



Western Riverside Council of Governments Planning Directors' Committee

AGENDA

**Thursday, August 10, 2017
9:00 a.m.**

**Tukwet Canyon Golf Club
36211 Champions Drive
Beaumont, CA 92223**

Please Note Meeting Location

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in the Planning Directors' Committee meeting, please contact WRCOG at (951) 955-8515. Notification of at least 48 hours prior to meeting time will assist staff in assuring that reasonable arrangements can be made to provide accessibility at the meeting. In compliance with Government Code Section 54957.5, agenda materials distributed within 72 hours prior to the meeting which are public records relating to an open session agenda item will be available for inspection by members of the public prior to the meeting at 4080 Lemon Street, 3rd Floor, Riverside, CA, 92501.

The Planning Directors' Committee may take any action on any item listed on the agenda, regardless of the Requested Action.

1. CALL TO ORDER (Patty Nevins, Chair)

2. SELF INTRODUCTIONS

3. PUBLIC COMMENTS

At this time members of the public can address the Planning Directors' Committee regarding any items with the subject matter jurisdiction of the Committee that are not separately listed on this agenda. Members of the public will have an opportunity to speak on agenda items at the time the item is called for discussion. No action may be taken on items not listed on the agenda unless authorized by law. Whenever possible, lengthy testimony should be presented to the Committee in writing and only pertinent points presented orally.

4. CONSENT CALENDAR

All items listed under the Consent Calendar are considered to be routine and may be enacted by one motion. Prior to the motion to consider any action by the Committee, any public comments on any of the Consent Items will be heard. There will be no separate action unless members of the Committee request specific items be removed from the Consent Calendar.

- A. Summary Minutes from the July 13, 2017, Planning Directors' Committee meeting are available for consideration. P. 1

Requested Action: 1. Approve Summary Minutes from the July 13, 2017, Planning Directors' Committee meeting.

- B. WRCOG Committees and Agency Activities Update Jennifer Ward, WRCOG P. 5

Requested Action: 1. Receive and file.

- C. Regional Streetlight Program Activities Update Tyler Masters, WRCOG P. 7

Requested Action: 1. Receive and file.

5. REPORTS/DISCUSSION

- A. Senate Bill (SB) 1 Update Shirley Medina, Riverside County Transportation Commission P. 87

Requested Action: 1. Receive and file.

- B. Assembly Bill (AB) 52: Tribal Consultation Requirements and Best Practices Terrie L. Robinson Esq, Native American Heritage Commission P. 191

Requested Action: 1. Receive and file.

- C. Assembly Bill (AB) 52: Tribal Perspective Raymond Huaute, Morongo Band of Mission Indians P. 211

Requested Action: 1. Receive and file.

- D. Western Riverside Energy Partnership Update Anthony Segura, WRCOG P. 213

Requested Action: 1. Receive and file.

6. ITEMS FOR FUTURE AGENDAS **Members**

Members are invited to suggest additional items to be brought forward for discussion at future Planning Directors' Committee meetings.

7. GENERAL ANNOUNCEMENTS **Members**

Members are invited to announce items/activities which may be of general interest to the Planning Directors' Committee.

8. NEXT MEETING: The next Planning Directors' Committee meeting is scheduled for Thursday, September 14, at 9:00 a.m. at the City of Murrieta.

9. ADJOURNMENT

1. CALL TO ORDER

The meeting of the Planning Directors' Committee (PDC) was called to order at 9:08 a.m. by Chair Matt Bassi at the Wildomar City Hall, Council Chambers.

2. SELF INTRODUCTIONS

Members present:

Patty Nevins, City of Banning
Mary Wright, City of Jurupa Valley
Richard MacHott, City of Lake Elsinore
Cheryl Kitzerow, City of Menifee
Cynthia Kinser, City of Murrieta
Kenneth Phung, City of Perris
Luke Watson, City of Temecula
Matt Bassi, City of Wildomar (Chair)
Shane Helms, Morongo Band of Mission Indians
Kristin Warsinki, Riverside Transit Agency

Staff present:

Jennifer Ward, Director of Government Relations
Christopher Tzeng, Program Manager
Andrea Howard, Senior Analyst
Daniel Ramirez-Cornejo, Senior Analyst
Cynthia Mejia, Staff Analyst

Guests present:

Aaron Pfannenstiel, Michael Baker International
Kimberly Clark, Southern California Association of Governments
Rye Berg, Southern California Association of Governments
Rameeta Garfwal, Michael Baker International

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR - (Kinser/MacHott) 10 yes; 0 no; 0 abstentions. Item 4.A was approved by a vote of those members present. The Cities of Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Moreno Valley, Norco, Riverside, San Jacinto, the County of Riverside, and March JPA were not present.

