth A., and Sieh, Kerry E., 1998, Uplift and erosion of the San Bernardino Mountains, associated with transpression along the San Andreas Fault, California, as constrained by radiogenic helium thermochronometry: *Tectonics*, vol. 17, p. 360–378.
- Spotila, James A., Farley, Kenneth A., Yule, J. Douglas, and Reiners, Peter W., 2001, Near-field transpressive deformation along the San Andreas fault zone in southern California, based on exhumation constrained by (U–Th) / He dating: *Journal of Geophysical Research*, vol. 106, no. B–12, p. 30909 to 30922. *Indicates vertical exhumation of Yucaipa Ridge at rate of ≈ 5 to 7 mm/year and total exhumation of ≈ 3 to 6 km since 1.8 Ma.*
- Stephenson, William J., Odum, J.K., Williams, R.A., and Anderson, M.L., 2002, Delineation of faulting and basin geometry along a seismic reflection transect in urbanized San Bernardino Valley, California: *Bulletin of the Seismological Society of America*, vol. 92, no. 6, August 2002 issue, p. 2504–2520.

- Streit, Jürgen E., 1999, Conditions for earthquake surface rupture along the San Andreas Fault system, California: *Journal of Geophysical Research*, vol. 104, no. B-8, August 10, 1999 issue, p. 17,929 to 17,939. *Emphasis on the bends in the fault azimuth in the San Bernardino Valley-Moreno Valley area as the probable location for future large earthquakes.*
- ★Toppozada, T.R., Borchardt, G., Hallstrom, C., Johnson, C., Per, R., and Lagario, H. 1993, Planning scenario for a major earthquake on the San Jacinto fault, Riverside and San Bernardino Counties, California: California Geological Survey, Special Publication 102, 219 p. *An essential reference for seismic safety planning in Moreno Valley.*
- Wallace, Robert E., editor, 1990, The San Andreas Fault System, California: U.S. Geological Survey Prof. Paper 1515, 283 pages.
- Weldon, Ray J., Fumal, Thomas E., Biasi, Glenn P., and Scharer, Katherine M., 2005, Past and future earthquakes on the San Andreas Fault: *AAAS Science*, vol. 308, issue #5724, 13 May 2005, p. 966-967.
- Wells, Stephen G., Connell, S.D., and Williamson, T.N., 1994, Soil development in valley floor deposits along the southern margin of the San Timoteo Badlands, Riverside County, California, in McGill, S.F., and Ross, T.M., editors, Geological Society of America, Cordilleran Section annual meeting, Guidebook 27, p. 140-146.
- Williams, Kirk D., 1998, Groundwater modeling in the Moreno and Perris valleys, Riverside County, California: University of California, Riverside, unpublished Master of Science thesis, 178 p.
- Williams, Patrick L., Sykes, Lynn R., Nicholson, Craig, and Seeber, Leonardo, 1990, Seismotectonics of the easternmost Transverse Ranges, California: relevance for seismic potential of the southern San Andreas Fault: *Tectonics*: vol. 9, p. 185-204.
- Wills, Christopher J., and Silva, Walter, 1998, Shear-wave velocity characteristics of geologic units in California: *EERI Earthquake Spectra*, v. 14, no. 3, August 1998, p. 533-556.
- Working Group on California Earthquake Probabilities, 1995, Seismic hazards in southern California: probable earthquakes, 1994 to 2024: *Bulletin of the Seismological Society of America*, v. 85, no. 2, p. 379-439. (available as a reprinted booklet from SCEC)
- Yule, J. Douglas, Fumal, Thomas, McGill, Sally F., and Seitz, Gordon G., 2001, Active tectonics and paleoseismic record of the San Andreas Fault, Wrightwood to Indio, in Dunne, George, and Cooper, John, editors, 2001, Geologic excursions in the California deserts and adjacent Transverse Ranges: Society for Sedimentary Geology, SEPM Pacific Section, Book #88, 126 p.; field trip #4, p. 91-126.
- Yule, J. Douglas, and Sieh, Kerry E., 2003, Complexities of the San Andreas fault near San Geronio Pass: implications for large earthquakes: *AGU Journal of Geophysical Research*, vol. 108, no. B-11, published on the web November 29, 2003, p. 2545; www.agu.org doi: 10.1029/2001JB00451, 2003.



Landslides

(particularly in northeastern Moreno Valley
with abundant debris-flows and acute erosion)

- Abramson, L.W., Lee, T.S., Sharma, S., and Boyce, G.M., 2001, Slope stability and stabilization methods, 2nd edition: John Wiley & Sons, Inc., 736 p.
- ★Blake, Thomas F., Hollingsworth, Robert A., and Stewart, Jonathan P., editors, 2002, Recommended procedures for implementation of CDMG Special Publication 117, *Guidelines for Analyzing and Mitigating Landslide Hazards in California*: Southern California Earthquake Center, 110 p., plus 17 p. appendix, edition of 6-20-2002; CD-ROM and paper text. < www.scec.org >
- ★California Geological Survey, 1997, *Guidelines for evaluating and mitigating seismic hazards in California*: California Geological Survey, Special Publication 117, 74 p., 7 chapters, Appendix A, B, C, and D. *Appendix A includes the full text of the Seismic Hazards Mapping Act of 1990.* < www.conservation.ca.gov/cgs > *SP-117 has been officially adopted by both the California Board of Geologists & Geophysicists and the California State Mining & Geology Board, so the criteria have legal precedent; consulting engineering geologists that perform work in Moreno Valley must meet minimum criteria outlined in SP-117. This is the reason why SP-117 needs to be cited and used in the Safety Element.*
- California Geological Survey, 1999, *Recommended criteria for delineating Seismic Hazards Zones in California*: California Geological Survey, Special Publication 118, 12 p.
- Cornforth, Derek, 2005, Landslides in practice: investigation, analysis, and remedial / preventative options in soils:

- John Wiley & Sons, Inc., 624 p., \$150 list price; 23 chapters, 12 case histories.
- Cruden, David M., and Varnes, David J., 1996, Landslide types and processes, *in* Turner, A.Keith, and Schuster, Robert L., *editors*, Landslides – investigation and mitigation: National Academy Press, Transportation Research Board Special Report 247, chap.3, p. 36–75.
- Duncan, J. Michael, and Wright, Stephen G., 2005, Soil strength and slope stability: John Wiley & Sons, Inc., 312 p.
- Fifield, Jerald S., 2001, Designing for effective sediment and erosion control on construction sites: Forester Press, 318 p. < www.foresterpress.com >
- Fifield, Jerald S., 2001, Field manual on sediment and erosion control best management practices for contractors and inspectors: Forester Press, 160 p. (*spiral-wire bound field-manual*) < www.foresterpress.com >
- Forrester, Kevin, 2001, Subsurface drainage for slope stabilization: American Society of Civil Engineers, ASCE Press, 208 p. www.asce.org
- Ghilardi, P., Natale, L., and Savi, F., 2000, Debris-flow propagation on urbanized alluvial fans, *in* Wiczorek, Gerald F., and Naeser, Nancy D., *editors*, Debris-flow hazards mitigation: mechanics, prediction, and assessment: A.A. Balkema Publishers, Rotterdam; *Proceedings of the Second International Conference on Debris Flows*, p. 471-478.
- Glade, Thomas, Anderson, Malcolm G., and Crozier, Michael J., *editors*, 2005, Landslide hazard and risk: John Wiley & Sons, Inc., 832 p.
- Gray, Donald H., and Sotir, Robbin B., 1996, Biotechnical and soil bioengineering slope stabilization — a practical guide for erosion control: John Wiley & Sons, Inc., 378 p. *Dr. Gray is professor of geotechnical engineering at the University of Michigan and a pioneer in the use of plants and geosynthetics for erosion control and surficial slope stability. This excellent textbook presents ecologically sound alternatives to conventional reinforced concrete retaining walls.*
- Keefer, Robert F., 2000, Handbook of soils for landscape architects: Oxford University Press, 272 p.
- Keller, Edward A., and Pinter, Nicholas, 1996, Active tectonics — earthquakes, uplift, and landscape: Prentice-Hall, 338 pages
- Kruckeberg, Arthur R., 2002, Geology and plant life: the effects of landforms and rock types on plants: University of Washington Press., 304 p., 98 photos, 47 tables, 21 figures. *Geobotany with application to engineering geology.*
- Lee, Tien Chang, Biehler, Shawn, Park, Stephen K., and Stephenson, William J., 1996, A seismic refraction and reflection study across the central San Jacinto Basin, southern California: Geophysics, vol. 61, no. 5, p. 1258-1268.
- Mitchell, James K., and Soga, K., 2005, Fundamentals of soil behavior, 3rd edition: John Wiley & Sons, Inc., 608 p.
- ★Morton, Douglas M., Distribution and frequency of storm-generated soil slips on burned and unburned slopes, San Timoteo Badlands, southern California, *in* Sadler, P.M., and Morton, D.M., *editors*, Landslides in a Semi-Arid Environment: Inland Geological Society and the University of California, Riverside, vol. 2, p. 279-284.
- ★Morton, Douglas M., and Sadler, Peter M., 1989, Landslides flanking the northeastern Peninsular Ranges and in the San Gorgonio Pass area of southern California, *in* Sadler, P.M., and Morton, D.M., *editors*, Landslides in a Semi-Arid Environment: Inland Geological Society and the University of California, Riverside, vol. 2, p. 338-355.
- Morton, Douglas M., Alvarez, R.M., and Campbell, Russell H., 2003, Preliminary soil-slip susceptibility maps, southwestern California: U.S. Geological Survey Open-File Report 03–17.
- ★Morton, Douglas M., 1994, Subsidence and ground fissures in the San Jacinto Basin area, southern California, *in* U.S. Geological Survey Subsidence Interest Group Conference: U.S. Geological Survey Open-File Report 94-532, p. 29-31. *This is a key report for the City of Moreno Valley Safety Element because it shows the locations of severe ground fissures and acute subsidence. In the past decade, the fissures have increased. This information needs to be plotted on maps within the Safety Element, so that consulting engineering geologists, developers, and city officials are aware of the extent of the fissuring.*
- Ortigao, Jose A.R., and Sayao, Alberto S.F.J., *editors*, 2004, Handbook of slope stabilization engineering: Springer-Verlag Publishers, 800 p.
- ★Sadler, Peter M., and Morton, Douglas M., *editors*, 1989, Landslides in a semi-arid environment, with emphasis on the inland valleys of southern California: University of California, Riverside, *Publications of the Inland Geological Society*, vol. 2, 386 pages.
- Schumm, Stanley A., *chairman*, and 7 others, 1996, Alluvial fan flooding: National Academy of Sciences, National Academy Press, Commission on Geosciences, Environment, and Resources, 172 p.
- Shanklin, D.W., Rademacher, K.R., and Talbot, J.R., *editors*, 2000, Construction and controlling compaction of earth fills, ASTM Special Technical Publication STP–1384, 336 p. www.astm.org
- Toy, Terrence J., Foster, George R., and Renard, Kenneth G., 2002, Soil erosion: processes, prediction, measurement, and control: John Wiley & Sons, Inc., 352 p., 100 photographs, drawings, and tables.

- Turner, A.K., and Schuster, Robert L., *editors*, 1996, Landslides — investigation and mitigation: National Academy Press, Transportation Research Board Special Report 247, 673 p. *The national treatise on landslides with 25 chapters by a team of geologists and geotechnical engineers.*
- Varnes, David J., 1974, The logic of geological maps, with reference to their interpretation and use for engineering purposes: U.S. Geological Survey Professional Paper 837, 48 p. (*a classic treatise on the preparation of engineering geology maps*)
- Vaughn, Diane M., Real, Charles R., McGuire, Terilee, Swift, Jennifer, Peters, Alexi, and Moskovitz, Robert, 2004, An e-government web portal for dissemination of geotechnical data, in Yegan, M.K, and Kavazanjian, Edward, *editors*, Geotechnical Engineering for Transportation Projects: American Society of Civil Engineers, *Proceedings of Geo-Trans*, held in Los Angeles in July 2004; ASCE Geotechnical Special Publication 126, p. 851–859.
- Wills, Chris J., and McCrink, Timothy P., 2002, Comparing landslide inventories: the map depends on the method: *Environmental & Engineering Geoscience*, AEG–GSA, vol. 8, no. 4, November 2002 issue, p. 279–293.
- Wyllie, Duncan C., and Mah, Christopher W., 2004, Rock slope engineering, 4th edition: Spon Press, a division of Taylor & Francis Publishers, 431 p. *This new fourth edition is based on the third edition by Hoek & Bray (1981). This textbook has direct application to rock slopes on the margins of Moreno Valley.*

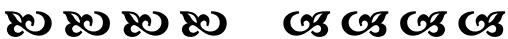


Seismic Safety, Land-Use Planning, and Building Codes

- ★ California Department of Water Resources, 2003, Guidebook for implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land-use planning: CDWR, 130 p. www.owue.water.ca.gov
The City of Moreno Valley must comply with the new requirements of Senate Bills 201 and 610 so that adequate water supplies are *demonstrated* prior to zoning and development.
- ★ California Geological Survey, 1997, *Guidelines for evaluating and mitigating seismic hazards in California*: California Geological Survey, Special Publication 117, 74 p., 7 chapters, Appendix A, B, C, and D. (*Appendix A includes the full text of the Seismic Hazards Mapping Act of 1990*) SP-117 is downloadable from the CGS website: < www.conservation.ca.gov/cgs >
SP-117 has been officially adopted by both the California Board of Geologists and Geophysicists and the California State Mining & Geology Board, so the criteria have legal president; consulting engineering geologists that perform work in Moreno Valley must meet minimum criteria outlined in SP-117.
- California Geological Survey, 1998, Maps of known active fault near-source zones in California and adjacent portions of Nevada: International Conference of Building Officials, Whittier, California, 11 × 17 atlas format.
- California Geological Survey, 1999, *Recommended criteria for delineating Seismic Hazards Zones in California*: California Geological Survey, Special Publication 118, 12 p.
- California Seismic Safety Commission, 1998, The commercial property owner's guide to earthquake safety: SSC Publication 98-01, 40 p. CSSC, 1755 Creekside Oaks Drive, Suite 100, Sacramento, CA 95833, ☎ 916-263-5505. *download from* www.seismic.ca.gov
- California Seismic Safety Commission, 2002, The homeowner's guide to earthquake safety: SSC Publication 2002-01, 30 p. CSSC, 1755 Creekside Oaks Drive, Suite 100, Sacramento, CA 95833, ☎ 916-263-5505. *download from* www.seismic.ca.gov
This practical and useful booklet is highly recommended for residents of Moreno Valley.
- California Seismic Safety Commission, 2004, A safer, more resilient California — the state plan for earthquake research: SSC Publication 2004-03, 11 p. CSSC, 1755 Creekside Oaks Drive, Suite 100, Sacramento, CA 95833, ☎ 916-263-5505. *download from* www.seismic.ca.gov

- California Seismic Safety Commission, 2004, Seismic safety in California's schools: SSC Publication 04-04, 15 p. CSSC, 1755 Creekside Oaks Drive, Suite 100, Sacramento, CA 95833, ☎ 916-263-5505. *download from* www.seismic.ca.gov
- Cao, Tianqing, Bryant, William A., Rowshandel, B., Branum, David, and Wills, Christopher J., 2003, The revised 2002 California probabilistic seismic hazards maps: California Geological Survey, posted as .pdf on CGS website, June 2003: www.conservation.ca.gov/cgs/rghm/psha
- ◆ Report, 11 p., with Appendix A (Type A, B, C faults):
 - ◆ Table of Type A Faults, 2 p.
 - ◆ Table of Type B Faults, 15 p.
 - ◆ Table of Type C Faults (= area sources), 1 p.
 - ◆ References for 2002 California Fault Parameters, 9 p. *This is the new 2002 statewide seismotectonic model used in probabilistic seismic hazard analysis by the California Geological Survey. CCR Title 24 projects (hospitals and schools) will be measured and evaluated against this PSHA model and its fault data—base that reflects a broad consensus of the seismology and engineering geology profession. This report updates and supersedes Petersen and others, CGS Open-File Report 96-08, which was the 1996 statewide consensus model. CGS OFR 96-08 contains 33 pages of text that remains as a pertinent explanation of PSHA methodology for California. The notable upgrade from 1996 to 2002 is the revised database of seismogenic faults (particularly slip-rates, Mmax, recurrence intervals, and fault segmentation).*
- Curtin, Daniel J., and Talbert, Cecily T., 2004, Curtin's California land use and planning law, 24th edition: Solano Press, 22 chap.
- Dewberry, S.O., editor, 2002, Land development handbook, 2nd edition: McGraw-Hill Publishing Co., 1,124 p., 700 illustrations (*a ten-year effort by two dozen specialists resulted in a comprehensive handbook on development*)
- Fulton, William, 2003, Guide to California planning, 2nd edition: Solano Press, 23 chap., 375 p.
- GeoScience World, 2005, A comprehensive Internet resource for research and communications in the geosciences, built on an aggregation of 30 peer-reviewed journals indexed, linked, and inter-operable with GeoRef debuted in February 2005 www.geoscienceworld.org
- Governor's Office of Planning and Research, 2004, CEQA, California Environmental Quality Act Statutes and Guidelines: OPR, 1400 Tenth Street, Sacramento, CA 95814, ☎ 916-322-4245 < www.opr.gov > PRC §§15000 — 15387
- Hart, Earl W., and Bryant, William A., 1997, Fault-rupture hazard zones in California: California Geological Survey, Special Publication 42, 1997 edition with 1999 supplements, 38 p. *The active San Jacinto Fault has been legally zoned under the Alquist-Priolo Earthquake Fault Zoning Act. SP-42 is the definitive official CGS publication to cite. Do not confuse this with the Seismic Hazards Zoning Act (landslides and liquefaction).*
- Jones, Lucile M., 2004, Putting down roots in earthquake country, second edition: Southern California Earthquake Center, 30 p. (*An excellent color booklet for the public in earthquake safety written by a USGS seismologist. Available from SCEC at 213-740-5843 or visit homepage at* www.scec.org)
- Martin, G.R., and Lew, M., editors, 1999, Recommended procedures for implementation of CDMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California: Southern California Earthquake Center, 63 pages, ☎ 213-740-5843 or homepages: www.scec.org or www.conservation.ca.gov/cgs
- Real, Charles R., 1998, Reducing future earthquake losses in California – action begins with knowing where the problems are: *California Geology*, vol. 51, no. 2, March/April 1998 issue, p. 10–14. (*explains the Seismic Hazards Mapping Act of 1990*)
- Real, Charles R., 2002, California's Seismic Hazards Mapping Act – geoscience and public policy, in Bobrowsky, Peter T., editor, *Geoenvironmental mapping – methods, theory, and practice*: A.A. Balkema Publishers, p. 93–120.
- Smith, Theodore C., and McKamey, Bea, 2000, Summary of outreach activities for California's Seismic Hazards Mapping Program: California Geological Survey, Special Publication 121, 38 p. *Contains five appendixes of brochures, fliers, and notices that were used in the CGS outreach program of the California Geological Survey to cities.*
- Stern, Paul C., and Fineberg, H.V., editors, and 17 members of the Committee on Risk Characterization, 1996, Understanding risk – informed decisions in a democratic society: National Academy Press, 249 p. (*contains definitions of risk terminology from the authoritative National Academy of Sciences*)
- Sydnor, Robert H., 2004, Checklist for the review of engineering geology and seismology reports for California public schools, hospitals, and essential services buildings: California Geological Survey Note 48, two pages, dated January 1, 2004. *Available on-line at:* www.conservation.ca.gov/cgs/information/publications/cgs_notes/

- Sydnor, Robert H., 2005, Engineering geology and seismology for public schools and hospitals in California: California Geological Survey, 303 p., 4 MB .pdf edition dated May 14, 2005. (*explains and accompanies Note 48 checklist listed below*)
- ★ Topozada, T.R., Borchardt, G., Hallstrom, C., Johnson, C., Per, R., and Lagario, H. 1993, Planning scenario for a major earthquake on the San Jacinto fault, Riverside and San Bernardino Counties, California: California Geological Survey, Special Publication 102, 219 p. *An essential reference for seismic safety planning in Moreno Valley.*
- Yeats, Robert S., 2001, Living with earthquakes in California: Oregon State University Press, 406 p. *Recommended for citizens of Moreno Valley for background information in seismic safety.*
- Yeats, Robert S., and Gath, Eldon M., 2004, The role of geology in seismic hazard mitigation, chapter 3, in Bozorgnia, Y., and Bertero, V.V., editors, Earthquake Engineering: CRC Press, a division of Taylor & Francis Publishers, 952 p.
< www.crcpress.com >
- Freeman, T.J., Driscoll, R.M.C., and Littlejohn, G.S., 2003, Has your house got cracks? – a homeowner’s guide to subsidence and heave damage, 2nd edition: American Society of Civil Engineers & Thomas Telford, Ltd., 128 p. www.asce.org *This is written as a practical guide for homeowners, but may also be a collateral reference for schools and hospitals — for communicating to the superintendent or owner regarding expansive soils and subsidence.*
- Handy, Richard L., 1995, The day the house fell — homeowner soil problems from landslides to expansive clays and wet basements: American Society of Civil Engineers, ASCE Press, 230 p.
- ★ Jones, Lucile M., 2004, Putting down roots in earthquake country, second edition: Southern California Earthquake Center, 30 p. (*An excellent color booklet for the public in earthquake safety written by a USGS seismologist. Available from SCEC at 213-740-5843 or visit homepage at www.scec.org*)
- Nelson, John D., and Miller, Deborah J., 1997, Expansive soils, 2nd edition: problems and practice in foundation engineering and pavement engineering: John Wiley & Sons, Inc., 288 p.
- St. John, D.A., Poole, A.B., and Sims, I., 1998, Concrete petrography: a handbook of investigative techniques: John Wiley & Sons, Inc., 474 p.
- Yeats, Robert S., 2001, Living with earthquakes in California: Oregon State University Press, 406 p. *Recommended for citizens of Moreno Valley for background information in seismic safety*



Homeowner Information

*regarding Seismic Safety & Foundation Problems
for Residents of the City of Moreno Valley*

- Audel, Harry S., 2004, Field guide to crack patterns in buildings — a guide to residential building cracks caused by geologic hazards: Association of Engineering Geologists, Special Publication 16.
- Boone, S.J., 1996, Ground-movement-related building damage: *Journal of Geotechnical Engineering*, American Society of Civil Engineers, vol. 122, no. 11, November 1996, p. 886-896 and vol. 124, p. 462-465.
- California Seismic Safety Commission, 2002, The homeowner’s guide to earthquake safety: SSC Publication 2002-01, 30 p. CSSC, 1755 Creekside Oaks Drive, Suite 100, Sacramento, CA 95833, ☎ 916-263-5505. *download from* www.seismic.ca.gov *This practical and useful booklet is highly recommended for residents of Moreno Valley.*



Seismology & Earthquake Engineering

- Bent, Alison L., and Helmberger, Donald V., 1991, A re-examination of historic earthquakes in the San Jacinto Fault zone, California: *Bulletin of the Seismological Society of America*, vol. 81, no. 6, p. 2289 — 2309.
- Bolt, Bruce A., 1999, Earthquakes, 4th edition: W.H. Freeman & Company, New York, 366 pages.
- Bolt, Bruce A., 2001, The nature of earthquake ground motion, in Naeim, F., editor, The seismic design handbook, 2nd edition: Kluwer Academic Publishers, p. 1-45.

- Bolt, Bruce A., and Abrahamson, Norman A., 2003, Estimation of strong seismic ground motions, Chapter 59 in Lee, William H.K., Kanamori, Hiroo, Jennings, Paul C., and Kisslinger, Carl, *editors*, International handbook of earthquake and engineering seismology: Academic Press, a division of Elsevier: vol. 81–B, June 2003, p. 983–1001.
- California Geological Survey, 1998, Maps of known active fault near-source zones in California and adjacent portions of Nevada: International Conference of Building Officials, Whittier, California, 11 × 17 atlas format.
- California Geological Survey, 1999, *Recommended criteria for delineating Seismic Hazards Zones in California*: California Geological Survey, Special Publication 118, 12 p.
- Campbell, Kenneth W., 1983, Bayesian analysis of extreme earthquake occurrences, Part II, Application to the San Jacinto Fault zone of southern California: *Bulletin of the Seismological Society of America*, vol. 73, no. 4, p. 1099-1115.
- Cao, Tianqing, Bryant, William A., Rowshandel, B., Branum, David, and Wills, Christopher J., 2003, The revised 2002 California probabilistic seismic hazards maps: California Geological Survey, posted as .pdf on CGS website, June 2003: www.conservation.ca.gov/cgs/rghm/psha
- ◆ Report, 11 p., with Appendix A (Type A, B, C faults):
 - ◆ Table of Type A Faults, 2 p.
 - ◆ Table of Type B Faults, 15 p.
 - ◆ Table of Type C Faults (= area sources), 1 p.
 - ◆ References for 2002 California Fault Parameters, 9 p.
- This is the new 2002 statewide seismotectonic model used in probabilistic seismic hazard analysis by the California Geological Survey. CCR Title 24 projects (hospitals and schools) will be measured and evaluated against this PSHA model and its fault data—base that reflects a broad consensus of the seismology and engineering geology profession. This report updates and supersedes Petersen and others, CGS Open-File Report 96–08, which was the 1996 statewide consensus model. CGS OFR 96–08 contains 33 pages of text that remains as a pertinent explanation of PSHA methodology for California. The notable upgrade from 1996 to 2002 is the revised database of seismogenic faults (particularly slip-rates, Mmax, recurrence intervals, and fault segmentation).*
- Doser, Diane I., 1992, Historic earthquakes (1918 to 1923) and an assessment of source parameters along the San Jacinto Fault system: *Bulletin of the Seismological Society of America*, vol. 82, no. 4, p. 1786 — 1801.
- Frankel, Arthur D., 1999, How does the ground shake? — perspectives in earthquake ground motion: *Science*, v. 283, p. 2032–2033, March 26, 1999 issue. *An excellent concise paper by a USGS seismologist on the nature of earthquake ground-motion.*
- Hamburger, Ronald O., 2003, Building code provisions for seismic resistance, in Chen, W.F., and Scawthorn, C., *editors*, Earthquake Engineering Handbook: CRC Press, a division of Taylor & Francis Publishers, chap. 11, p. 11–1 to 11–28.
- ★Jordan, Thomas H., *chairman*, Beroza, Gregory, Cornell, C. Allin, Crouse, C.B, Dieterich, James, Frankel, Arthur, Jackson, David D., Johnston, A., Kanamori, H., Langer, James, McNutt, Marcia, Rice, James R., Romanowicz, Barbara A., Sieh, Kerry E., and Somerville, Paul G, 2003, Living on an active Earth: perspectives on earthquake science: National Academy of Sciences, National Academy Press, 418 p. *This is an authoritative and comprehensive treatise in seismology by a blue-ribbon panel of seismologists, including Professor Kerry E. Sieh of Caltech, who is an alumnus of the University of California, Riverside.*
- McGuire, Robin K., 2004, Seismic hazard and risk analysis: Earthquake Engineering Research Institute, EERI Monograph No. 10, 240 p. *This monograph explains probabilistic seismic hazard analysis and strong-motion seismology.* www.eeri.org
- Milsom, John, 2003, Field geophysics, 3rd edition: John Wiley & Sons, 244 p.
- Mori, James J., 1993, Fault plane determinations for three small earthquakes along the San Jacinto Fault, California; search for cross faults: *AGU Journal of Geophysical Research*, vol. 98, no. 10, p. 17,711 — 17,722.
- Petersen, Mark D., Beeby, D.J., Bryant, W.A., Cao, C., Cramer, C.H., Davis, J.F., Reichle, M., Saucedo, G., Tan, S., Taylor, G., Topozada, T., Treiman, J., and Wills, C.J., 1999, Seismic shaking hazard maps of California: California Geological Survey, Map Sheet 48, published July 1, 1999, approximate scale = 1:2,127,600 www.conservation.ca.gov/cgs
- Reiter, Leon, 1990, Earthquake hazard analysis: Columbia University Press, 254 pages.
- Sieh, Kerry E., 1996, The repetition of large-earthquake ruptures, in Knopoff, L., Aki, K., Allen, C.R., Rice, J.R., and Sykes, L.R., *convenors*, Earthquake Prediction — the scientific challenge: *Proceedings of the National Academy of Sciences*, v. 93, p. 3764-3771, April 1996.

- Somerville, Paul G., and Moriwaki, Yoshiharu, 2003, Seismic hazards and risk assessment in engineering practice, Chapter 65 in Lee, William H.K., Kanamori, Hiroo, Jennings, Paul C., and Kisslinger, Carl, *editors*, International handbook of earthquake and engineering seismology: Academic Press, a division of Elsevier: vol. 81–B, June 2003, p. 1065–1095.
- Stewart, Jonathan P., Chiou, S.J., Bray, Jonathan D., Graves, Robert W., Somerville, Paul G., and Abrahamson, Norman A., 2001, Ground motion evaluation procedures for performance-based design: University of California, Berkeley; Pacific Earthquake Engineering Research Center, Report PEER 2001–09, 8 chapters, 229 p. *To be published in International Journal of Soil Dynamics and Earthquake Engineering in 2005. A significant new monograph in applied seismology funded by NSF written by an interdisciplinary California team of 4 seismologists and 3 geotechnical engineers.*
Download pdf from: < <http://peer.berkeley.edu> >
- ★ Toppozada, T.R., Borchardt, G., Hallstrom, C., Johnson, C., Per, R., and Lagario, H. 1993, Planning scenario for a major earthquake on the San Jacinto fault, Riverside and San Bernardino Counties, California: California Geological Survey, Special Publication 102, 219 p. *An essential reference for seismic safety planning in Moreno Valley.*
- Wald, David J., Quitoriano, V., Heaton, Thomas H., and Kanamori, H., 1999, Relationships between peak ground acceleration, peak ground velocity, and Modified Mercalli Intensity in California: EERI *Earthquake Spectra*, v. 15, no. 3, pages 557–564.
- Wallace, Robert E., *editor*, 1990, The San Andreas Fault System, California: U.S. Geological Survey Prof. Paper 1515, 283 pages.
- Weldon, Ray J., Fumal, Thomas E., Biasi, Glenn P., and Scharer, Katherine M., 2005, Past and future earthquakes on the San Andreas Fault: *AAAS Science*, vol. 308, issue #5724, 13 May 2005, p. 966–967.
- Wills, Christopher J., and Silva, Walter, 1998, Shear-wave velocity characteristics of geologic units in California: EERI *Earthquake Spectra*, v. 14, no. 3, August 1998, p. 533–556.
- Yeats, Robert S., 2001, Living with earthquakes in California: Oregon State University Press, 406 p. *Recommended for citizens of Moreno Valley for background information in seismic safety.*
- Yeats, Robert S., and Gath, Eldon M., 2004, The role of geology in seismic hazard mitigation, chapter 3, in Bozorgnia, Y., and Bertero, V.V., *editors*, Earthquake Engineering: CRC Press, a division of Taylor & Francis Publishers, 952 p.
< www.crcpress.com >

- Yeats, Robert S., Sieh, Kerry E., and Allen, Clarence R., 1997, The geology of earthquakes: Oxford University Press, 568 p. (especially Chapter 13, *Seismic Hazard Assessment*, p. 447–472).



Geotechnical Engineering & ASTM tests for earthwork

- ASTM, 2002, *Standards on environmental site characterization, 2nd edition*: American Society for Testing and Materials, 1,827 p., 163 tests methods, practices, guides; available in book format (paper copy, 8½×11 size) or CD-ROM.
< www.astm.org >
- ASTM, 2004, ASTM Standards in Building Codes, 41st edition: American Society for Testing & Materials, International, 4 volume set on one CD-ROM with 1,350 standards that are searchable
< www.astm.org >
- ASTM, 2004, ASTM Standards on soil and rock: Geosynthetics: American Society for Testing & Materials, 508 p. This ASTM volume 4.13, published May 2004, contains 100 standards in geosynthetics formerly printed in vol. 4.09, Soil & Rock II. www.astm.org
- ★ California Department of Water Resources, 2003, Guidebook for implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land-use planning: CDWR, 130 p. www.owue.water.ca.gov
- Coduto, Donald P., 1999, Geotechnical engineering – principles and practice: Prentice–Hall Publishers, 759 p. *Widely used college textbook in geotechnical engineering.*
- Coduto, Donald P., 2001, Foundation design – principles and practices, 2nd edition: Prentice–Hall Publishers, 883 p.
- Gray, Donald H., and Sotir, Robbin B., 1996, Biotechnical and soil bioengineering slope stabilization — a practical guide for erosion control: John Wiley & Sons, Inc., 378 p. *Dr. Gray is professor of geotechnical engineering at the University of Michigan and a pioneer in the use of plants and geosynthetics for erosion control and surficial slope stability. This excellent textbook presents ecologically sound alternatives to conventional reinforced concrete retaining walls.*
- Kramer, Steven L., 1996, Geotechnical earthquake engineering: Prentice–Hall Publishers, 653 p.

- Kramer, Steven L., and Stewart, Jonathan P., 2004, Geotechnical aspects of seismic hazards, chapter 4, in Bozorgnia, Y., and Bertero, V.V., editors, Earthquake Engineering: CRC Press, a division of Taylor & Francis Publishers, 952 p.
< www.crcpress.com >
- Martin, G.R., and Lew, M., editors, 1999, Recommended procedures for implementation of CDMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California: Southern California Earthquake Center, 63 pages, ☎ 213-740-5843 or homepages: www.scec.org or www.conservation.ca.gov/cgs
- Milsom, John, 2003, Field geophysics, 3rd edition: John Wiley & Sons, 244 p.
- Mitchell, James K., and Soga, K., 2005, Fundamentals of soil behavior, 3rd edition: John Wiley & Sons, Inc., 608 p.
- Nelson, John D., and Miller, Deborah J., 1997, Expansive soils, 2nd edition: problems and practice in foundation engineering and pavement engineering: John Wiley & Sons, Inc., 288 p.
- Oriard, Lewis L., 2002, Explosives engineering, construction vibrations, and geotechnology: International Society of Explosives Engineers, 680 p. hardcover, \$88.00 www.isee.org
Lewis Oriard, engineering geologist, is based in Orange County, California. He has over 40 years of experience in engineering geophysics with emphasis on minimizing effects of blasting of basement excavations on adjacent existing structures. Some excavations in granitic rock in the Lakeview Mountains for structural foundations may need specialized blasting techniques outlined in this textbook.
- Seed, Raymond B., Cetin, K.O., Moss, Robb E.S., Kammerer, Ann Marie, Wu, J., Pestana, J.M., Riemer, M.F., Sancio, R.B., Bray, Jonathan D., Kayen, Robert E., and Faris, A., 2003, Recent advances in soil liquefaction engineering — a unified and consistent framework: University of California, Earthquake Engineering Research Center Report 2003–06, 71 p. *Liquefaction analysis within the City of Moreno Valley should be performed in accordance with this milestone paper that was presented to hundreds of geotechnical engineers at the ASCE conference held on The Queen Mary.*
Download 10MB file from:
http://www.ce.berkeley.edu/~kammerer/files/seed_et_al_2003.pdf
- Shanklin, D.W., Rademacher, K.R., and Talbot, J.R., editors, 2000, Construction and controlling compaction of earth fills, ASTM Special Technical Publication STP–1384, 336 p. www.astm.org
- Shlemon, Roy J., 1985, Application of soil–stratigraphic techniques to engineering geology: *Bulletin of the Association of Engineering Geologists*, vol. 22, no 2, p. 129–142.



Lifelines that may be ruptured by the active San Jacinto Fault in eastern Moreno Valley

Natural Gas Transmission — Colorado Aqueduct — Highway 60
Water Mains — Electric Power Pylons — Telecommunications
Fiber Optics Cable — Sewage

The City of Moreno Valley is unusually vulnerable to explosions, fires, and loss of lifelines because a large number of lifelines cross the active San Jacinto Fault on the eastern side of Moreno Valley. New housing tracts and developments on the eastern and northeastern side of Moreno Valley need safe and reliable lifelines that have shut-off valves and minimize the number of active fault crossings. Proper greenbelts for utility corridors, automatic shut-off valves, and structural set-backs of homes from the location of likely fault rupture are recommended. These references will assist with seismic safety planning by the City of Moreno Valley.

- API, 1997, Effects of smooth and rock dents on liquid petroleum pipelines, Phase I and Phase II: API Publication 1156 and 1156-A, 242 pages, American Petroleum Institute, 1220 L St., N.W., Washington, D.C., 20005-4070 www.api.org
- API, 1993, Steel pipeline crossing railroads and highways, 6th edition, April 1993: API Research Publication 1102, 39 pages, \$63.00, American Petroleum Institute, 1220 L St., N.W., Washington, D.C., 20005-4070 www.api.org
- API, 1997, Pressure testing of liquid petroleum pipelines, 4th edition, March 1997: API Research Publication 1110, 13 pages, \$37.00, American Petroleum Institute, 1220 L St., N.W., Washington, D.C., 20005-4070 www.api.org
- API, 1996, Assurance of hazardous liquid pipeline system integrity, 1st edition, August 1996: API Research Publication 1129, 54 pages, \$95.00, American Petroleum Institute, 1220 L St., N.W., Washington, D.C., 20005-4070 www.api.org
- API, 1995, Risk management within the liquid pipeline industry: a report from the Joint Government/Industry Risk Assessment Quality Team, final report, June 1995: API Report D90600, 87 pages, \$5.00, American Petroleum Institute, 1220 L St., N.W., Washington, D.C., 20005-4070 www.api.org *A cooperative joint venture between the Office of Pipeline Safety of the U.S. Department of Transportation and API's General Committee on Pipelines.*
- API, 1996, Development of public awareness programs by hazardous liquid pipeline operators: API Research Report 1123, 2nd edition, August 1996, 9 pages, \$37.00, American Petroleum Institute, 1220 L Street, NW, Washington, D.C., 20005-0470, phone 202-682-8000

- www.api.org
- Ariman, T., and B.J. Lee, 1991, Tension/bending behavior of buried pipelines under large ground deformations in active faults, *in* Cassaro, M.A., *editor*, 1991, *Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4*, pages 226-233.
- ASCE, 1999, Earthquake-actuated automatic gas shutoff devices: American Society of Civil Engineers, ASCE Standard No. ASCE 25-97, 11 pages, \$24.00.
- ASCE, 1998, Pipeline route selection for rural and cross-country pipelines: American Society of Civil Engineers, ASCE Manuals and Reports on Engineering Practice No. 46, 95 pages, \$49.00.
- ASCE, 1996, Pipeline crossings: *ASCE Manuals and Reports on Engineering Practice No. 89*, American Society of Civil Engineers, 140 pages, \$39.00.
www.asce.org
- ASCE, 1983, Seismic response of buried pipes and structural components: American Society of Civil Engineers, 56 pages, \$14.00. www.asce.org
- ASCE, 1984, Guidelines for the seismic design of oil and gas pipeline systems: American Society of Civil Engineers, Reston, Virginia. www.asce.org
- ATC, 1991, Seismic vulnerability and impact of disruption of lifelines in the conterminous United States: Applied Technology Council, Redwood City, California, Report ATC-25, 440 pages, \$60.00;
www.atcouncil.org
- California Joint Legislative Staff, 1998, Aging Pipelines – California’s Forgotten Infrastructure: California Legislature, Task Force on Government Oversight, prepared for Assemblyman Ted Lempert, 13 p.
- Cassaro, Michael A., *editor*, 1991, *Lifeline earthquake engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4*, 1,189 pages. www.asce.org
- Castronovo, Joseph P., and James A. Clark, *editors*, 1998, *Pipelines in the constructed environment: American Society of Civil Engineers*, 810 pages, \$89.00.
- Catalano, Lawrence F., *editor*, 1996, *Pipeline crossings 1996: American Society of Civil Engineers*, 510 pages, \$54.00.
- ★ Clark, J.A., C.H. Lee, and Woodrow U. Savage, 1991, Seismic/geologic risks as factors in prioritizing gas pipeline system replacement, *in* Cassaro, Michael A., *editor*, 1991, *Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4*, p. 206-215.
- ★ CSFM-PSE, 1993, *Hazardous Liquid Pipeline Risk Assessment: California Department of Forestry & Fire Protection, Office of the California State Fire Marshal, Pipeline Safety & Enforcement*, 1131 S Street, Sacramento, CA 94244-2460, ☎ 916-445-8477; Southern Calif. Field Office ☎ 818-337-9999.
- Doeing, Brian J., Williams, David T., and Bradley, Jeffrey B., 1997, Gas pipeline erosion failures: January 1993 floods, Gila River Basin, Arizona, *in* Larson, R.A., and Slosson, J.E., *editors*, *Storm-Induced Geologic Hazards – case histories from the 1992-1993 winter in southern California and Arizona: Geological Society of America, Reviews in Engineering Geology*, vol. 11, p. 25-38.
- FEMA & ASCE, 2001, Seismic fragility formulations for water systems: American Lifelines Alliance, a joint FEMA and ASCE organization; part 1, Guidelines, 96 p.; part 2, Appendices, 101 p. download from: < www.americallifelinesalliance.org >
- FEMA, 1987, Abatement of seismic hazards to lifelines: proceedings of a workshop on development of an action plan, volume 5, papers on gas and liquid fuel lifelines and special workshop presentations: Federal Emergency Management Agency: FEMA Report 139, July 1987, 134 pages, available free from FEMA at (800) 480-2520 or e-mail to: www.fema.gov
- FEMA, 1992, Earthquake resistant construction of gas and liquid fuel pipeline systems serving, or regulated by, the federal government: Federal Emergency Management Agency: numbered as both FEMA Report 233 and NISTIR Report 4795, July 1992, 68 pages, available free from FEMA at (800) 480-2520 or e-mail to: www.fema.gov
- Goetz, Christopher, Brainard, Ray, Carlson, Jill, Cato, Kerry, Holst, Norman, Johnson, Dan, Riley, Don, and Siem, Martin, 1999, Geology of the Eastside Reservoir Project, Riverside County, California, *in* Cranham, Greg T., *editor*, *Water for Southern California – water resources development at the close of the century: San Diego Association of Geologists*, p. 41-56.
- ★ Keaton, Jeffrey R., R.M. Robison, G.H. Beckwith, and D.B. Slemmons, 1991, Philosophy of treatment of high-pressure natural gas pipelines at active fault crossings, *in* Cassaro, Michael A., *editor*, 1991, *Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4*, pages 898-906.
www.asce.org
- Lindell, Michael K., and Perry, Ronald W., 1998, Earthquake impacts and hazard adjustment by acutely hazardous materials facilities following the Northridge Earthquake: *EERI Earthquake Spectra*, v. 14, no. 2, p. 285-299.
- ★ McDonough, Peter W., *editor*, 1995, *Seismic design guide for natural gas distributors: ASCE Technical Council on Lifeline Earthquake Engineering, Monograph No. 9*, 96 pages, \$26.00. www.asce.org
- Ogawa, Y., and Koike, T., 2001, Structural design of buried pipelines for severe earthquakes: *Soil Dynamics & Earthquake Engineering*, vol. 21, p. 199-209.