A. Summary Minutes from the December 8, 2016, Planning Directors' Committee meeting were available for consideration.

Action: 1. *Approved Summary Minutes from the June 8, 2017, Planning Directors' Committee meeting.*

5. REPORTS AND DISCUSSIONS

A. Southern California Association of Governments Planning Resources

Kimberly Clark, Southern California Association of Governments (SCAG), introduced several technical tools available for SCAG Member jurisdictions to take advantage of at no cost. Among the resources Ms. Clark reviewed was the REVISION tool that provides regional performance monitoring for neighborhood and community-level analyses and evaluates regional growth. Ms. Clark also reviewed the Southern California Plug-in Electric Vehicle Atlas that gathers data based on Electrical Vehicle station usage and can analyze peak use patterns, popular destinations, employment, and workplace data.

A complete list of the tools presented and links to their web pages are available at <http://wrcog.us/DocumentCenter/View/1657>. SCAG staff is available to provide tutorials and technical support to member jurisdictions upon request. Some of the tools do require credentials to login, for assistance gaining access to tools or technical support, contact Kimberly Clark at clark@scag.ca.gov or (213) 236-1844.

Action: 1. *Received and filed.*

B. Transportation Uniform Mitigation Fee (TUMF) Program Nexus Study Update

Daniel Ramirez-Cornejo, WRCOG Senior Analyst, reported that at the July 10, 2017 meeting, the WRCOG Executive Committee approved the 2016 TUMF Nexus Study, which was started in 2012. The Committee's actions also included approval of the following: a four-year \$7.50/square foot retail land use fee and a two-year freeze followed by a two-year phase-in for the single-family residential fee, a policy for immediate implementation of the retail TUMF fee reduction, direction for staff to update the TUMF Ordinance to maintain the reduction in the retail fee until another action by the WRCOG Executive Committee is taken, direction for staff to develop a recommendation to potentially exempt local serving retail and service uses from TUMF within 30 days, and direction for staff to complete a comprehensive update to the TUMF Calculation Handbook within 60 days.

With the approval of the 2016 TUMF Nexus Study, City of Beaumont will rejoin the TUMF Program, once a TUMF Ordinance is adopted. Additionally, approval of the 2016 TUMF Nexus Study allowed the inclusion of new projects to the TUMF Network which are now eligible for TUMF funding: Scott Road/1-215 Interchange, Iowa Avenue, Cajalco Road/I-15 Interchange, and the Limonite Avenue Extension.

Action: 1. *Received and filed.*

C. WRCOG Planning Directors' Committee Visioning Session

Andrea Howard, WRCOG Senior Analyst, led a discussion to identify Committee priority projects for the new fiscal year beginning with an overview of the major programs and projects WRCOG is currently undertaking.

Within the Energy Department, the Streetlights Program is continuing to move forward to acquire and retrofit streetlamps on behalf of WRCOG's member jurisdictions; the Community Choice Aggregation (CCA) program is moving forward with its development, following a strong outlook in the feasibility analysis; and the Western Riverside Energy Program (WREP) continues to promote energy efficiency by increasing community awareness and participation in energy efficiency, demand response and self-generation programs.

The Environment & Recycling department is continuing both its Used Oil recycling and Solid Waste Cooperative Programs. Additionally, the department has partnered with the City of Lake Elsinore to pilot a new Litter Reduction Program.

The Transportation Department's activities include administration of the TUMF Program, development of the WRCOG Active Transportation Plan, and administration of the Clean Cities Coalition.

Finally, the agency's regional development and planning activities include administration of the BEYOND Framework Fund and Public Service Fellowship Programs, support for Healthy Communities Initiatives, and, the latest WRCOG initiative, exploring opportunities to support economic development in the subregion.

Ms. Howard introduced new opportunities currently under consideration by WRCOG's leadership and asked for feedback from Committee members regarding these potential initiatives. These potential new initiatives would require financial support, most likely to come through either the allocation of Fiscal Year 2016/2017 agency carryover revenues or outside grants. In the area of sustainability and innovation, WRCOG and potential partners are considering funding a Smart Cities Readiness Plan and a feasibility analysis for a regional sustainability center, branded EXPERIENCE. The agency is also considering an update to WRCOG's subregional Climate Action Plan (CAP), development of a CAP Environmental Impact Report (EIR), and an expansion of work in the area of Climate Adaptation and Resiliency Planning. Within the sphere of Economic Development, WRCOG's stakeholders are considering developing a Regional Branding Initiative, developing a Best Practices Tool Kit, or conducting a Regional Commuting Study. Finally, in the area of transportation and planning, Potential Projects include a Pilot Mobility Plan, a Regional Housing Element, and a Health Action Plan.