★ O'Rourke, Michael J., and X. Liu, 1999, Response of Buried Pipelines Subject to Earthquake Effects: Multidisciplinary Center for Earthquake Engineering Research, SUNY Buffalo, New York; MCEER Monograph #3, 249 pages, \$25.00
<http://mceer.eng.buffalo.edu>

O'Rourke, Michael J., *editor*, 1995, Lifeline Earthquake Engineering: American Society of Civil Engineers, Proceedings of the Fourth U.S. Conference, San Francisco, August 1995, 813 pages, \$78.00
www.asce.org

O'Rourke, Thomas D., and William J. Hall, 1991, Seismic behavior and vulnerability of pipelines, in Cassaro, M.A., *editor*, 1991, Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4, p. 761-773
www.asce.org

Perlmulder, S.D., and Ronald T. Eguchi, 1991, Regional risk assessment of environment contamination from oil pipelines, in Cassaro, M. A., *editor*, 1991, Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering, Monograph No. 4, p. 216-225
www.asce.org

Proctor, Richard James, Geologic features of a section across the Casa Loma Fault (a branch of the San Jacinto Fault), exposed in an aqueduct trench near San Jacinto, California: *Bulletin of the Geological Society of America*, vol. 73, no. 10, p. 1293-1295.

Seligson, Hope A., Eguchi, Ronald T., and Tierney, Kathleen J., 1991, A methodology for assessing the risk of hazardous materials release following earthquakes — a demonstration study for the Los Angeles area, in Cassaro, Michael A., *editor*, 1991, Lifeline Earthquake Engineering: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering Monograph No. 4, p. 805-816.
www.asce.org

★ Schiff, Ansel J., *editor*, 1995, Northridge Earthquake: lifeline performance and post-earthquake response: ASCE Technical Council on Lifeline Earthquake Engineering, Monograph No. 8, 340 p., \$39.00.
www.asce.org

★ Taylor, Craig, and VanMarcke, Erik, *editors*, Acceptable risk processes: lifelines and natural hazards: American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering, Monograph 21, 248 p.

TRB, 1988, Pipelines and public safety: Transportation Research Board, National Research Council, TRB Special Report 219.

URS, 2002, Proposed Standard Protocol for Pipeline Risk Analysis: unpublished consulting report (*working draft* dated May 13, 2002) for California Department of Education, School Facilities Planning Division, Sacramento, 6 chapters, appendix A to F.

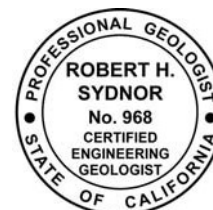
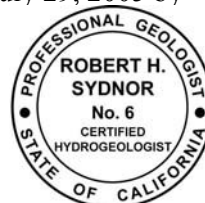
★ Watkins, R.K., and Anderson, Loren R., 2000, Structural Mechanics of Buried Pipes: CRC Press, 464 p.

Wells, Donald L., and Coppersmith, Kevin J., 1994, New empirical relationships among magnitude, rupture length, rupture width, rupture area, and surface displacement: *Bulletin of the Seismological Society of America*, vol. 84, no. 4, August 1994, pages 974-1002.
www.seismosoc.org
This paper is used to calculate fault displacement for the natural gas pipeline for the maximum moment magnitude, M_{max} , of a particular active fault.

Youd, T.Leslie., Hansen, Corbett M., and Bartlett, Steven F., 2002, Revised multilinear regression equations for prediction of lateral spread displacement: *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, vol. 128, no. 12, December 2002 issue, p. 1007-1017.
This paper contains the current formulas used to evaluate lateral spreading during liquefaction with application to displacement of natural gas pipelines.




Compilation on July 29, 2005 by



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Relationships Between Peak Ground Acceleration, Peak Ground Velocity, and Instrumental Intensity

for the City of Moreno Valley, Riverside County

*a summary table prepared July 27, 2005 by the California Geological Survey
for the seismic safety portion of the Safety Element within the General Plan of Moreno Valley*

adapted from a seismology publication by USGS and Caltech seismologists David J. Wald, V. Quintoriano, Thomas H. Heaton, & H. Kanamori published in EERI *Earthquake Spectra*, vol. 15, no. 3, Aug. 1999, p. 557-564; Earthquake Engineering Research Institute < www.eeri.org >

Perceived Shaking	Not Felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
Damage Potential	None	None	None	Very Light	Light	Moderate	Moderate to Heavy	Heavy	Very Heavy
Peak Acceleration (g = gravity)	<0.0017g	0.0017g – 0.014g	0.014g – 0.039g	0.039g – 0.092g	0.092g – 0.18g	0.18g – 0.34g	0.34g – 0.65g	0.65g – 1.24g	> 1.24g
Peak Velocity (cm/sec)	< 0.1	0.1 to 1.1	1.1 to 3.4	3.4 to 8.1	8.1 to 16	16 to 31	31 to 60	60 to 116	>116
Instrumental Intensity	I	II-III	IV	V	VI	VII	VIII	IX Moreno Valley	X

Design-Basis Earthquake Ground Motion for “regular” commercial and residential structures. Defined in 1997 UBC §1627 as 10 percent chance of exceedance in 50 years, with a statistical return period of 475 years.

For Residential and Commercial Buildings Peak Ground Acceleration, **PGA ≈ 0.86g**
Instrumental Intensity ≈ **IX**

Upper-Bound Earthquake Ground Motion for public schools, hospitals, skilled nursing facilities, essential services buildings (police stations, fire stations, city hall, emergency communication centers). Defined in 2001 CBC §1631A.2.6 as 10 percent chance of exceedance in 100 years, with a statistical return period of 949 years.

For Public Schools and Hospitals Peak Ground Acceleration, **PGA ≈ 1.05g**
Instrumental Intensity ≈ **IX**

Moreno Valley is located in **Seismic Zone 4** (reference : 1997 Uniform Bldg Code, Figure 16-2). Ground motion will be highest in sandy alluvium and slightly lower on hills underlain by granitic rock. The earthquake ground-motion shown is calculated alluvial subgrade at the intersection of Alessandro and Redlands Boulevards, near the center of Moreno Valley. Earthquake ground-motion will increase eastward — in the direction toward the active San Jacinto Fault.

Prepared July 27, 2005 under provisions of California Government Code § 65302(g)
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For public information from the state’s geological survey, geologic maps, Alquist-Priolo earthquake fault zone maps, seismic hazards zone maps, landslide maps, mineral resource maps, and geologic reports, telephone **(916) 445-5716**. Please visit our homepage for geologic information, down-loadable maps, and a list of geology publications:
www.conservation.ca.gov/cgs

Spectra Values of Earthquake Ground Motion City of Moreno Valley

Riverside County

33.9175° North Latitude, -117.1566° West Longitude
taken at the corner of Alessandro & Redlands Boulevards

Sunnymead 7½-minute USGS Quadrangle

$\zeta = 5$ percent viscous damping

Seismic Zone 4, so coefficient $Z = 0.4$

Geologic Subgrade from Table 16-J: Type $S_D \approx$ alluvium

Oscillator Period <i>in seconds</i>	Design-Basis Earthquake Ground Motion 10% chance of exceedance in 50 years Statistical Return Period \cong 475 years <i>for Residential & Commercial Buildings</i>	Upper-Bound Earthquake Ground Motion 10% chance of exceedance in 100 years Statistical Return Period \cong 949 years <i>for Hospitals and Public Schools</i>
0.10	1.68g	2.08g
0.15	1.95g	2.42g
0.20	2.05g <i>peak SA</i>	2.56g <i>peak SA</i>
0.30	1.86g	2.32g
0.40	1.64g	2.04g
0.50	1.41g	1.77g
0.75	1.12g	1.32g
1.00	1.05g	1.30g
1.50	0.71g	0.86g
2.00	0.55g	0.65g
Peak Ground Acceleration	0.86g	1.05g

Computed in July 2005 by Robert H. Sydnor, CEG 968, *Senior Engineering Geologist*

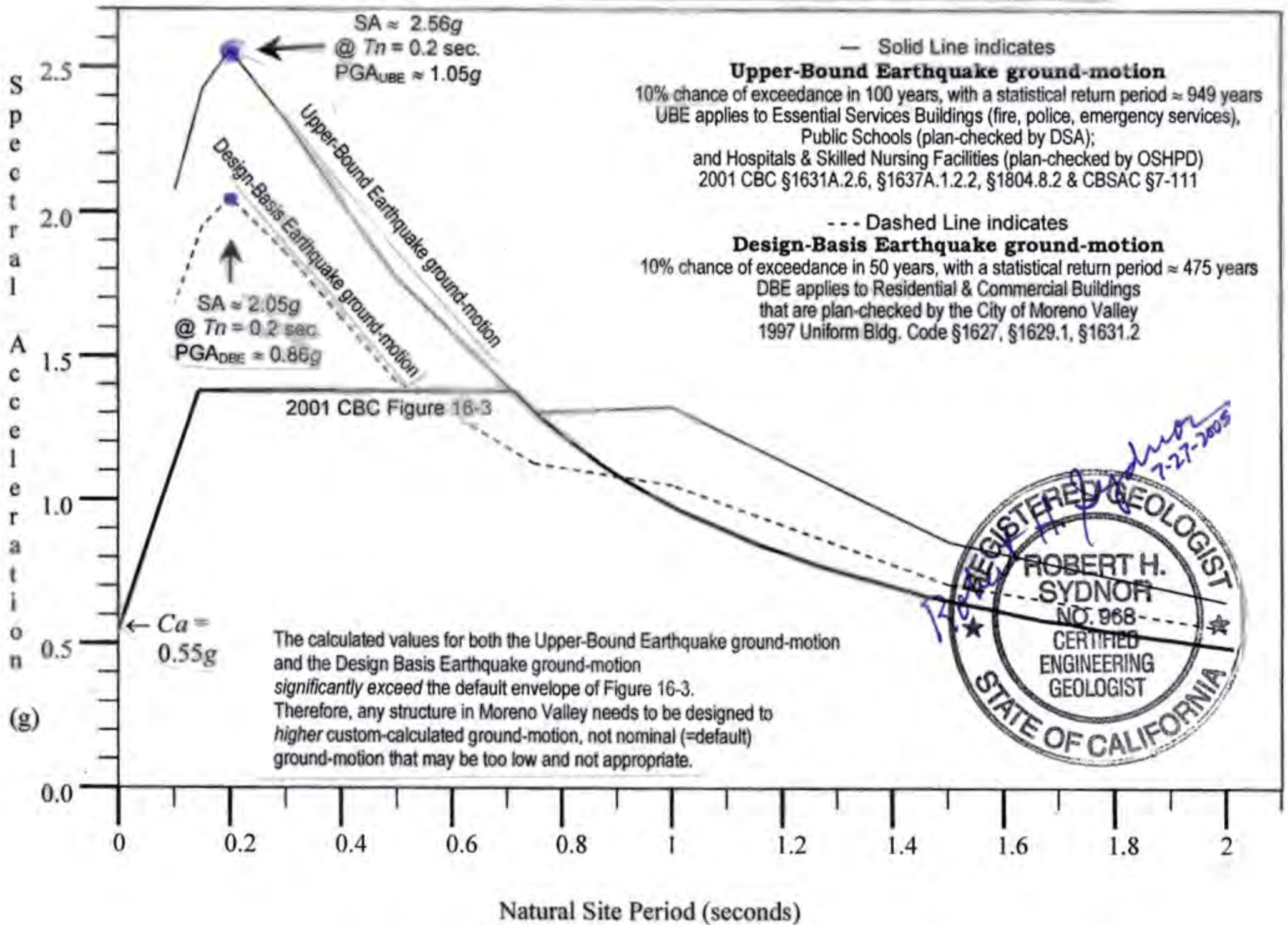
California Geological Survey

using the CGS state-wide seismology model of 2002.

The CGS state-wide model may be downloaded at: < www.conservation.ca.gov/cgs >

Earthquake Ground Motion for the City of Moreno Valley July 2005 Normalized Response Spectra Seismic Zone 4

Site Coordinates: 33.9175°N Latitude and 117.1566° W Longitude
Approximately the intersection of Alessandro Boulevard and Redlands Boulevard,
near the center of the City of Moreno Valley.
Coordinates are from the Sunnymead USGS 7½-minute Quadrangle, Riverside County



Quaternary alluvium of Moreno Valley Geologic Subgrade Type S_D, stiff soil

2001 CBC Site Class S_D geologic subgrade is defined in Code as
Shear-Wave Velocity, $V_s = 180$ to 360 meters/second or 590 to 1181 feet/second for upper 30 meters.
Reference: 2001 CBC Table 16A-J and §1636A.

Prepared July 27, 2005 in cooperation with the City of Moreno Valley
by Robert H. Sydnor, RG 3267, CHG 6, CPG 4496, CEG 968, Senior Engineering Geologist

California Geological Survey

www.conservation.ca.gov/cgs
using the 2002 CGS state-wide ground-motion model
with $\zeta = 5$ percent viscous damping for spectral acceleration

John C. Terell, Planning Official
City of Moreno Valley
Community and Economic Development Department
14177 Frederick Street
PO Box 88005
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Email: johnt@moval.org

March. 25, 2012

Re: Notice of Preparation of a Draft Environmental Impact Report – World Logistics Center Specific Plan

Dear Mr. John C. Terell:

I have been a resident of Moreno Valley since 1985 and a Geology professor at U.C. Riverside since 1984, concerned with geologic and seismic hazards in the Inland Empire. The following are my comments on the NOP for the World Logistics Center Specific Plan.

CEQA Requirements

Considering the regional size and scope of the proposed project, and the major impacts that it will have on the western part of the Inland Empire, a short 30-day notification and comment period on the Notice of Preparation for this project is insufficient to allow informed public review and input.

Geological and Seismic Hazards

Seismic, liquefaction, subsidence and flood hazards in the project area will have significant impacts and must be evaluated and mitigated in the project EIR. These evaluations must go beyond simple compilations of state Alquist-Priolo zone maps for seismic hazards and simple compilations of the FEMA flood zone maps, many of which are more than a decade out of date. More recent literature data must be incorporated.

Public health and safety, especially with regard to the planned construction of infrastructure, cannot be achieved (mitigated to a reasonable level) by hazard maps that are incomplete, inaccurate and seriously out of date. Scientific advances in our knowledge of geotechnical hazards occur quickly, and the information in the EIR must be kept up to date with such advances.

Alquist-Priolo guidelines and legislation require that plans by lead agencies include sufficient analysis based not only on the existing hazard map zones, but also on all other relevant published information on faults and hazards inside and *outside* of those map zones. This is because many recent deadly seismic events have occurred on faults that were not yet officially zoned by the state, or were not recognized to be active (Hart, 1992). The recent Landers, Northridge, Hector Mine and Napa Valley earthquakes are good examples.

Specific geologic hazards that should be evaluated and mitigated are:

- 1) seismic shaking and liquefaction/collapse potential in relation to uniform building codes.
- 2) seismic slumping and ground rupture potential caused by proximity to the active San Andreas, Casa Loma, San Jacinto, and Farm Road faults.
- 3) landslides and slow-motion creep related to active faulting along the project's boundary.

- 4) rupture-induced explosion and fire potential for two major regional natural gas pipelines that cross active faults within or adjacent to the project (see attachment from Topozada et al., 1993).
- 5) any other hazards identified by the state's existing emergency response plan for a major earthquake on the San Jacinto fault in the inland empire.
- 6) flooding, inundation, and hydrocompaction resulting from the increase in the area of Mystic Lake since 1938 and the projection of its areal extent to 2023 (see attachment from Morton et al., 2006).

The following publications address these hazards, and must be evaluated with sufficient analysis and mitigation in the project DEIR:

FEMA, 2007, HAZUS: Guide to Using HAZUS for Mitigation.
http://www.fema.gov/plan/prevent/hazus/dl_hazmit.shtm

FEMA, 2007, HAZUS: Flood Information Tool (FIT).
http://www.fema.gov/plan/prevent/hazus/hz_fit.shtm

Hart, E.W., 1992, Fault-rupture hazard zones in California; Calif. Div. Mines and Geol., Special Publ. 42, 32 pp.

Morton, D.M., 1977, Surface deformation in part of the San Jacinto Valley, southern California; Jour. Research U. S. Geological Survey, Vol. 5, No. 1, p. 117-124.

Morton, D.M., Matti, J.C., 1993, Extension and contraction within an evolving divergent strike-slip fault complex: the San Andreas and San Jacinto fault zones at their convergence in southern California; Memoir Geol Soc. America, 178, p. 217-230.

Morton, D.M., and Miller, F. K., 2006, Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California; USGS Open File Report 1271, 2006,
<http://pubs.usgs.gov/of/2006/1217/>

Morton, D.M. et al., 2006, Historic lake levels of Mystic Lake and a projection of where the lake level (closed depression) is predicted to be in 2023 http://pubs.usgs.gov/of/2006/1217/of2006-1217_map/of2006-1217_fig5.pdf

Morton, D.M., and Sadler, P.M., 1989; Landslides flanking the northeastern Penninsular Ranges and in the San Gorgonio Pass area of southern California; in Sadler, P.M., and Morton, D.M. (Eds.) Landslides in a Semi-Arid Environment; Inland Geological Society Publ., Vol. 2, p 338-355.

Park, S.K. et al. 1995, Delineation of intrabasin structure in a dilational jog of the San Jacinto fault zone, southern California; Jour. Geophysical Research, Vol. 100, No. BA, p. 691-702.

Topozada, T.R., et al., 1993, Planning scenario for a major earthquake on the San Jacinto fault in the San Bernardino area; Calif. Dept. of Conservation, Div. of Mines and Geology, Special Publ. 102, 250 pp.

U. S. Geological Survey, 2007, USGS/CGS Probabilistic Seismic Hazards Assessment (PSHA) Model online at: <http://www.conservation.ca.gov/cgs/rghm/pshamap/pshamain.html>

Working Group on California Earthquake Probabilities (WGCEP), 2007, Uniform California Earthquake Rupture Forecasts (UCERFs); <http://www.wgcep.org/>

Thank you for considering my comments on the NOP for the World Logistics Center Specific Plan.

I ask that these comments be incorporated into the public record for review of this NOP and EIR, and hereby incorporate all references cited (and their contained references) into the review process for this EIR.

I also ask that I be kept informed in writing of all notices, documents, meetings and actions regarding this NOP, EIR and Project, at the address listed below.

Sincerely,

Michael A. McKibben, Ph.D.
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Moreno Valley, CA 92557

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M. A. McRIBBEN

SPECIAL PUBLICATION 102

**PLANNING SCENARIO
FOR A MAJOR EARTHQUAKE
ON THE SAN JACINTO FAULT IN THE SAN BERNARDINO AREA**

By

**CALIFORNIA DEPARTMENT OF CONSERVATION
DIVISION OF MINES AND GEOLOGY**

Tousson R. Topozada, Glenn Borchardt, and Claudia L. Hallstrom

CONSULTANTS

Carl B. Johnson, Per Ron, and Henry J. Lagorio

1993

California Department of Conservation
Division of Mines and Geology
801 K Street, MS 12-30
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Seismic Considerations

The primary impact on natural gas facilities will be the widespread damage to transmission and distribution system pipelines resulting from surface rupture along the fault zone. Displacements averaging 3 feet across the fault zone will cause numerous breaks in mains, valves, and service connections. Secondary ground failures resulting from liquefaction will result in many additional breaks in the system. Fires will occur due to broken gas mains and service connections.

The gas supply west of the fault zone will be interrupted wherever large diameter transmission pipelines are damaged by fault offset. Elsewhere, the gas transmission and distribution system is vulnerable to damage from landslides and liquefaction.

Major gas transmission lines (diameter > 16 inches) cross the fault zone at four locations, as shown on Map G:

1. Lytle Canyon (G4)
2. Lytle Canyon (G5)
3. Allesandro Boulevard (G14)
4. San Jacinto Valley (G16)

Breaks and leaks will occur in the distribution system throughout the planning area, particularly in the zone of fault rupture and in areas of liquefaction. The areas of potential liquefaction are in Cajon Canyon, along the Santa Ana River, and in San Bernardino on the northeast side of the fault.

According to SoCal Gas Company, vulnerability to damage from ground shaking has been reduced within the distribution system since the 1971 San Fernando earthquake (M6.4). This improvement is largely due to replacement of steel pipe (and, in some instances, cast iron pipe) with medium density polyethylene plastic pipe having ductile properties that resist damage from earth movements. About 90 percent of all pipe replacements of 4-inch diameter and less are made with

EARTHQUAKE PLANNING SCENARIO

DEPARTMENT OF
CONSERVATION



Division of
Mines and Geology

FOR A MAJOR EARTHQUAKE ON THE
SAN JACINTO FAULT ZONE IN
SOUTHERN CALIFORNIA



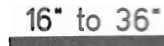
NATURAL GAS FACILITIES

1993

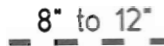
EXPLANATION



Location of assessment
(see text for details)



Major Transmission Pipeline

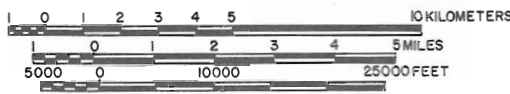


Major Distribution Trunk Line



Power Plant (capacity in megawatts, Mw)

SCALE 1:200000



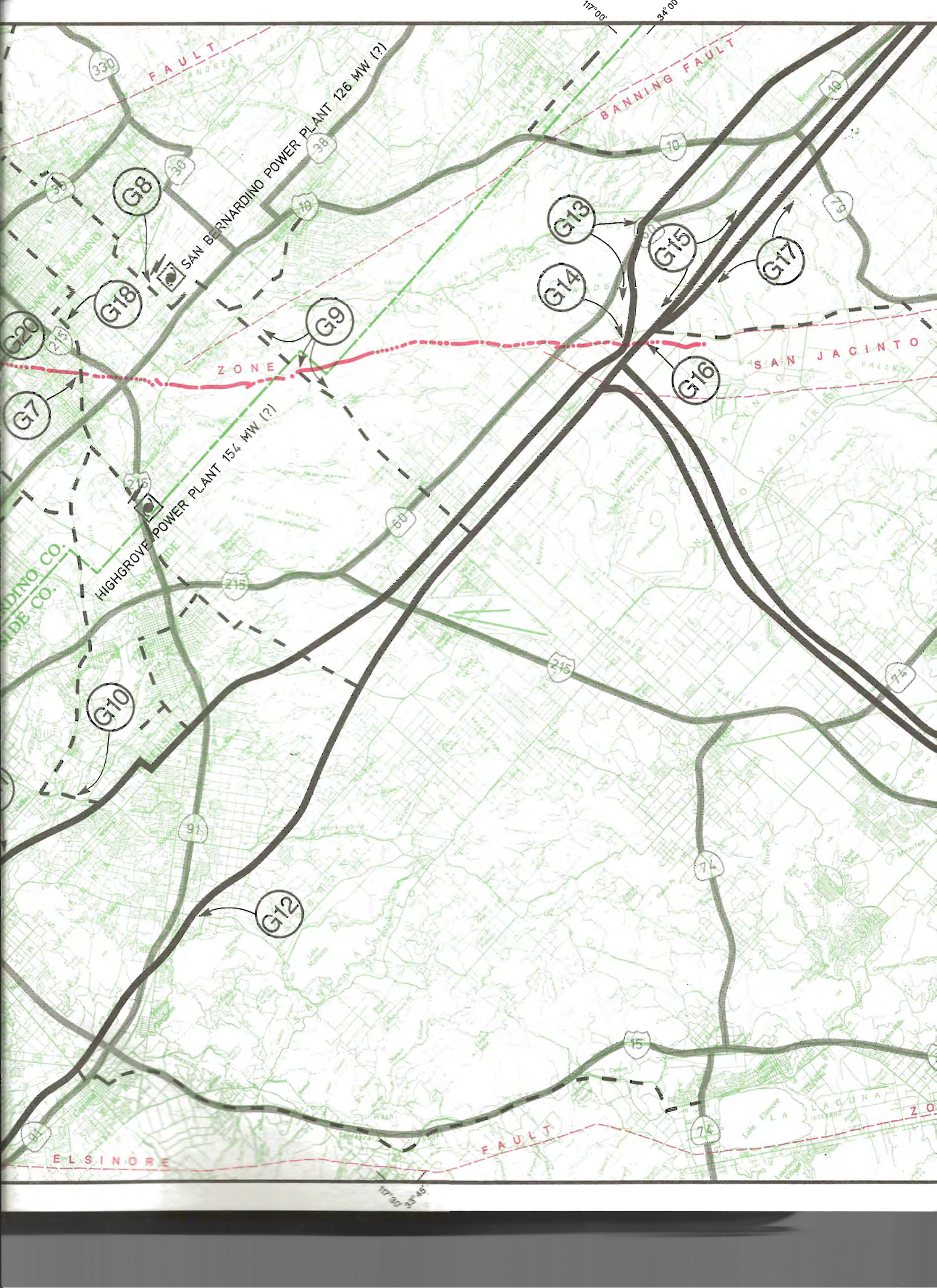
Scenario Fault Segment



Planning Area

SCENARIO MAPS AND DAMAGE ASSESSMENTS ARE INTENDED FOR EMERGENCY PLANNING PURPOSES ONLY

- THEY ARE BASED UPON THE FOLLOWING HYPOTHETICAL CHAIN OF EVENTS:
 1. A PARTICULAR EARTHQUAKE OCCURS
 2. VARIOUS LOCALITIES IN THE PLANNING AREA EXPERIENCE A SPECIFIC TYPE OF SHAKING OR GROUND FAILURE
 3. CERTAIN CRITICAL FACILITIES UNDERGO DAMAGE AND OTHERS DO NOT
- THE CONCLUSIONS REGARDING THE PERFORMANCE OF FACILITIES ARE HYPOTHETICAL AND NOT TO BE CONSTRUED AS SITE-SPECIFIC ENGINEERING EVALUATIONS. FOR THE MOST PART, DAMAGE ASSESSMENTS ARE STRONGLY INFLUENCED BY THE SEISMIC INTENSITY DISTRIBUTION MAP DEVELOPED FOR THIS PARTICULAR SCENARIO EARTHQUAKE. THERE IS DISAGREEMENT AMONG INVESTIGATORS AS TO THE MOST REALISTIC MODEL FOR PREDICTING SEISMIC INTENSITY DISTRIBUTION. NONE HAVE BEEN FULLY TESTED AND EACH WOULD YIELD A DIFFERENT EARTHQUAKE PLANNING SCENARIO. FACILITIES THAT ARE PARTICULARLY SENSITIVE TO EMERGENCY RESPONSE WILL REQUIRE A DETAILED GEOTECHNICAL STUDY.
- THE DAMAGE ASSESSMENTS ARE BASED UPON THIS SPECIFIC SCENARIO. AN EARTHQUAKE OF SIGNIFICANTLY DIFFERENT MAGNITUDE ON THIS OR ANY ONE OF MANY OTHER FAULTS IN THE PLANNING AREA WILL RESULT IN A MARKEDLY DIFFERENT PATTERN OF DAMAGE.



FAULT

BANNING FAULT

SAN BERNARDINO POWER PLANT 126 MW (?)

HIGHGROVE POWER PLANT 154 MW (?)

Z-ONE

SAN JACINTO

G8

G18

G9

G13

G15

G17

G14

G16

G7

G10

G12

ELSINORE

FAULT

Z-ONE

330

38

10

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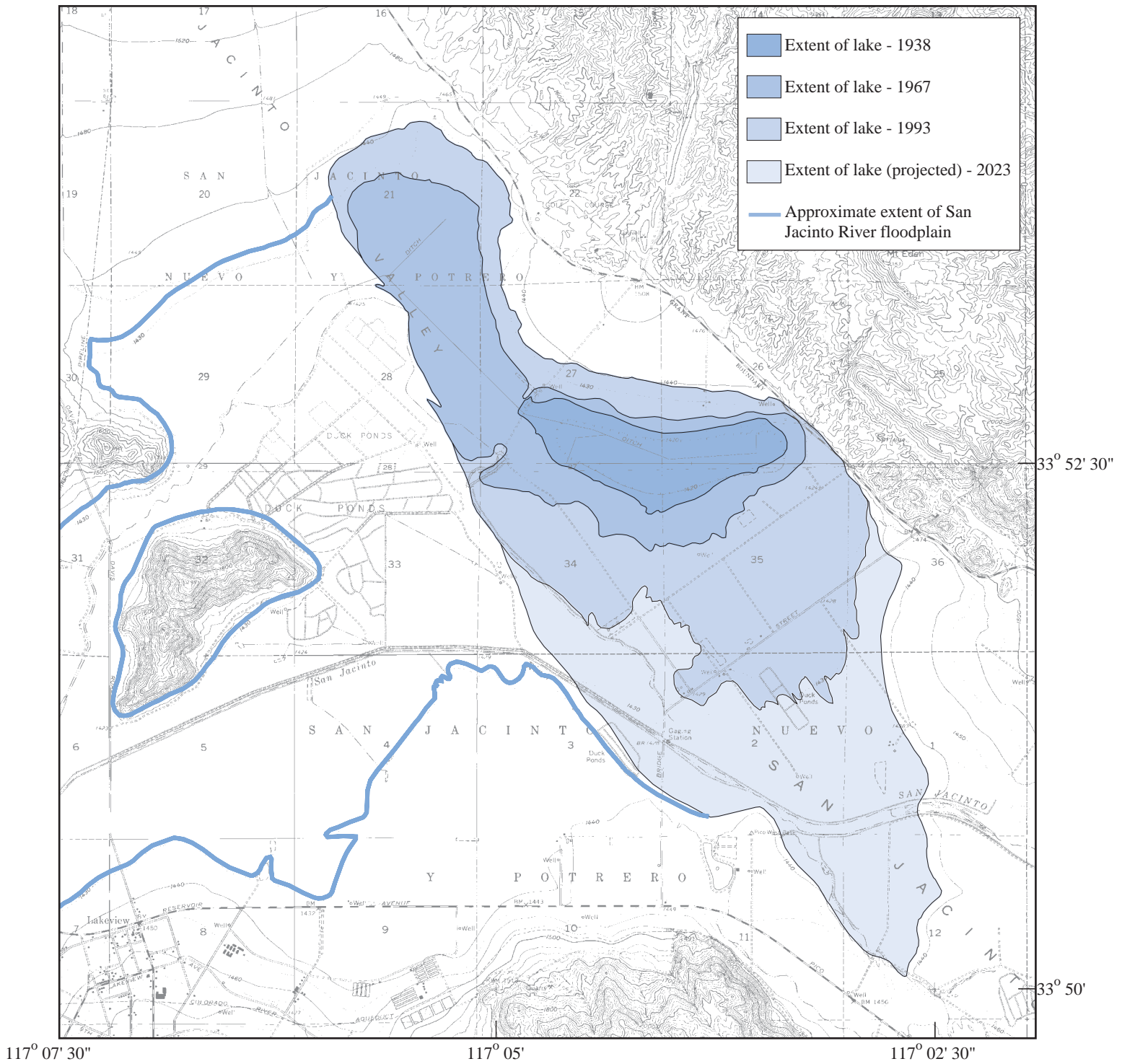
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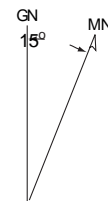
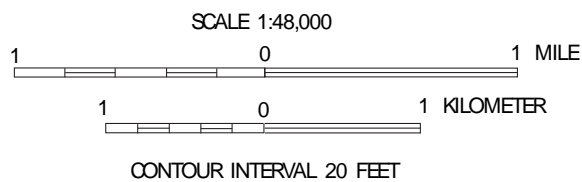
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Figure 5



Base from U.S. Geological Survey
7.5' Lakeview and El Casco quadrangles
UTM projection, Zone 11

Historic Lake Levels of Mystic Lake, Riverside County, California





April 9, 2020

Chris Ormsby, AICP, Senior Planner
Community Development Department
City of Moreno Valley
14177 Frederick St.,
Moreno Valley, CA 92553
chriso@moval.org

Re: NOP Comments on MoVal 2040: Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

Dear Mr. Ormsby:

On behalf of Earthjustice, I submit these comments on the Notice of Preparation for the Program Environmental Impact Report for MoVal 2040: Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan. Please include me on any future notices sent out regarding this project to the following email address: amartinez@earthjustice.org. In addition, mail correspondence can be sent to 707 Wilshire Blvd., Suite 4300, Los Angeles, CA 90017.

Earthjustice appreciates the efforts of the City to prepare a “Climate Action Plan ... that includes a community-wide inventory of [greenhouse gas] GHG emissions and a strategy for reducing them to achieve State mandated targets.” We encourage the City to deviate from the prior approach taken in the World Logistics Center Environmental Impact Report that functionally ignores the need to mitigate the GHG impacts from transportation emissions and energy use. This approach has been emphatically rejected by the California Air Resources Board – the agency responsible for implementing AB 32, California’s GHG reduction law. The comment letter for that project can be found here - https://ww2.arb.ca.gov/sites/default/files/classic//toxics/ttdceqalist/logisticsfeir.pdf?_ga=2.95033119.2095272129.1586469183-1950048288.1564603564

In addition, Earthjustice remains concerned about the air quality impacts of this proposed plan – especially if it heavily relies upon freight developments with inadequate mitigation measures. The City should explore a suite of requirements for zero-emissions equipment both onsite at freight facilities, in addition to requirements for zero-emission trucks to be used at any new facilities. Actions like this by local entities are the only way the region can meet federal and state air quality standards by 2040.

We appreciate your consideration of these comments, and we look forward to working with the South Coast AQMD to actually meet an ozone standard.

Sincerely,

A handwritten signature in black ink that reads "Adriano L. Martinez". The signature is written in a cursive style with a long horizontal flourish extending from the end of the name.

Adriano L. Martinez
Earthjustice



3200 E. Guasti Road Suite 100. Ontario, CA 91761
Phone: (909) 456-1460

Email: jason.ackerman@ackermanlawpc.com

April 9, 2020

VIA E-MAIL TO: CHRISO@MOVAL.ORG

Chris Ormsby, AICP, Senior Planner
Community Development Department,
City of Moreno Valley
14177 Fredrick Street
Moreno Valley, CA 92553

Re: Comments on Notice of Preparation of Programmatic EIR for MoVal
2040: The Moreno Valley Comprehensive General Plan Update,
Housing Element Update, and Climate Action Plan

Dear Mr. Ormsby:

Thank you for the opportunity to comment on the City of Moreno Valley's ("City") Notice of Preparation of Programmatic EIR for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan (collectively, "General Plan Update"). Consistent with section 15083 of Title 14 California Code of Regulations section 15000 *et seq.* (the "State CEQA Guidelines"), these comments are respectfully submitted as part of the City's early public consultation process on behalf of my client Mr. Shizao Zheng. Mr. Zheng owns approximately 33 acres of undeveloped land within the City's boundaries, identified as APN 256-150-001 and 256-150-008. Mr. Zheng intends to develop these parcels consistent with the City's vision for future development. Namely, Mr. Zheng intends to support the City's vision for a sustainable dynamic local economy, foster vibrant gathering places within the community, promote healthy and livable neighborhoods, and enhance a local sense of pride by developing an attractive development at a key gateway to the City.

As reflected in the City's Notice of Preparation, complying with the City's Regional Housing Needs Assessment ("RHNA") allocation is of paramount importance. The City's RHNA allocation for the current cycle is 13,495 units. According to the Department of Housing and Community Development, 97.6% of California cities did not meet their full RHNA goals during the last cycle. As the City is aware, cities that failed to meet their RHNA allocations have already lost land use decisionmaking authority to the State. (See e.g., SB 35-Weiner). Indeed, very

few jurisdictions avoided the mandates of SB 35 and it is likely that State-required mandates will become more expansive if cities fail to meet their future RHNA allocations.

The threat of losing local control is not illusory. Last year the State of California largely occupied the regulatory field for accessory dwelling units (“ADU”). (See AB 68-Weiner). AB 68’s stated purpose, like the purpose of the RHNA allocation and SB 35, is to address affordable housing needs. As the City is aware, AB 68 strips local jurisdictions of the authority to adopt minimum lot size ordinances for ADUs, expands the no-setback rule, and requires ministerial approval of ADU permit applications within 60 days. (See Gov. Code §65852.2.) If cities continually fail to meet their RHNA allocations, they can reasonably expect that AB 68 will serve as a precedent to expand the mandates of SB 35 and the State of California will divest cities of local land use control as it relates to housing in general.

Importantly, it must be noted that the COVID-19 pandemic is putting the City behind the curve with respect to meeting its RHNA allocation. While we do not know the magnitude of the pending market contraction and anticipated recession, we can already see negative impacts. Activity has instantly cooled in project acquisition, residential sales, and capital availability. This does not mean that project entitlements should slow down and, quite the opposite, the City should give high priority to project entitlements so that the City can achieve its RHNA goals. Immediate incentives should be considered to encourage willing projects to move forward.

With these prefatory comments in mind, we submit the following comments:

1. Land Use – The EIR should consider a robust expansion to its housing element. Undeveloped areas should be analyzed consistently with their existing land use and zoning designations, but the City should be forward thinking and consider variable zoning that allows for significantly higher densities. Multi-family developments, especially in hillside communities, present opportunities for aggregated living spaces with large amounts of open space, access to outdoor activities such as the City’s recreational trail system, and attractive and affordable housing opportunities. The EIR should consider significant variable zoning density bonuses for project features that implement the City’s vision, such as percentages of project open space designations, affordability, and age and economic considerations.
2. Transportation/Traffic. The EIR should provide a complete analysis of potential traffic impacts within the City, including the use and expansion of future gateways to the City such as access along Morton/Garnett Road.
3. Utilities and City Services - The EIR should provide a comprehensive analysis of utility needs and impacts to facilitate the proposed land use element of the General Plan Update. Utility and Service coordination is required to facilitate development plans of undeveloped areas within the City.

4. Open Space – The EIR should consider how the City tracks dedicated open space and the General Plan Update should incorporate policies promoting dedication of open-space areas. Use of the City’s trail systems promote healthy lifestyles and recreational activities for the City’s residents. Mitigation such as the development of an open space management plan may be necessary.

One again, we appreciate the opportunity to present these comments to the City and we look forward to continuing to participate in the City planning process for its General Plan Update.

Sincerely,



Jason M. Ackerman
Ackerman Law PC

cc: Ms. Shizao Zheng
Ms. Lin Su



April 9, 2020

Mr. Chris Ormsby
City of Moreno Valley, Community Development Department
14177 Frederick Street, P.O. Box 88005
Moreno Valley, California 92552
Phone: (951) 413-3229
E-mail: chriso@moval.org

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for MoVal 2040: Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan [SCAG NO. IGR10145]

Dear Mr. Ormsby,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for MoVal 2040: Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan ("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 Federal 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 the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (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 SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for MoVal 2040: Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan in Riverside County. The proposed project consists of planning for the approximately 50 square miles (SQ. MI) within the City limits and its approximately 18 SQ. MI Sphere of Influence. This comprehensive update will apply to all elements of the General Plan, and includes the addition of two new Economic and Health Community elements to incorporate strategies for complying with new State law that came into force since the last comprehensive update and addressing emerging trends and new technologies.

When available, please email environmental documentation to au@scag.ca.gov or send to SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang
Manager, Compliance and Performance Monitoring

¹ Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017
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Corridor Agencies**

Energy & Environment
Linda Parks, Ventura County

Transportation
Cheryl Viegas-Walker, El Centro

**COMMENTS ON THE NOTICE OF PREPARATION OF A
DRAFT ENVIRONMENTAL IMPACT REPORT FOR
MOVAL 2040: COMPREHENSIVE GENERAL PLAN UPDATE,
HOUSING ELEMENT UPDATE, AND CLIMATE ACTION PLAN [SCAG NO. IGR10145]**

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

Please note the Draft 2020 RTP/SCS (Connect SoCal) was released for public review on November 14, 2019 until January 24, 2020. The Final Connect SoCal is anticipated to be adopted by SCAG's Regional Council in late April 2020. Please refer to Connect SoCal goals and growth forecast for RTP/SCS consistency for future projects. The Proposed Final Connect SoCal is now available for review here: <https://www.connectsocial.org/Pages/Connect-SoCal-Final-Plan.aspx>.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>). The goals included in the 2016 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 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	<i>Align the plan investments and policies with improving regional economic development and competitiveness</i>
RTP/SCS G2:	<i>Maximize mobility and accessibility for all people and goods in the region</i>
RTP/SCS G3:	<i>Ensure travel safety and reliability for all people and goods in the region</i>
RTP/SCS G4:	<i>Preserve and ensure a sustainable regional transportation system</i>
RTP/SCS G5:	<i>Maximize the productivity of our transportation system</i>
RTP/SCS G6:	<i>Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)</i>
RTP/SCS G7:	<i>Actively encourage and create incentives for energy efficiency, where possible</i>
RTP/SCS G8:	<i>Encourage land use and growth patterns that facilitate transit and active transportation</i>
RTP/SCS G9:	<i>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*</i>
<small>*SCAG does not yet have an agreed-upon security performance measure.</small>	

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 goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS	
Goal	Analysis
RTP/SCS G1: <i>Align the plan investments and policies with improving regional economic development and competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
RTP/SCS G2: <i>Maximize mobility and accessibility for all people and goods in the region</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit <http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf>. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted City of Moreno Valley Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	210,600	250,200	256,600
Households	6,458,000	7,325,000	7,412,300	58,600	71,200	73,000
Employment	8,414,000	9,441,000	9,871,500	55,900	80,200	83,200

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG’s Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: <http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx>). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

Please note the Draft Connect SoCal PEIR was released for public review from December 9, 2019 to January 24, 2020. The Final Connect SoCal PEIR is anticipated to be certified by SCAG's Regional Council in late April 2020. Please refer to the certified Final Connect SoCal PEIR and adopted Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) for future projects. The Proposed Final Connect SoCal PEIR is now available for review here: <https://www.connectsocial.org/Pages/Final-2020-PEIR.aspx>.

**Law Office of Abigail Smith,
A Professional Corporation**

2305 Historic Decatur Road, Suite 100, San Diego, CA 92106

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Telephone: (951) 808-8595
Facsimile: (951) 972-8488

VIA E-MAIL ONLY

April 9, 2020

Chris Ormsby, Senior Planner
Community Development Department
City of Moreno Valley
141777 Frederick Street
Moreno Valley, CA 92553
chriso@moval.org

***Re: Notice of Preparation of Environmental Impact Report—Moreno Valley
Comprehensive General Plan Update 2040***

Dear City of Moreno Valley:

On behalf of the Sierra Club-San Gorgonio Chapter, thank you for the opportunity to comment on the Notice of Preparation (“NOP”) for the Program Environmental Impact Report (“PEIR”) for the MoVal 2040: Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan. This Project proposes a comprehensive update to all elements of the City’s General Plan and the addition of two new elements, Economic Development and Healthy Communities. Our comments below are limited to the information in the NOP which does not include an Initial Study or any draft documents.

The City Should Delay Future Meetings and Deadlines Until City Offices Reopen and the Public Can Safely and Fully Participate in the Planning Process

At the outset we note that the public at the current time is unable to fully engage and participate in the General Plan Update planning process on account of the global pandemic crisis. City offices are currently closed and the public is under mandatory stay-at-home orders. Given the importance of the proposed Project, we strongly urge the City to postpone and delay all deadlines, meetings, and the release of any documents until members of the public can personally participate in this momentous planning effort that will shape Moreno Valley for many years to come. Online meetings are difficult to understand and are inaccessible for many residents who face technology limitations. The holding of online meetings does not permit the same level of meaningful public participation and civic engagement by all residents that this wide-ranging Project warrants.

Land Use Designations: Environmental Justice Considerations

When assigning land use designations pursuant to the General Plan Update, we strongly encourage the City to follow the recommendation of the California Air Resources Board (“CARB”) that any land use designations which permit industrial/warehouse distribution uses should not be located within 1,000 feet of residential uses or areas designated for residential development.¹ Moreno Valley has approved numerous industrial warehouse facilities within close proximity of existing residences in recent years. The future General Plan land use plan should avoid designating land for industrial development of any kind near residential areas to minimize air quality and noise impacts to residents. In addition, appropriate buffers such as retail or commercial uses should separate industrial (or “business park” designations that permit industrial land uses such as warehousing) from residential land use designations and existing residential uses.

Importantly also, the General Plan Update must address and fully incorporate “environmental justice” planning principles in the designation of land uses. According to Gov’t Code Section 65040.12, subd. (e)(1), the term “environmental justice” “means the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” Gov’t Code Section 65040.12 (e)(2)(D) provides that “environmental justice” includes, “[a]t a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.” The General Plan Update must be fully consistent with Senate Bill 1000 and Gov’t Code § 65302 (h)(1) which requires that a general plan include “an environmental justice element... that identifies disadvantaged communities within the area.” The General Plan must specifically: “(A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity; (B) Identify objectives and policies to promote civil engagement in the public decisionmaking process; and (C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.”

Consistent with environmental justice principles, the General Plan shall not assign land uses in a manner so that disadvantaged and low income residential communities are located adjacent to or in proximity of industrial land uses (including any “business park” designations that permit warehousing), freeways, or other major sources of air pollution, noise, and traffic. We encourage the City to consult the Attorney General’s website for

¹ www.arb.ca.gov/ch/handbook.pdf. This hyperlink and all hyperlinks are fully incorporated herein by reference.

information on incorporating environmental justice considerations into the General Plan Update.²

To the extent that the Project will impact disadvantaged communities, all feasible, enforceable mitigation must be proposed to lessen the impact. For instance, the SCAG's 2012-2035 Regional Transportation Plan ("RTP")³ states that "potential mitigation for environmental justice impacts" includes: "*fund proactive measures to improve air quality in neighboring homes, schools and other sensitive receptors*"; "*provide education programs about environmental health impacts to better enable residents to make informed decisions about their health and community*"; and "*engage in proactive measures to train and hire local residents for construction or operation of the project to improve their economic status and access to health care.*" (emphasis added).

Air Quality Impacts: Enforceable Mitigation Is Necessary

The PEIR must propose enforceable mitigation measures that are *required* of site specific implementing projects to aggressively address conformance with applicable air quality standards as well as state legislation and regulations targeting the reduction of Greenhouse Gas Emissions (GHGs). Particular emphasis must be paid to measures to address tail pipe emissions insofar as the majority of harmful air quality emissions and GHGs are attributable to mobile sources. For instance, it is estimated that NOx emissions will need to be reduced by approximately two-thirds by 2023 and three-quarters by 2030 to meet applicable air quality standards.^{4 5} Thus the City must require implementing projects to utilize the cleanest available technologies; and it must require future projects to provide infrastructure to support near-zero and zero emission vehicles and equipment. With respect to future industrial and warehouse uses, all implementing projects should be required through the GP Update to establish fleet efficiency requirements. This should include, at a minimum, requirements that all future commercial and industrial projects shall use exclusively zero emission light and medium-duty delivery trucks and vans, and they shall use only zero emission service equipment such as forklifts. As the State moves toward its goal of zero emission goods movement, the City must ensure that projects are in line with this important objective including requiring at a minimum the phase-in of zero emission or clean technology for heavy duty trucks for all relevant projects.

² <https://oag.ca.gov/environment/sb1000>
http://opr.ca.gov/docs/20181120-EJ_Chapter_Public_Comment.pdf

³ http://rtpscs.scag.ca.gov/Documents/2012/final/2012fRTP_ExecSummary.pdf

⁴ <http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf>

⁵ <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/vision-for-clean-air-2012/draft-vision-for-clean-air-a-framework-for-air-quality-and-climate-planning.pdf?sfvrsn=4>

According to CARB, actions to deploy both zero emission and cleaner combustion technologies will be essential to meet air quality goals in California.⁶ As such, the City should incorporate the policies and goals of the State’s Zero Emission Vehicle (ZEV) Action Plan and Executive Order B-48-18 (setting a target of 5 million ZEVs in California by 2030) into General Plan policies and goals related to transportation and air quality for both public and private projects. With respect to goods movement, CARB is working towards the implementation of a sustainable freight transport system that relies on zero and near-zero emission equipment powered by renewable energy sources. According to CARB, a zero and near-zero emission freight system will demand not only new equipment and fuels but also *new transportation infrastructure*, communications and *industry operating practices*. The City must therefore incorporate into the GP Update plans and requirements to enable the State to meet its sustainable freight transport goals. This should include tangible measures to increase the availability of charging and refueling stations and other zero-emission vehicle infrastructure including direct current fast chargers. This also should include incorporating the use of near-zero and zero-emission technologies into heavy-duty applications such as the “last mile delivery.” The City should fully investigate and evaluate all zero emission vehicle measures, policies, and plans of regional and State agencies to ensure that the GP Update includes progressive measures to advance the State’s goals with respect to zero emission goods movement.⁷

Energy

The PEIR shall propose enforceable measures to ensure compliance with and the advancement of the policies and goals of Senate Bill 100 which commits to 100% clean energy in California by 2045. The City must propose measures through the GP Update that promote energy efficiency beyond existing regulatory requirements. For instance, requiring commercial and industrial projects to utilize solar energy is one means to ensure that the State can meet its laudable energy efficiency goals. Moreover, strong energy efficiency measures are needed to reduce California’s GHG emissions as electricity generation accounts for approximately 30% of California’s GHG emissions.⁸

Greenhouse Gas Emissions

With respect to GHGs, Executive Order S-3-05 establishes a 2030 target of a 40 percent GHG reduction below 1990 levels; Executive Order S-3-05 establishes a GHG emission reduction target of 80% below 1990 levels by 2050; and Executive Order B-16-2012 establishes a target for the reduction of GHG emissions from the transportation sector of 80% below 1990 levels by 2050. Therefore, the City must take all steps through its land

⁶ <https://ww3.arb.ca.gov/planning/sip/2016sip/2016mobsrsrc.pdf>

⁷ *E.g., see*, <https://business.ca.gov/industries/zero-emission-vehicles/zev-action-plan/> . *See also*, <https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html>

⁸ <http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf>

use plans to ensure that future projects are in conformance with these GHG emission reduction targets. Strong, enforceable mitigation measures will be required of implementing projects.

As the transportation sector is the largest source of GHG emissions in the State, accounting for roughly 40 percent of California's GHGs, the City must incorporate transportation measures through the GP Update that are designed to reduce fuel use in cars and trucks. This would include reducing vehicle miles traveled ("VMT") through "Smart Land Use" planning such as designating land uses to improve the City's jobs/housing balance. Land use plans should include a mix of housing and commercial land use designations that are intended to provide housing and employment opportunities for residents at different income and professional levels, thus reducing the need for residents to commute longer distances to employment centers. It is important to assign land uses that enable a diversity of employment opportunities to ensure that "smart growth" principles are advanced.

A robust analysis of the Project's GHG emissions with enforceable GHG mitigation is important through the PEIR because global climate change has already resulted in irreversible environmental consequences. Particularly where the transportation sector is the largest source of GHG emissions in California, the Project must fully evaluate the cumulative impact of proposed land use changes, and land use plans shall be designed to lessen the Project's cumulative impacts by reducing VMT. To this end, the Project must include enforceable measures to increase the use of public transit and alternatives to vehicle use such as the incorporation of transit stops, pedestrian walkways, and extension of bike trails and lanes in transportation plans. Affordable housing should be located near transit centers, shopping, bus routes, bicycle paths and sidewalks to promote walkability.

Consistency with Regional Land Use Plans

The Project must be fully consistent with all regional planning documents, including, but not limited to, the SCAG's 2012-2035 Regional Transportation Plan ("RTP") including the RTP's "regional commitment for the broad deployment of zero- and near-zero emission transportation technologies in the 2023-2035 time frame and clear steps to move toward this objective."⁹

Transportation

Should the PEIR find that necessary transportation mitigation measures are outside the control of the City or are under the jurisdiction of another public agency, the PEIR and General Plan should include timelines and milestones for limiting development until the necessary improvements are made. Furthermore, the City should establish mitigation

⁹ http://rtpscs.scag.ca.gov/Documents/2012/final/2012fRTP_ExecSummary.pdf

programs for all necessary improvements rather than find the traffic impact significant and unmitigable.

Truck Routes

Through the GP Update the City should revisit and re-designate truck routes to ensure that routes are limited to major streets and highways and not through residential neighborhoods or near schools. As it is, City-designated truck routes traverse residential neighborhoods and impact sensitive receptors such as school children.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in cursive script that reads "Abigail Smith".

Abigail Smith, Esq.

Residents for a Livable Moreno Valley Info

29177 Stevens Avenue, Moreno Valley, CA 92555

April 9, 2020

Chris Ormsby, Senior Planner
Community Development Department
City of Moreno Valley
141777 Frederick Street
Moreno Valley, CA 92553
chriso@moval.org

Sent via E-mail

Subject: Notice of Preparation for MoVal 2040 Program Environmental Impact Report

Dear Mr. Ormsby

On behalf of concerned area residents through the Residents for a Livable Moreno Valley, I hereby submit these comments on the Notice of Preparation for the Program Environmental Impact Report for the MoVal 2040: Comprehensive General Plan Update. Since it is the City's intent to adopt a Programmatic Environment Impact Report (PEIR) it is believed that the city will rely on the PEIR to forgo further environment reviews as development proposals come forth. If this is the case then this PEIR must include substantial mitigation measures to address expected development impacts and provide guidelines for those types of projects that go beyond the scope of the PEIR's evaluations and thus must be subject to more intense review include a need for and EIR. It is feared that the city will whitewash a large portion of intensive impacts for its opportunity to encourage development. Responsible and safe development must be the city's priority. The comments that follow reflect a variety of community concerns that residents want addressed.

1. The proper distance separation from warehousing to residential uses should be of a significant distance to lower air quality, noise, and aesthetic impacts. Multiple factors play into the need for greater setbacks.
 - a. Air pollution from truck exhaust is a major air quality impact and only distances of 1,000 feet or greater should be considered. Multiple studies and agencies back this figure.
 - b. Noise concerns and concerns for nuisance noises (those that fall below decibel thresholds) need to be addressed. Nuisance noises from businesses permitted to operate 24/7 can produce irritating noises such as those associated with truck deliveries involving cargo doors opening and closing, backup beeping, trucks idling and building equipment operations. These become distracting background noise that can grate on a person peace and tranquility at their residence. What can be done to address this problem?
 - c. How will added truck traffic noise along roadway from expanded land uses permitting warehouse be addressed? Existing circulation routes run adjacent to existing residential development.

- d. Large (long & tall) buildings some 2,000 feet long with permitted heights to 100 feet create aesthetic obstructions and substantially degrade the existing visual character of public views. Though designated “scenic vistas” do not exist in our community the degrading of the existing visual character with massive walls of warehouses are not only intrusive they lack instigated aesthetic relief. Therefore, greater setbacks need to be established from all publically visible area along with residential property. Suggest a setback ratio greater the 3:1 for the height.
2. For environmental justice housing should be kept away from pollutant sources appropriate distances to all areas where concentrated air pollution occurs. This should include adjacent to freeway, warehouses, and heavy industrial uses.

Air Quality & Green House Gases

3. There is no doubt that air quality impacts will be of great significance to the community. Offer a broad range of mitigations that can be implemented to insure future development does as much as possible without the option to use the override of said impacts. Provide a list of feasible mitigation that must be implemented. Please define and list these.
4. When it comes to GHG mitigation the ultimate results would be a net zero impact. This is admirable and it is commendable if it can be done. However, if a project would chose to pursue credits they must be sourced locally first before moving onto regional or state credit options. Credits to limit impacts outside of the community do not directly offset a project impact thus the danger will remain and add to the cumulative impacts. Make sure this is address in detail.
5. Evaluations must be done that define acceptable separation of residential uses and sensitive receptor from all air quality impacts.

Economic Evaluations

6. A jobs/housing balance it important factor but the intent of achieving this should be from diverse job opportunities with businesses that have a higher per square foot ratio than warehouses. Large quantities of land in the community and surrounding areas have been designated for warehousing whether built or awaiting development. Further land use designations will only diminished future opportunities for land available for development of business with greater job diversity and density.
7. There has been talk of bring in and creating “well-paying jobs” for the community to limit residents need to travel elsewhere for better paying jobs.. Define what wage range qualifies as a well-paying jobs. This should, at least, be a wage that would sustain a family of say four above a level that would qualify them for any form of family assistance (including school lunch programs).
8. The city’s push for warehouse and distribution facilities has been encouraged by economists date about the average pay for those involved in the logistics sector. However, the actual range and quantity of jobs offered need to documented along with their wage rate so a clear interpretation can be made regarding the value of the jobs brought to Moreno Valley.
9. What is considered “adequate infrastructure” that will support “local job growth” and what will be the costs to the community? Both financially and physically.
10. Improving the “socio-economic conditions” must include job diversity beyond logistic jobs. Buildout of exiting land uses and approved projects will leave the city job heave in one industry

that is not known to pay well for the majority of the workers. Provide the insight into what will balance our community.

11. Please provide an evaluation of property tax revenue and the cost of services over time. By this we want to see the property tax revenue relevant to new construction and its cost impact to community services. With service rate exceeding property tax incremental allowances there should come a point when taxes no longer cover services. Make sure this is properly explained for all developable land uses.
12. How financially responsible is the city with its transportation revenues to assure it can meet improvement obligations.

Land Use / Population and Housing

13. There has been talk of having a “flexible land use framework” and this should be well defined with what it entails for the possible range of zoning that could be permitted under a designated land use. Address how the PEIR will be able to balance variations in uses that bring on more intensive impacts.
14. Assess and evaluate the impacts various land uses will have on each other. Define what uses best buffer intensively negative uses from less intensive uses (such as residential to industrial).
15. Explain how interweaving of land uses would not be considered an impact that divides a community. For example the northeastern portion of the city contains a large amount of vacant land with parcels large enough for warehouses but ingress into this area would divide it from other residential development. Dropping warehouse or other industrial uses in the middle of residential areas diminishes a sense of community.
16. Explain the value of keeping a diverse mix of residential development opportunities.
17. Explain why or why not the city won't consider diminishing development intensity at the eastern and northern limits of the community. Urban limits typically have diminished intensities at their peripheries. What is the city's stand?
18. Make sure the land use data used reflects accurately on the built and approved development (specific plans or entitlements) when evaluating the available potential of currently vacant land.
19. With the desire of the city to be diverse and environmentally responsible, address the likelihood the city would encourage agricultural land use so the city could be more self-sustaining.
20. Address whether the city's animal keeping overlay would be maintained over properties currently permitted this use. The removal of land uses that permit this opportunity diminishes housing diversity and the ease with which property owners can maintain horses and use the trail network developed to accommodate them in on the eastern edge of the community.

Biological Resources

21. On the north, east, and southeast perimeters of the city are lands designated as open space or habitat. Address how development should be placed in proximity to these areas to limit its impact into the natural environment. Address:
 - a. Light/glare and noise
 - b. Pet intrusion
 - c. Invasive species
 - d. Water runoff

Circulation

22. Address the appropriate ways to mitigatable impacts whose mitigation measure compliance is reliant on outside agencies and out of the city or the developer's control. Many traffic related mitigation measures for recent project approvals require the involvement of regional transportation agencies that decide when and what improvements should be made. Until improvements can be made the circulation level of streets could fall below acceptable standards as development occurs. Mitigation measures under outside control are not enforceable so they should include timelines and milestones for limiting development until improvements are made in the name of safety and general welfare. Please address and include mitigation to that limits development or offers leverage to assure impacts will be mitigate before problem arise.
23. Address and provide mitigation that stops all impacts associated with regular truck traffic passing by locations with sensitive receptors to assure limiting air impacts and insuring safety.
24. The World Logistics Center and any future high traffic generating uses north of SR-60 will severely impact traffic flow at the freeway interchanges for Redlands Blvd., Moreno Beach, and Theodore Avenue. How with this be addressed and improvements implemented.
25. Redlands Blvd provides access San Timoteo Canyon for daily commuters. Since this is a heavily travel commuter route that is designated a truck route, how will the city and the county jointly deal with the impacts? The LOS for AM & PM traffic is already at level F at Redlands and San Timoteo Canyon. Although, this intersection is outside the city limits commuter from this community currently are the primary cause. Future development plus additional truck traffic with require major improvement. How will the city participate in making these improvements?
26. Traffic impacts at freeway interchanges will be impacted with future development. Address the timing and milestones that will limit development until the necessary improvements can be cleared and built with the approval of Caltrans and the RCTC.
27. How will the city make circulation improvement in those area of the city that will not have potential for development that would otherwise pay or install the improvements?

Energy

28. To best meet state requirements for renewable energy address the opportunities available to the city to promote extensive rooftop solar. The available warehouse rooftop and parking lot square footage could provide a tremendous offset and provide mitigation for air quality impacts. Doing so could potentially provide a net zero GHG mitigation. This should become a mandatory objective of the city. What measure will the city take?

Hydrology and Water

29. With the city's past emphasis on large warehouses the total impervious surface area of the city has drastically increased. Provide creative mitigation options for on-site water retention and appropriate storm drain capacity.
30. One of the draft MoVal 2040 maps shows the northeaster portion of the city to be in a flood zone. The exiting grade from the northern hillsides downward to SR-60 does not appear to warrant inclusion in a flood zone. Please address the actual flooding potential and whether there is a need for reevaluation by FEMA.

Housing

31. How does the city plan to address the housing needs in such a fashion that the higher density residential will be located in areas that provide for many personal need with the option to get services without the need for personal transportation?
32. Without knowing what land use changes are proposed it is difficult to ascertain the proper placement of housing. What guiding principles will be provided to assure proper placement of development will occur to meet the housing needs and requirements of the state without compromising the results of the PEIR?
33. How will the state's recent legislation to ease housing development impact the proposed land use at the time of the general plan's adoption and as time passes? How can the future impacts of property owners' exercising their option to increase density affect all aspects of the EIR?

Social Justice

34. For all intent and purposes MV comes across as a disadvantage community thus we need to fully address all aspect with special interest to environmental impacts on the residents. The city's massive push for warehousing does not always provide a livable wage and it brings heavy pollution from the truck traffic and roadway congestion right next to homes. Employees in this industry and the surround community suffer the impacts of exhaust fumes. It seems our community, at its current SoEco level, has been the location of choice for industries that don't pay well and cause community harm along with increase traffic congestion. We need to move beyond this and raise the appeal of our community so better jobs creators desire to locate here. Please refrain from using the lower education rates of many of our residence as justification for low skill jobs industries such as the logistics industry. On perpetuates the other and the city needs a focus on better jobs and high graduation rate and continued education and skilled job training. Explain the steps the city must take to make this a reality.

Should you have any questions feel free to contact me and keep me informed of the progress of the MoVal 2040 General Plan Update.

Sincerely,

Tom Thornsley
Residents for a Livable Moreno Valley



Attn. Chris Ormsby, AICP
Community Development Department
City of Moreno Valley
14177 Frederick St.
Moreno Valley, CA
92553

RE: MoVal 2040 NOP Comments

Dear Mr. Ormsby,

The Riverside University Health System-Public Health (RUHS-PH) is pleased to provide the following comments as part of the MoVal 2040 Notice of Preparation for an Environmental Impact Report. RUHS-PH respectfully request that the Environmental Impact Report include a Health Impact Assessment (HIA) that evaluates the merits of this General Plan Update related to the positive and negative effects over Moreno Valley's population. The HIA preparation should be prepared concurrently with the EIR Scoping session to identify specific public health topics that the community at large would like the study to address. Some initial topics linked to the prevalence or absence of major chronic diseases the study should include are:

1. Access to Healthy Foods/ Food Deserts
2. Active Transportation/ Public places to stay physically active
3. Tobacco Control
4. Community Design

This request is in full consistence with:

1. The City Council's vision for "Promoting Healthy and Livable Neighborhoods" in the City's General Plan Update;
2. The development of the two new proposed and intrinsic elements: Healthy Communities and Economic Development;
3. SB1000 compliance, and
4. Mitigation of the ongoing effects of COVID-19 health crisis.

Kim Saruwatari, M.P.H., Director

Cameron Kaiser, M.D., Public Health Officer



Our team is open to participate closely with you and/or your team of consultants in the development of the HIA and any public health-related recommendations, policy development and plan implementation.

Should you have any questions, please contact me at mvazquez@ruhealth.org or at (951) 358-7171.

Thank you for your consideration,

Miguel A. Vazquez, AICP
Healthy Communities Urban and Regional Planner

AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY



January 15, 2021

Mr. Chris Ormsby, Senior Planner
Community Development Department City of Moreno Valley
14177 Frederick Street
Moreno Valley CA 92553

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County Administrative Center
4080 Lemon St., 14th Floor.
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW REQUIRED

Jurisdiction Project Case: MoVal 2040 General Plan Update

Dear Mr. Ormsby:

Thank you for providing the Riverside County Airport Land Use Commission (ALUC) with a copy of the transmittal for the City of Moreno Valley case; a proposal for a comprehensive update of the City's General Plan.

ALUC staff has determined that the project is located within Compatibility Zones A, B1, B2, C1, D and E of March Air Reserve Base/Inland Port Airport Influence Area which has varying restrictions to residential density and non-residential intensity.

California Public Utilities Code section 21676 requires the local agency to refer any amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within an Airport Land Use Compatibility Plan (ALUCP) to the ALUC. Additionally, California Public Utilities Code Section 21676.5 allows the ALUC to review all projects within the Airport Influence Area when the local jurisdiction's General Plan is not consistent with the applicable ALUCP. Since the General Plan is not consistent with the ALUCP and/or because the project contemplates amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation, the ALUC requests that you submit the above-identified project(s) for its review. ALUC staff is also available to assist in bringing your jurisdiction's General Plan into consistency with the applicable ALUCP, if the local jurisdiction so desires.

If you have any questions, please contact Paul Rull, ALUC Principal Planner, at (951) 955-6893.

Sincerely,

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Principal Planner



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



April 8, 2020
Sent via email

Mr. Chris Ormsby
Senior Planner
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553
chriso@moval.org

Subject: Notice of Preparation of a Draft Program Environmental Impact Report
City of Moreno Valley Comprehensive General Plan Update, Housing
Element Update, and Climate Action Plan Project
State Clearinghouse No. 2020039022

Dear Mr. Ormsby:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (DPEIR) from the City of Moreno Valley (City) for the City of Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project proposes a comprehensive update to all elements of the General Plan, and the addition of two new elements: Economic Development and Healthy Communities, to reflect City's growth and vision for a future horizon year of 2040.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to the Project's consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

CDFW recognizes that the general plan DPEIR need not be as detailed as CEQA documents prepared for specific projects that may follow (CEQA Guidelines § 15146). CDFW also recognizes that the level of detail should be reflective of the level contained in the plan or plan element being considered (*Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351). However, please note that the City cannot defer the analysis of significant effects of the general plan to later-tiered CEQA documents (*Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182).

CDFW recommends that the forthcoming DPEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the

DPEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats.

CDFW recommends that the DPEIR specifically include:

1. An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009²). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDDB@wildlife.ca.gov 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, in the vicinity of the proposed Project.

Please note that CDFW's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be effected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and 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

² Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. <http://vegetation.cnps.org/>

consultation with CDFW and the U.S. Fish and Wildlife Service (USFWS), where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018)³;
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).
6. A full accounting of all mitigation/conservation lands within and adjacent to the Project.

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DPEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to affect biological resources as a result of the Project (including the plan's land use designations, policies and programs). To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the DPEIR:

1. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

With respect to defensible space: please ensure that the DPEIR fully describes and identifies the location, acreage, and composition of defensible space *within* proposed development land use designations. Please ensure that any graphics and descriptions of defensible space associated with this Project comply with Riverside

³ California Department of Fish and Wildlife (CDFW). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plan Populations and Sensitive Natural Communities*. State of California, Natural Resources Agency. Available for download at: <https://wildlife.ca.gov/Conservation/Plants>

County Fire (or other applicable agency) regulations/ requirements. The City, through their planning processes, should be ensuring that defensible space is provided and accounted for *within proposed development land use designated areas*, and not transferred to adjacent open space or conservation lands.

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or conservation/mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

Please note that the Project area supports significant biological resources and contains habitat connections, providing for wildlife movement across the broader landscape, sustaining both transitory and permanent wildlife populations. CDFW encourages the City to consider project design that avoids and preserves onsite features that contribute to habitat connectivity. The DPEIR should include a discussion of both direct and indirect impacts to wildlife movement and connectivity, including maintenance of wildlife corridor/movement areas to adjacent undisturbed habitats.

3. An evaluation of impacts to adjacent open space lands from both the Project and long-term operational and maintenance needs.
4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. CDFW recommends that the DPEIR analyze the cumulative effects of the plan's land use designations, policies and programs on the environment. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Alternatives Analysis

CDFW recommends that the DPEIR describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would "feasibly attain most of the basic objectives of the Project," and would avoid or substantially lessen any of the Project's significant effects (CEQA Guidelines § 15126.6[a]). The alternatives analysis should also evaluate a "no project" alternative (CEQA Guidelines § 15126.6[e]). The no Project alternative should evaluate how the changing environment, such as climate change and drought, may affect the community if a new or revised general plan were not adopted.

Mitigation Measures for Project Impacts to Biological Resources

CDFW recommends that the DPEIR identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The City should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the Project and its long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species may not be taken or possessed at any time. Project activities described in the DPEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DPEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species.
2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DPEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.
3. *California Species of Special Concern (CSSC)*: CSSC status applies to animals generally not listed under the federal Endangered Species Act or the CESA, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CSSCs should be considered during the environmental review process.
4. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DPEIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail.

The DPEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative

losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DPEIR. CEQA Guidelines §15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777).

CDFW recommends that the DPEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, for mitigation measures to be effective, they should be specific, enforceable, and feasible actions that will improve environmental conditions.

5. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum:
 - (a) the location of restoration sites and assessment of appropriate reference sites;
 - (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates;
 - (c) a schematic depicting the mitigation area;
 - (d) a local seed and cuttings and 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 the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or

association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

6. *Nesting Birds and Migratory Bird Treaty Act*: Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW recommends that the DPEIR include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DPEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. If pre-construction surveys are proposed in the DPEIR, CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the Project; unless this Project is proposed to be

a covered activity under the MSHCP. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. The California Fish and Game Code requires that CDFW comply with CEQA for issuance of a CESA ITP. CDFW therefore recommends that the DPEIR addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of CESA.

Western Riverside County Multiple Species Habitat Conservation Plan

CDFW issued Natural Community Conservation Plan Approval and Take Authorization for the Western Riverside County MSHCP per Section 2800, *et seq.*, of the California Fish and Game Code on June 22, 2004. The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and provides for the incidental take of covered species in association with activities covered under the permit.

Compliance with approved habitat plans, such as the MSHCP, is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the MSHCP as a result of this Project is necessary to address CEQA requirements. To obtain additional information regarding the MSHCP please go to: <http://rctlma.org/epd/WR-MSHCP>.

The proposed Project occurs within the MSHCP area and is subject to the provisions and policies of the MSHCP. In order to be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the MSHCP and its associated Implementing Agreement. The City is the Lead Agency and is signatory to the Implementing Agreement of the MSHCP. The entirety of the project is located within the MSHCP. The DPEIR should address how individual projects will demonstrate consistency with the policies and procedures of the MSHCP, including: Joint Project Review (JPR) process through the RCA (where relevant), Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP section 6.1.2), Protection of Narrow Endemic Plant Species (MSHCP section 6.1.3), Additional Survey Needs and Procedures for burrowing owl and Criteria Area Species (MSHCP section 6.3.2), and the Guidelines Pertaining to the Urban/Wildlands Interface (MSHCP section 6.1.4).

Regardless of whether take of threatened and/or endangered species is obtained through the MSHCP or through a CESA ITP, the DPEIR needs to address how the proposed Project will affect the policies and procedures of the MSHCP.

Lake and Streambed Alteration Program

Based on review of aerial photography, the City boundary encompasses a multitude of ephemeral streambeds. CDFW recommends that the City condition the DPEIR to include a mitigation measure for consultation with CDFW to determine if Fish and Game Code section 1600 *et seq.* resources may occur within a proposed project area. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DPEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DPEIR for the City of Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan Project (SCH No. 202039022) and recommends that City address CDFW's comments and concerns in the forthcoming DPEIR. If you should have any questions pertaining to the comments provided in this letter, please contact Joanna Gibson, Senior Environmental Scientist, Specialist, at (909) 987-7449 or at joanna.gibson@wildlife.ca.gov.

Sincerely,



Scott Wilson
Environmental Program Manager

ec: California Department of Fish and Wildlife
HCPB CEQA Coordinator

Office of Planning and Research, State Clearinghouse
State.clearinghouse@opr.ca.gov

MARCH JOINT POWERS AUTHORITY



April 3, 2020

Chris Ormsby, AICP
Senior Planner
City of Moreno Valley
Community Development Department
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805

**RE: Notice of Preparation of a Program Environmental Impact Report for the MoVal 2040,
The Moreno Valley Comprehensive General Plan Update, Housing Element Update and Climate
Action Plan**

Dear Mr. Ormsby:

March Joint Powers Authority staff has completed their review of the **Notice of Preparation of a Program Environmental Impact Report for the MoVal 2040, The Moreno Valley Comprehensive General Plan Update, Housing Element Update and Climate Action Plan**. We have no comments at this time. When available, please provide the March Joint Powers Authority a copy of, or link to the Draft EIR when completed.

If you have any questions regarding our comments or need additional information, please feel free to contact me at (951) 656-7000, or by email at, smith@marchjpa.com. Thank you.

Sincerely,

Jeffrey M. Smith, AICP
Senior Planner
March Joint Powers Authority



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:

April 1, 2020

chriso@moval.org

Chris Ormsby, AICP, Senior Planner
City of Moreno Valley, Community Development Department
14177 Frederick Street
Moreno Valley, CA 92553

Notice of Preparation of a Program Environmental Impact Report for the Proposed MoVal 2040

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Program Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the Program EIR upon its completion and public release. Note that copies of the Program EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the Program EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the Program EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files¹. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on South Coast AQMD's website at: [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

On March 3, 2017, the South Coast AQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on March 23, 2017.

¹ Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NO_x) emissions in 2023 and an additional 55 percent NO_x reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on South Coast AQMD's website at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005². This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. South Coast AQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. Guidance³ on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

South Coast AQMD has also developed both regional and localized air quality significance thresholds. South Coast AQMD staff requests that the Lead Agency compare the emissions to the recommended regional significance thresholds found here: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>. In addition to analyzing regional air quality impacts, South Coast AQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by South Coast AQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources,

² South Coast AQMD. 2005. Accessed at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

³ In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operational activities, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

Mobile Source Health Risk Assessment

Notwithstanding the court rulings, South Coast AQMD staff recognizes that the Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of South Coast AQMD staff's concern about the potential public health impacts of siting sensitive populations within close proximity of freeways and other sources of air pollution, South Coast AQMD staff recommends that, prior to approving the project, Lead Agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

Based on review of Figure 1, *Planning Area*, enclosed in the Notice of Preparation, South Coast AQMD staff found that sensitive land uses may be located within close proximity to Interstate 215 and State Route 60. Sensitive receptors would be exposed to diesel particulate matter (DPM) emitted from heavy-duty, diesel-fueled on-road vehicles. DPM is a toxic air contaminant and a carcinogen. Since sensitive receptors would be exposed to toxic emissions, South Coast AQMD staff recommends that the Lead Agency conduct a mobile source health risk assessment (HRA)⁴ in the Program EIR to disclose the potential health risks⁵. The HRA will facilitate the purpose and goal of CEQA on public disclosure and enable decision-makers with meaningful information to make an informed decision on project approval. This will also foster informed public participation by providing the public with useful information that is needed to understand the potential health risks from living and working within close proximity to freeways.

Mitigation Measures

If the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD's *CEQA Air Quality Handbook*
- South Coast AQMD's CEQA web pages available here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>

⁴ South Coast AQMD. *Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

⁵ South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- California Air Pollution Control Officers Association's (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* available here:
<http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Health Risks Reduction Strategies

As stated above, the Proposed Project is located within close proximity to freeways. Many strategies are available to reduce exposures, including, but are not limited to, building filtration systems with MERV 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. Enhanced filtration units are capable of reducing exposures. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

Enhanced filtration systems have limitations. South Coast AQMD staff recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that South Coast AQMD conducted to investigate filters⁶, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the sensitive receptors (e.g., residents). It is typically assumed that the filters operate 100 percent of the time while sensitive receptors at the Proposed Project are indoors, and the environmental analysis does not generally account for the times when sensitive receptors have their windows or doors open or are in common space areas of the project. In addition, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to DPM emissions.

Because of the limitations, to ensure that enhanced filters are enforceable throughout the lifetime of the Proposed Project as well as effective in reducing exposures to DPM emissions, South Coast AQMD staff recommends that the Lead Agency provide additional details regarding the ongoing, regular maintenance and monitoring of filters in the environmental analysis. To facilitate a good faith effort at full disclosure and provide useful information to people who will live at the Proposed Project, the environmental analysis should include the following information, at a minimum:

- Disclose the potential health impacts to sensitive receptors from living in close proximity of sources of air pollution and the reduced effectiveness of air filtration system when windows are open and/or when receptors are outdoor (e.g., in the common and open space areas);
- Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are installed on-site at the Proposed Project before a permit of occupancy is issued;
- Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are inspected regularly;
- Provide information to sensitive receptors on where the MERV filters can be purchased;
- Disclose the potential increase in energy costs for running the HVAC system to sensitive receptors;
- Provide recommended schedules (e.g., once a year or every six months) for replacing the enhanced filtration units to sensitive receptors;

⁶ This study evaluated filters rated MERV 13 or better. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see 2012 Peer Review Journal article by South Coast AQMD: <https://onlinelibrary.wiley.com/doi/10.1111/ina.12013>.

- Identify the responsible entity such as sensitive receptors themselves (e.g., residents), Homeowner's Association, or property management for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if sensitive receptors should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the Lead Agency should include this information in the disclosure form);
- Identify, provide, and disclose any ongoing cost sharing strategies, if any, for the purchase and replacement of the enhanced filtration units;
- Set City-wide criteria for assessing progress in installing, replacing, and maintaining the enhanced filtration units; and
- Develop a City-wide process for evaluating the effectiveness of the enhanced filtration units at the Proposed Project.

Alternatives

If the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Program EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Program EIR. For more information on permits, please visit South Coast AQMD's webpage at: <http://www.aqmd.gov/home/permits>. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling the South Coast AQMD's Public Information Center at (909) 396-2001. Much of the information available through the Public Information Center is also available via the South Coast AQMD's webpage (<http://www.aqmd.gov>).

South Coast AQMD staff is available to work with the Lead Agency to ensure that project's air quality impacts are accurately evaluated and mitigated where feasible. Please contact me at lsun@aqmd.gov, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS

RVC200310-01

Control Number

ATKINSON, ANDELSON, LOYA, RUUD & ROMO

A PROFESSIONAL LAW CORPORATION

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March 17, 2020

VIA OVERNIGHT MAIL

RECEIVED

MAR 18 2020

CITY OF MORENO VALLEY
Planning Division

Ms. Patty Nevins
Planning Official - Community Development
City of Moreno Valley
14177 Frederick Street
Moreno Valley, California 92553-9014

Re: Notice of Preparation of the Moreno Valley Unified School District's 2020 School Facilities Needs Analysis

Dear Ms. Nevins:

Our firm represents the Moreno Valley Unified School District ("District") regarding its School Facilities Needs Analysis ("SFNA"). Please be advised that the District is in the process of preparing for adoption its 2020 SFNA and alternative school fee amounts applicable to new residential construction with the District, pursuant to Education Code § 17620 and Government Code §§ 65995.5, 65995.6, and 65995.7 ("Alternative School Fees").

Government Code § 65352.2 provides that the District shall notify applicable cities and/or counties of the preparation of a SFNA and provide the opportunity for such entities to meet with the District, if they so desire, prior to the completion of the SFNA. Hence, the District hereby provides notice that it is anticipated that the 2020 SFNA will be considered by the Board of Education ("Board") on May 19, 2020 or at a Board meeting scheduled shortly thereafter. A final draft of the 2020 SFNA has not yet been completed. However, when it has been completed, a copy will be provided for review. In the interim, we are enclosing a copy of the 2019 SFNA as the currently relevant and available information regarding this matter.