Members of the Committee expressed interest in more information regarding the potential CAP EIR, the Regional Housing Element, and the Regional Commuting Study. WRCOG staff agreed to return with presentations on these items from staff or outside authorities at a future Committee meeting.

Action: 1. *Received and filed.*

D. WRCOG Committees and Agency Activities Update

Andrea Howard, WRCOG Senior Analyst, reported that staff are currently finalizing contracts for consultants serving on WRCOG's On-Call Planning bench. Through these agreements, member agencies will soon be able to utilize consultants for assistance with grant writing and WRCOG will receive general staff support and capacity building in several functional areas.

WRCOG and SCAG are moving forward with WRCOG's Sustainability Planning Grant funded project to study how to implement the requirements of Senate Bill (SB) 743, which requires a switch from level of service thresholds to vehicle miles traveled (VMT) thresholds. Staff anticipate beginning work in early fall.

At the June 23, 2017, Executive Committee meeting, staff presented several potential projects to fund through the agency's Fiscal Year 2016/2017 carryover revenues—many of these were presented on by Ms. Howard in Item C. The Committee directed staff to continue discussions with the Administration & Finance (A&F) Committee. That discussion will likely resume at the September 13 A&F meeting.

Action: 1. *Received and filed.*

E. Selection of WRCOG Planning Directors' Committee Chair, Vice-Chair, and 2nd Vice-Chair positions for Fiscal Year 2017/2018

Andrea Howard, WRCOG Senior Analyst, reminded members that the PDC leadership has traditionally followed the Executive Committee's (EC) leadership by agency, meaning that the new PDC Chair, Vice-Chair, and 2nd Vice-Chair, would be from the same jurisdiction (the City of Banning, the County of Riverside, and the City of Hemet, respectively) as the EC Chair, Vice-Chair, and 2nd Vice-Chair. Ms. Howard corrected the staff report, noting that Charissa Leach is the new PDC representative from the county, replacing Kristi Lovelady.

Action: 1. *Selected WRCOG Planning Directors' Committee Chair – Patty Nevins, City of Banning, Vice-Chair – Charissa Leach, County of Riverside, and 2nd Vice-Chair – Deanna Elliano, City of Hemet.*

(Kinser/Kitzerow) 10 yes; 0 no; 0 abstentions. Item 5.E was approved by a vote of those members present. The Cities of Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Moreno Valley, Norco, Riverside, San Jacinto, the County of Riverside, and March JPA were not present.

6. ITEMS FOR FUTURE AGENDAS

Chairman Bassi requested a presentation on the EXPERIENCE sustainability center concept. In addition to a presentation, Jennifer Ward, Director of Government Relations, noted that WRCOG could arrange a tour of one of the similar projects in the area, such as the Frontier Project in Rancho Cucamonga.

Committee member Luke Watson stated that the City of Temecula would be happy to hold a bus tour highlighting the City's latest projects.

7. GENERAL ANNOUNCEMENTS

Jennifer Ward, Director of Government Relations, announced that WRCOG and the City of Beaumont have settled their lawsuit and the City has rejoined WRCOG as a voting member in addition to rejoining the TUMF Program.

Kristin Warsinki announced that RTA has started service for it's Bus Rapid Transit (BRT) a route from Corona to UCR which will run every 15 minutes and only have 14 stops each way. Additionally, RTA has released a new BusWatch which provides bus riders with information regarding bus arrival times that is informed by live bus tracking.

8. NEXT MEETING: The next Planning Directors' Committee meeting is scheduled for Thursday, August 10, 2017, at 9:00 a.m. at the Morongo Golf Club at Tukwet Canyon in Beaumont.

9. ADJOURNMENT: The meeting of the Planning Directors' Committee adjourned at 10:18 a.m.



Western Riverside Council of Governments Planning Directors' Committee

Staff Report

Subject: WRCOG Committees and Agency Activities Update

Contact: Jennifer Ward, Director of Government Relations, jward@wrcog.us, (951) 955-0186

Date: August 10, 2017

The purpose of this item is to update the Committee on noteworthy actions and discussions held in WRCOG's recent standing Committee meetings and general WRCOG project updates.