Also, in compliance with Government Code § 65352.2, the District is available to meet to discuss such matters relating to the coordination of future school facilities within the District, if desired, provided you notify the District of your request to attend such a meeting. ***If a meeting is desired, please provide times of your availability within the next two weeks for a meeting at the District, located at 25634 Alessandro Boulevard, California.***

ATKINSON, ANDELSON, LOYA, RUUD & ROMO

Ms. Patty Nevins
March 17, 2020
Page 2

Please contact Ms. Susana Lopez, Chief Business Official for the District, at (951) 571-7500 ext. 17241 at your earliest convenience to confirm your interest in attending a meeting, or to indicate that such a meeting is not desired. If confirmation is not received by **Wednesday, April 1, 2020**, the District will assume that such a meeting is not being requested.

As previously set forth, the District plans to complete its 2020 SFNA pursuant to applicable law for presentation to its Board on May 19, 2020 or at a Board meeting scheduled shortly thereafter. The consultant preparing the 2020 SFNA is Ms. Barbara Hale-Carter of Special District Financing & Administration, who can be reached at (760) 233-2630.

Thank you and please do not hesitate to contact the undersigned if you have any questions or comments.

Very truly yours,

ATKINSON, ANDELSON, LOYA, RUUD & ROMO



Nicolle A. Falcis

Enclosure

cc: Susana Lopez, Moreno Valley Unified School District (w/o enclosure)
Amy Esquibel, Moreno Valley Unified School District (w/o enclosure)
Barbara Hale-Carter, Special District Financing & Administration (w/o enclosure)
Jacqueline Donnelly, Special District Financing & Administration (w/o enclosure)

S DFA

School Facilities Needs Analysis

Moreno Valley Unified School District

May 3, 2019

School Facilities Needs Analysis as provided for in
Government Code Section 65995 *et seq.*

Moreno Valley Unified School District
25634 Alessandro Boulevard
Moreno Valley CA 92553-4306
Tel: 951-571-7500 ext. 17241
Contact: Mike Reynolds – Interim Chief Business Official

SPECIAL DISTRICT FINANCING & ADMINISTRATION
437 West Grand Avenue
Escondido CA 92025
760.233.2630 Fax 233.2631

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Executive Summary

On November 3, 1998, California voters approved Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998. Such passage was a precedent to the enactment of Government Code Sections 65995.5, 65995.6, and 65995.7. Prior to the passage of Proposition 1A, school districts relied on the Statutory Fee provided in Assembly Bill 2926 (School Fee Legislation) which was adopted in 1986, as well as certain court decisions (i.e., Mira-Hart-Murrieta) requiring that under certain circumstances new development reasonably mitigate its impact on school facilities. In a post-Proposition 1A environment, the Statutory Fee contained in the School Fee Legislation remains, and mitigation requirements not embodied in a mitigation agreement but set forth in conditions of approval remained enforceable until January 1, 2000. These non-contractual requirements have been replaced by Alternative Fees – sometimes referred to as Level II and Level III Fees as to new residential construction. The Statutory Fee is referred to in these circumstances as Level I Fees applicable to new residential construction and certain other residential construction, as well as commercial/industrial fees to commercial and industrial development.

The purpose of a School Facilities Needs Analysis (“SFNA”) is to quantify, for the next five-year period, the impacts of new residential development on the school district’s facilities and calculate the permissible Level II and Level III Fees. Using a statutorily prescribed methodology, the SFNA requires using a state mandated “per pupil” grant, a limited sampling for determining student generation and does not provide for funding of interim facilities or central administration and support. Because of the prescribed methodology, the Level II and Level III Fees do not correspond to the true impact on school facilities. School districts must calculate and review the true cost of school facilities for planning purposes. The Moreno Valley Unified School District (“MVUSD” or “District”) adopted the MVUSD Master Plan, as defined herein, which provides a comprehensive review. The MVUSD Master Plan is on file in the District office and is herein incorporated.

In recognition of the impact on school facilities from new development, the District and the development community previously have entered into various mitigation agreements in order to seek to ensure the timely construction of school facilities to house students from new development (“Mitigated Development”). These Mitigated Developments have been excluded from the projections contained within this SFNA as they are providing funding and support to the District’s school facilities program and will not generate “Unhoused Students.”

A district notifies the cities and county of the SFNA and provides relevant and available information relating to the expansion of existing school sites or the necessity to acquire additional school sites, including notice of a proposed meeting to discuss this information. The governing board must adopt the SFNA by resolution at a public hearing after the report has been made available to the public for a period of not less than 30 days. Also, the district must give notice to any applicable cities or counties in accordance with Government Code Section 65352.2. Prior to the adoption of the SFNA, the public is given the opportunity to review and comment and the governing board must respond to written comments it receives. The Level II and Level III Fees must be adopted by a

resolution of the governing board as part of the adoption of the SFNA. The Alternative Fees are effective immediately after adoption of the resolution per Government Code Section 65995.6(f) and may not be in effect for more than one year.

On July 17, 2018 the Moreno Valley Unified School District Board of Education adopted Resolution No. 2018-19-01. This action put into effect a Level II Fee of \$4.59 per square foot of assessable space and a Level III Fee of \$9.17 per square foot of assessable space. These fees remain in effect through July 17, 2019 unless a new SFNA is adopted earlier.

The following SFNA was prepared in compliance with Government Code Section 65995, *et seq.* and provides the determination of eligibility for, and the calculation of a revised Level II Fee of \$4.64 and a revised Level III Fee of \$9.29. If adopted, these Alternative Fees are effective for not more than one year and must be substantiated and adopted on a yearly basis.

Moreno Valley Unified School District

This SFNA has been prepared in accordance with applicable law including Section 65995, *et seq.* of the California Government Code.

Introduction

A SFNA is prepared and adopted by the governing board of a school district to determine the need for new school facilities to house pupils that are attributed to projected enrollment growth from the development of new residential units over the next five years. The analysis takes into account current capacity, surplus property, and dedicated local funding sources among other things.

A SFNA is required to be adopted by resolution at a public hearing after it has been made available to the public for a period of not less than 30 days. The Alternative Fees (Level II or Level III, discussed herein) are adopted by a resolution of the governing board as part of the adoption of the SFNA. The Alternative Fees authorized by the resolution take effect immediately and are in effect for a maximum of one year.

Senate Bill 50

On November 3, 1998, California voters approved Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998. The passage of Proposition 1A authorized \$9.2 billion in State bonds for K-12 and higher education school facilities construction and modernization. Of this amount, \$2.9 billion was allocated for new construction for grades K-12.

The approval of Proposition 1A activated the provisions of Government Code Sections 65995.5, 65995.6, and 65995.7. The new program, known as the School Facilities Program ("SFP"), established a State program to provide State per pupil funding for new construction and modernization of existing school facilities. Additional funds have been provided by the subsequent voter approval of bonds for the funding of the SFP. The SFP requires the State to provide an estimated 50% of the funds required for new school projects ("Regular Grant") matched by 50% funding from local funds ("Local Match"). Questions have been raised regarding the adequacy of the Regular Grant to fund 50% of the cost of new construction. The intent is that the Regular Grant, together with the payment of either Statutory School Fees or Alternative Fees, both discussed herein, are all that will be available for all necessary school facilities absent other local funds. No

consideration was given in the State funding of the Regular Grant for interim facilities or central administration and support facilities.

School Fees Created by SB-50

The following school fees were created by Education Code Section 17620 as well as Government Code Sections 65995.5, 65995.6, and 65995.7.

Statutory School Fees (Level I Fees)

Under the SFP, Statutory School Fees collected pursuant to Education Code Section 17620 and Government Code Section 65995, also referred to as Level I Fees, and Commercial / Industrial Fees, respectively, remain. Currently, they are \$3.79 per square foot of assessable space for residential construction and \$0.61 per square foot of new chargeable covered and enclosed space for Commercial / Industrial construction. Both fees may increase in the year 2020, and every two years thereafter, according to an inflation adjustment determined by the State Allocation Board ("SAB").

Alternative School Fee (Level II Fee)

Level II Fees are calculated pursuant to Government Code Section 65995.5(c) and in general can be described as the number of unhoused students identified in the SFNA, multiplied by the Regular Grant amount per pupil, plus 50% of the sum of site acquisition and development costs, less surplus property or proceeds thereof, if any and if applicable, less local funds available and dedicated for such facilities construction, divided by the projected total square footage of residential units anticipated to be constructed during the next five years.

Requirements to collect the Level II Fee are as follows:

- The governing board must make a "timely application" to the SAB for new construction funding for which it is eligible and the SAB must determine that the District meets the eligibility requirements for new construction funding as set forth in Education Code Sections 17071.10 and 17071.75. The school district is deemed eligible by default if the SAB fails to notify the school district within 120 days of receipt of the application.
- The school district must satisfy at least two of four eligibility requirements per Government Code Section 65995.5(b)(3). These requirements are summarized as follows:
 1. The school district meets the Multi-Track Year Round Education (MTYRE) Requirement.
 2. The school district has placed a local bond measure on the ballot in the past 4 years which received at least 50% plus 1 of the votes.
 3. The school district meets one of the following criteria:

- a. The school district has issued debt or incurred obligations for capital outlay equal to 15% of local bonding capacity including indebtedness repaid from:
 - i. property taxes,
 - ii. parcel taxes,
 - iii. the school district's general fund,
 - iv. special taxes approved by a two-thirds vote of the qualified electors pursuant to Article XIII A Section 4 of the California Constitution,
 - v. special taxes levied pursuant to the Mello-Roos Community Facilities District Act of 1982 that are approved by a vote of registered voters,
 - vi. special taxes levied pursuant to the Mello-Roos Community Facilities District Act of 1982 that are approved by a vote of the landowners **prior** to November 4, 1998,
 - vii. revenues received pursuant to the Community Redevelopment Law (i.e., pass-through funds, tax increment funds), or;
- b. The school district has issued debt or incurred obligations for capital outlay equal to 30% of local bonding capacity including indebtedness repaid from:
 - i. property taxes,
 - ii. parcel taxes,
 - iii. the school district's general fund,
 - iv. special taxes approved by a two-thirds vote of the qualified electors pursuant to Article XIII A Section 4 of the California Constitution,
 - v. special taxes levied pursuant to the Mello-Roos Community Facilities District Act of 1982 that are approved by a vote of registered voters,
 - vi. special taxes levied pursuant to the Mello-Roos Community Facilities District Act of 1982 that are approved by a vote of the landowners **after** November 4, 1998,
 - vii. revenues received pursuant to the Community Redevelopment Law (i.e., pass-through funds, tax increment funds).

- 4. At least 20% of teaching stations per Education Code Section 17071.25 within the school district are relocatable classrooms.

Alternative School Fee (Level III Fee)

The calculation of the Level III Fee is performed pursuant to Government Code Section 65995.7(a) and is roughly double the Level II Fee plus the full amount of surplus property or proceeds therefrom, if any, plus the full amount of local funds dedicated by the school district to provide school facilities to accommodate students generated from new growth, including any commercial and industrial fees collected and dedicated for such purposes.

The requirements to levy the Level III Fee are generally as follows:

- State Funding is not available per Government Code Section 65995.7(a).
- The school district has adopted an SFNA pursuant to Government Code Section 65995.5.

The Level III Fee has a reimbursement provision which is detailed in Government Code Sections 65995.7(b), (c) and (d). In general, there are two types of reimbursement elections. The first is a Statutory Reimbursement, which is the difference between the Level II Fee and the Level III Fee, less any amount expended for interim facilities. The alternative, in the sole discretion of the school district, is a Negotiated Reimbursement in which the Negotiated Reimbursement is mutually agreed to by both the school district and the party paying the Level III Fee. If the school district fails to offer a reimbursement election or enter into an alternative reimbursement agreement, the amount of State funding subsequently received shall be reduced by the difference between the Level II Fee and the Level III Fee, to the extent provided by applicable law.

Reconstruction/Redevelopment

Reconstruction/Redevelopment means the voluntary demolition of existing residential dwelling units or commercial or industrial construction and the subsequent construction of new development ("Reconstruction").

The District anticipates Reconstruction projects, more specifically, the demolishing of existing residential dwelling units replaced with new residential dwelling units, within the next five-year period. In such a situation, the District may levy school fees authorized pursuant to Education Code Section 17620 and Government Code Section 65995 *et seq.* ("School Fees") if there is a nexus established between the impacts of the new residential dwelling units after taking into consideration the impact from the prior residential units. In other words, the School Fees must bear a nexus to the burden caused by the Reconstruction project.

The purpose of this section is to set forth a general policy for the levy of School Fees on future Reconstruction projects within the District. The District may levy the applicable Alternative School Fees if an unmitigated impact exists once an analysis has been done on the impact on school facilities from such new residential dwelling units and consideration has been taken as to the impact from pre-existing units.

The analysis will include a review as to whether the Reconstruction project results in an additional impact to the District. This will be analyzed by comparing the square footage and projected number of students and costs generated from the existing residential dwelling units or commercial or industrial structure to the proposed square footage and number of students and costs projected from the new dwelling units using applicable student generation rates determined in this Report and as shown in Table 2.

School Fees will be assessed only to the extent of the actual cost of the school facilities impact as determined above, but in no event will the School Fees assessed be greater than the applicable Alternative School Fees. The District will complete a detailed analysis utilizing the above-mentioned criteria to determine the applicability of School Fees to each Reconstruction project presented to the District.

Moreno Valley Unified School District

New Development Fiscal Impact

Regardless of facilities funding sources, each school district must regularly monitor current capacity, current and projected enrollment and the resulting timing of future facilities needs. These facilities needs are guided by board policy, district standards and community interaction. Ultimately, these facilities needs are controlled by their funding.

While working within the SFP, it is critical that a school district keep in mind the cost of new facilities and the district-wide student generation rate. These figures allow a school district to accurately and comprehensively plan future facilities. This section calculates these actual figures for the District.

School Costs

Appendix A contains a school facilities cost breakdown for each school level. These cost estimates were provided by the District and reviewed by an architectural firm for the District. Land cost was based upon a recent land acquisition by the District. It should be noted that these costs do not include administration and support facilities, nor do they include start-up costs associated with opening a school such as library books, landscaping, or the complete cost of technology. The total cost per school level is shown below:

School Level	Total Cost	Number of Students Housed (School Capacity)	Cost per Student
Elementary	\$41,538,546	800	\$51,923
Middle	\$84,573,627	1,200	\$70,478
High	\$236,070,023	2,500	\$94,428

The above table also shows school capacity at each school level. Capacity was calculated by using the current prescribed state loading factors. The division of school cost by school capacity results in a cost per student per school type. The sum of the cost per student for each school type is the total cost per student.

District Student Generation

District-wide student generation is calculated by dividing the total number of students by the total number of dwelling units within the District. The source for the total number of students was the October 3, 2018 Preliminary CBEDS Enrollment Report, a summary of which is contained in Appendix D. The enrollment total was 32,774 students.

The total number of dwelling units within the District boundaries was determined through the analysis of data provided by the Southern California Association of Governments ("SCAG"), as adjusted by request of the City of Riverside for the area of the District covered by the City of Riverside. By using the SCAG provided data which showed, by census tract, the number of households within the District in 2012, and adding the dwelling units which received a Certificate of Compliance by the District to allow the issuance of a building permit, the number of dwelling units existing as of January 1, 2019 can be determined. This figure is 48,723 (47,338 as of January 1, 2012 and 2,796 Certificates of Compliance issued) households existing as of January 1, 2019. Boundaries of the census tracts that overlap the boundaries of the District were reviewed by SCAG and the figures used were adjusted for such overlap. The data provided by SCAG, as well as the SCAG data as adjusted by request of the City of Riverside, is contained within Appendix F.

The following table shows the calculation of the District-Wide Student Generation Rate.

Table 2 Calculation of Estimated Average District-Wide Student Generation			
Grades	Number of Students	Number of Dwelling Units	District-Wide Student Generation
K – 5	14,988	48,723	0.3076
6 – 8	7,818	48,723	0.1605
9 – 12	9,968	48,723	0.2046
TOTAL	32,774	48,723	0.6727

Cost per Dwelling Unit

The Estimated Average Cost per Student at each school level, calculated in Table 1, times the Estimated Average District-Wide Student Generation Rate for each school level, calculated in Table 2 above, provides the Estimated Average True Cost per Dwelling Unit. This calculation is shown below:

Table 3			
Estimated Average True Cost per Dwelling Unit			
School Type	Cost per Student	District-Wide Student Generation	True Cost per Dwelling Unit
Elementary	\$51,923	0.3076	\$15,971.51
Middle	\$70,478	0.1605	\$11,311.72
High	\$94,428	0.2046	\$19,319.97
Total		0.6727	\$46,603.20

This Estimated Average True Cost per Dwelling Unit figure of \$46,603.20 is a blended figure used to calculate and track the estimated average true impact of development on the grades K-12 school facilities of the District. As identified on page 17, Table 10, no additional middle school facilities are required for the next five-year period and as shown on page 22, Table 17, there are no high school site acquisition costs for the next five-year period. As such, the total True Cost per Dwelling Unit identified in Table 3 above reduced by the True Cost per Dwelling Unit for middle school facilities and by an adjusted True Cost per Dwelling Unit for high school facilities can be used to identify the True Cost per Dwelling Unit for the next five-year period ($\$46,603.20 - \$11,311.72 - \$639.63 = \$34,651.85$). Dividing this figure by the weighted average square footage of assessable space for single-family detached, single-family attached and multi-family attached dwelling units, projected to be built within the next five-year period within the District, of 1,335 square feet of assessable space, computes to a cost per square foot of \$25.96. The basis of the average square footage per dwelling unit is shown in Table 20.

Moreno Valley Unified School District

Satisfaction of the Requirements to Levy Alternative Fees

Timely Application

The first requirement set forth in Education Code Section 17071.10 and Section 17071.75, is that the governing board make a “timely application” to the SAB and be deemed eligible.

The Board of Education of the Moreno Valley Unified School District previously adopted the required resolution requesting an eligibility determination by the State Allocation Board. This resolution stated the District’s desire to apply for funding under the new School Facilities Program.

District staff completed the required forms and transmitted the same to the SAB on January 25, 1999. These forms have been updated and resubmitted to the SAB. A copy of the most recently updated SAB 50-01 form is contained within Appendix B. The District was originally deemed eligible on August 25, 1999.

Satisfaction of 2 of 4 Statutory Requirements

A school district must satisfy at least two of the four requirements per Government Code Section 65995.5(b)(3). These requirements were summarized in Section One of this Report and apply to the District as follows:

Table 4	
Statutory Requirements for Adoption of Alternative Fees	
Apply	Description
	Multi-Track Year Round Education (MTYRE) Requirement.
	A local bond measure on the ballot in the past 4 years which received at least 50% plus 1 of the votes.
X	The District has issued debt or incurred obligations for capital outlay equal to 15% or 30%, as required, of local bonding capacity.
X	At least 20% of teaching stations per Education Code Section 17071.25 within the district are relocatable classrooms.

Further details as to the two eligibility requirements that the District elects to specify it has met are as follows:

- For the 2018/19 tax year, the total assessed value for the District, as reported by the Riverside County Assessor, was \$14,853,016,107. The outstanding principal as of July 1, 2018 of Community Facilities District Bonds was \$95,640,000, Certificates of Participation was \$9,900,000 and \$125,699,483 for General Obligation Bonds. The sum of the outstanding principals as of July 1, 2018 was \$231,239,483. For a unified school district, the bonding capacity is calculated at 2.5% of the total assessed value. The bonding capacity for the District is \$371,325,403. The District is currently at 62.27% (\$231,239,483 divided by \$371,325,403) of its bonding capacity.
- For the 2018/19 school year the District determined and by approval of this SFNA is certifying that it is operating in excess of twenty percent (20%) of the teaching stations in relocatable classrooms per Education Code Section 17071.25. Of the 1,616 total teaching stations within the District, 454 are in relocatable classrooms. This equates to approximately 28% of the District's teaching stations being in relocatable classrooms. See Appendix C for more information.

Moreno Valley Unified School District

Alternative Fee (Level II)

The following section reflects the calculation of the Level II Fee.

Projected Enrollment from New Homes in the Next Five Years

Student generation for an SFNA is based, per Government Code Section 65995.6, on the historical student generation rates ("SGR") of new residential units constructed during the previous five years that are of a similar type of unit to those anticipated to be constructed either in the city or the county in which the District is located in the next five-year period. Based upon the prescribed criteria, the following SGR per housing type has been determined. A copy of the student generation rate analysis is contained within Appendix E.

Housing Type	Elementary	Middle	High	Total*
Single-Family Detached	0.2611	0.1448	0.1618	0.5677
Single-Family Attached	0.2622	0.1230	0.1148	0.5000
Multi-Family Attached	0.2364	0.1286	0.0954	0.4604

* Note: May not sum due to rounding.

A projection was made of the residential units to be constructed in the next five years by housing type according to Government Code Section 65995.6. The projection was made by using and cross-checking independent sources as provided by applicable law. All data on development projections is contained within Appendix F. These sources are as follows:

- Local Agencies. Starting in March of 2019 contact was made with the City of Moreno Valley, the City of Riverside and the County of Riverside (collectively referred to as “Local Agencies”). Residential development and square footage by dwelling unit type projection letters were sent to the Local Agencies in March and April of 2019. Copies of such correspondence are contained as the final pages of Appendix F.
- Governmental Agencies. SCAG compiles residential development projections. As a cross-check on the information from Local Agencies as set forth herein, a review was made of the projections provided based on input from SCAG as to overlapping census tracts across the District boundaries. According to SCAG these Local Agencies concurred with the original projections released in April 2016, the most currently available update is contained in Appendix F.

The following table shows the summary of development projections by housing type. A copy of the analysis is contained within Appendix F and is shown in that Appendix on Table F-1.

Table 6			
Five-Year Estimated Projection of Unmitigated Dwelling Units by Housing Type			
Single-Family Detached	Single-Family Attached	Multi-Family Attached	Total
221	50	750	1,021

The combination of SGR by Housing Type (Table 5) and Projected Unmitigated Dwelling Units by Housing Type (Table 6) results in an estimate of the total number of projected students per housing type and school level generated from new homes in the next five-year period. This is shown below in Table 7.

Table 7				
Estimated Projection of Enrollment from Unmitigated New Homes in the Next Five Years				
Housing Type	School Facility Type			Total
	Elementary	Middle	High	
Single-Family Detached	58	32	36	126
Single-Family Attached	13	6	6	25
Multi-Family Attached	177	96	72	345
Total	248	134	114	496

District Capacity

The District conducted a capacity analysis pursuant to Section 17071.25 of the Education Code. The process as contained in Section 17071.25 is shown below:

1. Identify by grade level all permanent teaching stations existing in the school district, or where appropriate, the attendance area. A “teaching station” is defined as, “any space that was constructed or reconstructed to serve as an area in which to provide pupil instruction, but shall not include portable buildings, except as provided in Section 17071.30.”
2. The assumed capacity of each teaching station pursuant to paragraph (1) is established as 25 pupils for each teaching station used for kindergarten or for grades 1 to 6 inclusively, and 27 pupils for each teaching station used for grades 7 to 12, inclusively.
3. The assumed capacity as specified in paragraph (2) is multiplied by the number of teaching stations calculated under paragraph (1).
4. The result of this computation represents the number of pupils housed by grade level in the existing school building capacity of the applicant school district.

Portable classrooms are not included in the calculation to the extent that they are:

- Leased from the state pursuant to the State Relocatable Classroom Act of 1979 (Section 17085).
- Portable classrooms, not used for interim housing on modernization projects, and which exceed twenty-five percent (25%) of the number of permanent classrooms available to the District.

- Leased not pursuant to Section 17085, but leased for a period of less than five years prior to the date of application.

This capacity was previously reported on the SAB 50-02 form and was recalculated for this SFNA as shown in Appendix C pursuant to Government Code Section 65995.6, which was amended by Assembly Bill 695 of the 1999 Legislative Session. The data is summarized in Table 8 below.

Table 8 Capacity	
Type	Capacity
Elementary (K-5)	14,390
Middle (6-8)	11,180
High (9-12)	10,609
Total	36,179

Projected Unhoused Students

Current excess capacity was determined and is shown on Table 9 below.

Table 9 Excess Capacity			
Type	Current Capacity (October 2018)	Enrollment (October 2018)	Excess/(Deficit) Capacity (October 2018)
Elementary (K-5)	14,390	14,988	(598)
Middle (6-8)	11,180	7,818	3,362
High (9-12)	10,609	9,968	641
Total	36,179	32,774	3,405

The excess seats identified in Table 9 for the middle and high school levels were evaluated as to the build out requirement of the District. According to SCAG (including modification provided by the City of Riverside) and as shown in Appendix F, the total number of dwelling units as of January 1, 2019 can be estimated by adding the number of dwelling units reported as existing on January 1, 2012 and adding the dwelling units

represented by Certificates of Compliance issued by the District as 48,723. As to a future date, SCAG (including modifications provided by the City of Riverside which provide projections to the year 2035) shows an estimated 66,735 dwelling units to exist in the year 2040. The difference of the existing units from the year 2040 provides an estimate of future dwelling units to the year 2040 of (66,735 – 48,723) 18,012 dwelling units.

The total future dwelling unit figure (18,012) was multiplied by the District-wide SGRs for each school level, as shown on Table 2, provides a future middle school student figure of 2,891 and a future high school student figure of 3,685. As shown in Table 7, 134 unmitigated middle school students and 114 unmitigated high school students have been projected for the next five-year period. Therefore it can be determined that 4.64% of the future middle school students and 3.09% of the future high school students will be generated from unmitigated homes in the next five years. As such, 4.64%, or 156 middle school seats of the 3,362 existing excess middle school seats have been used to lower the needs of middle school capacity for the next five-year period, bringing the projected unhoused middle school students to zero (0). And 3.09%, or 20 high school seats of the 641 existing excess high school seats have been used to lower the needs of high school capacity for the next five-year period.

The subtraction of excess allocated capacity as of October 2018 determined above from projected enrollment (Table 7) results in the number of unhoused students for each school level. This calculation is shown below in Table 10.

Table 10			
Estimated Projection of Unmitigated Unhoused Students			
Type	Projected New Students	Allocated Excess Capacity (Deficit = Zero Capacity)	Unhoused Students
Elementary (K-5)	248	0	248
Middle (6-8)	134	156	0
High (9-12)	114	20	94
Total	496	176	342

Maximum New Construction Grant

The total new construction grant is determined by multiplying the number of unhoused students calculated in Table 10 above by the per-pupil grant (“PPG”). The PPG is the sum of the base grant, the Automatic Fire Detection/Alarm System Grant (“ADG”), and the Automatic Sprinkler System Grant (“ASG”). Adding to the calculated total PPG amount is the addition of assistance for site development and acquisition.

Each January, beginning January 1999, the grant amounts may be adjusted per Education Code 17072.10(b). The SAB adopted the following adjusted grant amounts in January 2019.

The SAB adopted emergency amendments to Section 1859.76 – New Construction Additional Grant for Site Development Costs in June 2006, these additional grants have been extended and remain in effect. These amendments provide funding in two components. The first component is equaled a 6% increase to the base grant for elementary and middle schools and a 3.75% increase for high school. This component of the new General Site Grant is referenced herein as General Site Grant – Component 1, or GSG-C1. The second component, a new grant which provides for a new component to the cost of site development, set in 2006, was equal to 50 percent of \$26,112 per new, useable acre acquired for new construction. This component of the new General Site Grant is referenced herein as General Site Grant – Component 2, or GSG-C2. GSG-C2 was adjusted based upon the construction cost index at the January 2019 SAB meeting.

Table 11 Current Per-Pupil Grant Amounts			
Level	Base Grant	ADG	ASG
Elementary	\$12,197	\$15	\$205
Middle	\$12,901	\$20	\$243
High	\$16,415	\$33	\$253
Severe	\$34,274	\$61	\$646
Non-Severe	\$22,922	\$43	\$433

Pursuant to Section 1859.71.1 of the SAB Regulations, the new construction grant amount for all projected unhoused students with exceptional needs are calculated using the above shown PPG. Specifically, the current percentage of severely handicapped students and the current percentage of non-severely handicapped students to the total student population are determined. This percentage is applied to the Total Projected Unhoused Students to determine the number of Projected Unhoused Non-Severe Students and Projected Unhoused Severe Students in the next five-year period. The Projected Unhoused Non-Severe Students and Projected Unhoused Severe Students are allocated among the school levels based on the currently enrolled actual severe and non-severe students as shown in Appendix D. Each individual result is then multiplied by the PPG for the specified type of exceptional need. For the 2018/19 school year, MVUSD has 3.32% students with non-severe exceptional needs and 1.39% students with severe exceptional needs. The following table calculates the Projected Unhoused Students with exceptional needs.

Table 12 Projected Exceptional Needs Unhoused Students				
Type	Total Projected Unhoused Students	Projected Unhoused Non-Severe Students	Projected Unhoused Severe Students	Remaining Projected Unhoused Students
Elementary	248	4	2	242
Middle	0	0	0	0
High	94	4	3	87
Total	342	8	5	329

Calculation of the total new construction grant is shown in Table 13 below.

Table 13 Total New Construction Grant Amount						
	Elementary	Middle	High	Severe	Non-Severe	Total
Base Grant	\$12,197	\$12,901	\$16,415	\$34,274	\$22,922	
ADG	\$15	\$20	\$33	\$61	\$43	
ASG	\$205	\$243	\$253	\$646	\$433	
Subtotal Grant Amount	\$12,417	\$13,164	\$16,701	\$34,981	\$23,398	
Students	242	0	87	5	8	342
Subtotal	\$3,004,914	\$0	\$1,452,987	\$174,905	\$187,184	\$4,819,990
GSG-C1	\$745	\$790	\$626			
Students	248	0	94			342
Subtotal	\$184,760	\$0	\$58,844			\$243,604
Total	\$3,189,674	\$0	\$1,511,831	\$174,905	\$187,184	\$5,063,594

Site and development costs per Education Code 17072.12 may be added to the Total New Construction Grant if the following two conditions are met:

1. The amount of site acquisition and development assistance does not exceed 50% of the cost of site development to the school district, plus the lesser of 50% of the site cost to the school district or 50% of the appraised value of the site at the time the complete application is submitted, whichever is less; and
2. The school district certifies that there is no alternative available site, or that the district plans to sell an available site in order to use the proceeds of the sale for the purchase of a new site.

Government Code Section 65995.5(h) sets forth the procedures for determining eligible site acquisition and site development costs. Specifically, Section 65995.5(h) states that site acquisition costs shall not exceed one-half (1/2) of the amount determined by multiplying the land acreage by the estimated cost per acre as established in Education Code Section 17072.12.

The District, by the adoption hereof, certifies that the above two conditions have been met and has provided the following site acquisition costs and development costs per school level shown in Table 14 and Table 15. These costs are shown in Appendix A and were evaluated and determined in coordination with the District's consultants. Land cost was based upon a recent land acquisition by the District. Site size was determined by reference to the 1998 California Department of Education Site Determination Requirements Handbook for applicable school levels and loading projections and is reflected in Appendix A.

Table 14				
Total Site Acquisition Cost per School Type				
Type	Site Cost*	Appraisal, Survey, Escrow Etc.**	Total Site and Additions Cost	50% of the Total Site and Additions Cost
Elementary	\$1,258,362	\$50,334	\$1,308,696	\$654,348
Middle	\$2,696,490	\$107,860	\$2,804,350	\$1,402,175
High	\$5,872,356	\$234,894	\$6,107,250	\$3,053,625

* Note: Site cost is equal to \$119,844 multiplied by 10.5 acres for elementary school, by 22.5 acres for middle school and by 49.0 acres for high school

** Note: This amount is equal to 4% of the actual site cost but not less than \$50,000 per SAB Regulation 1859.74(a)(2).

Site development costs were taken from estimated school costs prepared by the District (See Appendix A).

Table 15					
Total Site Development Cost per School Type					
Type	Service Site Cost Per School	Off-Site Cost Per School	Utility Cost Per School	GSG-C2* Per School	Total Site Development Cost**
Elementary	\$1,535,660	\$840,000	\$280,000	\$208,457	\$1,536,287
Middle	\$3,640,000	\$2,240,000	\$1,008,000	\$446,693	\$3,890,693
High	\$18,697,694	\$3,803,430	\$4,862,200	\$972,797	\$14,654,459

* Note: The GSG-C2 as of January 2019 is equal to \$19,853 multiplied by 10.5 acres for elementary school, 22.5 acres for middle school and 49.0 acres for high school.

** Note: Total Site Development Cost per School is equal to 50% of the sum of service site, off-site and utility costs plus the total cost of the GSG-C2.

The site and development costs shown above in Table 14 and Table 15 are per school. The following table identifies the number of schools required by the projected number of unhoused students from new development in the next five years based on the SGRs set forth in Table 5.

Table 16			
Number of Schools Required for Projected Unhoused Students from New Development			
School Type	Projected Unhoused Students	School Capacity	Number of Schools Required
Elementary	248	800	0.31
Middle	0	1,200	0.00
High	94	2,500	0.04

The number of schools required to house the projected unhoused students from new development is multiplied by the site and development cost per school shown in Table 14 and Table 15 to determine the total site and development cost grant. This calculation is shown below in Table 17 and reflects the ownership of one District owned high school site. The site has not been improved and as such, development cost grants are calculated for the needs of the next five-year period.

Table 17					
Calculation of the Site and Development Grant					
School Type	Site Acquisition Cost	Schools Required	Site Development Cost	Schools Required	Total Site and Development Grant
Elementary	\$654,348	0.31	\$1,536,287	0.31	\$679,097
Middle	\$1,402,175	0.00	\$3,890,693	0.00	\$0
High	\$3,053,625	0.00	\$14,654,459	0.04	\$586,178
Total					\$1,265,275

The sum of the total site and development grant (Table 17), and the total PPG (Table 13) provides the basis for the maximum new construction grant for projected unhoused students from new development. This summation is shown in Table 18 below.

Table 18	
Maximum New Construction Grant	
Total Per-Pupil Grant	\$5,063,594
Site and Development Cost Allowance	\$1,265,275
Maximum New Construction Grant	\$6,328,869

Local Funds

An analysis of Local Funds is contained within Appendix G and details in Table G-2 the amount of local funds currently on deposit which can be utilized to lower the needs of the projected unhoused students in the next five-year period.

Total New Construction Grant

The total amount of local funds, if existent and dedicated to Unhoused Projected Students, is subtracted from the maximum new construction grant to determine the Total New Construction Grant. This amount is calculated in Table 19 below.

Table 19 Total New Construction Grant	
Maximum New Construction Grant	\$6,328,869
Local Funds	\$0
Total New Construction Grant	\$6,328,869

The Level II Fee

The total new construction grant amount calculated above (per Government Code Section 65995.5(c)(3)) is divided by the projected total square footage of assessable space of new residential units anticipated to be constructed during the next five-year period. The City of Moreno Valley and the County of Riverside, as detailed in correspondence contained in Appendix F, provided a projection of average square footage by dwelling unit type based on currently processing projects. The City of Riverside confirmed a projection of no dwelling units for the next five-year period, as such average dwelling unit size by housing type was not provided or discussed. Correspondence to each agency is contained as the final pages of Appendix F. The projected total square footage is calculated as shown in Table 20 below.

Table 20 Calculation of Projected Total Square Feet of Assessable Space for the Next Five-Year Period				
Housing Type	Data Source for Average Home Size	Average Size Home	Projected Number of Units	Total Projected Square Feet of Assessable Space
Single-Family Detached	City of Moreno Valley	2,497	210	524,370
	County of Riverside	1,200	11	13,200
Single-Family Attached	City of Moreno Valley	1,500	50	75,000
Multi-Family Attached	City of Moreno Valley	1,000	750	750,000
Total			1,021	1,362,570

Table 21 shows the division of the total new construction grant by the projected square feet of assessable space to be developed in the next five years. The result of this division represents the Level II Fee amount.

Table 21	
Calculated Level II Fee per Square Foot of Assessable Space	
Total New Construction Grant	\$6,328,869
Projected Square Feet of Assessable Space	1,362,570
Level II Fee	\$4.64

Moreno Valley Unified School District

Alternative Fee (Level III)

Application of the Level III Fee

Pursuant to Section 65995.7 of the Government Code, if State funds for new facility construction are not available, the governing board of a school district that has complied with Section 65995.5 may increase the Level II Fee to the Level III Fee. State funds are not available if the SAB is no longer approving apportionments for new construction due to a lack of funds available for new construction. Upon making a determination that State funds are no longer available, the SAB shall notify the Secretary of the Senate and the Chief Clerk of the Assembly, in writing, of that determination.

Calculation of the Level III Fee

The Level III Fee is the Level II Fee increased by an amount not to exceed the amount calculated pursuant to subdivision (c) of Section 65995.5, except that for the purpose of calculating this additional amount, the amount identified in paragraph (2) of subdivision (c) of Section 65995.5 is not subtracted from the amount determined pursuant to paragraph (1) of subdivision (c) of Section 65995.5. This calculation is shown in Table 22 below.

Total New Construction Grant	\$6,328,869
Maximum New Construction Grant	\$6,328,869
Total Level III New Construction Grant	\$12,657,738
Projected Square Feet of Assessable Space	1,362,570
Level III Fee	\$9.29

Reimbursement Elections

A governing board may offer a reimbursement election to the person subject to the Level III Fee that provides the person with the right to monetary reimbursement of an agreed portion of the difference between the Level III and the Level II Fee to the extent that the District receives funds from state sources for construction of the facilities for which that amount was required, less any amount expended by the district for interim housing. At the option of the person subject to the Level III Fee, if the school district elects to make reimbursement available, the reimbursement election may be made on a tract or lot basis. In accordance with Section 65995.7(b) of the Government Code, reimbursement shall be made within 30 days after such funding is received by the district.

A governing board may offer the person subject to the Level III Fee an opportunity to negotiate an alternative agreement.

A governing board may provide that the rights granted by the reimbursement election or the alternative reimbursement agreement are assignable.

If a school district fails to offer a reimbursement election or enter into an alternative reimbursement agreement, the amount of state funding subsequently received shall be reduced by the difference between the Level II Fee and the Level III Fee to the extent provided by applicable law.

Moreno Valley Unified School District

Adoption of the School Facilities Needs Analysis and Implementation of the Alternative Fees

A school district notifies the applicable cities and county of the SFNA and provides relevant and available information relating to the expansion of existing school sites or the necessity to acquire additional school sites, including notice of a proposed meeting to discuss this information in accordance with Government Code Section 65352.2. The governing board adopts the SFNA by resolution at a public hearing after the SFNA has been made available to the public for a period of not less than 30 days. In addition, during the public review period, the SFNA is provided to the local agencies responsible for land planning for their review and comment. Prior to the adoption of the SFNA, the public is given the opportunity to review and comment on the SFNA and the governing board must respond to written comments it receives.

Notice of the time and place of the hearing, including the location and procedure for viewing or requesting a copy of the proposed SFNA and any proposed revision must be published in at least one newspaper of general circulation within the jurisdiction of the school district not less than 30 days prior to the hearing. The governing board shall mail a copy of the SFNA and any proposed revision not less than 30 days prior to the hearing to any person who has made a written request at least 45 days prior to the hearing.

The SFNA may be revised at any time and the revision is subject to the same conditions and requirements applicable to the adoption of the SFNA.

The Level II and Level III Fees are adopted by a resolution of the governing board as a part of the adoption or revision of the SFNA and are effective for a maximum of one year. The Alternative Fees are effective immediately after adoption of the resolution per Government Code Section 65995.6(f). Upon adoption, the District files notices with any applicable City or County.

Section
Seven

Moreno Valley Unified School District

Section 66000 of the Government Code

Sections 66000, *et. seq.* of the Government Code were enacted by the State of California in 1987. These Sections require that all public agencies satisfy the following requirements when establishing, increasing or imposing a fee, such as the Alternative Fees described herein, as a condition of approval for the a development project.

1. Determine the purpose of the fee.
2. Identify the facilities to which the fee will be applied.
3. Determine that there is a reasonable relationship between the need for public facilities and the type of development on which the fee is imposed.
4. Determine that there is a reasonable relationship between the amount of the fee and the public facility or portion of the public facility attributable to the development on which the fee is imposed.
5. Provide an annual accounting of any portion of the fee remaining unexpended or uncommitted in the school district's accounts five (5) or more years after it was collected.

This SFNA and the information included in the Appendices hereto establishes that the Alternative Fees meet the requirements of Section 66000, *et seq.* and such a determination by the District as part of adopting the Alternative Fees is justified and appropriate. By way of summary, the Alternative Fees will be used to fund in part the school facilities collectively identified in the "2013-14 Facilities Master Plan" dated November 12, 2013 ("MVUSD Master Plan") adopted by the District and (i) new school facilities, (ii) expansion of existing school facilities and (iii) other upgrades to existing school facilities, but only to the extent that such items are needed to accommodate the projected unhoused students and to the extent that the use of the Alternative Fees on such items is permitted by applicable law.

Additional new residential development in the District will generate additional students who will require the District to provide additional school facilities. The amount to be included in the Alternative Fees is specified by statute or direction is given by statute as to the costs permissible to include. The Level II Fee of \$4.64 per square foot and the Level III Fee of \$9.29 per square foot are justified in this Report. The estimated average cost to the District per square foot as calculated on Page 10 is \$25.96 per square foot.

As the school facilities cost impacts per square foot of new residential construction are greater than the Alternative Fees, it is reasonable for the District to determine that the Alternative Fees of \$4.64 per square foot and \$9.29 per square foot for Level II and Level III, respectively, are roughly proportional and reasonably related to the impacts caused by new residential development on the District.

**APPENDIX A
SCHOOL COSTS
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
May 2019**

**MORENO VALLEY UNIFIED SCHOOL DISTRICT
SUMMARY OF ESTIMATED COSTS
ELEMENTARY SCHOOL**

A. SITE		
1	Purchase Price of Property	\$ 1,258,361
	Acres: 10.5	
	Cost/Acre*: \$ 119,844	
2	EIR/CEQA	\$ 80,000
3	Appraisals (Prelim, Update, Final)	\$ 25,000
4	Escrow/Title	\$ 16,000
5	Surveys (geo-hazard, phase-1/PEA, topo)	\$ 121,000
6	Relocation	\$ -
7	Legal	\$ 50,000
	Total	\$ 1,550,361

* Assumes an Unimproved Site and Net Useable Acres

B. PLANS (% of Construction)		
1	Architect's Fee	\$ 1,751,347
2	Preliminary Tests (1%)	\$ 326,671
3	DSA/CDE Plan Check (2%)	\$ 653,342
4	Environmental Fee Analysis (0.3%)	\$ 98,001
5	Duplicating/Advertising Costs (0.1%)	\$ 32,667
6	Other (0.2%)	\$ 65,334
	Total	\$ 2,927,362

C. CONSTRUCTION		
1	Construction (\$450 per sqft x 75 sqft per student)	\$ 27,000,000
2	Utility Services	\$ 280,000
3	Off-Site Development	\$ 840,000
4	Service Site Development	\$ 1,535,660
5	General Conditions	\$ 1,285,272
6	Technology	\$ 336,000
7	Unconventional Energy	\$ -
8	Other/Deferred Items (CM, PM, etc.)	\$ 1,390,166
	Total	\$ 32,667,098

D. TEST (1% of Item C)	\$ 326,670.98
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E. INSPECTION (1.2% of Item C)	\$ 392,005.18
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F. FURNITURE AND EQUIPMENT (6.25% of Item C)	\$ 2,041,694
---	---------------------

G. CONTINGENCY (5% of Item C)	\$ 1,633,355
--------------------------------------	---------------------

TOTAL ESTIMATED COST **\$ 41,538,546**

Projected Number of Students	800
Facilities Cost Per Student	\$ 51,923

NOTE: Total may not sum due to rounding.

**MORENO VALLEY UNIFIED SCHOOL DISTRICT
SUMMARY OF ESTIMATED COSTS
MIDDLE SCHOOL**

A. SITE		
1	Purchase Price of Property	\$ 2,996,098
	Acres: 25	
	Cost/Acre*: \$ 119,844	
2	EIR/CEQA	\$ 150,000
3	Appraisals (Prelim, Update, Final)	\$ 22,000
4	Escrow/Title	\$ 20,000
5	Surveys (geo-hazard, phase-1/PEA, topo)	\$ 180,000
6	Relocation	\$ -
7	Legal	\$ 50,000
	Total	\$ 3,418,098

* Assumes an Unimproved Site and Net Useable Acres

B. PLANS (% of Construction)		
1	Architect's Fee	\$ 3,373,300
2	Preliminary Tests (1%)	\$ 664,521
3	DSA/CDE Plan Check (2%)	\$ 1,329,043
4	Environmental Fee Analysis (0.3%)	\$ 199,356
5	Duplicating/Advertising Costs (0.1%)	\$ 66,452
6	Other (0.2%)	\$ 132,904
	Total	\$ 5,765,577

C. CONSTRUCTION		
1	Construction (\$450 per sqft x 100 sqft per student)	\$ 54,000,000
2	Utility Services	\$ 1,008,000
3	Off-Site Development	\$ 2,240,000
4	Service Site Development	\$ 3,640,000
5	General Conditions	\$ 2,156,000
6	Technology	\$ 672,000
7	Unconventional Energy	\$ -
8	Other/Deferred Items (CM, PM, etc.)	\$ 2,736,140
	Total	\$ 66,452,140

D. TEST (1% of Item C)	\$ 664,521
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E. INSPECTION (1.2% of Item C)	\$ 797,426
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F. FURNITURE AND EQUIPMENT (6.25% of Item C)	\$ 4,153,259
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G. CONTINGENCY (5% of Item C)	\$ 3,322,607
--------------------------------------	---------------------

TOTAL ESTIMATED COST **\$ 84,573,627**

Projected Number of Students 1,200
Facilities Cost Per Student **\$ 70,478**

NOTE: Total may not sum due to rounding.

**MORENO VALLEY UNIFIED SCHOOL DISTRICT
SUMMARY OF ESTIMATED COSTS
HIGH SCHOOL**

A. SITE		
1	Purchase Price of Property	\$ 7,190,634
	Acres: 60	
	Cost/Acre*: \$ 119,844	
2	EIR/CEQA	\$ 300,000
3	Appraisals (Prelim, Update, Final)	\$ 50,000
4	Escrow/Title	\$ 25,000
5	Surveys (geo-hazard, phase-1/PEA, topo)	\$ 200,000
6	Relocation	\$ -
7	Legal	\$ 50,000
	Total	\$ 7,815,634

* Assumes an Unimproved Site and Net Useable Acres

B. PLANS (% of Construction)		
1	Architect's Fee	\$ 9,237,250
2	Preliminary Tests (1%)	\$ 1,863,183
3	DSA/CDE Plan Check (2%)	\$ 3,726,366
4	Environmental Fee Analysis (0.3%)	\$ 558,955
5	Duplicating/Advertising Costs (0.1%)	\$ 186,318
6	Other (0.2%)	\$ 372,637
	Total	\$ 15,944,708

C. CONSTRUCTION		
1	Construction (\$450 per sqft x 125 sqft per student)	\$ 140,625,000
2	Utility Services	\$ 4,862,200
3	Off-Site Development	\$ 3,803,430
4	Service Site Development	\$ 18,697,694
5	General Conditions	\$ 5,502,673
6	Technology	\$ 1,680,000
7	Unconventional Energy	\$ 5,824,000
8	Other/Deferred Items (CM, PM, etc.)	\$ 5,323,283
	Total	\$ 186,318,281

D. TEST (1.5% of Item C)	\$ 2,794,774
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E. INSPECTION (1.2% of Item C)	\$ 2,235,819
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F. FURNITURE AND EQUIPMENT (6.25% of Item C)	\$ 11,644,893
---	----------------------

G. CONTINGENCY (5% of Item C)	\$ 9,315,914
--------------------------------------	---------------------

TOTAL ESTIMATED COST **\$ 236,070,023**

Projected Number of Students	2,500
Facilities Cost Per Student	\$ 94,428

NOTE: Total may not sum due to rounding.

**APPENDIX B
STATE ALLOCATION BOARD FORM 50-01
and 50-03 (Eligibility Document)
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
April 2014 / August 1999**

SCHOOL DISTRICT Moreno Valley Unified	FIVE DIGIT DISTRICT CODE NUMBER (see California Public School Directory) 67124
COUNTY Riverside	HIGH SCHOOL ATTENDANCE AREA (HSAA) OR SUPER HSAA (if applicable) N/A

Check one: Fifth-Year Enrollment Projection Tenth-Year Enrollment Projection
 HSAA Districts Only - Check one: Attendance Residency
 Residency - COS Districts Only - (Fifth Year Projection Only)

<input type="checkbox"/> Modified Weighting (Fifth-Year Projection Only)	3rd Prev. to 2nd Prev.	2nd Prev. to Prev.	Previous to Current
<input type="checkbox"/> Alternate Weighting - (Fill in boxes to the right):			

Part G. Number of New Dwelling Units
 (Fifth-Year Projection Only) 3043

Part H. District Student Yield Factor
 (Fifth-Year Projection Only) 0.7

Part A. K-12 Pupil Data

Grade	7th Prev.	6th Prev.	5th Prev.	4th Prev.	3rd Prev.	2nd Prev.	Previous	Current
	/	/	/	/	2010/2011	2011/2012	2012/2013	2013/2014
K					2610	2558	2570	2662
1					2802	2679	2773	2592
2					2700	2630	2611	2761
3					2560	2622	2665	2565
4					2675	2514	2689	2642
5					2720	2675	2505	2636
6					2552	2644	2662	2479
7					2718	2585	2595	2598
8					2669	2726	2581	2657
9					2698	2631	2453	2509
10					2744	2657	2703	2550
11					2562	2468	2512	2261
12					2492	2289	2395	2118
TOTAL					34502	33678	33714	33030

Part I. Projected Enrollment

1. Fifth-Year Projection
 Enrollment/Residency - (except Special Day Class pupils)

K-6	7-8	9-12	TOTAL
20006	5299	9824	35129

Special Day Class pupils only - Enrollment/Residency

	Elementary	Secondary	TOTAL
Non-Severe	718	418	1136
Severe	229	162	391
TOTAL	947	580	

2. Tenth-Year Projection
 Enrollment/Residency - (except Special Day Class pupils)

K-6	7-8	9-12	TOTAL

Special Day Class pupils only - Enrollment/Residency

	Elementary	Secondary	TOTAL
Non-Severe			
Severe			
TOTAL			

Part B. Pupils Attending Schools Chartered By Another District

7th Prev.	6th Prev.	5th Prev.	4th Prev.	3rd Prev.	2nd Prev.	Previous	Current
				0	3	476	564

Part C. Continuation High School Pupils - (Districts Only)

Grade	7th Prev.	6th Prev.	5th Prev.	4th Prev.	3rd Prev.	2nd Prev.	Previous	Current
9					0	0	0	0
10					13	3	0	9
11					121	142	116	123
12					331	209	223	150
TOTAL					465	354	339	282

Part D. Special Day Class Pupils - (Districts or County Superintendent of Schools)

	Elementary	Secondary	TOTAL
Non-Severe	686	432	1118
Severe	219	168	387
TOTAL	905	600	

Part E. Special Day Class Pupils - (County Superintendent of Schools Only)

7th Prev.	6th Prev.	5th Prev.	4th Prev.	3rd Prev.	2nd Prev.	Previous	Current
/	/	/	/	2010/2011	2011/2012	2012/2013	2013/2014

Part F. Birth Data - (Fifth-Year Projection Only)

County Birth Data Birth Data by District ZIP Codes Estimate Estimate Estimate

8th Prev.	7th Prev.	6th Prev.	5th Prev.	4th Prev.	3rd Prev.	2nd Prev.	Previous	Current

I certify, as the District Representative, that the information reported on this form and, when applicable, the High School Attendance Area Residency Reporting Worksheet attached, is true and correct and that:

- I am designated as an authorized district representative by the governing board of the district.
- If the district is requesting an augmentation in the enrollment projection pursuant to Regulation Section 1859.42.1 (a), the local planning commission or approval authority has approved the tentative subdivision map used for augmentation of the enrollment and the district has identified dwelling units in that map to be contracted. All subdivision maps used for augmentation of enrollment are available at the district for review by the Office of Public School Construction (OPSC).
- This form is an exact duplicate (verbatim) of the form provided by the Office of Public School Construction. In the event a conflict should exist, then the language in the OPSC form will prevail.

NAME OF DISTRICT REPRESENTATIVE (PRINT OR TYPE)

Sergio San Martin

SIGNATURE OF DISTRICT REPRESENTATIVE

DATE
April 30, 2014

TELEPHONE NUMBER
(951) 571-7690 x 17692

E-MAIL ADDRESS
ssanmartin@mvusd.net



District Main Page

Return to Search Results

District: Moreno Valley Unified
 District Rep: Mr. Sergio San Martin

Modernization Eligibility New Construction Eligibility Fund Release

District Code	Attendance Area	Original SAB Approval Date	Recent SAB Approval																																
67124	0	8/25/1999	12/10/2008																																
<p>SAB 50-03 New Construction Eligibility Information</p> <p>New Construction Baseline Eligibility</p> <table> <thead> <tr> <th>Grade Level:</th> <th>K - 6</th> <th>7 - 8</th> <th>9 - 12</th> <th>Non-Severe</th> <th>Severe</th> </tr> </thead> <tbody> <tr> <td>Established Eligibility:</td> <td>5942</td> <td>-2925</td> <td>2453</td> <td>0</td> <td>0</td> </tr> <tr> <td>SAB Approvals/Adjustments:</td> <td>-4228</td> <td>608</td> <td>-883</td> <td>89</td> <td>168</td> </tr> <tr> <td>Remaining Eligibility:</td> <td>1714</td> <td>-2317</td> <td>1570</td> <td>89</td> <td>168</td> </tr> </tbody> </table> <hr/> <p>SAB 50-03 Eligibility Document Status/Dates</p> <table> <tbody> <tr> <td>Status:</td> <td>PM Complete</td> </tr> <tr> <td>Date Signed:</td> <td>4/12/1999</td> </tr> <tr> <td>Date Received:</td> <td>5/11/1999</td> </tr> <tr> <td>SAB Approval Date:</td> <td>8/25/1999</td> </tr> </tbody> </table>				Grade Level:	K - 6	7 - 8	9 - 12	Non-Severe	Severe	Established Eligibility:	5942	-2925	2453	0	0	SAB Approvals/Adjustments:	-4228	608	-883	89	168	Remaining Eligibility:	1714	-2317	1570	89	168	Status:	PM Complete	Date Signed:	4/12/1999	Date Received:	5/11/1999	SAB Approval Date:	8/25/1999
Grade Level:	K - 6	7 - 8	9 - 12	Non-Severe	Severe																														
Established Eligibility:	5942	-2925	2453	0	0																														
SAB Approvals/Adjustments:	-4228	608	-883	89	168																														
Remaining Eligibility:	1714	-2317	1570	89	168																														
Status:	PM Complete																																		
Date Signed:	4/12/1999																																		
Date Received:	5/11/1999																																		
SAB Approval Date:	8/25/1999																																		

**APPENDIX C
UPDATED EXISTING SCHOOL CAPACITY
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
Fall 2018**

Moreno Valley Unified School District
Update to Existing School Building Capacity

The District conducted a capacity analysis pursuant to Section 17071.25 of the Education Code, which analysis was recalculated for this Report in accordance with Government Code Section 65995.6 as amended by Assembly Bill 695 of the 1999 Legislative Session ("AB 695").

Part I. Classroom Inventory

	K-6	7-8	9-12	Non-Severe	Severe	Total
Line 1 Leased State Relocatable Classrooms						0
Line 2 Portable Classrooms leased less than 5 years						0
Line 3 Interim Housing Portables leased less than 5 years			14			14
Line 4 Interim Housing Portables leased at least 5 years			0			0
Line 5 Portable Classrooms leased at least 5 years			14			14
Line 6 Portable Classrooms owned by the District	208	92	126			426
Line 7 Permanent Classrooms	509	257	258	86	52	1,162
Line 8 Total of Above:	717	349	412	86	52	1,616

Part II. Available Classrooms

	K-6	7-8	9-12	Non-Severe	Severe	Total
<i>Option A</i>						
a. Part I, Line 4	0	0	0	0	0	0
b. Part I, Line 5	0	0	14	0	0	14
c. Part I, Line 6	208	92	126	0	0	426
d. Part I, Line 7	509	257	258	86	52	1,162
e. Total of Above:	717	349	398	86	52	1,602
<i>Option B</i>						
a. Part I, Line 8	717	349	412	86	52	1,616
b. Part I, Lines 1, 2, 5 and 6 (total only)						440
c. 25 percent of Part I, Line 7 (total only)						291
d. Subtract c from b (enter 0 if negative)	72	35	42	0	0	149
e. Total (a minus d)	645	314	370	86	52	1,467

Part III. Determination of Existing School Building Capacity

	K-6	7-8	9-12	Non-Severe	Severe	Total
Line 1 Classroom Capacity						
Line 2 SER Adjustment	16,125	8,478	9,990	1,118	468	36,179
Line 3 Operational Grants						0
Line 4 Greater of Lines 2 or 3						0
Line 5 Total of Lines 1 and 4	16,125	8,478	9,990	1,118	468	36,179

Part IV. Allocation of Existing School Building Capacity to K-5, 6-8 Grade Configuration

	K-5	6-8	9-12	Total
Allocation of Capacity K-6, 7-8 to K-5, 6-8 based on number of grades	13,821	10,782	9,990	34,593
Current Enrollment SDC Only	555	388	603	1,546
Allocation of SDC Capacity to Elementary and Secondary	569	619	619	1,586
Total Capacity	14,390	11,180	10,609	36,179

**APPENDIX D
STUDENT ENROLLMENT
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
October 2018**

Appendix D

Moreno Valley Unified School District
October 3, 2018 Preliminary CBEDS Enrollment Report

Enrollment Data			
Grade	Enrollment	Ungraded	Subtotal by School Level (K-5, 6-8)
TK	537		
K	2,218		
1	2,337		
2	2,361		
3	2,349		
4	2,211		
5	2,420		
Ungraded		555	14,988
6	2,406		
7	2,596		
8	2,428		
Ungraded		388	7,818
9	2,411		
10	2,407		
11	2,251		
12	2,296		
Ungraded		603	9,968
Totals	31,228	1,546	32,774

Special Day Class Pupils			
	Non-Severe	Severe	Total
Elementary	410	145	555
Middle	305	83	388
High	374	229	603
Totals	1,089	457	1,546

Source: FY 2018/19 CBEDS Report provided February 7, 2019.

**APPENDIX E
STUDENT GENERATION RATE ANALYSIS
PER GOVERNMENT CODE SECTION 65995.6
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
May 2019**

Student Generation Rates

SGRs for an SFNA are based, per Government Code Section 65995.6, on the historical student generation rates of new residential units constructed during the previous five years that are of a similar type of unit to those anticipated to be constructed either in the school district or in the city or the county in which the school district is located in the next five years. The methodology used to determine student generation rates is as follows:

Methodology

County data was obtained from the Assessor's Office of the County of Riverside. Residential construction built within the past five years was extracted. This data was then matched to a student database received in February of 2019 which reported student enrollment as of October 3, 2018. A "match" was reported when a student was found in the student file, registered with the District with the same address as the address of the unit built ("situs" address) within the past five years. The total students matched divided by the total dwelling units extracted, by grade and housing type, result in the SGR.

STUDENT DATABASE

The District provided Special District Financing & Administration with a current student file, which contained student identification numbers, grades and situs addresses. There were 32,620 students in the file. Of these students, 32,620 had "regular" addresses. The term "regular" refers to an address that is readable and not, for example, a post office box. The difference was 0.00% or 0 students had undeterminable addresses.

The following section reviews the steps taken to match existing students to dwelling units constructed in the last five years.

COUNTY OF RIVERSIDE

In February of 2019, a property characteristics database was obtained from the Assessor's Office of the County of Riverside. This database contains only residential parcels and provides the year that the structure was built. This database contained 41,462 records.

According to the County of Riverside, 531 single-family detached dwelling units, 0 single-family attached dwelling units and 258 multi-family attached dwelling units were constructed and sold based on ownership within the last five-year period. The five-year period being evaluated is approximately ten months of calendar year 2014 through two months 2019. There are a total of 420 students living in these 789 residential units.

STUDENTS TRANSFERRING OUT OF THE DISTRICT

The District provided SDFA with a listing of students that are generated from within the boundaries of the District but currently are transferring out of the District. These students were also matched to dwelling units constructed within the past five-year period. These students are included in the total figures provided above and the tables below.

Students Generated from Dwelling Units Constructed in the Last Five-Year Period

The match of student to dwelling unit, when divided by the number of dwelling units of various types constructed in the past five-year period, produces the SGR per grade per housing type. These calculations are shown in the tables below.

Table E-1 Single-Family Detached SGR				
Grade	Students Matched	SFD Dwelling Units	SGR by Grade*	SGR by School Level*
T-K & K	22		0.0418	
1	19		0.0364	
2	25		0.0478	
3	22		0.0421	
4	21		0.0396	
5	28		0.0534	0.2611
6	17		0.0317	
7	30		0.0559	
8	30		0.0572	0.1448
9	20		0.0368	
10	26		0.0490	
11	17		0.0311	
12	24		0.0449	0.1618
Total	301	531	0.5677	0.5677

*Total may not divide across or add down due to rounding.

**Table E-2
Multi-Family Attached SGR**

Grade	Students Matched	MFA Dwelling Units	SGR by Grade*	SGR by School Level*
Kindergarten	11		0.0400	
1	8		0.0303	
2	11		0.0435	
3	13		0.0513	
4	7		0.0277	
5	11		0.0435	0.2364
6	13		0.0493	
7	11		0.0439	
8	9		0.0354	0.1286
9	7		0.0279	
10	6		0.0240	
11	7		0.0277	
12	4		0.0159	0.0954
Total	119	258	0.4604	0.4604

*Total may not divide across or add down due to rounding.

Generation Rates for Single Family Attached Dwelling Units

Section 65995.6 of the Government Code directs the District to project enrollment growth from the development of new residential units over the next five years. This projection is based upon the historical SGRs of new residential units constructed in the previous five years that are of a similar type of unit to those anticipated to be constructed either in the District or the Cities or County in which the District is located in the next five years.

According to the records of the County of Riverside and the District, the District did not experience the construction of any single family attached dwelling units within the past five-year period that were not senior-restricted.

The Beaumont Unified School District ("BUSD"), also located in Riverside County, was contacted and asked to provide data regarding the construction of single family attached dwelling units during the previous five-year period and their resulting SGRs. It is projected that Moreno Valley Unified School District will experience some development of non-senior restricted single family attached dwelling units in the next five years. The BUSD SGR for SFA dwelling units was used as a reasonable projection due to proximity of the two school districts and the similar dwelling unit size; BUSD projects SFA dwelling units of 1,400 square feet of assessable space and the District is projecting SFA dwelling units of 1,500 square feet of assessable space. The source of the data is the BUSD School Facilities Needs Analysis, adopted April 10, 2018. The table below shows the data provided by the BUSD.

Table E-3
Single Family Attached Dwelling Units Student Generation
Source: Beaumont Unified School District, 2018 SFNA

Grade	SGR by School Level*
Elementary (K-5)	0.2622
Middle (6-8)	0.1230
High (9-12)	0.1148
Total	0.5000

*Total may not add down due to rounding.

**APPENDIX F
DEVELOPMENT PROJECTIONS
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
May 2019**

Development Projections

A projection was made of the residential units to be constructed in the next five years by housing type according to Government Code Section 65995.6. In March of 2019, the City of Moreno Valley, the City of Riverside and the County of Riverside were sent prior year residential development projections and average residential dwelling unit square footage projections and asked to provide updated information comments. Data was also requested from SCAG which was provided to the agencies in March and April of 2019 and used to cross-check the final residential development projections. Each of the following sections identifies the data gathered and comments received from each source.

Local Agencies

The District encompasses the majority of the City of Moreno Valley, a portion of the City of Riverside and unincorporated areas of the County of Riverside. The planning departments of each of these agencies were contacted and asked to provide, if possible, a projection of residential dwelling units to be constructed within the next five-year period. The request was further defined to include the type and estimated size of the dwelling units.

For the City of Moreno Valley three of typically four data sources were reviewed. For the current year, the City of Moreno Valley "California Development Projects Map" and listings titled, "New Single-Family Development" and "New Multi-Family Development" were being updated and not available for review. Second, historical permit activity was reviewed by analysis of the County of Riverside Assessor data which tracks the year a dwelling unit is constructed. This data provided historical trends. And finally, data from SCAG was requested and reviewed to provide a five-year projection of residential dwelling units, both for the entire District and the area within the City of Moreno Valley served by the District. Contact was made with City staff and updates were provided on processing projects. Our draft residential development projections and the projection of average square footage per dwelling unit type was provided to the Planning Official of the City of Moreno Valley and a Senior Planner in April of 2019. Page 4 to our correspondence requesting a signed response to our proposed projections was received requesting modifications to our projections on April 26, 2019 and has been included in the attached correspondence.

Staff of the City of Riverside provided residential development projections by Traffic Analysis Zones ("TAZ") for the next five-year period in February 2016. This same data has been provided by the City of Riverside to SCAG. In prior correspondence city Staff had noted that the area within the city and the District is land designated as non-residential land use per the General Plan 2025. The projection of zero dwelling units and no projection of average square footage per dwelling unit type due to no projection of dwelling units was sent to staff at the City of Riverside on April 10, 2019 (which is attached to this Appendix). Page 4 to our correspondence requesting a signed response to our proposed projections was received as accepted on April 12, 2019. The signed certification had been inserted into the letter attached to this Appendix.

Correspondence was sent to the County of Riverside, Senior Transportation Planner. The correspondence, which is attached as the final pages to this Appendix, requested a review of the draft residential development projections and to the projection of average square footage per dwelling unit type. Page 4 to our correspondence requesting a signed response to our proposed projections was received as accepted on April 11, 2019 and has been included in the attached correspondence.

Governmental Agencies

As a cross-check, SCAG was contacted. They provided a residential forecast for the area within the boundaries of the District. The 2016 Regional Transportation Plan and Sustainable Communities Strategy Growth Forecast adopted in April of 2016 by TAZ was approved by each agency prior to release and remains the most current available data. A review was made by SCAG using their geographic information system of TAZ that cross the boundary of the District and a percentage was applied by SCAG to represent the portion of the TAZ within the boundaries of the District and if necessary a portion of the TAZ within each agency. The SCAG projection for the Moreno Valley Unified School District, as adjusted by the removal of portions of TAZ as described and as modified by request for those portions within the City of Riverside, was enclosed in the correspondence to each of the local agencies.

As a cross-check to projected development for the prescribed local agencies, it can be extrapolated from the adjusted SCAG data, as modified by the City of Riverside, that between fiscal years 2019/20 and 2023/24 a total of 3,847 dwelling units will have building permits issued.

Final Development Projections

The following table shows the final development projections by housing type. In recognition of the impact on school facilities from new development, the District and the development community previously have entered into various mitigation agreements in order to seek to ensure the timely construction of school facilities to house students from new development ("Mitigated Development"). These Mitigated Developments, shown separately in the table below, can be excluded from the projections contained within this SFNA as they are providing funding and support to the District's school facilities program and will not generate "Unhoused Students." Mitigated Development is not included for purposes of projecting development to be constructed in the next five-year period.

Table F-1	
Final Residential Development Projections	
Fiscal Years 2019/2020 through 2023/2024	
Single-Family Detached	
Mitigated	190
Unmitigated	221
Single-Family Attached	
Mitigated	0
Unmitigated	50
Multi-Family Attached	
Mitigated	0
Unmitigated	750
Total Units	1,211



**SPECIAL DISTRICT FINANCING
& ADMINISTRATION**

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- Via Email Only -

April 18, 2019

Ms. Patty Nevins
Planning Manager
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Ms. Claudia Manrique
Advanced Planning
Community & Economic Development Department
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Mr. Chris Ormby
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Senior Planner
Community & Economic Development Department
Planning Division

City of Moreno Valley
14177 Frederick Street
Moreno Valley CA 92552

**RE: CONFIRMATION OF RESIDENTIAL DEVELOPMENT AND SQUARE
FOOTAGE PROJECTIONS FOR THE MORENO VALLEY UNIFIED SCHOOL
DISTRICT**

Special District Financing & Administration ("SDFA") is a consultant to the Moreno Valley Unified School District ("MVUSD" or "School District") tasked with updating the current School Facilities Needs Analysis ("SFNA") which calculates the impact fee paid by residential development at the time of building permit issuance. The SFNA is only valid for a one-year period and as such is updated at a minimum on an annual basis. We are sending this correspondence to confirm our recent communication regarding two elements of the report as to accuracy and completeness.

Residential Development Projections for the Next Five-Year Period

The statute requires that a projection of the residential development for the next five-year period by housing type be established. Housing type in the statute makes reference to single family detached dwelling units ("SFD"), single family attached dwelling units ("SFA") and multi-family attached dwelling units ("MFA"). These last two

categories can be further classified to include townhomes and condominiums for the SFA dwelling units and apartments for the MFA dwelling units. The five-year projection period for the current update will cover the fiscal years of 2019/20 through 2023/24.

Typically, a review is made of the “City of Moreno Valley, California Development Projects” Map (most recent dated May 2017) and listings labeled “New Single-Family Development” and “New Multi-Family Development.” It is our understanding that these documents are currently being updated and not yet available to the public. In the review of these listings, projects outside of the School District boundaries were removed and modifications were made based on communications from City staff. These modifications included the deletion of projects due to expired entitlements, the addition of projects newly approved, or the revision to reflect more accurate dwelling unit totals. In future years we will again review these listings as described but, have not done so for the current five-year projection.

We reviewed historical permit activity by review of the City of Moreno Valley Building Permit Activity Report from 2012 through December 2018. This reports show a total of 1,739 SFD, 0 SFA and 632 MFA (represented by 61 building permits) dwelling units. Understanding that the City includes property not within the boundaries of the School District, the use of this seven-year historical average as a base for the dwelling units to be constructed in the next five-year period (dividing by seven and multiplying by five), which would adjust the projections for the marked increase in permit activity for calendar years 2017 and 2018, a total of 1,242 SFD, zero (0) SFA and 451 MFA residential dwelling units would be projected.

We also reviewed historical Certificates of Compliance issued by the School District. For the prior five fiscal year periods (fiscal years 2013/14 through 2017/18) the School District issued Certificates of Compliance representing the construction of 1,219 dwelling units. These dwelling units can be subdivided into the housing types as 703 SFD, 0 SFA and 516 MFA. Again, we recognizing that the School District does not contain the same geographic boundaries as the City.

The Southern California Association of Governments (“SCAG”) was contacted. They provided the most recent available projection of residential dwelling units (“2016 Regional Transportation Plan and Sustainable Communities Strategy Growth Forecast”) adopted in April of 2016, in April of 2016. (Please note; SCAG projections for the area of the School District within the City of Riverside are sourced from the City of Riverside. These separate projections are enclosed.) Because the SCAG projections are on a calendar-year basis and the five-year projection period is on a fiscal-year basis the following assumptions were made; the SCAG calculations are as of January 1 in any given year, are reporting on occupiable dwelling units and there is a six month lag from permit date to saleable or occupancy date. Therefore, the SCAG 2020 through 2024 projection is being used to project permit issuance from fiscal year 2019/20 through 2023/24. The enclosed resulting projections show the calculation of an estimated number of dwelling units to be constructed from fiscal years 2019/20 through 2023/24 for both the MVUSD in total and for the City of Moreno Valley. The total projected to be constructed within the next five-year period for the City of Moreno Valley is 3,649 dwelling units. The total projected to be constructed with the next five years for the MVUSD is 3,848 dwelling units (3,649 within the City of Moreno Valley, 188 within the County of Riverside and 11 within the City of Riverside). This projected total is considerably higher than the total projected using historical averages of permits issued

from the City of Moreno Valley or historical Certificates of Compliance issued by the School District.

These results were discussed with City staff, and as a result we have based our projections on the recommendations of staff. These resulting projections are supported by the above sources and remain conservative.

The resulting projections by unit type for the property within the MVUSD and the City of Moreno Valley is 400 SFD dwelling units, 50 SFA dwelling units and 550 MFA dwelling units to be constructed between July 1, 2019 and June 30, 2024. A final projection will be used to calculate the Level II Fee once comments are received from the City of Moreno Valley, the City of Riverside and the County of Riverside.

We appreciate the review that the City of Moreno Valley staff has already provided. Please be in contact with any additional comments if necessary. We value your earlier analysis and correspondence and appreciate your final review.

Residential Livable Square Footage Projections for the Next Five-Year Period

The calculation of the Level II and Level III Fee involves determining an average livable square footage for dwelling unit types to be constructed in the next five-year period. A review was made of the historical assessable space of like dwelling units. This review was discussed with staff at the City of Moreno Valley. Staff evaluated processing projects and currently processing viable projects and found that the average assessable space for dwelling units projected to be constructed in the next five-year period was most accurately reflected as 2,497 for SFD dwelling units, 1,500 for SFA dwelling units and 1,001 for MFA dwelling units. These averages, as sourced from the City of Moreno Valley and based on currently processing projects, are being provided as the projection of average square footage per dwelling unit type for the next five-year period. We are asking the City of Moreno Valley to confirm or provide comments regarding these averages.


Clarity of Request

To make the acceptance or correction of the proposed draft projection of dwelling units and average dwelling unit sizes simple, we have included below an area noting acceptance or requesting modifications. The addition of this area came at the request of other agencies. Please feel free to communicate any comments or questions through email or phone if preferred. We will use the confirmation for our records.


Timing of Our Request

We will be using this information to support the School Facilities Needs Analysis, which establishes the Level II and Level III Fees. The final draft of such report will be distributed to the City of Riverside, the City of Moreno Valley and the County of Riverside on or about May 1, 2019. We are respectfully asking that any comments or acceptance correspondence be received in our office by telephone, fax or U.S. Mail by **April 26, 2019**. Any communication received after this date will be considered for additional updates to the MVUSD SFNA.

We thank you in advance for your efforts. Please do not hesitate to call should you have any questions.

A handwritten signature in black ink, appearing to read "Barbara Hale-Carter". The signature is fluid and cursive, with a large initial "B" and a long, sweeping underline.

Barbara Hale-Carter
Principal

City of Moreno Valley Confirmation of Projections for the Area of the City within the Moreno Valley Unified School District Fiscal Years 2019/20 through 2023/24		
Projection of Dwelling Units:	Proposed	Modified
Single Family Detached	300	400
Single Family Attached	50	50
Multi-Family Attached	125	750
Total Dwelling Units Projected:	475	1200
Projection of Average Assessable Space in Square Feet:		
Single Family Detached	2,497	2497
Single Family Attached	1,500	1500
Multi-Family Attached	1,001	1000
Confirmation that the above projections appear reasonable at this time. Please mark any modifications requested in the area provided. Additional City Comments:		
Printed Name: <i>Sean Keltcher</i>	Signature: 	
Title: <i>Senior Planner</i>	Date: <i>4/26/2019</i>	

Enclosure

- C: Mike Reynolds; Moreno Valley Unified School District
 Samer Alzubaidi; Moreno Valley Unified School District
 Wendy Wiles; Atkinson, Andelson, Loya, Ruud & Romo

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43262100	Moreno Valley	99.97%	1,424	1,462	1,524	1,524
43262200	Moreno Valley	99.98%	583	641	641	641
43262300	Moreno Valley	25.39%	1	4	14	17
43263100	Moreno Valley	3.73%	6	7	10	11
43263200	Moreno Valley	42.26%	180	231	350	377
43263300	Moreno Valley	93.84%	969	984	1,016	1,016
43264100	Moreno Valley	14.74%	1	2	2	2
43264200	Moreno Valley	98.97%	851	1,105	1,734	1,836
43264300	Moreno Valley	3.60%	0	0	1	1
43266100	Moreno Valley	99.30%	509	559	559	559
43266200	Moreno Valley	100.00%	2,295	2,602	2,897	2,897
43267100	Moreno Valley	83.37%	0	0	0	0
43267200	Moreno Valley	100.00%	836	836	836	836
43268200	Moreno Valley	0.60%	1	1	1	1
43269200	Moreno Valley	99.41%	534	625	836	869
43269300	Moreno Valley	3.18%	1	2	3	3
43270100	Moreno Valley	96.96%	0	0	0	0
43270200	Moreno Valley	100.00%	878	994	1,067	1,067
43271100	Moreno Valley	100.00%	799	896	896	896
43272100	Moreno Valley	100.00%	1,222	1,432	1,901	1,971
43273100	Moreno Valley	100.00%	1,638	1,722	1,910	1,938
43274100	Moreno Valley	100.00%	922	1,042	1,079	1,079
43275100	Moreno Valley	100.00%	1,350	1,557	2,023	2,093
43276100	Moreno Valley	100.00%	855	934	934	934
43277100	Moreno Valley	95.58%	0	0	0	0
43277200	Moreno Valley	100.00%	816	922	938	938
43278100	Moreno Valley	100.00%	1,151	1,304	1,421	1,421
43279100	Moreno Valley	100.00%	1,027	1,311	2,011	2,124
43280100	Moreno Valley	100.00%	867	891	944	952
43281100	Moreno Valley	100.00%	1,020	1,158	1,334	1,334
43282100	Moreno Valley	74.45%	884	1,011	1,291	1,323
43283100	Moreno Valley	100.00%	773	875	939	939
43284100	Moreno Valley	100.00%	98	106	106	106
43284200	Moreno Valley	100.00%	430	492	629	649
43285200	Moreno Valley	36.88%	150	241	457	490
43286100	Moreno Valley	100.00%	815	932	1,192	1,231
43287100	Moreno Valley	100.00%	857	983	1,266	1,308
43288100	Moreno Valley	100.00%	650	734	754	754
43288200	Moreno Valley	100.00%	522	536	567	572
43289100	Moreno Valley	100.00%	319	366	469	484
43289200	Moreno Valley	100.00%	166	252	465	500
43290100	Moreno Valley	100.00%	939	1,086	1,418	1,469
43290200	Moreno Valley	100.00%	366	493	808	859
43291100	Moreno Valley	100.00%	962	1,104	1,420	1,467
43292100	Moreno Valley	100.00%	667	722	848	867
43292200	Moreno Valley	100.00%	457	517	553	553
43293100	Moreno Valley	100.00%	833	875	969	983
43294100	Moreno Valley	100.00%	436	502	652	675
43295100	Moreno Valley	100.00%	444	504	567	567
43295200	Moreno Valley	100.00%	595	656	656	656
43296100	Moreno Valley	5.98%	20	23	30	31
43296200	Moreno Valley	96.53%	515	636	934	983
43297100	Moreno Valley	100.00%	1,296	1,483	1,898	1,959
43298100	Moreno Valley	19.80%	13	18	32	34
43298200	Moreno Valley	100.00%	266	320	449	469
43298300	Moreno Valley	100.00%	285	338	462	482

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43319100	Moreno Valley	60.75%	1,059	1,059	1,059	1,059
43319200	Moreno Valley	66.21%	962	1,019	1,145	1,161
43322100	Moreno Valley	100.00%	416	497	685	714
43322200	Moreno Valley	100.00%	888	905	942	948
43322300	Moreno Valley	100.00%	770	883	1,132	1,169
43324100	Moreno Valley	100.00%	1,345	1,605	2,223	2,320
43324200	Moreno Valley	100.00%	142	291	704	777
43324300	Moreno Valley	77.54%	751	875	1,160	1,203
43328100	Moreno Valley	22.98%	351	419	579	604
43328200	Moreno Valley	94.41%	189	222	298	311
43328300	Moreno Valley	1.40%	1	2	2	2
43330100	Moreno Valley	100.00%	824	934	1,193	1,234
43335100	Moreno Valley	1.56%	0	0	1	1
43336100	Moreno Valley	100.00%	217	258	362	379
43336200	Moreno Valley	100.00%	6	6	6	6
43338100	Moreno Valley	79.81%	170	245	245	245
43338200	Moreno Valley	100.00%	1,347	1,574	2,115	2,200
43338300	Moreno Valley	100.00%	98	98	98	98
43338400	Moreno Valley	100.00%	406	468	609	631
43344100	Moreno Valley	7.15%	1	1	1	1
43344200	Moreno Valley	82.09%	2	2	0	0
43447100	Moreno Valley	30.00%	2	4	15	15
43254100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43255400	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43260100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43262300	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264200	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264300	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43253200	Unincorporated	5.62%	70	81	101	102
43255300	Unincorporated	0.83%	17	18	19	19
43255400	Unincorporated	4.39%	87	90	95	97
43257100	Unincorporated	0.72%	5	5	6	6
43259100	Unincorporated	1.70%	1	1	2	2
43260100	Unincorporated	0.37%	6	6	7	7
43260200	Unincorporated	97.61%	153	190	281	307
43261200	Unincorporated	33.74%	0	0	0	0
43261300	Unincorporated	88.91%	145	148	154	155
43262300	Unincorporated	70.59%	1	12	39	46
43263100	Unincorporated	94.92%	158	188	260	277
43263200	Unincorporated	55.68%	238	304	462	496
43263300	Unincorporated	6.16%	64	65	67	67
43267100	Unincorporated	16.63%	0	0	0	0
43268100	Unincorporated	1.14%	0	0	0	0
43268200	Unincorporated	99.29%	210	243	243	243
43269100	Unincorporated	5.87%	6	8	11	12
43269200	Unincorporated	0.59%	3	4	5	5
43269300	Unincorporated	81.10%	29	39	67	73
43270100	Unincorporated	3.04%	0	0	0	0
43277100	Unincorporated	4.42%	0	0	0	0
43296100	Unincorporated	44.33%	152	171	224	233
43296200	Unincorporated	3.47%	19	23	34	35
43298100	Unincorporated	57.84%	37	53	93	100
43328100	Unincorporated	0.81%	12	15	20	21
43328300	Unincorporated	65.17%	61	70	91	94
43335100	Unincorporated	38.92%	0	9	37	37
43338100	Unincorporated	1.78%	4	5	5	5
43344200	Unincorporated	1.70%	0	0	0	0

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43445100	Unincorporated	5.58%	8	8	9	9
43447100	Unincorporated	1.32%	0	0	1	1
			45,927	52,152	63,620	65,274

Extrapolation of Five Year Projections based on Annual Averages:

Difference Current Year to Prior Year:	6,225	11,468	1,654
Number of Years within Years Estimated:	8	15	5
Annual Average Dwelling Units per Year Estimated:*	778.13	764.53	330.80

Estimated Number of Dwelling Units January 1, 2019

	City of	County of	Total
	Moreno Valley	Riverside	
<u>Existing Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>
As of January 1, 2012	44,441.00	1,486.00	45,927.00
Additional Dwelling Units Constructed 1/1/2012 to 1/1/2013	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2013 to 1/1/2014	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2014 to 1/1/2015	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2015 to 1/1/2016	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2016 to 1/1/2017	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2017 to 1/1/2018	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2018 to 1/1/2019	744.38	33.75	778.13
Estimated Dwelling Units to Exist on January 1, 2019:***	49,651.63	1,722.25	51,373.88

Estimated Number of Dwelling Units Permitted for Five Year Period:

	City of	County of	Total
	Moreno Valley	Riverside	
<u>Permitted Date</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>
Dwelling Units Permitted 7/1/19 to 7/1/20	744.38	33.75	778.13
Dwelling Units Permitted 7/1/20 to 7/1/21	726.07	38.47	764.53
Dwelling Units Permitted 7/1/21 to 7/1/22	726.07	38.47	764.53
Dwelling Units Permitted 7/1/22 to 7/1/23	726.07	38.47	764.53
Dwelling Units Permitted 7/1/23 to 7/1/24	726.07	38.47	764.53
Projected Number of Dwelling Units Permitted for Five Fiscal Years:	3,648.64	187.62	3,836.26

*The data provided by SCAG per TAZ was adopted at a Jurisdictional Level Only in April of 2016 to be used in the 2016 Regional Transportation Plan and Sustainable Communities Strategy.