Requested Action:

1. Receive and file.

Below is an update on items that have been discussed at recent WRCOG Standing Committee meetings.

Property Assessed Clean Energy (PACE) Programs

The Executive Committee took action in July 2017 to amend the PACE Program reports to allow seismic strengthening as an eligible PACE product. Types of seismic projects include residential and commercial property foundation work, structural bracing, and support systems. If a member jurisdiction wants to add the financing of seismic strengthening as an eligible project for properties within its boundaries, the jurisdiction will need to adopt a Resolution and/or an amendment to its Implementation Agreement with WRCOG. Please contact Crystal Adams, PACE Program Manager, at cadams@wrcog.us for more information.

TUMF Nexus Study Update Approved

The Transportation Uniform Mitigation Fee (TUMF) Program collects fees in Western Riverside County to ensure development pays its fair share for needed transportation and transit improvements that will support our region's continued growth. The TUMF Nexus Study establishes the nexus between growth, development impacts, and infrastructure needs. In July 2017, the Executive Committee, approved an updated 2016 TUMF Nexus Study and a new TUMF Fee Schedule for all development types. These are available on the WRCOG website: <http://www.wrcog.us/174/TUMF>, but here are the highlights:

- The 2016 Nexus Study updates the version of the Nexus Study that WRCOG jurisdictions have been operating under since 2009.
- The Nexus Study seeks to address the region's goals for economic development, jobs-housing balance, and provision of an adequate transportation network for future population growth in Western Riverside County.
- Over the life of the program, TUMF will collect nearly \$4 billion for improvements to transportation infrastructure (including road widenings, grade separations, bridges, interchanges, and transit facilities), and acquisition of open space and sensitive habitat.
- The newly adopted fee structure for each development type becomes effective once each jurisdiction adopts a revised TUMF Ordinance (anticipated completion by October 1, 2017).
- WRCOG leaders allowed for an immediate reduction in the retail fee to \$7.50 a square foot.

TUMF Fee Schedule - As Approved by WRCOG on July 10, 2017					
Land Use Type	Current Fee	2018	2019	2020	2021
Single-family Residential	\$8,873	\$8,873	\$8,873	\$9,146	\$9,418
Multi-family Residential	\$6,231	\$6,134	\$6,134	\$6,134	\$6,134
Industrial	\$1.73	\$1.77	\$1.77	\$1.77	\$1.77
Retail	\$10.49	\$7.50	\$7.50	\$7.50	\$7.50
Service	\$4.19	\$4.56	\$4.56	\$4.56	\$4.56

The updated Nexus Study provides additional funding for key regional projects like the Cajalco Road interchange, the Scott Road interchange, Adams Street interchange and other projects throughout the region. WRCOG staff will host a series of TUMF workshops this summer and fall for jurisdictions, developers, and other interested parties to learn about the 2016 Nexus Study and TUMF Fee Schedule. If you have immediate questions about the TUMF Nexus Study or the new TUMF Fee Schedule, please contact Daniel Ramirez-Cornejo, WRCOG Senior Analyst, at dramirez-cornejo@wrcog.us.

WRCOG Used Oil Program Events

The following is a list of Used Oil and Oil Filter Exchange events that are currently scheduled for the upcoming months. To request an event for your jurisdiction please contact Kyle Rodriguez, WRCOG Staff Analyst, at krodriguez@wrcog.us.

7/8/2017	City of Hemet Used Oil Event	O'Reilly, 849 West Florida Ave	9 am - 12 pm
8/5/2017	City of Norco Used Oil Event	AutoZone, 1404 Hamner Ave	9 am - 12 pm
8/19/2017	City of Riverside Used Oil Event	AutoZone, 7315 Indiana Ave	9 am - 1 pm
8/26/2017	City of Lake Elsinore Used Oil Event	AutoZone, 32231 Mission Trail	9 am - 12 pm

Upcoming Meetings

- **Executive Committee** – Next meeting: Monday, August 7, 2017 at 2:00 p.m.
- **Public Works Committee** – Next meeting: Thursday, August 10, 2017 at 2:00 p.m.
- **Technical Advisory Committee** – Next meeting: Thursday, August 17, 2017 at 9:30 a.m.
- **Administration & Finance Committee** – Next meeting: Wednesday, September 13, 2017 at 12:00 p.m.
- **Finance Directors' Committee** – Next meeting: Thursday, September 28, 2017 at 10:00 a.m.

Prior Action:

None.

Fiscal Impact:

This item is informational only; therefore there is no fiscal impact.