**Percentage in District was provided by SCAG by GIS review.

***Totals may not sum due to rounding.

Moreno Valley Unified School District

Source: City of Riverside - Socio-Economic Data Approved with SCAG and WRCOG

Manipulated to Provide the Area of the City of Riverside within the Boundaries of the Moreno Valley Unified School District

Data provided: May 19, 2015 (Most recent as of February 2016)

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43132100	Riverside	0.00%	0.00	0.00	0.00
43136100	Riverside	0.00%	0.00	0.00	0.00
43142100	Riverside	0.00%	0.00	0.00	0.00
43142200	Riverside	0.00%	0.00	0.00	0.00
43142300	Riverside	0.00%	0.00	0.00	0.00
43144300	Riverside	0.00%	0.00	0.00	0.00
43144500	Riverside	0.00%	0.00	0.00	0.00
43178100	Riverside	0.00%	0.00	0.00	0.00
43182300	Riverside	0.00%	0.00	0.00	0.00
43185200	Riverside	0.00%	0.00	0.00	0.00
43186100	Riverside	0.00%	0.00	0.00	0.00
43186200	Riverside	0.00%	0.00	0.00	0.00
43187100	Riverside	0.00%	0.00	0.00	0.00
43187200	Riverside	0.00%	0.00	0.00	0.00
43190100	Riverside	0.00%	0.00	0.00	0.00
43191100	Riverside	0.00%	0.00	0.00	0.00
43191200	Riverside	0.00%	0.00	0.00	0.00
43192100	Riverside	0.00%	0.00	0.00	0.00
43192200	Riverside	0.00%	0.00	0.00	0.00
43192300	Riverside	0.00%	0.00	0.00	0.00
43193100	Riverside	0.00%	0.00	0.00	0.00
43194100	Riverside	0.00%	0.00	0.00	0.00
43194200	Riverside	0.00%	0.00	0.00	0.00
43195100	Riverside	0.00%	0.00	0.00	0.00
43195200	Riverside	0.00%	0.00	0.00	0.00
43195300	Riverside	0.00%	0.00	0.00	0.00
43196100	Riverside	0.00%	0.00	0.00	0.00
43196200	Riverside	0.00%	0.00	0.00	0.00
43196300	Riverside	0.00%	0.00	0.00	0.00
43196400	Riverside	0.00%	0.00	0.00	0.00
43197100	Riverside	0.00%	0.00	0.00	0.00
43197200	Riverside	0.00%	0.00	0.00	0.00
43197300	Riverside	0.00%	0.00	0.00	0.00
43197400	Riverside	0.00%	0.00	0.00	0.00
43198100	Riverside	0.00%	0.00	0.00	0.00
43198200	Riverside	0.00%	0.00	0.00	0.00
43198300	Riverside	0.00%	0.00	0.00	0.00
43198400	Riverside	0.00%	0.00	0.00	0.00
43198500	Riverside	0.00%	0.00	0.00	0.00
43199200	Riverside	0.00%	0.00	0.00	0.00
43199300	Riverside	0.00%	0.00	0.00	0.00
43199400	Riverside	0.00%	0.00	0.00	0.00
43199500	Riverside	0.00%	0.00	0.00	0.00
43200100	Riverside	0.00%	0.00	0.00	0.00
43201100	Riverside	0.00%	0.00	0.00	0.00
43201200	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43202100	Riverside	0.00%	0.00	0.00	0.00
43202200	Riverside	0.00%	0.00	0.00	0.00
43203100	Riverside	0.00%	0.00	0.00	0.00
43203200	Riverside	0.00%	0.00	0.00	0.00
43204100	Riverside	0.00%	0.00	0.00	0.00
43205100	Riverside	0.00%	0.00	0.00	0.00
43206100	Riverside	0.00%	0.00	0.00	0.00
43207100	Riverside	0.00%	0.00	0.00	0.00
43207200	Riverside	0.00%	0.00	0.00	0.00
43208100	Riverside	0.00%	0.00	0.00	0.00
43209100	Riverside	0.00%	0.00	0.00	0.00
43209200	Riverside	0.00%	0.00	0.00	0.00
43209300	Riverside	0.00%	0.00	0.00	0.00
43209400	Riverside	0.00%	0.00	0.00	0.00
43209500	Riverside	0.00%	0.00	0.00	0.00
43209600	Riverside	0.00%	0.00	0.00	0.00
43210100	Riverside	0.00%	0.00	0.00	0.00
43210200	Riverside	0.00%	0.00	0.00	0.00
43211100	Riverside	0.00%	0.00	0.00	0.00
43211200	Riverside	0.00%	0.00	0.00	0.00
43211300	Riverside	0.00%	0.00	0.00	0.00
43211400	Riverside	0.00%	0.00	0.00	0.00
43212100	Riverside	0.00%	0.00	0.00	0.00
43213100	Riverside	0.00%	0.00	0.00	0.00
43213200	Riverside	0.00%	0.00	0.00	0.00
43213300	Riverside	0.00%	0.00	0.00	0.00
43214100	Riverside	0.00%	0.00	0.00	0.00
43214200	Riverside	0.00%	0.00	0.00	0.00
43214300	Riverside	0.00%	0.00	0.00	0.00
43215100	Riverside	0.00%	0.00	0.00	0.00
43215200	Riverside	0.00%	0.00	0.00	0.00
43215300	Riverside	0.00%	0.00	0.00	0.00
43215400	Riverside	0.00%	0.00	0.00	0.00
43217100	Riverside	0.00%	0.00	0.00	0.00
43217200	Riverside	0.00%	0.00	0.00	0.00
43218100	Riverside	0.00%	0.00	0.00	0.00
43218200	Riverside	0.00%	0.00	0.00	0.00
43218300	Riverside	0.00%	0.00	0.00	0.00
43218400	Riverside	0.00%	0.00	0.00	0.00
43219100	Riverside	0.00%	0.00	0.00	0.00
43219200	Riverside	0.00%	0.00	0.00	0.00
43220200	Riverside	0.00%	0.00	0.00	0.00
43221100	Riverside	0.00%	0.00	0.00	0.00
43221200	Riverside	0.00%	0.00	0.00	0.00
43222100	Riverside	0.00%	0.00	0.00	0.00
43222200	Riverside	0.00%	0.00	0.00	0.00
43222300	Riverside	0.00%	0.00	0.00	0.00
43223100	Riverside	0.00%	0.00	0.00	0.00
43223200	Riverside	0.00%	0.00	0.00	0.00
43223300	Riverside	0.00%	0.00	0.00	0.00
43223400	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43223500	Riverside	0.00%	0.00	0.00	0.00
43223600	Riverside	0.00%	0.00	0.00	0.00
43223700	Riverside	0.00%	0.00	0.00	0.00
43223800	Riverside	0.00%	0.00	0.00	0.00
43223900	Riverside	0.00%	0.00	0.00	0.00
43224100	Riverside	0.00%	0.00	0.00	0.00
43224200	Riverside	0.00%	0.00	0.00	0.00
43224300	Riverside	0.00%	0.00	0.00	0.00
43225100	Riverside	0.00%	0.00	0.00	0.00
43225200	Riverside	0.00%	0.00	0.00	0.00
43225300	Riverside	0.00%	0.00	0.00	0.00
43227100	Riverside	0.00%	0.00	0.00	0.00
43227200	Riverside	0.00%	0.00	0.00	0.00
43227300	Riverside	0.00%	0.00	0.00	0.00
43227400	Riverside	0.00%	0.00	0.00	0.00
43228100	Riverside	0.00%	0.00	0.00	0.00
43228200	Riverside	0.00%	0.00	0.00	0.00
43228300	Riverside	0.00%	0.00	0.00	0.00
43228400	Riverside	0.00%	0.00	0.00	0.00
43229100	Riverside	0.00%	0.00	0.00	0.00
43229200	Riverside	0.00%	0.00	0.00	0.00
43230100	Riverside	0.00%	0.00	0.00	0.00
43230200	Riverside	0.00%	0.00	0.00	0.00
43230300	Riverside	0.00%	0.00	0.00	0.00
43230400	Riverside	0.00%	0.00	0.00	0.00
43231100	Riverside	0.00%	0.00	0.00	0.00
43231200	Riverside	0.00%	0.00	0.00	0.00
43231300	Riverside	0.00%	0.00	0.00	0.00
43231400	Riverside	0.00%	0.00	0.00	0.00
43231500	Riverside	0.00%	0.00	0.00	0.00
43231600	Riverside	0.00%	0.00	0.00	0.00
43231700	Riverside	0.00%	0.00	0.00	0.00
43231800	Riverside	0.00%	0.00	0.00	0.00
43232100	Riverside	0.00%	0.00	0.00	0.00
43232200	Riverside	0.00%	0.00	0.00	0.00
43233100	Riverside	0.00%	0.00	0.00	0.00
43233200	Riverside	0.00%	0.00	0.00	0.00
43233300	Riverside	0.00%	0.00	0.00	0.00
43234100	Riverside	0.00%	0.00	0.00	0.00
43234200	Riverside	0.00%	0.00	0.00	0.00
43235100	Riverside	0.00%	0.00	0.00	0.00
43235200	Riverside	0.00%	0.00	0.00	0.00
43235300	Riverside	0.00%	0.00	0.00	0.00
43235400	Riverside	0.00%	0.00	0.00	0.00
43235500	Riverside	0.00%	0.00	0.00	0.00
43236100	Riverside	0.00%	0.00	0.00	0.00
43236200	Riverside	0.00%	0.00	0.00	0.00
43236300	Riverside	0.00%	0.00	0.00	0.00
43236400	Riverside	0.00%	0.00	0.00	0.00
43236500	Riverside	0.00%	0.00	0.00	0.00
43236600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43237300	Riverside	0.00%	0.00	0.00	0.00
43238100	Riverside	0.00%	0.00	0.00	0.00
43238200	Riverside	0.00%	0.00	0.00	0.00
43238300	Riverside	0.00%	0.00	0.00	0.00
43238400	Riverside	0.00%	0.00	0.00	0.00
43238500	Riverside	0.00%	0.00	0.00	0.00
43239100	Riverside	0.00%	0.00	0.00	0.00
43239200	Riverside	0.00%	0.00	0.00	0.00
43239300	Riverside	0.00%	0.00	0.00	0.00
43239400	Riverside	0.00%	0.00	0.00	0.00
43240100	Riverside	0.00%	0.00	0.00	0.00
43240200	Riverside	0.00%	0.00	0.00	0.00
43240300	Riverside	0.00%	0.00	0.00	0.00
43240400	Riverside	0.00%	0.00	0.00	0.00
43241100	Riverside	0.00%	0.00	0.00	0.00
43241200	Riverside	0.00%	0.00	0.00	0.00
43242100	Riverside	0.00%	0.00	0.00	0.00
43242200	Riverside	0.00%	0.00	0.00	0.00
43242300	Riverside	0.00%	0.00	0.00	0.00
43242400	Riverside	0.00%	0.00	0.00	0.00
43243100	Riverside	0.00%	0.00	0.00	0.00
43244100	Riverside	0.00%	0.00	0.00	0.00
43244200	Riverside	0.00%	0.00	0.00	0.00
43245100	Riverside	0.00%	0.00	0.00	0.00
43246100	Riverside	0.00%	0.00	0.00	0.00
43246200	Riverside	0.00%	0.00	0.00	0.00
43246300	Riverside	0.00%	0.00	0.00	0.00
43246400	Riverside	0.00%	0.00	0.00	0.00
43246500	Riverside	0.00%	0.00	0.00	0.00
43248100	Riverside	0.00%	0.00	0.00	0.00
43249100	Riverside	0.00%	0.00	0.00	0.00
43249200	Riverside	0.00%	0.00	0.00	0.00
43249300	Riverside	0.00%	0.00	0.00	0.00
43249400	Riverside	0.00%	0.00	0.00	0.00
43250100	Riverside	0.00%	0.00	0.00	0.00
43250200	Riverside	0.00%	0.00	0.00	0.00
43251100	Riverside	0.00%	0.00	0.00	0.00
43251200	Riverside	0.00%	0.00	0.00	0.00
43252100	Riverside	0.00%	0.00	0.00	0.00
43252200	Riverside	0.00%	0.00	0.00	0.00
43252300	Riverside	0.00%	0.00	0.00	0.00
43253100	Riverside	0.00%	0.00	0.00	0.00
43253200	Riverside	0.00%	0.00	0.00	0.00
43254100	Riverside	13.30%	275.02	277.68	282.65
43255100	Riverside	0.00%	0.00	0.00	0.00
43255200	Riverside	0.00%	0.00	0.00	0.00
43255300	Riverside	0.00%	0.00	0.00	0.00
43255400	Riverside	0.57%	10.28	10.39	10.60
43255500	Riverside	0.00%	0.00	0.00	0.00
43256500	Riverside	0.00%	0.00	0.00	0.00
43256600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43256900	Riverside	0.00%	0.00	0.00	0.00
43257100	Riverside	0.00%	0.00	0.00	0.00
43257200	Riverside	0.00%	0.00	0.00	0.00
43258100	Riverside	0.00%	0.00	0.00	0.00
43258200	Riverside	0.00%	0.00	0.00	0.00
43259100	Riverside	0.00%	0.00	0.00	0.00
43259200	Riverside	0.00%	0.00	0.00	0.00
43260100	Riverside	69.40%	1,121.44	1,135.32	1,161.27
43260200	Riverside	0.00%	0.00	0.00	0.00
43261100	Riverside	0.00%	0.00	0.00	0.00
43261300	Riverside	0.00%	0.00	0.00	0.00
43262300	Riverside	3.91%	0.00	0.00	0.00
43264100	Riverside	85.19%	4.26	5.11	6.70
43264200	Riverside	1.03%	0.00	0.00	0.00
43264300	Riverside	96.40%	0.00	0.00	0.00
43266100	Riverside	0.00%	0.00	0.00	0.00
Totals			1,410.99	1,428.50	1,461.23

Extrapolation of Five Year Projection based on Annual Averages:

Difference Current Year to Prior Year:	17.50	32.73
Number of Years within Years Estimated:	8	15
Annual Average Dwelling Units per Year Estimated:*	2.19	2.18

Estimated Number of Dwelling Units January 1, 2019

	Existing Units	Total Dwelling Units
As of January 1, 2012		1,411
Additional Dwelling Units Constructed 01/01/2012 to 01/01/2013		2.19
Additional Dwelling Units Constructed 01/01/2013 to 01/01/2014		2.19
Additional Dwelling Units Constructed 01/01/2014 to 01/01/2015		2.19
Additional Dwelling Units Constructed 01/01/2015 to 01/01/2016		2.19
Additional Dwelling Units Constructed 01/01/2016 to 01/01/2017		2.19
Additional Dwelling Units Constructed 01/01/2017 to 01/01/2018		2.19
Additional Dwelling Units Constructed 01/01/2018 to 01/01/2019		2.19
Estimated Dwelling Units to Exist on January 1, 2019		1,426.31

Estimated Number of Dwelling Units Permitted for Five Year Period:

	Permitted Date	Total Dwelling Units
Dwelling Units Permitted 07/01/19 to 7/01/20		2.19
Dwelling Units Permitted 07/01/20 to 7/01/21		2.18
Dwelling Units Permitted 07/01/21 to 7/01/22		2.18
Dwelling Units Permitted 07/01/22 to 7/01/23		2.18
Dwelling Units Permitted 07/01/23 to 7/01/24		2.18
Projected Number of Dwelling Units Permitted for Five Fiscal Years:		10.92

*Percentage in District was proved by SCAG by GIS Review



**SPECIAL DISTRICT FINANCING
& ADMINISTRATION**

**437 West Grand Avenue
Escondido CA 92025
760 · 233 · 2630
Fax 233 · 2631**

April 10, 2019

Jay Eastman
Principal Planner
City of Riverside
3900 Main Street
Riverside, CA 92522

Doug Darnell, AICP
Senior Planner
City of Riverside
3900 Main Street
Riverside, CA 92522

RE: RESIDENTIAL DEVELOPMENT AND SQUARE FOOTAGE PROJECTIONS FOR THE MORENO VALLEY UNIFIED SCHOOL DISTRICT

Special District Financing & Administration (“SDF A”) is a consultant to the Moreno Valley Unified School District (“MVUSD” or “School District”) tasked with updating the current School Facilities Needs Analysis (“SFNA”) which calculates the impact fee paid by residential development at the time of building permit issuance. The SFNA is only valid for a one-year period and as such is updated at a minimum on an annual basis. At this time we are asking the City of Riverside to review two elements of the report as to accuracy and completeness.

Residential Development Projections for the Next Five-Year Period

The statute requires that a projection of the residential development for the next five-year period by housing type be established. Housing type in the statute makes reference to single family detached dwelling units (“SFD”), single family attached dwelling units (“SFA”) and multi-family attached dwelling units (“MFA”). These last two categories can be further classified to include townhomes and condominiums for the SFA units and apartments for the MFA units. The five-year projection period for the current update will cover the fiscal years of 2019/20 through 2023/24.

In February of 2016, City staff provided revised Southern California Association of Governments (“SCAG”) data as approved by the City of Riverside, which details a projection of residential dwelling units divided by traffic analysis zones (TAZ). SDF A matched the TAZ numbers to the District-wide data provided by SCAG in April 2016, and used the SCAG assigned percentages to those TAZ numbers within the boundaries of the School District. This identification and assignment of the percentage is shown on the attached.

As the TAZ projections are on a calendar year basis and the five-year projection period is on a fiscal year basis the following assumptions were made; the TAZ calculation is as of January 1 in any given year, the figures report occupiable dwelling units and that there is a six month lag from permit date to saleable or occupancy date. Using the years provided in the TAZ data for 2012, 2020 and 2035, we extrapolated by the use of annual averages the number of dwelling units projected to be constructed for fiscal year 2019/20 through 2023/24. A summary of the data provided by the City of Riverside has been enclosed. The extrapolation using annual averages is detailed on the final page which shows an estimated number of dwelling units to be constructed for fiscal years 2019/20 through 2023/24 for the City of Riverside. On a separate attachment, the projection of dwelling units to be constructed for the same period within the County of Riverside and the City of Moreno Valley within the boundary of the Moreno Valley Unified School District using the same extrapolation using annual averages is also enclosed. The total dwelling units projected to be constructed within the next five-year period for the City of Riverside within the boundaries of the School District utilizing the base TAZ data and extrapolating by use of annual averages is 11 dwelling units which equates to an average of approximately 2.2 dwelling unit annually:

A review of the number of dwelling units constructed using year of construction as provided by the Riverside County Assessor for property within the School District was made and found to be irrelevant for the projection of dwelling units to be constructed in the next five-year period within the boundaries of the City of Riverside due to the small amount of developable property within this area.

Although the resulting total projected units for the City of Riverside, based solely on the data provided by the City, provides for the projection of 11 non-senior SFD dwelling units to be constructed in the next five-year period, we have modified our final projection to remain the same as was approved by the City for the past four years of zero (0). A final projection will be used to calculate the Level II Fee once comments are received from the City of Riverside, the City of Moreno Valley and the County of Riverside.

We are requesting that the City of Riverside provide comments or acceptance that these projections of residential dwelling units appear to be reasonable based on the expertise of City staff.

Residential Livable Square Footage Projections for the Next Five-Year Period

The calculation of the Level II and Level III Fee involves determining an average livable square footage for dwelling unit types to be constructed in the next five-year period. To determine this average, a review was made of the historical livable square footages of like dwelling units constructed in the previous five-year period as provided by the issuing agencies to the County of Riverside as shown on the County of Riverside Assessor data.

These historically-driven and currently constructing estimates have been provided to the County of Riverside and the City of Moreno Valley for their review and comment. The final averages will be used in the calculation of the Level II and Level III Fees. We are not asking the City of Riverside to provide comment or acceptance regarding these averages, if they appear to be reasonable based on the expertise of City staff, as the area within the boundaries of the City and the School District is not projected to produce residential development within the next five-year period.

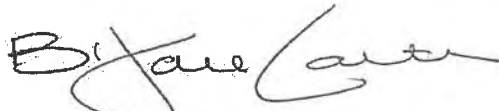
Clarity of Request

To make the acceptance of the proposed draft projection of dwelling units simple, we have included an area noting acceptance below. The addition of this area came at the request of other agencies. Please feel free to communicate any comments or questions through email or phone, if preferred. We will use the confirmation for our records.


Timing of Our Request

We will be using this information to support the School Facilities Needs Analysis, which establishes the Level II and Level III Fees. The final draft of such report will be distributed to the City of Riverside, the City of Moreno Valley and the County of Riverside on or about May 1, 2019. We are respectfully asking that any comments or acceptance correspondence be received in our office by telephone, fax or U.S. Mail by **April 15, 2019**. Any communication received after this date will be included if possible but may need to be considered for additional updates to the MVUSD SFNA.

We thank you in advance for your efforts. Planning staff has been very helpful in providing data and discussing the projections. Please do not hesitate to call should you have any questions.



Barbara Hale-Carter
Principal

<i>City of Riverside</i> Confirmation of Projections	
Projection of Dwelling Units:	Fiscal Years 2019/20 through 2023/24:
Single Family Detached	0
Single Family Attached	0
Multi-Family Attached	0
Total Dwelling Units Projected:	0
Confirmation that the above projections appear reasonable at this time.	
Printed Name: <i>DOUG DARNELL</i>	Signature: 
Title: <i>SENIOR PLANNER</i>	Date: <i>4/12/19</i>

Enclosures

- C: Mike Reynolds; Moreno Valley Unified School District
Samer Alzubaidi; Moreno Valley Unified School District
Wendy Wiles; Atkinson, Andelson, Loya, Ruud & Romo

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43262100	Moreno Valley	99.97%	1,424	1,462	1,524	1,524
43262200	Moreno Valley	99.98%	583	641	641	641
43262300	Moreno Valley	25.39%	1	4	14	17
43263100	Moreno Valley	3.73%	6	7	10	11
43263200	Moreno Valley	42.26%	180	231	350	377
43263300	Moreno Valley	93.84%	969	984	1,016	1,016
43264100	Moreno Valley	14.74%	1	2	2	2
43264200	Moreno Valley	98.97%	851	1,105	1,734	1,836
43264300	Moreno Valley	3.60%	0	0	1	1
43266100	Moreno Valley	99.30%	509	559	559	559
43266200	Moreno Valley	100.00%	2,295	2,602	2,897	2,897
43267100	Moreno Valley	83.37%	0	0	0	0
43267200	Moreno Valley	100.00%	836	836	836	836
43268200	Moreno Valley	0.60%	1	1	1	1
43269200	Moreno Valley	99.41%	534	625	836	869
43269300	Moreno Valley	3.18%	1	2	3	3
43270100	Moreno Valley	96.96%	0	0	0	0
43270200	Moreno Valley	100.00%	878	994	1,067	1,067
43271100	Moreno Valley	100.00%	799	896	896	896
43272100	Moreno Valley	100.00%	1,222	1,432	1,901	1,971
43273100	Moreno Valley	100.00%	1,638	1,722	1,910	1,938
43274100	Moreno Valley	100.00%	922	1,042	1,079	1,079
43275100	Moreno Valley	100.00%	1,350	1,557	2,023	2,093
43276100	Moreno Valley	100.00%	855	934	934	934
43277100	Moreno Valley	95.58%	0	0	0	0
43277200	Moreno Valley	100.00%	816	922	938	938
43278100	Moreno Valley	100.00%	1,151	1,304	1,421	1,421
43279100	Moreno Valley	100.00%	1,027	1,311	2,011	2,124
43280100	Moreno Valley	100.00%	867	891	944	952
43281100	Moreno Valley	100.00%	1,020	1,158	1,334	1,334
43282100	Moreno Valley	74.45%	884	1,011	1,291	1,323
43283100	Moreno Valley	100.00%	773	875	939	939
43284100	Moreno Valley	100.00%	98	106	106	106
43284200	Moreno Valley	100.00%	430	492	629	649
43285200	Moreno Valley	36.88%	150	241	457	490
43286100	Moreno Valley	100.00%	815	932	1,192	1,231
43287100	Moreno Valley	100.00%	857	983	1,266	1,308
43288100	Moreno Valley	100.00%	650	734	754	754
43288200	Moreno Valley	100.00%	522	536	567	572
43289100	Moreno Valley	100.00%	319	366	469	484
43289200	Moreno Valley	100.00%	166	252	465	500
43290100	Moreno Valley	100.00%	939	1,086	1,418	1,469
43290200	Moreno Valley	100.00%	366	493	808	859
43291100	Moreno Valley	100.00%	962	1,104	1,420	1,467
43292100	Moreno Valley	100.00%	667	722	848	867
43292200	Moreno Valley	100.00%	457	517	553	553
43293100	Moreno Valley	100.00%	833	875	969	983
43294100	Moreno Valley	100.00%	436	502	652	675
43295100	Moreno Valley	100.00%	444	504	567	567
43295200	Moreno Valley	100.00%	595	656	656	656
43296100	Moreno Valley	5.98%	20	23	30	31
43296200	Moreno Valley	96.53%	515	636	934	983
43297100	Moreno Valley	100.00%	1,296	1,483	1,898	1,959
43298100	Moreno Valley	19.80%	13	18	32	34
43298200	Moreno Valley	100.00%	266	320	449	469
43298300	Moreno Valley	100.00%	285	338	462	482

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43319100	Moreno Valley	60.75%	1,059	1,059	1,059	1,059
43319200	Moreno Valley	66.21%	962	1,019	1,145	1,161
43322100	Moreno Valley	100.00%	416	497	685	714
43322200	Moreno Valley	100.00%	888	905	942	948
43322300	Moreno Valley	100.00%	770	883	1,132	1,169
43324100	Moreno Valley	100.00%	1,345	1,605	2,223	2,320
43324200	Moreno Valley	100.00%	142	291	704	777
43324300	Moreno Valley	77.54%	751	875	1,160	1,203
43328100	Moreno Valley	22.98%	351	419	579	604
43328200	Moreno Valley	94.41%	189	222	298	311
43328300	Moreno Valley	1.40%	1	2	2	2
43330100	Moreno Valley	100.00%	824	934	1,193	1,234
43335100	Moreno Valley	1.56%	0	0	1	1
43336100	Moreno Valley	100.00%	217	258	362	379
43336200	Moreno Valley	100.00%	6	6	6	6
43338100	Moreno Valley	79.81%	170	245	245	245
43338200	Moreno Valley	100.00%	1,347	1,574	2,115	2,200
43338300	Moreno Valley	100.00%	98	98	98	98
43338400	Moreno Valley	100.00%	406	468	609	631
43344100	Moreno Valley	7.15%	1	1	1	1
43344200	Moreno Valley	82.09%	2	2	0	0
43447100	Moreno Valley	30.00%	2	4	15	15
43254100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43255400	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43260100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43262300	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264100	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264200	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43264300	Riverside	Used City of Riverside TAZ Data - See Separate Attachment				
43253200	Unincorporated	5.62%	70	81	101	102
43255300	Unincorporated	0.83%	17	18	19	19
43255400	Unincorporated	4.39%	87	90	95	97
43257100	Unincorporated	0.72%	5	5	6	6
43259100	Unincorporated	1.70%	1	1	2	2
43260100	Unincorporated	0.37%	6	6	7	7
43260200	Unincorporated	97.61%	153	190	281	307
43261200	Unincorporated	33.74%	0	0	0	0
43261300	Unincorporated	88.91%	145	148	154	155
43262300	Unincorporated	70.59%	1	12	39	46
43263100	Unincorporated	94.92%	158	188	260	277
43263200	Unincorporated	55.68%	238	304	462	496
43263300	Unincorporated	6.16%	64	65	67	67
43267100	Unincorporated	16.63%	0	0	0	0
43268100	Unincorporated	1.14%	0	0	0	0
43268200	Unincorporated	99.29%	210	243	243	243
43269100	Unincorporated	5.87%	6	8	11	12
43269200	Unincorporated	0.59%	3	4	5	5
43269300	Unincorporated	81.10%	29	39	67	73
43270100	Unincorporated	3.04%	0	0	0	0
43277100	Unincorporated	4.42%	0	0	0	0
43296100	Unincorporated	44.33%	152	171	224	233
43296200	Unincorporated	3.47%	19	23	34	35
43298100	Unincorporated	57.84%	37	53	93	100
43328100	Unincorporated	0.81%	12	15	20	21
43328300	Unincorporated	65.17%	61	70	91	94
43335100	Unincorporated	38.92%	0	9	37	37
43338100	Unincorporated	1.78%	4	5	5	5
43344200	Unincorporated	1.70%	0	0	0	0

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43445100	Unincorporated	5.58%	8	8	9	9
43447100	Unincorporated	1.32%	0	0	1	1
			45,927	52,152	63,620	65,274

Extrapolation of Five Year Projections based on Annual Averages:

Difference Current Year to Prior Year:	6,225	11,468	1,654
Number of Years within Years Estimated:	8	15	5
Annual Average Dwelling Units per Year Estimated:*	778.13	764.53	330.80

Estimated Number of Dwelling Units January 1, 2019

	City of	County of	Total
	Moreno Valley	Riverside	
<u>Existing Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>
As of January 1, 2012	44,441.00	1,486.00	45,927.00
Additional Dwelling Units Constructed 1/1/2012 to 1/1/2013	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2013 to 1/1/2014	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2014 to 1/1/2015	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2015 to 1/1/2016	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2016 to 1/1/2017	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2017 to 1/1/2018	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2018 to 1/1/2019	744.38	33.75	778.13
Estimated Dwelling Units to Exist on January 1, 2019:***	49,651.63	1,722.25	51,373.88

Estimated Number of Dwelling Units Permitted for Five Year Period:

	City of	County of	Total
	Moreno Valley	Riverside	
<u>Permitted Date</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>	<u>Dwelling Units</u>
Dwelling Units Permitted 7/1/19 to 7/1/20	744.38	33.75	778.13
Dwelling Units Permitted 7/1/20 to 7/1/21	726.07	38.47	764.53
Dwelling Units Permitted 7/1/21 to 7/1/22	726.07	38.47	764.53
Dwelling Units Permitted 7/1/22 to 7/1/23	726.07	38.47	764.53
Dwelling Units Permitted 7/1/23 to 7/1/24	726.07	38.47	764.53
Projected Number of Dwelling Units Permitted for Five Fiscal Years:	3,648.64	187.62	3,836.26

*The data provided by SCAG per TAZ was adopted at a Jurisdictional Level Only in April of 2016 to be used in the 2016 Regional Transportation Plan and Sustainable Communities Strategy.

**Percentage in District was provided by SCAG by GIS review.

***Totals may not sum due to rounding.

Moreno Valley Unified School District

Source: City of Riverside - Socio-Economic Data Approved with SCAG and WRCOG

Manipulated to Provide the Area of the City of Riverside within the Boundaries of the Moreno Valley Unified School District

Data provided: May 19, 2015 (Most recent as of February 2016)

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43132100	Riverside	0.00%	0.00	0.00	0.00
43136100	Riverside	0.00%	0.00	0.00	0.00
43142100	Riverside	0.00%	0.00	0.00	0.00
43142200	Riverside	0.00%	0.00	0.00	0.00
43142300	Riverside	0.00%	0.00	0.00	0.00
43144300	Riverside	0.00%	0.00	0.00	0.00
43144500	Riverside	0.00%	0.00	0.00	0.00
43178100	Riverside	0.00%	0.00	0.00	0.00
43182300	Riverside	0.00%	0.00	0.00	0.00
43185200	Riverside	0.00%	0.00	0.00	0.00
43186100	Riverside	0.00%	0.00	0.00	0.00
43186200	Riverside	0.00%	0.00	0.00	0.00
43187100	Riverside	0.00%	0.00	0.00	0.00
43187200	Riverside	0.00%	0.00	0.00	0.00
43190100	Riverside	0.00%	0.00	0.00	0.00
43191100	Riverside	0.00%	0.00	0.00	0.00
43191200	Riverside	0.00%	0.00	0.00	0.00
43192100	Riverside	0.00%	0.00	0.00	0.00
43192200	Riverside	0.00%	0.00	0.00	0.00
43192300	Riverside	0.00%	0.00	0.00	0.00
43193100	Riverside	0.00%	0.00	0.00	0.00
43194100	Riverside	0.00%	0.00	0.00	0.00
43194200	Riverside	0.00%	0.00	0.00	0.00
43195100	Riverside	0.00%	0.00	0.00	0.00
43195200	Riverside	0.00%	0.00	0.00	0.00
43195300	Riverside	0.00%	0.00	0.00	0.00
43196100	Riverside	0.00%	0.00	0.00	0.00
43196200	Riverside	0.00%	0.00	0.00	0.00
43196300	Riverside	0.00%	0.00	0.00	0.00
43196400	Riverside	0.00%	0.00	0.00	0.00
43197100	Riverside	0.00%	0.00	0.00	0.00
43197200	Riverside	0.00%	0.00	0.00	0.00
43197300	Riverside	0.00%	0.00	0.00	0.00
43197400	Riverside	0.00%	0.00	0.00	0.00
43198100	Riverside	0.00%	0.00	0.00	0.00
43198200	Riverside	0.00%	0.00	0.00	0.00
43198300	Riverside	0.00%	0.00	0.00	0.00
43198400	Riverside	0.00%	0.00	0.00	0.00
43198500	Riverside	0.00%	0.00	0.00	0.00
43199200	Riverside	0.00%	0.00	0.00	0.00
43199300	Riverside	0.00%	0.00	0.00	0.00
43199400	Riverside	0.00%	0.00	0.00	0.00
43199500	Riverside	0.00%	0.00	0.00	0.00
43200100	Riverside	0.00%	0.00	0.00	0.00
43201100	Riverside	0.00%	0.00	0.00	0.00
43201200	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43202100	Riverside	0.00%	0.00	0.00	0.00
43202200	Riverside	0.00%	0.00	0.00	0.00
43203100	Riverside	0.00%	0.00	0.00	0.00
43203200	Riverside	0.00%	0.00	0.00	0.00
43204100	Riverside	0.00%	0.00	0.00	0.00
43205100	Riverside	0.00%	0.00	0.00	0.00
43206100	Riverside	0.00%	0.00	0.00	0.00
43207100	Riverside	0.00%	0.00	0.00	0.00
43207200	Riverside	0.00%	0.00	0.00	0.00
43208100	Riverside	0.00%	0.00	0.00	0.00
43209100	Riverside	0.00%	0.00	0.00	0.00
43209200	Riverside	0.00%	0.00	0.00	0.00
43209300	Riverside	0.00%	0.00	0.00	0.00
43209400	Riverside	0.00%	0.00	0.00	0.00
43209500	Riverside	0.00%	0.00	0.00	0.00
43209600	Riverside	0.00%	0.00	0.00	0.00
43210100	Riverside	0.00%	0.00	0.00	0.00
43210200	Riverside	0.00%	0.00	0.00	0.00
43211100	Riverside	0.00%	0.00	0.00	0.00
43211200	Riverside	0.00%	0.00	0.00	0.00
43211300	Riverside	0.00%	0.00	0.00	0.00
43211400	Riverside	0.00%	0.00	0.00	0.00
43212100	Riverside	0.00%	0.00	0.00	0.00
43213100	Riverside	0.00%	0.00	0.00	0.00
43213200	Riverside	0.00%	0.00	0.00	0.00
43213300	Riverside	0.00%	0.00	0.00	0.00
43214100	Riverside	0.00%	0.00	0.00	0.00
43214200	Riverside	0.00%	0.00	0.00	0.00
43214300	Riverside	0.00%	0.00	0.00	0.00
43215100	Riverside	0.00%	0.00	0.00	0.00
43215200	Riverside	0.00%	0.00	0.00	0.00
43215300	Riverside	0.00%	0.00	0.00	0.00
43215400	Riverside	0.00%	0.00	0.00	0.00
43217100	Riverside	0.00%	0.00	0.00	0.00
43217200	Riverside	0.00%	0.00	0.00	0.00
43218100	Riverside	0.00%	0.00	0.00	0.00
43218200	Riverside	0.00%	0.00	0.00	0.00
43218300	Riverside	0.00%	0.00	0.00	0.00
43218400	Riverside	0.00%	0.00	0.00	0.00
43219100	Riverside	0.00%	0.00	0.00	0.00
43219200	Riverside	0.00%	0.00	0.00	0.00
43220200	Riverside	0.00%	0.00	0.00	0.00
43221100	Riverside	0.00%	0.00	0.00	0.00
43221200	Riverside	0.00%	0.00	0.00	0.00
43222100	Riverside	0.00%	0.00	0.00	0.00
43222200	Riverside	0.00%	0.00	0.00	0.00
43222300	Riverside	0.00%	0.00	0.00	0.00
43223100	Riverside	0.00%	0.00	0.00	0.00
43223200	Riverside	0.00%	0.00	0.00	0.00
43223300	Riverside	0.00%	0.00	0.00	0.00
43223400	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43223500	Riverside	0.00%	0.00	0.00	0.00
43223600	Riverside	0.00%	0.00	0.00	0.00
43223700	Riverside	0.00%	0.00	0.00	0.00
43223800	Riverside	0.00%	0.00	0.00	0.00
43223900	Riverside	0.00%	0.00	0.00	0.00
43224100	Riverside	0.00%	0.00	0.00	0.00
43224200	Riverside	0.00%	0.00	0.00	0.00
43224300	Riverside	0.00%	0.00	0.00	0.00
43225100	Riverside	0.00%	0.00	0.00	0.00
43225200	Riverside	0.00%	0.00	0.00	0.00
43225300	Riverside	0.00%	0.00	0.00	0.00
43227100	Riverside	0.00%	0.00	0.00	0.00
43227200	Riverside	0.00%	0.00	0.00	0.00
43227300	Riverside	0.00%	0.00	0.00	0.00
43227400	Riverside	0.00%	0.00	0.00	0.00
43228100	Riverside	0.00%	0.00	0.00	0.00
43228200	Riverside	0.00%	0.00	0.00	0.00
43228300	Riverside	0.00%	0.00	0.00	0.00
43228400	Riverside	0.00%	0.00	0.00	0.00
43229100	Riverside	0.00%	0.00	0.00	0.00
43229200	Riverside	0.00%	0.00	0.00	0.00
43230100	Riverside	0.00%	0.00	0.00	0.00
43230200	Riverside	0.00%	0.00	0.00	0.00
43230300	Riverside	0.00%	0.00	0.00	0.00
43230400	Riverside	0.00%	0.00	0.00	0.00
43231100	Riverside	0.00%	0.00	0.00	0.00
43231200	Riverside	0.00%	0.00	0.00	0.00
43231300	Riverside	0.00%	0.00	0.00	0.00
43231400	Riverside	0.00%	0.00	0.00	0.00
43231500	Riverside	0.00%	0.00	0.00	0.00
43231600	Riverside	0.00%	0.00	0.00	0.00
43231700	Riverside	0.00%	0.00	0.00	0.00
43231800	Riverside	0.00%	0.00	0.00	0.00
43232100	Riverside	0.00%	0.00	0.00	0.00
43232200	Riverside	0.00%	0.00	0.00	0.00
43233100	Riverside	0.00%	0.00	0.00	0.00
43233200	Riverside	0.00%	0.00	0.00	0.00
43233300	Riverside	0.00%	0.00	0.00	0.00
43234100	Riverside	0.00%	0.00	0.00	0.00
43234200	Riverside	0.00%	0.00	0.00	0.00
43235100	Riverside	0.00%	0.00	0.00	0.00
43235200	Riverside	0.00%	0.00	0.00	0.00
43235300	Riverside	0.00%	0.00	0.00	0.00
43235400	Riverside	0.00%	0.00	0.00	0.00
43235500	Riverside	0.00%	0.00	0.00	0.00
43236100	Riverside	0.00%	0.00	0.00	0.00
43236200	Riverside	0.00%	0.00	0.00	0.00
43236300	Riverside	0.00%	0.00	0.00	0.00
43236400	Riverside	0.00%	0.00	0.00	0.00
43236500	Riverside	0.00%	0.00	0.00	0.00
43236600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43237300	Riverside	0.00%	0.00	0.00	0.00
43238100	Riverside	0.00%	0.00	0.00	0.00
43238200	Riverside	0.00%	0.00	0.00	0.00
43238300	Riverside	0.00%	0.00	0.00	0.00
43238400	Riverside	0.00%	0.00	0.00	0.00
43238500	Riverside	0.00%	0.00	0.00	0.00
43239100	Riverside	0.00%	0.00	0.00	0.00
43239200	Riverside	0.00%	0.00	0.00	0.00
43239300	Riverside	0.00%	0.00	0.00	0.00
43239400	Riverside	0.00%	0.00	0.00	0.00
43240100	Riverside	0.00%	0.00	0.00	0.00
43240200	Riverside	0.00%	0.00	0.00	0.00
43240300	Riverside	0.00%	0.00	0.00	0.00
43240400	Riverside	0.00%	0.00	0.00	0.00
43241100	Riverside	0.00%	0.00	0.00	0.00
43241200	Riverside	0.00%	0.00	0.00	0.00
43242100	Riverside	0.00%	0.00	0.00	0.00
43242200	Riverside	0.00%	0.00	0.00	0.00
43242300	Riverside	0.00%	0.00	0.00	0.00
43242400	Riverside	0.00%	0.00	0.00	0.00
43243100	Riverside	0.00%	0.00	0.00	0.00
43244100	Riverside	0.00%	0.00	0.00	0.00
43244200	Riverside	0.00%	0.00	0.00	0.00
43245100	Riverside	0.00%	0.00	0.00	0.00
43246100	Riverside	0.00%	0.00	0.00	0.00
43246200	Riverside	0.00%	0.00	0.00	0.00
43246300	Riverside	0.00%	0.00	0.00	0.00
43246400	Riverside	0.00%	0.00	0.00	0.00
43246500	Riverside	0.00%	0.00	0.00	0.00
43248100	Riverside	0.00%	0.00	0.00	0.00
43249100	Riverside	0.00%	0.00	0.00	0.00
43249200	Riverside	0.00%	0.00	0.00	0.00
43249300	Riverside	0.00%	0.00	0.00	0.00
43249400	Riverside	0.00%	0.00	0.00	0.00
43250100	Riverside	0.00%	0.00	0.00	0.00
43250200	Riverside	0.00%	0.00	0.00	0.00
43251100	Riverside	0.00%	0.00	0.00	0.00
43251200	Riverside	0.00%	0.00	0.00	0.00
43252100	Riverside	0.00%	0.00	0.00	0.00
43252200	Riverside	0.00%	0.00	0.00	0.00
43252300	Riverside	0.00%	0.00	0.00	0.00
43253100	Riverside	0.00%	0.00	0.00	0.00
43253200	Riverside	0.00%	0.00	0.00	0.00
43254100	Riverside	13.30%	275.02	277.68	282.65
43255100	Riverside	0.00%	0.00	0.00	0.00
43255200	Riverside	0.00%	0.00	0.00	0.00
43255300	Riverside	0.00%	0.00	0.00	0.00
43255400	Riverside	0.57%	10.28	10.39	10.60
43255500	Riverside	0.00%	0.00	0.00	0.00
43256500	Riverside	0.00%	0.00	0.00	0.00
43256600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43256900	Riverside	0.00%	0.00	0.00	0.00
43257100	Riverside	0.00%	0.00	0.00	0.00
43257200	Riverside	0.00%	0.00	0.00	0.00
43258100	Riverside	0.00%	0.00	0.00	0.00
43258200	Riverside	0.00%	0.00	0.00	0.00
43259100	Riverside	0.00%	0.00	0.00	0.00
43259200	Riverside	0.00%	0.00	0.00	0.00
43260100	Riverside	69.40%	1,121.44	1,135.32	1,161.27
43260200	Riverside	0.00%	0.00	0.00	0.00
43261100	Riverside	0.00%	0.00	0.00	0.00
43261300	Riverside	0.00%	0.00	0.00	0.00
43262300	Riverside	3.91%	0.00	0.00	0.00
43264100	Riverside	85.19%	4.26	5.11	6.70
43264200	Riverside	1.03%	0.00	0.00	0.00
43264300	Riverside	96.40%	0.00	0.00	0.00
43266100	Riverside	0.00%	0.00	0.00	0.00
Totals			1,410.99	1,428.50	1,461.23

Extrapolation of Five Year Projection based on Annual Averages:

Difference Current Year to Prior Year:	17.50	32.73
Number of Years within Years Estimated:	8	15
Annual Average Dwelling Units per Year Estimated:*	2.19	2.18

Estimated Number of Dwelling Units January 1, 2019

	Existing Units	Total Dwelling Units
As of January 1, 2012		1,411
Additional Dwelling Units Constructed 01/01/2012 to 01/01/2013		2.19
Additional Dwelling Units Constructed 01/01/2013 to 01/01/2014		2.19
Additional Dwelling Units Constructed 01/01/2014 to 01/01/2015		2.19
Additional Dwelling Units Constructed 01/01/2015 to 01/01/2016		2.19
Additional Dwelling Units Constructed 01/01/2016 to 01/01/2017		2.19
Additional Dwelling Units Constructed 01/01/2017 to 01/01/2018		2.19
Additional Dwelling Units Constructed 01/01/2018 to 01/01/2019		2.19
Estimated Dwelling Units to Exist on January 1, 2019		1,426.31

Estimated Number of Dwelling Units Permitted for Five Year Period:

	Permitted Date	Total Dwelling Units
Dwelling Units Permitted 07/01/19 to 7/01/20		2.19
Dwelling Units Permitted 07/01/20 to 7/01/21		2.18
Dwelling Units Permitted 07/01/21 to 7/01/22		2.18
Dwelling Units Permitted 07/01/22 to 7/01/23		2.18
Dwelling Units Permitted 07/01/23 to 7/01/24		2.18
Projected Number of Dwelling Units Permitted for Five Fiscal Years:		10.92

*Percentage in District was proved by SCAG by GIS Review



SPECIAL DISTRICT FINANCING
& ADMINISTRATION

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- Via Email Only -

April 11, 2019

Mr. Richard Fairhurst
Senior Transportation Planner
County of Riverside
Transportation Department
4080 Lemon Street, 8th Floor
Riverside, CA 92502

**RE: RESIDENTIAL DEVELOPMENT AND SQUARE FOOTAGE PROJECTIONS
FOR THE MORENO VALLEY UNIFIED SCHOOL DISTRICT**

Special District Financing & Administration ("SDFA") is a consultant to the Moreno Valley Unified School District ("MVUSD") tasked with updating the current School Facilities Needs Analysis ("SFNA") which calculates the impact fee paid by residential development at the time of building permit issuance. The SFNA is only valid for a one-year period and as such is updated at a minimum on an annual basis. At this time we are asking the County of Riverside to review two elements of the report as to accuracy and completeness.

Residential Development Projections for the Next Five-Year Period

The statute requires that a projection of the residential development for the next five-year period by housing type be established. Housing type in the statute makes reference to single family detached dwelling units ("SFD"), single family attached dwelling units ("SFA") and multi-family attached dwelling units ("MFA"). These last two categories can be further classified to include townhomes and condominiums for the SFA units and apartments for the MFA units. The five-year projection period for the current update will cover the fiscal years of 2019/20 through 2023/24.

Data from the County of Riverside Transportation Department was provided April 2018. This information, along with historical activity, were reviewed and in conjunction with conversations held, the resulting projection of residential development for the next five-year period for the property within the County of Riverside and the Moreno Valley Unified School District was established as detailed below.

Southern California Department of Governments

The Southern California Association of Governments ("SCAG") was contacted. They provided a projection of residential dwelling units ("2016 Regional Transportation Plan and Sustainable Communities Strategy Growth Forecast") adopted in April of 2016, provided in April of 2016. (Please note; SCAG projections for the area of the School District within the City of Riverside are sourced from the City of Riverside. These separate projections are enclosed.) Because the SCAG projections are on a calendar-year basis and the five-year projection period is on a fiscal-year basis, the following assumptions were made; the SCAG calculations are as of January 1 in any given year, are reporting on occupiable dwelling units and there is a six-month lag from permit date to saleable or occupancy date. Therefore, the SCAG 2020 through 2024 projection is being used to project permit

issuance from fiscal year 2019/20 through 2023/24. The enclosed resulting projections show the calculation of an estimated number of dwelling units to be constructed from fiscal years 2019/20 through 2023/24 for both the MVUSD in total and for the County of Riverside. The total projected to be constructed within the next five-year period for the County of Riverside is 188 dwelling units. The total projected to be constructed with the next five years for the MVUSD is 3,848 dwelling units (3,649 within the City of Moreno Valley, 188 within the County of Riverside and 11 within the City of Riverside).

Historical Building Activity

A review was made of historical activity for the prior five calendar years through review of MVUSD certificate of compliance activity for new dwelling units located within the County of Riverside. There were two certificates of compliance issued for SFD dwelling units for the past five full fiscal years. Using history as a projection of the next five year period, two SFD dwelling units being projected for the next five-year period. This projected total is much lower than the projection derived from with the County of Riverside Approved Projects Listing analyzed in 2017 of a potential 169 dwelling units or data provided by SCAG detailing 188 dwelling units.

Discussions with County Staff

Discussions with County Staff on the status of the projects on both the Approved Residential Project Listing and the Tentative Residential Project Listing allowed us to understand that the timing of the development of the dwelling units on both listings to be uncertain at this time.

Final Draft Projections

We have concluded that the most conservative estimate was derived from historical activity. In summary, a projection of 2 single family detached dwelling units, zero (0) single family attached dwelling units, and zero (0) multi-family attached dwelling units are estimated to be constructed within the boundaries of the County of Riverside and the MVUSD within the next five-year period. A final projection will be used to calculate the Level II Fee once comments are received from the City of Moreno Valley, the City of Riverside and the County of Riverside.

We are requesting that the County of Riverside provide comments or acceptance that these projections of residential dwelling units appear to be reasonable based on the expertise of County Staff.

Residential Livable Square Footage Projections for the Next Five-Year Period

The calculation of the Level II and Level III Fee also involves determining an average assessable square footage for dwelling unit types to be constructed in the next five-year period. To determine this average, a review was made of the historical assessable square footages of like dwelling units constructed in the previous five-year period as provided by the issuing agencies to the County of Riverside as shown on the County of Riverside Assessor data. The average square footage of dwelling units constructed in 2018 was 2,597 square feet for SFD dwelling units for the total area of the School District. For the area projected to develop within the County of Riverside, certificates of compliance issued by the School District for the past five full fiscal years were reviewed which provided an average of 1,554 assessable square feet (1 dwelling unit at 1,920 square feet and 1 dwelling unit at 1,188 square feet). A projection of average square feet for SFA and MFA dwelling units is not discussed as none are projected for the area within both the School District and the County of Riverside.

The historical average calculated from certificates of compliance issued of 1,554 square feet for SFD units is proposed to be used in the calculation of the Level II and Level III Fees. We are asking the County of Riverside to provide comment or acceptance that this averages appear to be reasonable based on the expertise of County staff.

Clarity of Request

To make the acceptance of the proposed draft projection of dwelling units and average dwelling unit sizes simple, we have included an area noting County acceptance below. The addition of this area came at the request of other agencies. Please feel free to communicate any comments or questions through email or phone, if preferred. We will use the confirmation for our records.

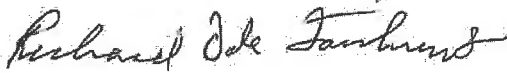
Timing of Our Request

We will be using this information to support the School Facilities Needs Analysis, which establishes the Level II and Level III Fees. The final draft of such report will be distributed to the City of Riverside, the City of Moreno Valley and the County of Riverside on or about May 3, 2019. We are respectfully asking that any comments or acceptance correspondence be received in our office by telephone, fax or U.S. Mail by **April 22, 2019**. Any communication received after this date will be considered for additional updates to the MVUSD SFNA.

We thank you in advance for your efforts. Please do not hesitate to call should you have any questions.



Barbara Hale-Carter
Principal

County of Riverside		
Residential Development Projections		
Fiscal Years 2019/20 through 2023/24		
Projection of Dwelling Units by Housing Type:	Proposed:	Confirmed or Modified:
Single Family Detached	2	11
Single Family Attached	0	0
Multi-Family Attached	0	0
Total Dwelling Units Projected:	2	11
Projection of Average Assessable Square Feet by Housing Type:	Proposed:	Confirmed or Modified:
Single Family Detached	1,554	1,200
Single Family Attached	NA	NA
Multi-Family Attached	NA	NA
<p>Thank you for your review. Please either confirm that the proposed projections appear reasonable at this time by inserting a check-mark or modify the projections by entering the modified figures in the column heading "Confirmed or Modified." Please sign and date below.</p>		
Printed Name: Richard Dale Fairhurst	Signature: 	
Title: Senior Transportation Planner	Date: April 11, 2019	

Enclosures

- C: Mike Reynolds; Moreno Valley Unified School District
 Samer Alzubaidi; Moreno Valley Unified School District
 Wendy Wiles; Atkinson, Andelson, Loya, Ruud & Romo

School District: **Moreno Valley Unified School District**

Local Planning Authority Representative: Signature, Date,

Printed Name, Title and phone/email required if no other supporting documentation is submitted

County: **Riverside**

Enrollment Year: **2018/19**

Richard D. Fairhurst 4/11/19

Richard Fairhurst, Senior Transportation Planner

phone: (951) 955-6757 e-mail: rfairhur@rvco.org

A. Tract Map Number	B. Development - Unincorporated Area of Riv. County	C. Tract Map Approval Date	D. Tract Map Expiration Date	E. Tract Map Status	F. Number of Approved Dwelling Units	G. Number of Permits Pulled or Occupied Dwelling Units to Date (on SAB 50-01)	H. Total Number of Eligible Dwelling Units to be Reported to Date (on SAB 50-01)	Comments (Optional)
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Tract approval and permit issuance data was updated on April 10, 2019

There are no tentative tracts within the Moreno Valley Unified School District that have been approved since 1997 that have not expired and that are still pending recordation or construction.

The Gateway Center Specific Plan - SP 250 - was approved on 8/15/2000 for 553 units, but the only tract filed within it expired on 9/19/2004 and since that time nothing has been filed. Therefore I am currently not projecting that this Specific Plan will start construction during the next 5 years. From July 1, 2014 to the present, there were 11 residential permits granted final occupancy, 1 residential permit currently in an issued status and 3 permits pending issuance on parcels located outside of tracts approved since 1997. I therefore will project that 11 SFD units like these will be built in the next 5 years. My total projection over the next 5 years is for 11 single family detached residential dwelling units within the unincorporated county in the MVUSD boundaries.

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43262100	Moreno Valley	99.97%	1,424	1,462	1,524	1,524
43262200	Moreno Valley	99.98%	583	641	641	641
43262300	Moreno Valley	25.39%	1	4	14	17
43263100	Moreno Valley	3.73%	6	7	10	11
43263200	Moreno Valley	42.26%	180	231	350	377
43263300	Moreno Valley	93.84%	969	984	1,016	1,016
43264100	Moreno Valley	14.74%	1	2	2	2
43264200	Moreno Valley	98.97%	851	1,105	1,734	1,836
43264300	Moreno Valley	3.60%	0	0	1	1
43266100	Moreno Valley	99.30%	509	559	559	559
43266200	Moreno Valley	100.00%	2,295	2,602	2,897	2,897
43267100	Moreno Valley	83.37%	0	0	0	0
43267200	Moreno Valley	100.00%	836	836	836	836
43268200	Moreno Valley	0.60%	1	1	1	1
43269200	Moreno Valley	99.41%	534	625	836	869
43269300	Moreno Valley	3.18%	1	2	3	3
43270100	Moreno Valley	96.96%	0	0	0	0
43270200	Moreno Valley	100.00%	878	994	1,067	1,067
43271100	Moreno Valley	100.00%	799	896	896	896
43272100	Moreno Valley	100.00%	1,222	1,432	1,901	1,971
43273100	Moreno Valley	100.00%	1,638	1,722	1,910	1,938
43274100	Moreno Valley	100.00%	922	1,042	1,079	1,079
43275100	Moreno Valley	100.00%	1,350	1,557	2,023	2,093
43276100	Moreno Valley	100.00%	855	934	934	934
43277100	Moreno Valley	95.58%	0	0	0	0
43277200	Moreno Valley	100.00%	816	922	938	938
43278100	Moreno Valley	100.00%	1,151	1,304	1,421	1,421
43279100	Moreno Valley	100.00%	1,027	1,311	2,011	2,124
43280100	Moreno Valley	100.00%	867	891	944	952
43281100	Moreno Valley	100.00%	1,020	1,158	1,334	1,334
43282100	Moreno Valley	74.45%	884	1,011	1,291	1,323
43283100	Moreno Valley	100.00%	773	875	939	939
43284100	Moreno Valley	100.00%	98	106	106	106
43284200	Moreno Valley	100.00%	430	492	629	649
43285200	Moreno Valley	36.88%	150	241	457	490
43286100	Moreno Valley	100.00%	815	932	1,192	1,231
43287100	Moreno Valley	100.00%	857	983	1,266	1,308
43288100	Moreno Valley	100.00%	650	734	754	754
43288200	Moreno Valley	100.00%	522	536	567	572
43289100	Moreno Valley	100.00%	319	366	469	484
43289200	Moreno Valley	100.00%	166	252	465	500
43290100	Moreno Valley	100.00%	939	1,086	1,418	1,469
43290200	Moreno Valley	100.00%	366	493	808	859
43291100	Moreno Valley	100.00%	962	1,104	1,420	1,467
43292100	Moreno Valley	100.00%	667	722	848	867
43292200	Moreno Valley	100.00%	457	517	553	553
43293100	Moreno Valley	100.00%	833	875	969	983
43294100	Moreno Valley	100.00%	436	502	652	675
43295100	Moreno Valley	100.00%	444	504	567	567
43295200	Moreno Valley	100.00%	595	656	656	656
43296100	Moreno Valley	5.98%	20	23	30	31
43296200	Moreno Valley	96.53%	515	636	934	983
43297100	Moreno Valley	100.00%	1,296	1,483	1,898	1,959
43298100	Moreno Valley	19.80%	13	18	32	34
43298200	Moreno Valley	100.00%	266	320	449	469
43298300	Moreno Valley	100.00%	285	338	462	482

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43319100	Moreno Valley	60.75%	1,059	1,059	1,059	1,059
43319200	Moreno Valley	66.21%	962	1,019	1,145	1,161
43322100	Moreno Valley	100.00%	416	497	685	714
43322200	Moreno Valley	100.00%	888	905	942	948
43322300	Moreno Valley	100.00%	770	883	1,132	1,169
43324100	Moreno Valley	100.00%	1,345	1,605	2,223	2,320
43324200	Moreno Valley	100.00%	142	291	704	777
43324300	Moreno Valley	77.54%	751	875	1,160	1,203
43328100	Moreno Valley	22.98%	351	419	579	604
43328200	Moreno Valley	94.41%	189	222	298	311
43328300	Moreno Valley	1.40%	1	2	2	2
43330100	Moreno Valley	100.00%	824	934	1,193	1,234
43335100	Moreno Valley	1.56%	0	0	1	1
43336100	Moreno Valley	100.00%	217	258	362	379
43336200	Moreno Valley	100.00%	6	6	6	6
43338100	Moreno Valley	79.81%	170	245	245	245
43338200	Moreno Valley	100.00%	1,347	1,574	2,115	2,200
43338300	Moreno Valley	100.00%	98	98	98	98
43338400	Moreno Valley	100.00%	406	468	609	631
43344100	Moreno Valley	7.15%	1	1	1	1
43344200	Moreno Valley	82.09%	2	2	0	0
43447100	Moreno Valley	30.00%	2	4	15	15
43254100	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43255400	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43260100	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43262300	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43264100	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43264200	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43264300	Riverside		Used City of Riverside TAZ Data - See Separate Attachment			
43253200	Unincorporated	5.62%	70	81	101	102
43255300	Unincorporated	0.83%	17	18	19	19
43255400	Unincorporated	4.39%	87	90	95	97
43257100	Unincorporated	0.72%	5	5	6	6
43259100	Unincorporated	1.70%	1	1	2	2
43260100	Unincorporated	0.37%	6	6	7	7
43260200	Unincorporated	97.61%	153	190	281	307
43261200	Unincorporated	33.74%	0	0	0	0
43261300	Unincorporated	88.91%	145	148	154	155
43262300	Unincorporated	70.59%	1	12	39	46
43263100	Unincorporated	94.92%	158	188	260	277
43263200	Unincorporated	55.68%	238	304	462	496
43263300	Unincorporated	6.16%	64	65	67	67
43267100	Unincorporated	16.63%	0	0	0	0
43268100	Unincorporated	1.14%	0	0	0	0
43268200	Unincorporated	99.29%	210	243	243	243
43269100	Unincorporated	5.87%	6	8	11	12
43269200	Unincorporated	0.59%	3	4	5	5
43269300	Unincorporated	81.10%	29	39	67	73
43270100	Unincorporated	3.04%	0	0	0	0
43277100	Unincorporated	4.42%	0	0	0	0
43296100	Unincorporated	44.33%	152	171	224	233
43296200	Unincorporated	3.47%	19	23	34	35
43298100	Unincorporated	57.84%	37	53	93	100
43328100	Unincorporated	0.81%	12	15	20	21
43328300	Unincorporated	65.17%	61	70	91	94
43335100	Unincorporated	38.92%	0	9	37	37
43338100	Unincorporated	1.78%	4	5	5	5
43344200	Unincorporated	1.70%	0	0	0	0

Moreno Valley Unified School District

Source: Southern California Association of Governments

SCAG's 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted April 2016

Data Date: April 2016 (Most Recent Available Data)

Tier2 (TAZ)	Location	Percent in District **	2012 Households	2020 Households	2035 Households	2040 Households
43445100	Unincorporated	5.58%	8	8	9	9
43447100	Unincorporated	1.32%	0	0	1	1
			45,927	52,152	63,620	65,274

Extrapolation of Five Year Projections based on Annual Averages:

Difference Current Year to Prior Year:	6,225	11,468	1,654
Number of Years within Years Estimated:	8	15	5
Annual Average Dwelling Units per Year Estimated:*	778.13	764.53	330.80

Estimated Number of Dwelling Units January 1, 2019

	City of	County of	Total
	Moreno Valley	Riverside	
Existing Units	Dwelling Units	Dwelling Units	Dwelling Units
As of January 1, 2012	44,441.00	1,486.00	45,927.00
Additional Dwelling Units Constructed 1/1/2012 to 1/1/2013	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2013 to 1/1/2014	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2014 to 1/1/2015	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2015 to 1/1/2016	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2016 to 1/1/2017	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2017 to 1/1/2018	744.38	33.75	778.13
Additional Dwelling Units Constructed 1/1/2018 to 1/1/2019	744.38	33.75	778.13
Estimated Dwelling Units to Exist on January 1, 2019:***	49,651.63	1,722.25	51,373.88

Estimated Number of Dwelling Units Permitted for Five Year Period:

	City of	County of	Total
	Moreno Valley	Riverside	
Permitted Date	Dwelling Units	Dwelling Units	Dwelling Units
Dwelling Units Permitted 7/1/19 to 7/1/20	744.38	33.75	778.13
Dwelling Units Permitted 7/1/20 to 7/1/21	726.07	38.47	764.53
Dwelling Units Permitted 7/1/21 to 7/1/22	726.07	38.47	764.53
Dwelling Units Permitted 7/1/22 to 7/1/23	726.07	38.47	764.53
Dwelling Units Permitted 7/1/23 to 7/1/24	726.07	38.47	764.53
Projected Number of Dwelling Units Permitted for Five Fiscal Years:	3,648.64	187.62	3,836.26

*The data provided by SCAG per TAZ was adopted at a Jurisdictional Level Only in April of 2016 to be used in the 2016 Regional Transportation Plan and Sustainable Communities Strategy.

**Percentage in District was provided by SCAG by GIS review.

***Totals may not sum due to rounding.

Moreno Valley Unified School District

Source: City of Riverside - Socio-Economic Data Approved with SCAG and WRCOG

Manipulated to Provide the Area of the City of Riverside within the Boundaries of the Moreno Valley Unified School District

Data provided: May 19, 2015 (Most recent as of February 2016)

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43132100	Riverside	0.00%	0.00	0.00	0.00
43136100	Riverside	0.00%	0.00	0.00	0.00
43142100	Riverside	0.00%	0.00	0.00	0.00
43142200	Riverside	0.00%	0.00	0.00	0.00
43142300	Riverside	0.00%	0.00	0.00	0.00
43144300	Riverside	0.00%	0.00	0.00	0.00
43144500	Riverside	0.00%	0.00	0.00	0.00
43178100	Riverside	0.00%	0.00	0.00	0.00
43182300	Riverside	0.00%	0.00	0.00	0.00
43185200	Riverside	0.00%	0.00	0.00	0.00
43186100	Riverside	0.00%	0.00	0.00	0.00
43186200	Riverside	0.00%	0.00	0.00	0.00
43187100	Riverside	0.00%	0.00	0.00	0.00
43187200	Riverside	0.00%	0.00	0.00	0.00
43190100	Riverside	0.00%	0.00	0.00	0.00
43191100	Riverside	0.00%	0.00	0.00	0.00
43191200	Riverside	0.00%	0.00	0.00	0.00
43192100	Riverside	0.00%	0.00	0.00	0.00
43192200	Riverside	0.00%	0.00	0.00	0.00
43192300	Riverside	0.00%	0.00	0.00	0.00
43193100	Riverside	0.00%	0.00	0.00	0.00
43194100	Riverside	0.00%	0.00	0.00	0.00
43194200	Riverside	0.00%	0.00	0.00	0.00
43195100	Riverside	0.00%	0.00	0.00	0.00
43195200	Riverside	0.00%	0.00	0.00	0.00
43195300	Riverside	0.00%	0.00	0.00	0.00
43196100	Riverside	0.00%	0.00	0.00	0.00
43196200	Riverside	0.00%	0.00	0.00	0.00
43196300	Riverside	0.00%	0.00	0.00	0.00
43196400	Riverside	0.00%	0.00	0.00	0.00
43197100	Riverside	0.00%	0.00	0.00	0.00
43197200	Riverside	0.00%	0.00	0.00	0.00
43197300	Riverside	0.00%	0.00	0.00	0.00
43197400	Riverside	0.00%	0.00	0.00	0.00
43198100	Riverside	0.00%	0.00	0.00	0.00
43198200	Riverside	0.00%	0.00	0.00	0.00
43198300	Riverside	0.00%	0.00	0.00	0.00
43198400	Riverside	0.00%	0.00	0.00	0.00
43198500	Riverside	0.00%	0.00	0.00	0.00
43199200	Riverside	0.00%	0.00	0.00	0.00
43199300	Riverside	0.00%	0.00	0.00	0.00
43199400	Riverside	0.00%	0.00	0.00	0.00
43199500	Riverside	0.00%	0.00	0.00	0.00
43200100	Riverside	0.00%	0.00	0.00	0.00
43201100	Riverside	0.00%	0.00	0.00	0.00
43201200	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43202100	Riverside	0.00%	0.00	0.00	0.00
43202200	Riverside	0.00%	0.00	0.00	0.00
43203100	Riverside	0.00%	0.00	0.00	0.00
43203200	Riverside	0.00%	0.00	0.00	0.00
43204100	Riverside	0.00%	0.00	0.00	0.00
43205100	Riverside	0.00%	0.00	0.00	0.00
43206100	Riverside	0.00%	0.00	0.00	0.00
43207100	Riverside	0.00%	0.00	0.00	0.00
43207200	Riverside	0.00%	0.00	0.00	0.00
43208100	Riverside	0.00%	0.00	0.00	0.00
43209100	Riverside	0.00%	0.00	0.00	0.00
43209200	Riverside	0.00%	0.00	0.00	0.00
43209300	Riverside	0.00%	0.00	0.00	0.00
43209400	Riverside	0.00%	0.00	0.00	0.00
43209500	Riverside	0.00%	0.00	0.00	0.00
43209600	Riverside	0.00%	0.00	0.00	0.00
43210100	Riverside	0.00%	0.00	0.00	0.00
43210200	Riverside	0.00%	0.00	0.00	0.00
43211100	Riverside	0.00%	0.00	0.00	0.00
43211200	Riverside	0.00%	0.00	0.00	0.00
43211300	Riverside	0.00%	0.00	0.00	0.00
43211400	Riverside	0.00%	0.00	0.00	0.00
43212100	Riverside	0.00%	0.00	0.00	0.00
43213100	Riverside	0.00%	0.00	0.00	0.00
43213200	Riverside	0.00%	0.00	0.00	0.00
43213300	Riverside	0.00%	0.00	0.00	0.00
43214100	Riverside	0.00%	0.00	0.00	0.00
43214200	Riverside	0.00%	0.00	0.00	0.00
43214300	Riverside	0.00%	0.00	0.00	0.00
43215100	Riverside	0.00%	0.00	0.00	0.00
43215200	Riverside	0.00%	0.00	0.00	0.00
43215300	Riverside	0.00%	0.00	0.00	0.00
43215400	Riverside	0.00%	0.00	0.00	0.00
43217100	Riverside	0.00%	0.00	0.00	0.00
43217200	Riverside	0.00%	0.00	0.00	0.00
43218100	Riverside	0.00%	0.00	0.00	0.00
43218200	Riverside	0.00%	0.00	0.00	0.00
43218300	Riverside	0.00%	0.00	0.00	0.00
43218400	Riverside	0.00%	0.00	0.00	0.00
43219100	Riverside	0.00%	0.00	0.00	0.00
43219200	Riverside	0.00%	0.00	0.00	0.00
43220200	Riverside	0.00%	0.00	0.00	0.00
43221100	Riverside	0.00%	0.00	0.00	0.00
43221200	Riverside	0.00%	0.00	0.00	0.00
43222100	Riverside	0.00%	0.00	0.00	0.00
43222200	Riverside	0.00%	0.00	0.00	0.00
43222300	Riverside	0.00%	0.00	0.00	0.00
43223100	Riverside	0.00%	0.00	0.00	0.00
43223200	Riverside	0.00%	0.00	0.00	0.00
43223300	Riverside	0.00%	0.00	0.00	0.00
43223400	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43223500	Riverside	0.00%	0.00	0.00	0.00
43223600	Riverside	0.00%	0.00	0.00	0.00
43223700	Riverside	0.00%	0.00	0.00	0.00
43223800	Riverside	0.00%	0.00	0.00	0.00
43223900	Riverside	0.00%	0.00	0.00	0.00
43224100	Riverside	0.00%	0.00	0.00	0.00
43224200	Riverside	0.00%	0.00	0.00	0.00
43224300	Riverside	0.00%	0.00	0.00	0.00
43225100	Riverside	0.00%	0.00	0.00	0.00
43225200	Riverside	0.00%	0.00	0.00	0.00
43225300	Riverside	0.00%	0.00	0.00	0.00
43227100	Riverside	0.00%	0.00	0.00	0.00
43227200	Riverside	0.00%	0.00	0.00	0.00
43227300	Riverside	0.00%	0.00	0.00	0.00
43227400	Riverside	0.00%	0.00	0.00	0.00
43228100	Riverside	0.00%	0.00	0.00	0.00
43228200	Riverside	0.00%	0.00	0.00	0.00
43228300	Riverside	0.00%	0.00	0.00	0.00
43228400	Riverside	0.00%	0.00	0.00	0.00
43229100	Riverside	0.00%	0.00	0.00	0.00
43229200	Riverside	0.00%	0.00	0.00	0.00
43230100	Riverside	0.00%	0.00	0.00	0.00
43230200	Riverside	0.00%	0.00	0.00	0.00
43230300	Riverside	0.00%	0.00	0.00	0.00
43230400	Riverside	0.00%	0.00	0.00	0.00
43231100	Riverside	0.00%	0.00	0.00	0.00
43231200	Riverside	0.00%	0.00	0.00	0.00
43231300	Riverside	0.00%	0.00	0.00	0.00
43231400	Riverside	0.00%	0.00	0.00	0.00
43231500	Riverside	0.00%	0.00	0.00	0.00
43231600	Riverside	0.00%	0.00	0.00	0.00
43231700	Riverside	0.00%	0.00	0.00	0.00
43231800	Riverside	0.00%	0.00	0.00	0.00
43232100	Riverside	0.00%	0.00	0.00	0.00
43232200	Riverside	0.00%	0.00	0.00	0.00
43233100	Riverside	0.00%	0.00	0.00	0.00
43233200	Riverside	0.00%	0.00	0.00	0.00
43233300	Riverside	0.00%	0.00	0.00	0.00
43234100	Riverside	0.00%	0.00	0.00	0.00
43234200	Riverside	0.00%	0.00	0.00	0.00
43235100	Riverside	0.00%	0.00	0.00	0.00
43235200	Riverside	0.00%	0.00	0.00	0.00
43235300	Riverside	0.00%	0.00	0.00	0.00
43235400	Riverside	0.00%	0.00	0.00	0.00
43235500	Riverside	0.00%	0.00	0.00	0.00
43236100	Riverside	0.00%	0.00	0.00	0.00
43236200	Riverside	0.00%	0.00	0.00	0.00
43236300	Riverside	0.00%	0.00	0.00	0.00
43236400	Riverside	0.00%	0.00	0.00	0.00
43236500	Riverside	0.00%	0.00	0.00	0.00
43236600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43237300	Riverside	0.00%	0.00	0.00	0.00
43238100	Riverside	0.00%	0.00	0.00	0.00
43238200	Riverside	0.00%	0.00	0.00	0.00
43238300	Riverside	0.00%	0.00	0.00	0.00
43238400	Riverside	0.00%	0.00	0.00	0.00
43238500	Riverside	0.00%	0.00	0.00	0.00
43239100	Riverside	0.00%	0.00	0.00	0.00
43239200	Riverside	0.00%	0.00	0.00	0.00
43239300	Riverside	0.00%	0.00	0.00	0.00
43239400	Riverside	0.00%	0.00	0.00	0.00
43240100	Riverside	0.00%	0.00	0.00	0.00
43240200	Riverside	0.00%	0.00	0.00	0.00
43240300	Riverside	0.00%	0.00	0.00	0.00
43240400	Riverside	0.00%	0.00	0.00	0.00
43241100	Riverside	0.00%	0.00	0.00	0.00
43241200	Riverside	0.00%	0.00	0.00	0.00
43242100	Riverside	0.00%	0.00	0.00	0.00
43242200	Riverside	0.00%	0.00	0.00	0.00
43242300	Riverside	0.00%	0.00	0.00	0.00
43242400	Riverside	0.00%	0.00	0.00	0.00
43243100	Riverside	0.00%	0.00	0.00	0.00
43244100	Riverside	0.00%	0.00	0.00	0.00
43244200	Riverside	0.00%	0.00	0.00	0.00
43245100	Riverside	0.00%	0.00	0.00	0.00
43246100	Riverside	0.00%	0.00	0.00	0.00
43246200	Riverside	0.00%	0.00	0.00	0.00
43246300	Riverside	0.00%	0.00	0.00	0.00
43246400	Riverside	0.00%	0.00	0.00	0.00
43246500	Riverside	0.00%	0.00	0.00	0.00
43248100	Riverside	0.00%	0.00	0.00	0.00
43249100	Riverside	0.00%	0.00	0.00	0.00
43249200	Riverside	0.00%	0.00	0.00	0.00
43249300	Riverside	0.00%	0.00	0.00	0.00
43249400	Riverside	0.00%	0.00	0.00	0.00
43250100	Riverside	0.00%	0.00	0.00	0.00
43250200	Riverside	0.00%	0.00	0.00	0.00
43251100	Riverside	0.00%	0.00	0.00	0.00
43251200	Riverside	0.00%	0.00	0.00	0.00
43252100	Riverside	0.00%	0.00	0.00	0.00
43252200	Riverside	0.00%	0.00	0.00	0.00
43252300	Riverside	0.00%	0.00	0.00	0.00
43253100	Riverside	0.00%	0.00	0.00	0.00
43253200	Riverside	0.00%	0.00	0.00	0.00
43254100	Riverside	13.30%	275.02	277.68	282.65
43255100	Riverside	0.00%	0.00	0.00	0.00
43255200	Riverside	0.00%	0.00	0.00	0.00
43255300	Riverside	0.00%	0.00	0.00	0.00
43255400	Riverside	0.57%	10.28	10.39	10.60
43255500	Riverside	0.00%	0.00	0.00	0.00
43256500	Riverside	0.00%	0.00	0.00	0.00
43256600	Riverside	0.00%	0.00	0.00	0.00

TAZ	Location	Percent within MVUSD**	Household 2012	Household 2020	Household 2035
43256900	Riverside	0.00%	0.00	0.00	0.00
43257100	Riverside	0.00%	0.00	0.00	0.00
43257200	Riverside	0.00%	0.00	0.00	0.00
43258100	Riverside	0.00%	0.00	0.00	0.00
43258200	Riverside	0.00%	0.00	0.00	0.00
43259100	Riverside	0.00%	0.00	0.00	0.00
43259200	Riverside	0.00%	0.00	0.00	0.00
43260100	Riverside	69.40%	1,121.44	1,135.32	1,161.27
43260200	Riverside	0.00%	0.00	0.00	0.00
43261100	Riverside	0.00%	0.00	0.00	0.00
43261300	Riverside	0.00%	0.00	0.00	0.00
43262300	Riverside	3.91%	0.00	0.00	0.00
43264100	Riverside	85.19%	4.26	5.11	6.70
43264200	Riverside	1.03%	0.00	0.00	0.00
43264300	Riverside	96.40%	0.00	0.00	0.00
43266100	Riverside	0.00%	0.00	0.00	0.00
Totals			1,410.99	1,428.50	1,461.23

Extrapolation of Five Year Projection based on Annual Averages:

Difference Current Year to Prior Year:	17.50	32.73
Number of Years within Years Estimated:	8	15
Annual Average Dwelling Units per Year Estimated:*	2.19	2.18

Estimated Number of Dwelling Units January 1, 2019

	Existing Units As of January 1, 2012	Total Dwelling Units
Additional Dwelling Units Constructed 01/01/2012 to 01/01/2013		2.19
Additional Dwelling Units Constructed 01/01/2013 to 01/01/2014		2.19
Additional Dwelling Units Constructed 01/01/2014 to 01/01/2015		2.19
Additional Dwelling Units Constructed 01/01/2015 to 01/01/2016		2.19
Additional Dwelling Units Constructed 01/01/2016 to 01/01/2017		2.19
Additional Dwelling Units Constructed 01/01/2017 to 01/01/2018		2.19
Additional Dwelling Units Constructed 01/01/2018 to 01/01/2019		2.19
Estimated Dwelling Units to Exist on January 1, 2019		1,426.31

Estimated Number of Dwelling Units Permitted for Five Year Period:

	Permitted Date	Total Dwelling Units
Dwelling Units Permitted 07/01/19 to 7/01/20		2.19
Dwelling Units Permitted 07/01/20 to 7/01/21		2.18
Dwelling Units Permitted 07/01/21 to 7/01/22		2.18
Dwelling Units Permitted 07/01/22 to 7/01/23		2.18
Dwelling Units Permitted 07/01/23 to 7/01/24		2.18
Projected Number of Dwelling Units Permitted for Five Fiscal Years:		10.92

*Percentage in District was proved by SCAG by GIS Review

**APPENDIX G
LOCAL FUNDS
PER GOVERNMENT CODE SECTION 65995.6(b)
FOR THE
MORENO VALLEY UNIFIED SCHOOL DISTRICT
May 2019**

Local Funds

Section 65995.6(b) of the California Government Code directs that when determining the funds necessary to meet the facilities needs of the District, the SFNA shall do each of the following:

1. Identify and consider any surplus property owned by the District that can be used as a school site or that is available for sale to finance school facilities.
2. Identify and consider the extent to which projected enrollment growth may be accommodated by excess capacity in existing facilities.
3. Identify and consider local sources other than fees, charges, dedications, or other requirements imposed on residential construction available to finance the construction or reconstruction of school facilities needed to accommodate any growth in enrollment attributable to the construction of new residential units.

Section 65995.5(c)(2) of the California Government Code adds that the full amount of local funds the governing board has dedicated to facilities necessitated by new construction shall be subtracted from the Total Per Unhoused Pupil Grant. Local funds include fees, charges, dedications, or other requirements imposed on commercial or industrial construction.

Each of these requirements is reviewed in the following sections.

Surplus Property

The District does own two sites that are not currently useable according to State standards as a school site. The first site is located at Wilmont and Cactus and is approximately 8.97 acres. The second site is located in Reche Canyon and is approximately 5.0 acres. Assuming the District could receive a price per acre equal to a recent site purchase of \$119,844 per acre, the District would generate \$1,674,221 for these two sites. These funds are shown as Identified Local Funds in the final section of Appendix G.