Attachment:

None.



Western Riverside Council of Governments Planning Directors' Committee

Staff Report

Subject: Regional Streetlight Program Activities Update

Contact: Tyler Masters, Program Manager, tmasters@wrcog.us, (951) 955-8378

Date: August 10, 2017

The purpose of this item is to provide the Committee with an update on the steps that member jurisdictions are taking to acquire their streetlights and participate in the Program, provide an update on the LightSuite document, and to provide an update on the status of the RFP for operations & maintenance.

Requested Action:

1. Receive and file.

WRCOG's Regional Streetlight Program will assist member jurisdictions with the acquisition and retrofit of their Southern California Edison (SCE)-owned and operated streetlights. The Program has three phases, which include: 1) streetlight inventory; 2) procurement and retrofitting of streetlights; and 3) ongoing operations and maintenance. The overall goal of the Program is to provide significant cost savings to the member jurisdictions.

Background

At the direction of the Executive Committee, WRCOG developed a Regional Streetlight Program that allows jurisdictions (and Community Service Districts) to purchase streetlights within their boundaries that are currently owned / operated by SCE. Upon ownership by the jurisdiction, the lamps will be retrofitted to Light Emitting Diode (LED) technology to provide added benefits (e.g., lower maintenance costs, reduced energy use, and improvements in public safety). Local control of the streetlight system opens the door for future revenue-generating opportunities such as digital-ready networks, telecommunications and IT strategies.

The goal of the Program is to provide cost-efficiencies for local jurisdictions through the purchase, retrofit, and maintenance of streetlights within jurisdictional boundaries, without the need of additional jurisdictional resources. WRCOG is working with jurisdictions to move through the acquisition process, develop financing recommendations, develop / update regional and community-specific streetlight standards, and implement a regional operations and maintenance agreement that will enhance the level of service SCE currently provides.

Regional Streetlight Acquisition Update

The following jurisdictions have approved City Council direction to acquire the SCE-owned streetlights in their boundaries (this accounts for approximately 47,000 of the 55,000 acquirable streetlights in the subregion):

October 18, 2016 / March 21, 2017:	City of Moreno Valley
January 24, 2017:	City of Lake Elsinore
February 15, 2017:	City of Menifee
February 28, 2017:	City of Temecula
March 7, 2017:	City of Murrieta

March 8, 2017:	City of Wildomar
March 13, 2017:	Jurupa Community Services District
March 14, 2017:	City of Hemet
March 28, 2017:	City of Perris
March 28, 2017:	City of San Jacinto
April 12, 2017:	City of Eastvale

Next Steps: As of August 2015, SCE is no longer allowing jurisdictions to start discussions to acquire the streetlights within their jurisdictional boundaries. All WRCOG member jurisdictions pre-dated this August 2015 deadline and were provided the opportunity to assess streetlight acquisition opportunities. The member jurisdictions listed above have deemed it feasible to move forward, have met all SCE deadlines, and will continue with the streetlight acquisition process.

To date, eleven WRCOG member jurisdictions have approved the Purchase and Sales Agreement. Upon the signing of the Agreement by the City Manager, city staff will distribute the document to SCE where they will package the Agreement and send it to the California Public Utilities Commission (CPUC). This process can take anywhere from six to twelve months (depending on valuation price). Jurisdictions with estimated streetlight sales prices exceeding \$5 million will move forward in the CPUC as a “full filing,” which require CPUC action and can take upwards of 6 to 12 months for approval. For those jurisdictions with estimated streetlights sales prices of under \$5 million, those will move forward in the CPUC as an “advice filing,” and can be administratively approved within two to six months.

In June 2017, SCE presented all participating cities with a first amendment to its Purchase and Sales Agreements, which includes two changes. The first is a potential decrease in the overall price of the streetlight systems to include the additional depreciation of the streetlight systems from the original 2015/2016 valuation. The second is a minor increase in the transition cost, from \$30.00 per pole to \$32.15 per pole. The transition cost component of the Agreement includes the time and materials that SCE’s contractor will take during the acquisition and transition process when converting a streetlight from SCE-ownership to jurisdictional-ownership. Once the Amendment has been signed by the jurisdiction and sent to SCE, it will be packaged and sent to the CPUC for review and approval. WRCOG staff has been informed by CPUC staff that they will be working in an efficient and expeditious manner to review and approve the Agreements within a 45-60 day timeframe.

During this timeframe, WRCOG staff will be working with the member jurisdictions on identifying a regional financing option, preparing the member jurisdictions for the transfer of streetlights, hosting a workshop to assist interested jurisdictions with new development, and selecting a vendor to provide the services of ongoing retrofit, operation & maintenance.

Recently WRCOG staff and its financial consultants PFM, met with jurisdictions moving forward with the streetlight acquisition to provide an update on the regional financing option that Bank of America can provide to interested member jurisdictions. WRCOG staff and PFM informed jurisdictional staff about the draft leasing documents that will be distributed to them for upcoming City Council / Board approval, and their updated cash flow models, which take into account the amount each jurisdiction will need to purchase, retrofit to LED, operate and maintain the streetlights, and implement a re-lamp reserve for future LED lighting.

LightSuite Outdoor Lighting Resource Update

LightSuite is a package of seven outdoor lighting resources developed to help interested member jurisdictions with implementation / regulation of outdoor lighting within their community. This package was created through the analysis of the Streetlight Demonstration Area that was held in the City of Hemet, analysis of existing lighting regulations, and analysis and incorporation of Palomar Mountain, CalTech and the American Medical Association recommendation of LED technologies. The Streetlight Demonstration Area had over 150 lighting fixtures from 12 different lighting manufactures. WRCOG hosted 5 guided tours to identify attendees’ preference in lighting. Attendees from these tours included elected officials, city staff, astronomers, lighting specialists, and residents throughout Riverside and San Bernardino Counties.

The LightSuite contains the following seven components:

- **LightSuite 1:** Specification of LED Cobra head Luminaires for New and Relocated Street Lighting Systems
 - o Provides a review of specifications for the selection of new and relocated LED street lighting systems.
- **LightSuite 2:** Design Standards for New or Relocated Street lighting
 - o Provides a review of standards for street lighting.
- **LightSuite 3:** Specifications of LED Luminaires for Replacement of Cobra head Street Lighting Systems
 - o Suggested specification sheets for replacement of legacy high intensity discharge street lighting systems.
- **LightSuite 4:** Design Standards for LED Replacement Street Lighting
 - o Provides information on standards for street lighting that will help mitigate light pollution, reduce energy consumption, and minimizing light trespass.
- **LightSuite 5:** Proposed Riverside County Ordinance 655P Regulating Outdoor Lighting
 - o Ordinance that helps to provide regulations for outdoor lighting.
- **LightSuite 6:** Proposed Modernization of Riverside County Ordinance No. 915P Regulating Outdoor Lighting
 - o Ordinance that illustrates requirements for outdoor lighting, health, property and residential areas.
- **LightSuite 7:** Suggested Community Outdoor Lighting Ordinance
 - o Illustrates goals to promote and protect public health, safety, welfare, and quality of life by establishing regulations for outdoor lighting.

The LightSuite package is intended to provide template lighting design standards for local jurisdictions to use, as related to existing streetlight system retrofits and new development installations. The package is not intended to recommend one manufacturer over another, but simply to demonstrate the manufacturers that provided products and technologies for the Demonstration Area that met the minimum standards identified as part of the LightSuite.

Next Steps: WRCOG staff will be taking the Draft LightSuite package to both the Planning Directors and Public Works Directors Committee for final review with the purpose of taking the final LightSuite package to the September Executive Committee for approval. Upon approval of the document, WRCOG staff will coordinate with interested member jurisdictions to see if they would like to adopt the package and implement it within their jurisdictional boundaries as a street lighting ordinance.

Request for Proposal (RFP) for Streetlight Retrofit, Operations & Maintenance

On March 10, 2017, WRCOG released an RFP for streetlight retrofit, operations & maintenance of the lighting fixtures that are going to be acquired on behalf of the participating jurisdictions. With several jurisdictions moving forward with acquisition, SCE will no longer provide operations or maintenance on the acquired poles. SCE will continue to maintain any of the underground wiring that connects these streetlights to SCE's grid; however, the city will own, and need to maintain and operate, the streetlight fixture and pole from the base of the pole and up.

WRCOG seeks a vendor that will provide cost effective retrofit, operation and maintenance needs to support the transition of current streetlight technologies (high and low-pressure sodium vapor) lights to LED lighting, maintain / respond to streetlight knockdown / damaged poles, keeping in account economies of scales and increasing the level of services to the participating jurisdictions in Western Riverside County. The selected vendor will work with WRCOG and jurisdictional staff to provide supplemental assistance with the recording documents of each streetlight, installation of housing shields, complying with all state mandated laws, and coordinating with the removal and disposal of any existing luminaire heads / hazardous materials.