In addition, the District owns two additional sites. The first is a future high school site near Ironwood Avenue and Redlands Boulevard. The ownership of this site has been taken into consideration when determining the number of school sites needed in the next five-year period in the body of this Report as shown in Table 17. The second is an elementary site of 8.97 acres on Nason Street. This site will be used to house a replacement school for Moreno Valley Elementary. Moreno Valley Elementary will be used as a replacement site for Rainbow Springs Elementary, which will converted for District use and not house students. There will not be an increase in capacity from this reorganization and there are no funds available from the ownership of these sites.

Projected Enrollment Housed in Current Excess Capacity

The body of the SFNA has taken into consideration the use of current excess capacity to house projected enrollment and as detailed on page 16-17, and shown on Table 10, a portion of the excess capacity is available to house projected enrollment from unmitigated houses in the next five-year period. This calculation is summarized below.

Table G-1 Excess Capacity			
Type	Current Enrollment (October 2018)	Capacity (October 2018)	Excess/(Deficit) Capacity (October 2018)
Elementary (K-5)	14,988	14,390	(598)
Middle (6-8)	7,818	11,180	3,362
High (9-12)	9,968	10,609	641
Total	32,774	36,179	3,405
Type	Excess Capacity (October 2018)	Percent of Future Students to be Generated in the Next 5 Years	Excess Capacity to be Allocated to the Next 5 Years
Elementary (K-5)	0	NA	0
Middle (6-8)	3,362	4.64%	156
High (9-12)	641	3.09%	20
Total			176
Type	Projected Unhoused Students in the Next 5 Years	Excess Capacity to be Allocated to the Next 5 Years as Allocated Above Plus Additional Seats	Adjusted Unhoused Students in the Next 5 Year Period
Elementary (K-5)	248	0	248
Middle (6-8)	134	156	0
High (9-12)	114	20	94
Total	496	176	342

Local Sources Other Than Fees, etc., on Residential Construction

The requirement is to identify and consider local sources other than fees, charges, dedications, or other requirements imposed on residential construction available to finance the construction or reconstruction of school facilities needed to accommodate any growth in enrollment attributable to the construction of new residential units. Each source available to the District has been reviewed and is contained in the following sections.

GENERAL OBLIGATION BOND FUNDS

The District successfully passed a General Obligation Bond measure in November of 2014 for a total authorization of \$398,000,000. Since the passage of the bond measure, two series of bonds have been issued. In April of 2015, Series A was issued in the amount of \$103,000,000. In September of 2018, Series B was issued in the amount of \$56,000,000. As of March 4, 2019, the balance in the construction funds was approximately \$79,004,259. These funds have been dedicated to modernization projects, none of which will increase capacity. The calculation of the use of these funds (\$0) is contained within Table G-2.

CERTIFICATES OF PARTICIPATION

In July of 1997 and in June of 1998, the District issued Certificates of Participation. The Acquisition Fund has been closed.

DEVELOPER FEES

The District, as of the date of this Report, collects Level I Fees of \$3.79 or, as applicable during the past year, a Level II Fee of \$4.59 per square foot of residential construction and \$0.61 per square foot of commercial and industrial construction. As of March 4, 2019, the balance in the Capital Facilities Fund was approximately \$9,708,282. The calculation of the use of these funds is contained within Table G-2.

In addition, an analysis was performed to determine to what extent, if any, future commercial/industrial fees could be projected as an offset against the impact of future new residential construction. Research found that for the past year, the District has collected approximately \$1,035,222 in fees from commercial and industrial development. Projecting this annual figure times five to represent five years of commercial/industrial fees corresponds to approximately \$5,176,110 in projected revenue. Although the receipt of these funds is speculative, the analysis contained as Table G-2 uses these funds.

STATE FUNDS

As of March 4, 2019, the balance in the County School Facilities Fund representing State Funds was approximately \$3,426,424. The calculation of the use of these funds is contained within Table G-2.

Use of Identified Local Funds

Section 65995.5(c)(2) of the California Government Code requires the District to identify and consider local funds and to subtract these funds, if available, from the Total Per Unhoused Pupil Grant. Over the next five years, the District will need to construct facilities to house currently 598 unhoused elementary students identified on Table 9, 248 projected elementary students and 94 projected high school students (without the need for land) identified on Table 10. Based on current costs for school facilities detailed in Appendix A, without taking into consideration administrative or interim housing needs, these facilities needs carry an estimated financial impact to the District of \$52,509,223.

As detailed above, the District has identified available Local Funds from the sale of excess sites, balances in the Developer Fee Fund and State Funds. Also detailed above is an analysis which projects revenue from Developer Fees collected from Non-Residential Property. In addition to these sources the District can also project to receive Level II Fees from Residential Property constructed over the next five-year period. This estimate, based on the dwelling units projected to contain 1,362,570 square feet of assessable space as calculated on Table 20, is \$6,322,325. The District plans to pursue State funding for school facilities to house students generated from existing residential units and Projected Unmitigated Dwelling Units. Based on current per-pupil grant amounts established by the State and the District's site costs, the District can project to receive \$7,575,531 in State funding.

The following table calculates the extent to which the District has excess local funds available to lower the impact of future development in the next five-year period. As shown, when considering current and future school needs as well as current and projected school facilities revenue, the District does not have surplus local facilities funds available to lower the needs of projected development.

Table G-2 Calculation of Surplus Local Funds		
Summary of Fiscal Impact and Local Funds		Total Identified Impact or Local Funds
Summary of Fiscal Impact:		
Existing Unhoused Impact	\$31,049,954	
Projected Impact	\$21,459,269	
Total Fiscal Impact:		\$52,509,223
Summary of Local Funds:		
Projected Sale of Excess Property	\$1,674,221	
General Obligation Bonds Construction Fund Balance	\$0	
Certificates of Participation Fund Balance	\$0	
Developer Fee Fund Balance	\$9,708,282	
State Funds Balance	\$3,426,424	
Projected Non-Residential Developer Fee	\$5,176,110	
Projected Residential Level II Fees	\$6,322,325	
Projected State Funding	\$7,575,531	
Total Identified and Projected Local Facilities Funds:		\$33,882,893
Calculation of Surplus/(Deficit) Local Funds:		(\$18,626,330)



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The mission of Moreno Valley Unified School District is to ensure all students graduate high school prepared to successfully enter into higher education and/or pursue a viable career path.

March 24, 2020

Chris Ormsby
City of Moreno Valley
Community Development Department
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552

Email: chriso@moval.org

Project: Notice of Preparation of a Program Environmental Impact Report for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

Dear Mr. Ormsby,

The Moreno Valley Unified School District (District) appreciates the opportunity to review the NOP for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan

The District's focus continues to be the health and well-being of our students and staff, specifically to air and noise pollution as a result of an increase in traffic that may negatively impact the School District.

Additionally, it should be noted that there will be developer impact fees associated with this project, payable to the Moreno Valley Unified School District. It is highly suggested that contact should be made with our Facilities and Planning Department's Demographics Technician, Cheryl Acevedo (cacevedo@mvusd.net) prior to processing a certificate of compliance and payment of fees – as the following fees are subject to change.

For Industrial/Commercial Projects, these fees are currently \$.61 per square foot.

For Residential Development Projects, these fees are currently:

- New Residential: \$4.64/sq. ft.
- Room Additions/Conversions: $\leq 499\text{ sq. ft.}$ (no fees)
- Room Additions/Conversions: 500 sq. ft.+ = \$3.79/sq. ft.
- Stand-alone Accessory Dwelling Units: 750 sq. ft. +, fees are calculated based on a percentage of the existing main residential dwelling unit
- Stand-alone Accessory Dwelling Units: $\leq 749\text{ sq. ft.}$ (no fees)

Please keep us informed as to the City's progress in this matter, and any notifications relating to this project.

Sincerely,

Samer Alzubaidi, Director
Facilities Planning & Development
salzubaidi@mvusd.net

RECEIVED

MAR 30 2020

CITY OF MORENO VALLEY
Planning Division

NATIVE AMERICAN HERITAGE COMMISSION

March 9, 2020

Governor's Office of Planning & Research

MAR 12 2020

STATE CLEARINGHOUSE

Chris Ormsby
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

Re: 2020039022, Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Update Project, Riverside County

Dear Mr. Ormsby:

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

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

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

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



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AB 52

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

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

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

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

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

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

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

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

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

SB 18

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

Some of SB 18's provisions include:

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

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

NAHC Recommendations for Cultural Resources Assessments

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

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3.** Contact the NAHC for:
- a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- 4.** Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:
Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Staff Services Analyst

cc: State Clearinghouse

NATIVE AMERICAN HERITAGE COMMISSION

March 18, 2020

Chris Ormsby
City of Moreno Valley

Via Email to: chriso@moval.org

Re: Native American Consultation, Pursuant to Senate Bill 18, Government Code §65352.3 and §65352.4, MoVal 2040: Comprehensive General Plan Update and Climate Action Plan Project, Riverside County

Dear Mr. Ormsby:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties.

Government Code §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

The law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

The NAHC also believes that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources that have already been recorded or are adjacent to the APE, such as known archaeological sites;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.



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California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code §6254.10.

3. The result of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the tribes on the attached list for more information.
4. Any ethnographic studies conducted for any area including all or part of the APE; and
5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment

**Native American Heritage Commission
Tribal Consultation List
Riverside County
3/18/2020**

**Agua Caliente Band of Cahuilla
Indians**

Jeff Grubbe, Chairperson
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

**Morongo Band of Mission
Indians**

Robert Martin, Chairperson
12700 Pumarra Rroad Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

**Augustine Band of Cahuilla
Mission Indians**

Amanda Vance, Chairperson
P.O. Box 846 Cahuilla
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

**Pechanga Band of Luiseno
Indians**

Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

**Cabazon Band of Mission
Indians**

Doug Welmas, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

**Quechan Tribe of the Fort Yuma
Reservation**

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Cahuilla Band of Indians

Daniel Salgado, Chairperson
52701 U.S. Highway 371 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Ramona Band of Cahuilla

Joseph Hamilton, Chairperson
P.O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramona-nsn.gov

**Los Coyotes Band of Cahuilla
and Cupeño Indians**

Shane Chapparosa, Chairperson
P.O. Box 189 Cahuilla
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712

**San Fernando Band of Mission
Indians**

Donna Yocum, Chairperson
P.O. Box 221838 Kitanemuk
Newhall, CA, 91322 Vanyume
Phone: (503) 539 - 0933 Tataviam
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ddyocum@comcast.net

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Government Code Sections 65352.3 and 65352.4 et seq for the proposed MoVal 2040: Comprehensive General Plan Update and Climate Action Plan Project, Riverside County.

**Native American Heritage Commission
Tribal Consultation List
Riverside County
3/18/2020**

***San Manuel Band of Mission
Indians***

Jessica Mauck, Director of
Cultural Resources
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
jmauck@sanmanuel-nsn.gov

***Torres-Martinez Desert Cahuilla
Indians***

Thomas Tortez, Chairperson
P.O. Box 1160 Cahuilla
Thermal, CA, 92274
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tmchair@torresmartinez.org

***Santa Rosa Band of Cahuilla
Indians***

Steven Estrada, Chairperson
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Anza, CA, 92539
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mflaxbeard@santarosacahuilla-
nsn.gov

***Serrano Nation of Mission
Indians***

Wayne Walker, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
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serranonation1@gmail.com

***Serrano Nation of Mission
Indians***

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Phone: (909) 528 - 9032
serranonation1@gmail.com

***Soboba Band of Luiseno
Indians***

Scott Cozart, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92583 Luiseno
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Government Code Sections 65352.3 and 65352.4 et seq for the proposed MoVal 2040: Comprehensive General Plan Update and Climate Action Plan Project, Riverside County.

From: [Green, Andrew@NAHC](mailto:Green.Andrew@NAHC)
To: [Chris Ormsby](#)
Subject: MoVal 2040: Comprehensive General Plan Update and Climate Action Plan Project
Date: Wednesday, March 18, 2020 4:35:59 PM
Attachments: [SB 18 ALL MoVal 2040 Comprehensive General Plan Update and Climate Action Plan Project 3.18.2020.pdf](#)
[MoVal 2040 Comprehensive General Plan Update and Climate Action Plan Project 3.18.2020.pdf](#)

Warning: External Email – Watch for Email Red Flags!

Good Afternoon,

Attached is the response to the project referenced above. If you have any additional questions, please feel free to contact our office email at nahc@nahc.ca.gov.

Regards,

Andrew Green

Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Andrew.Green@nahc.ca.gov
Direct Line: (916) 573-1072
Office: (916) 373-3710



Dear City of Moreno Valley,

April 9, 2020

RE: Notice of Preparation (NOP) of Program Environmental Impact Report (PEIR) for Moreno Valley's General Plan Update (GPU) and Climate Action Plan (CAP).

The Sierra Club appreciates these opportunity to add some additional thoughts on the Program Environmental Impact Report (PEIR) for the General Plan Update's (GPU) and Climate Action Plan (CAP). We have cobbled together ideas and thoughts from several sources we hope will help make for a better product.

I have attended several of the Cities public meetings on the GPU's and CAP's PEIR which included a short presentation. I was surprised that almost no time was spent on the Environmental Justice (EJ) Element of the General Plan Update. In fact I do not believe anyone indicated it was important to them at the General Plan Advisory Committee (GPAC) meeting when people were given an opportunity to place a post-it on the different elements they considered important.

The following link (<https://datausa.io/profile/geo/moreno-valley-ca>) indicates Moreno Valley has a poverty rate of almost 17% or about 34,000 out of a population of more than 203,000. It also shows that almost 58% (118,000) of the population is Latino with about 25% (50,000) of Moreno Valley is foreign born. The maps shared at public meetings indicated Moreno Valley has large disadvantaged areas south of SR-60. Many of those areas are also disadvantaged because of their proximity to approved warehouse projects as well as their diesel truck traffic.

The purpose of SB 1000 is to make environmental justice a real and vital part of the planning process by promoting transparency and public engagement in local governments' planning and decision-making processes, reducing harmful pollutants and associated health risks in environmental justice communities, and encouraging equitable access to health-inducing benefits, such as healthy food options, housing, and recreation. The Sierra Club has asked for more than a decade for all environmental documents be in both English and Spanish in order to involve a higher percentage of Moreno Valley residents. We again ask you to do that for all public documents related to the GPU, CAP and Housing Element.

SB 1000 requires local governments to adopt EJ policies that "reduce the unique or compounded health risks and pollution burdens borne by the disadvantaged communities" in the jurisdiction, including policies that reduce pollution exposure and improve air quality. (Gov. Code§ 65302, subd. (h)(1)(A).)

Moreno Valley must explain its methodology for identifying the disadvantaged communities, including an explanation of the disproportionate pollution burdens, health risks, and unique needs faced by the identified communities.

Our general plan's policies must "reduce the unique or compounded health risks in the disadvantaged communities" by doing at least the following:

- 1) reduce pollution exposure;
- 2) improve air quality;
- 3) promote public facilities;
- 4) promote food access;
- 5) promote safe and sanitary homes' and
- 6) promote physical activity.

Environmental justice aims to correct the legacy of concentrating pollution and other hazards in or near low-income communities of color by reducing these hazards and involving the impacted communities in any decisions that affect their environment or health.

The EJ Element must prohibit new sources of air pollution within the City's disadvantaged communities. Like many urban areas of California, Moreno Valley disadvantaged communities face health risks from air pollution generated by mobile and industrial sources. The EJ Element must thoughtfully detail the risks the communities face from diesel particulate matter and toxic air contaminants, explaining the origins of these pollutants and the potential health consequences of exposure in straightforward language. To help ameliorate air quality concerns, the EJ Element must promote land use patterns that reduce driving and redirect truck routes away from residential areas and sensitive land uses, as well as encouraging existing sources of air pollutants to use feasible mechanisms to minimize their emissions.

The EJ Element must explain the impact that climate change will have in the disadvantaged communities, linking the communities' low tree canopy coverage with the risk of heat-island effect. Moreno Valley could have a policy that commits to planting street trees along all streets in the disadvantaged communities by 2026. This is just one example of a clear policy—with a concrete deadline—that will yield benefits by cleaning the air, sequestering carbon, cooling neighborhoods, reducing storm water costs, buffering noise, and providing wildlife habitat. Likewise, the Element's comprehensive policies need to include one supporting resilience training for staff, community leaders, and residents to deal with the social and psychological impacts of climate change. Innovative policies like this will equip Moreno Valley residents with the tools they need to live longer, healthier lives in a changing climate.

The approved 40.6 million sq ft World Logistic Center (WLC) warehouse projects environmental impacts must be part of the analysis within all elements of the GPU's and CAP's PEIR. This must include the WLC's more than 13,000 daily diesel truck trips, more than 50,000 daily trips, all the diesel forklifts, diesel hostlers/yard goats, diesel auxiliary power units. This is especially true for its impacts on the Disadvantaged Communities of our town. That includes truck routes leading to the

project which will pass through portion of town. The General Plan Update must show all the places in Moreno Valley as shown in the WLC's DEIR/FEIR which will require a wall to protect residents from the environmental impacts from the WLC.

Moreno Valley continues to put its residents at risk from warehouse development. They are currently processing a 1.3 million sq ft Moreno Valley Trade Center. I believe this project may be with the area designated as part of our Disadvantaged Community and if it is not, it is very close. This project will be directly across the street from existing homes and land zoned for homes. The project site is currently zoned for homes and should be used for transitional uses — between an existing warehouse and existing homes — to lessen the impacts on homeowners. The City is currently showing this land as a place for this project and not housing which is wrong on so many levels. When planning staff was asked why they would allow this project to move forward, they simple said the developer brought us the project and we need to process it. The EJ section of the GPU must be written to not allow such thinking which puts families at risk for significant health problems. Moreno Valley, however, has already approved two other major warehouse projects in the past two years that are across the street from family homes. The City did nothing to protect the families and even allowed truck traffic to pass by on the street between the warehouse and homes.

The City has been told many times that Heacock Street should not be a designated truck route, because it not only passes peoples' residents, but also it passes three schools. The EJ section must required all the warehouse diesel truck traffic to go to/from the nearest freeway (I-215 or SR-60) and to avoid sensitive uses. Other current truck routes also have other problems and must be thoroughly evaluated.

A wide variety of homes are needed in Moreno Valley. These include homes on 1/2 acre and larger lots to affordable units. The GPU must show how many units of each type may be built for the proposed zoning. None of the land zoned for homes should be allowed within 1,000 feet of land which would permit warehousing/logistic centers to be built. Affordable housing must be placed near transit centers, shopping, bus routes, bicycle paths, and sidewalks. All lands zoned for affordable units/homes must show they have all these uses nearby.

There also needs to be a wide variety of jobs/professions available for Moreno Valley residents. The Sierra Club believes we have enough warehousing. Since this is a GPU for 2040, it need to have section showing how many warehouse jobs will be automated/robotics during the next 20 years. This includes diesel truck driving which is already happening in Arizona and is expected in most states by 2025.

All the warehousing which produces very few jobs per acre of job producing land will cause many Moreno Valley residents to commute. This is because Moreno Valley has used land that could be used for many more jobs/acre for warehousing which is becoming automated and filled with robotics. Even without the automation/robotics warehousing will provide very few jobs. The GPU Draft PEIR need to show how people will need to commute because of the warehouse economy.

The GPU needs to also show how our non-attainment City is not adding to our air quality, Green House Gas, and particulate pollution. In fact the GPU needs to show how we are reducing these health problems to our residents.

Moreno Valley needs to show how many more jobs we could have if half of those lands that are zoned to allow warehousing would instead only allow other types of businesses jobs/professions. The GPU's PEiR needs to show that the median salary for a warehouse worker is a livable wage. That means their children do not have to be on free and reduced lunches. This should also be in in the EJ element to show the city is providing a wide variety of jobs/professions.

The Climate Action Plan (CAP) Draft PEIR must include the following:

- 1) Summarizes the methodologies used to calculate the City's GHG emissions and forecasts.
- 2) Summarizes the City's historic and future GHG emissions and the reduction targets the City has established.
- 3) Details the reduction strategies that will be implemented to meet the reduction targets identified in point 3 found above. Measures also include the potential energy savings and local co-benefits of the measures.
- 4) Includes the implementation of the measures, potential funding sources, and how the CAP Update will be monitored and updated over time. It also summarizes the outreach and CEQA review process conducted as part of this CAP Update.

Climate Action Plan must have 2020 or earlier baseline data.

The community inventory for Green House Gas (GHG) emissions must be categorized by sectors based on a sector's ability to be affected through our local programs, incentives, zoning, and other policies. Moreno Valley's community inventory must be divided into at least the following sectors:

- Energy which is further broken down into two subsectors:
 - ◦ Electricity includes emissions from electricity consumption in nonresidential buildings and facilities (including outdoor lighting) as well as residential buildings in Moreno Valley.
 - ◦ Natural Gas includes emissions from natural gas consumption in nonresidential buildings and facilities, as well as residential buildings in Moreno Valley.
- On-Road Transportation includes emissions from vehicle fuel use in trips wholly within Moreno Valley ("in-boundary") and trips that either originate or end in Moreno Valley ("crossboundary"). Emissions from in-boundary trips are fully accounted for in the inventory, whereas only half of the emissions from cross-boundary trips are accounted for.
- Solid Waste includes emissions from waste that is generated in the community and sent to landfills.
- Water and Wastewater includes emissions from the electricity used to source, treat, and deliver imported water in the community that is not accounted for in the community utility data. Wastewater includes emissions from treating wastewater generated in the community.
- Off-Road Sources include emissions from operating equipment for construction, commercial, light industrial, lawn and garden equipment; and recreational vehicles, such as all-terrain vehicles.

The above needs to be in a chart/tables/graphs that shows Business as Usually (BAU) vs Adjusted BAU in metric tons. The chart needs to show the goals for 2030, 2040 and 2050. The CAP needs tables/graphs with Green House Gas reduction Measures, Timelines and Phasing Schedule.

Require energy audits of non-residential buildings and retrofits.

Home energy evaluations and renovations.

Require new residential units exceed the latest Title 24's energy efficiency standards.

Energy efficiency enhancement of existing buildings.

Require solar on all commercial building. Energy storage systems must also be strongly recommended.

Tree shaded building are 20 - 45 degrees cooler than unshaded and they reduce urban heat islands along with reducing air conditioning.

Commercial rooftops must be covered with light reflective surfaces to produce cool roofs.

Increase reclaimed water and recycled or grey water for community use such as residential landscaping.

Reduce waste to landfills.

Community Choice Aggregation program. Moreno Valley's own electric utilities for the eastern half of our City must stop discouraging solar on warehousing and other large structures so the City can benefit financially by selling them power. The lack of solar required on the WLC is an example of this problem. The WLC should have been an exporter of solar energy.

The CAP's PEIR needs to explain how they will have an ongoing education process for the public and business community on current and developing energy as well as water efficiency.

More and better transportation options need to be included in the CAP's PEIR. We are doing better with our bicycle master plan, but it needs to be expanded along with improved multi-use trails.

Electrify fleets. All major warehouse projects in the past several years have charging stations for electric cars because of Sierra Club litigation and not the City's requirements. This has to change where the City is requiring the electric vehicles (EV) fast charging stations throughout the City. Banning has been able to write grants for two DC Fast/Level 3 Fast Charging stations in the last year. Moreno Valley needs to quickly begin to strategically place these fast changing stations for EV vehicles throughout our City.

No gas allowed in new homes/units which has already been adopted by one California City.

Net Zero homes.

Solar water heating in homes and businesses.

Continue to retrofit all existing traffic signals with high-efficiency LED and require them on all new. Same must be true for street lights.

The GPU's and CAP's PEIR must let the public know who will be in charge of monitoring and the inventory as part of the CAP. Who will be in charge of to revise the program to take advantage of new and emerging technology? How will they be immediately be incorporated for use within our City along with implementing future state and federal actions? What within CAP will require the City to adopt the best technologies to protect its residents and the environment?

Riverside County has an elaborate point system for new construction to show how the project will meet their CAP guidelines/goals. Those projects which can show they have reached 100 points are considered consistent with the County's CAP, but those with less will require additional analysis. Moreno Valley needs to show in their CAP's PEIR how they will be evaluate new project to meet their goals and guidelines.

The Sierra Club is also very concerned about two members of the General Plan Advisory Committee (GPAC) who do not live in Moreno Valley. They are major developers in our City and have donated \$10,000's of dollars to make sure the current City Council majority is elected and remains in place. One of them owns a large portion of Moreno Valley on both sides of SR-60. They should be required to fill out Form 700 before they are allowed to give input into a process which could easily benefit them financially.

The Sierra Club appreciates this opportunity to add some additional input into the General Plan Update, Climate Action Plan, and Housing Element. We hope to read the Draft PEIR with many of the suggestions contained in our letter. Please keep us informed of all future meetings and documents by using the address found below.

Thank you for consideration of our comments,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair
P.O. Box 1325
Moreno Valley, CA 92556 -1325

From: George Hague <gbhague@gmail.com>
Sent: Thursday, April 9, 2020 10:37 AM
To: Chris Ormsby
Cc: andrew@dyyettandbhatia.com
Subject: NOP Comments on the Moreno Valley's General Plan Update and Climate Action Plan

Warning: External Email – Watch for Email Red Flags!

Good morning Mr Ormsby,

Re: NOP comments on Moreno Valley's General Plan Update (GPU) and Climate Action Plan (CAP).

I have mentioned several times at public meetings that the maps the City is using to indicate the location/boundaries of the San Jacinto Wildlife Area (SJWA) are inaccurate. They also do not place the name San Jacinto Wildlife Area near the border of Moreno Valley so the public will understand how close they are to each other — in fact they boarder one other.

There is also a need to show the holdings of San Diego Gas and Electric Company which in one location are between the SJWA and the City of Moreno Valley.

The three maps found below will give you accurate pictures of the SJWA on which the State of California has spent more than \$90,000,000 of tax payers' money to acquire and maintain.

The Sierra Club expects to see only accurate maps of the San Jacinto Wildlife Area in any maps/figures the City is using with the public in connection with the GPU and CAP as well as its name placed near the City's boundary. This includes those large displays used at public meetings which show the City and surrounding lands.

The environmental documents need to explain the importance of the SJWA. It is a core reserve of the Western Riverside County Multiple Species Habitat Conservation Plan reserve system. Over 65 of the 146 species of animals and plants protected by the plan are found on these important public lands. There are endangered/threatened as well as species of concern found on the 10,000 acres of the Davis unit of the SJWA. This includes 25 species of raptors.

Lake Perris also has many special species in need of protection from urbanization. The GPU needs to explain to the public about these important biological resources of Lake Perris and the SJWA as well as how urbanization could impact them. Then explain how the City of Moreno Valley is going to develop a GPU to avoid those impacts.

The GPU and CAP must analyze possible impacts to the resources of the SJWA and Lake Perris and explain how they will be protected from urbanization's direct, indirect and cumulative impacts.

Sincerely,

George Hague

Sierra Club
Moreno Valley Group
Conservation Chair

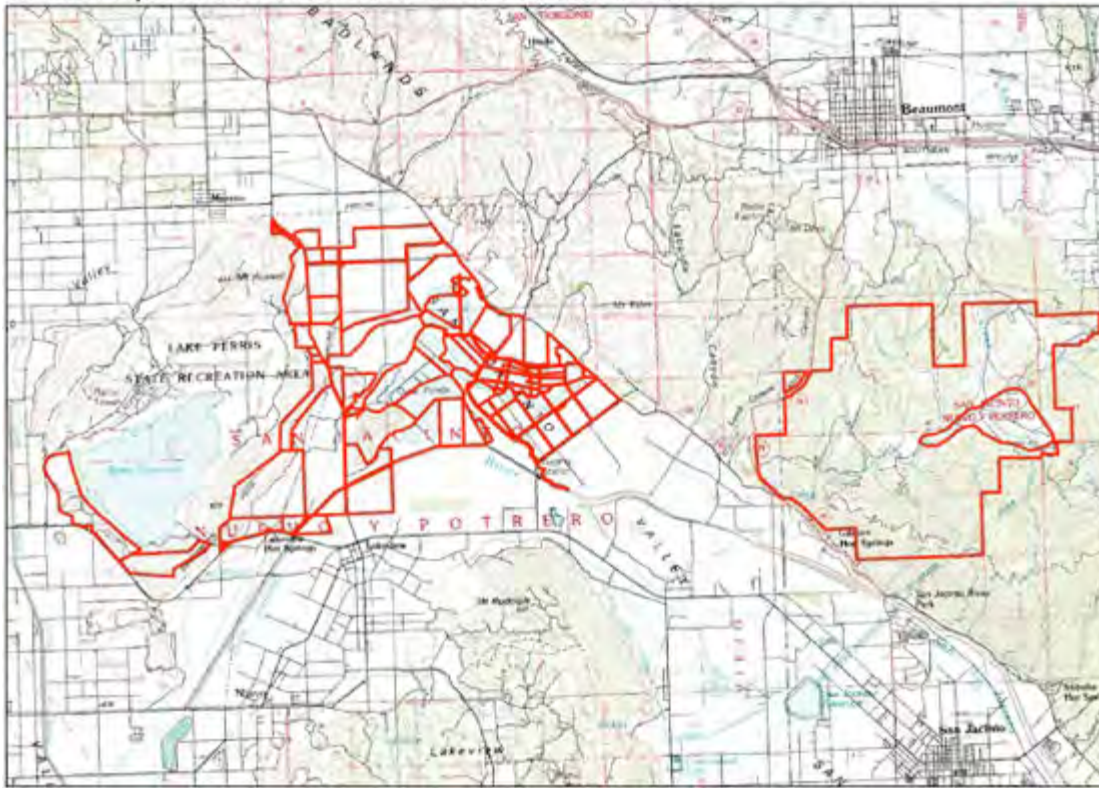
California Department of Fish and Game
 Inland Deserts Region
SAN JACINTO WILDLIFE AREA
 Riverside County

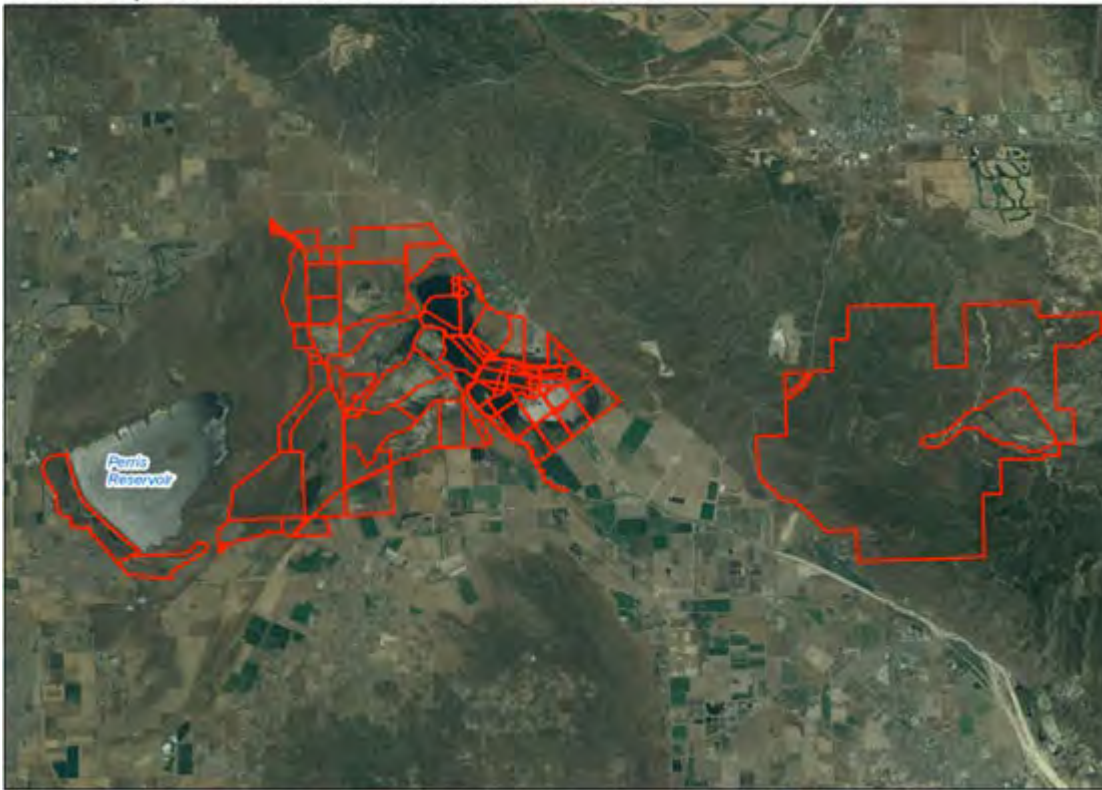


Wildlife Area	State Highway		
State Recreation Area	Interstate Highway		
Aqueduct	Local Road		

September 2008 - Stacy Lee, DFG - WB / BDB
 Prepared by BDB for WB

California Department of Fish and Game - San Jacinto Wildlife Area





From: [George Hague](#)
To: [Chris Ormsby](#)
Subject: II Additional Sierra Club comments on Moreno Valley's GPU & CAP
Date: Thursday, April 9, 2020 5:15:59 PM
Attachments: [MV GPU & CAP SC commnets 4-9-2020.pdf](#)
[ATT00001.htm](#)
[image3dc4ef.PNG](#)
[ATT00002.htm](#)

Warning: External Email – Watch for Email Red Flags!

Good evening Mr Ormsby,

Just want to make sure that when I use GPU and CAP throughout my letter I am referring to their Program Environmental Impact Report (PEIR).

Thank you,

George Hague

Begin forwarded message:

From: Chris Ormsby <chriso@moval.org>
Subject: RE: Additional Sierra Club comments on Moreno Valley's GPU & CAP
Date: April 9, 2020 at 4:56:39 PM PDT
To: 'George Hague' <gbhague@gmail.com>

George,

This is to confirm that your comments have been received. I will pass your comments on to the City's consultant.

Chris

Chris Ormsby
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3229 | e: chriso@moval.org <<mailto:chriso@moval.org>> w:
www.moval.org <<http://www.moval.org>>
14177 Frederick St., Moreno Valley, CA 92553

[City of Moreno Valley] <<http://www.moval.org>>

-----Original Message-----

From: George Hague <gbhague@gmail.com>
Sent: Thursday, April 9, 2020 4:50 PM
To: Chris Ormsby <chriso@moval.org>
Subject: Additional Sierra Club comments on Moreno Valley's GPU & CAP

Warning: External Email - Watch for Email Red Flags!

Good afternoon Mr Ormsby,

Please accept this attached additional comments from the the Sierra Club on Moreno Valley's General Plan Update and Climate Action Plan.

Please confirm you have received them in a timely manner and that you were able to open them.

Thank you,

George Hague

**Friends of the Northern San Jacinto Valley
1610 Sams Canyon
Beaumont, California 92223**

April 8, 2020

Via: U.S. Postal Service and Email: chriso@moval.org

Chris Ormsby, AICP, Senior Planner
Community Development Department
City of Moreno Valley
14177 Frederick Street
Moreno Valley, California 92553

RECEIVED

APR 13 2020

CITY OF MORENO VALLEY
Planning Division

Re: Notice of Preparation (NOP) of a Program Environmental Impact Report for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Housing Element Update, and Climate Action Plan.

We have reviewed the City of Moreno Valley Notice of Preparation (NOP) of a Program Environmental Impact Report for **MoVal 2040: The Moreno Valley Comprehensive General Plan Update and Climate Action Plan**. In performing the Biological Resource analysis for the Comprehensive General Plan Update it is imperative to recognize/acknowledge the City of Moreno Valley is a signatory to the 1995 Stephen's Kangaroo Rat Habitat Conservation Plan (SKRHCP) and the 2004 Multiple Species Habitat Conservation Plan (MSHCP). It is also imperative for the City to recognize that compliance with the SKRHCP or the MSHCP is **not compliance** with the California Environmental Quality Act (CEQA).

In enacting the California Environmental Quality Act (CEQA) our legislature declared it is the policy of the state to *"prevent the elimination of fish and wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representatives of all plant and animal communities."* (Public Resources Code § 21001(c)). *"Public agencies should not approve projects if there are **feasible alternatives** or **feasible mitigation measures**, which would substantially lessen **significant environmental effects**."* (Public Resources Code § 21002). *"The purpose of an Environmental Impact Report (EIR) is to identify the **Significant***

effects [impacts] on the environment, to identify **alternatives** to the project, and to indicate the manner in which those **significant effects** can be **mitigated or avoided.**" (Public Resources Code § 21001.1(a)). *"...it is the policy of the state that noncompliance with the information disclosure provisions of this division [CEQA] which precludes relevant information from being presented to the public agency, or noncompliance with substantive requirements of this division, [CEQA] may constitute a prejudicial abuse of discretion..."* (Public Resources Code § 21005(a)).

The City of Moreno Valley, the CEQA Lead Agency for the Comprehensive General Plan Update, continues to fail to properly acknowledge/recognize that the federal Endangered Species Act (ESA) prohibits the "take" (kill, capture and habitat destruction) of listed endangered or threatened species. More importantly in a like manner, the California Endangered Species Act (CESA) prohibits the "take" of endangered or threatened species listed by the California Fish and Game Commission. Under the 2004 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) the "take" of **146 plant and animal species** [many of which are found within the City of Moreno Valley] are permitted for 75 years throughout western Riverside County. The "take" is allowed in exchange for assembly and management of coordinated **MSHCP Conservation Areas**, the most prominent being the California Department of Fish and Wildlife (CDFW) San Jacinto Wildlife Area (SJWA) partially located within the City of Moreno Valley eastern boundary.

Both the federal and state endangered species statutes provide for exceptions to their "take" prohibitions. The federal exception requires applicants to submit a Habitat Conservation Plan [the MSHCP]. If approved by the U.S. Fish and Wildlife Service the applicant will be issued an incidental "take" permit. Under California law the "take" exception is authorized pursuant to the Natural Community Conservation Planning Act (NCCP Act – Fish and Game Code §§ 2800-2835). After approval of a NCCP Act Conservation Plan, the CDFW permits the "take" of any covered species whose conservation and management is provided for in the NCCP approved by the CDFW. The NCCP Act section 2826 provides: **"Nothing in this chapter exempts a project proposed in a natural community planning area from Division 13 (commencing with section 21000) of the Public Resources Code [CEQA] or otherwise alters the applicability of that division."** The holding of the California Supreme Court bolsters this legislative intent: *"CESA can be harmonized*

with CEQA.” (Mountain Lion Foundation v. Fish and Game Commission (1997) 16 Cal. 4th 105, 111).

The March 9, 2020, City of Moreno Valley Notice of Preparation (NOP) specifically advises the public and reviewing agencies: *“Since the city has determined that a Program EIR is required for the Project, pursuant to Section 15060(d) of the CEQA Guidelines (14 CCR 15000 et seq.) preparation of an **Initial Study** is not required and, therefore, one has not been prepared.”* By omission the City neglected to recognize the important purposes of the **Initial Study**: *“Initial Study means a preliminary analysis prepared by the Lead Agency to determine whether an EIR or a Negative Declaration must be prepared **or to identify the significant environmental effects to be analyzed in the EIR.**”* (CEQA Guidelines § 15365)

With regard to the “take” of MSHCP Covered/Endangered species, we assert the City of Moreno Valley is endeavoring to ignore/avoid CEQA Guideline § 15065 (a)(1) and (a)(3) – **Mandatory Finding of Significance**. CEQA requires that an agency contemplating an action having the potential *“to...reduce the number or restrict the range [“take”] of an endangered species”* may have a significant effect on the environment (15065(a)(1)). Equally important, 15065(a)(3) requires the assessment of the incremental effects [cumulative impacts] of the “take” of individual species lost to Project implementation. This cumulative analysis will be crucial to the tracking and guidance of individual species conservation or extirpation.

When the City of Moreno Valley avoids/disregards **Mandatory Findings of Significance** it is able to avoid the identification/consideration of the “take” of MSHCP Covered species [Endangered species] as being a **significant** project impact. This error allows the City to avoid the required analysis of direct project impacts [“take” of MSHCP covered species on the project site] and indirect project impacts [“take” of MSHCP covered species on adjacent conservation lands/San Jacinto Wildlife Area]. It avoids the required analysis of “take” **alternatives** or **mitigation measures** to minimize the “take” impact. This error will be compounded if the Draft EIR fails to consider the Cumulative impact of the “take” of MSHCP covered species as to each species ultimate conservation or extirpation (Guidelines § 15065(a)(1) and (a)(3) – **Mandatory Findings of Significance**).

“[W]hen an agency fails to proceed as CEQA requires, harmless error analysis is inapplicable. The failure to comply with the law subverts the purposes of CEQA if it omits material necessary to informed decision making and informed participation. Case law is clear that in such cases, the error is prejudicial.”
(California Supreme Court, December 24, 2018, Sierra Club v. County of Fresno)[515]

Please ensure we receive timely notice of completion of the Draft EIR for the Comprehensive General Plan Update and Climate Action Plan and the scheduling of any public hearings for this project,

Thank you for your courtesy.


Tom Paulek
FNSJV Conservation Chair.


Susan Nash
FNSJV President