WRCOG received seven responses to the RFP and is in the process of reviewing the submittals. WRCOG staff, PFM, and representatives from four member jurisdictions comprise the Evaluation committee. The Evaluation Committee reviewed the proposals, and interviewed the top proposers during the week of June 19, 2017. A second round of interviews was held the week of July 24, 2017, with the top two candidates to fully understand the online work order management system that WRCOG, jurisdictional staff, and residents throughout Western Riverside County will have access to in order to submit work order requests for streetlight maintenance. Upon selection of a top candidate, WRCOG staff will report out to the Committees in coming months to provide the results of the process.

Prior Actions:

July 27, 2017: The Finance Directors' Committee received report.
July 10, 2017: The Executive Committee received report.

Fiscal Impact:

Activities for the Regional Streetlight Program are included in the Agency's adopted Fiscal Year 2017/2018 Budget.

Attachment:

1. Draft LightSuite.

Item 4.C

Regional Streetlight Program
Activities Update

Attachment 1

Draft LightSuite

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Streetlight Program



WRCOG LightSuite For Outdoor Lighting Regulations

August 1, 2017

Introduction

Most communities have some sort of outdoor lighting regulation. Older regulations tend to focus on preventing objectionable light trespass and overlighting of sites, but more recently ordinances strive to prevent environmental impacts and to preserve dark skies at night for astronomy and star-gazing. The urgency of creating modernized lighting regulations recently increased dramatically with the 2016 announcement by the American Medical Association of its concern about the impact on human health and the environment caused by some types of LED lighting.

Riverside County is one of the first governing bodies in the world to restrict outdoor lighting to preserve the dark night sky. While the intent was primarily to benefit the Palomar Observatory, it also served to maintain one of the largest areas of dark skies in populated areas of Southern California, considered by many to be a significant contribution to quality of life in the County. But the original ordinances have been rendered obsolete by LED technology. In fact, LED lighting is now being installed throughout the County and without modern regulations, years of care and concern will be quickly undone by the careless installation of LED's that don't meet the recommendations of the AMA

As part of the WRCOG LED Street Lighting Conversion project, a group of modern lighting regulation documents, called the LightSuite, has been developed for use by WRCOG member communities and Riverside County. In addition to ensuring that all LED lighting complies with AMA recommendations, LightSuite modernizes all existing ordinances and coordinates them with State of California outdoor lighting regulations put in place since 2006. Properly implemented, LightSuite will help improve planning, permitting and enforcement in every community

In addition, the technical aspects of LightSuite have been reviewed by Cal Tech's principal astronomers and scientists and determined to be consistent with best practices to mitigate light pollution that could affect the work of Palomar Observatory.

Regulating Outdoor Lighting

In California, outdoor lighting became restricted by the California Code of Regulations on January 1, 2006. Title 24 Part 1 instituted a statewide lighting zone system. It has default zones for the entire state, but communities can change the zones throughout their jurisdiction. Title 24 Part 6, the Energy Efficiency standards, restrict the amount of light by limited power (watts) and energy per zone and need – including, to a certain extent, signs. Title 24, Part 11, CAL Green, the statewide sustainability code, restricts upward light, glare and off-site impacts per the lighting zone using the BUG (Backlight Uplight Glare) rating system for outdoor lighting. **Communities already have these tools** to regulate lighting through planning, permitting and inspection of all new buildings as well as for renovations, remodeling and additions.

But Title 24 alone is not adequate. It does not restrict residential lighting in specific important ways that have been proven to be needed for communities to resolve the common complaints among neighbors. It does not restrict streetlights. Communities must individually develop or modernize and implement several standards and regulations:

1. A **lighting ordinance** regulating lighting for buildings, site development such as parking lots and walkways, and other uses of outdoor lighting other than streets or signs.
2. A **design standard** that specifies the design of street lighting for developer projects that will become part of the community lighting system.
3. **Street lighting standards** for new roadways and intersections and for maintaining or revising existing street lighting.
4. **Specifications** for all LED street lighting products.

The WRCOG LightSuite

This suite of proposed ordinances and standards is provided free of charge for use by WRCOG communities and includes the following:

- LightSuite 1 - Specification of LED Cobrahead LUMINAIRES for New and Relocated Street Lighting Systems
- Light Suite 2 – Design Standards for New or Relocated Street Lighting
- LightSuite 3 – Specifications of LED luminaires for Replacement of Cobrahead Street Lighting Systems
- LightSuite 4 – Design Standards for LED Replacement Street Lighting
- LightSuite 5 – Proposed Riverside County Ordinance 655P Regulating Outdoor Lighting
- LightSuite 6 – Proposed Modernization of Riverside County Ordinance 915P Regulating Outdoor Lighting
- LightSuite 7 – Suggested Community Outdoor Lighting Ordinance

For questions concerning the WRCOG LightSuite or the LED Street Light Program, feel free to contact Tyler Masters, WRCOG Project Manager, at tmasters@wrcog.us.

WRCOG LightSuite 1	
Specification of LED Cobrahead Luminaires for New and Relocated Street Lighting Systems	4
WRCOG LightSuite 2	
Design Standards for New or Relocated Street Lighting.....	19
WRCOG LightSuite 3	
Specifications of LED Luminaires for Replacement of Cobrahead Street Lighting Systems.....	26
WRCOG LightSuite 4	
Design Standards for LED Replacement Street Lighting	40
WRCOG LightSuite 5	
Proposed Riverside County Ordinance 655P Regulating Outdoor Lighting	50
WRCOG LightSuite 6	
Proposed Modernization of Riverside County Ordinance 915P Regulating Outdoor Lighting	60
WRCOG LightSuite 7	
Suggested Community Outdoor Lighting Ordinance.....	65

SPECIFICATION OF LED COBRAHEAD LUMINAIRES FOR NEW AND RELOCATED STREET LIGHTING SYSTEMS

PART 1 – GENERAL**1.1. SCOPE**

Luminaires to be used for new and relocated LED street lighting systems.

1.2. REFERENCES

The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by their basic designation only. Versions listed shall be superseded by updated versions as they become available.

A. American National Standards Institute (ANSI)

1. C136.2-2004 (or latest), American National Standard for Roadway and Area Lighting Equipment—Luminaire Voltage Classification
2. C136.10-2010 (or latest), American National Standard for Roadway and Area Lighting Equipment - Locking-Type Photocontrol Devices and Mating Receptacle Physical and Electrical Interchangeability and Testing
3. C136.15-2011 (or latest), American National Standard for Roadway and Area Lighting Equipment – Luminaire Field Identification
4. C136.22-2004 (R2009 or latest), American National Standard for Roadway and Area Lighting Equipment – Internal Labeling of Luminaires
5. C136.25-2009 (or latest), American National Standard for Roadway and Area Lighting Equipment – Ingress Protection (Resistance to Dust, Solid Objects and Moisture) for Luminaire Enclosures
6. C136.31-2010 (or latest), American National Standard for Roadway Lighting Equipment – Luminaire Vibration
7. C136.37-2011 (or latest), American National Standard for Roadway and Area Lighting Equipment - Solid State Light Sources Used in Roadway and Area Lighting.

- B. American Society for Testing and Materials International (ASTM)
 - 1. B117-09 (or latest), Standard Practice for Operating Salt Spray (Fog) Apparatus
 - 2. D1654-08 (or latest), Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
 - 3. D523-08 (or latest), Standard Test Method for Specular Gloss
 - 4. G154-06 (or latest), Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
- C. Council of the European Union (EC)
 - 1. RoHS Directive 2002/95/EC, on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- D. Federal Trade Commission (FTC)
 - 1. Green Guides, 16 CFR Part 260, Guides for the Use of Environmental Marketing Claims
- E. Illuminating Engineering Society of North America (IESNA or IES)
 - 1. DG-21-15, Design Guide for Residential Lighting
 - 2. DG-4-03 (or latest), Design Guide for Roadway Lighting Maintenance
 - 3. HB-10-11 (or latest), IES Lighting Handbook, 10th Edition
 - 4. LM-50-99 (or latest), IESNA Guide for Photometric Measurement of Roadway Lighting Installations
 - 5. IES RES-1-16, Measure and Report on Luminaire Dirt Depreciation (LDD) in LED Luminaires for Street and Roadway Lighting Applications
 - 6. LM-61-06 (or latest), Approved Guide for Identifying Operating Factors Influencing Measured Vs. Predicted Performance for Installed Outdoor High Intensity Discharge (HID) Luminaires
 - 7. LM-79-08 (or latest), IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
 - 8. LM-80-08 (or latest), IESNA Approved Method for Measuring Lumen Maintenance of LED Light Sources
 - 9. RP-8-14 ANSI / IESNA American National Standard Practice for Roadway Lighting
 - 10. RP-16-10 (or latest), ANSI/IES Nomenclature and Definitions for Illuminating Engineering
 - 11. TM-3-95 (or latest), A Discussion of Appendix E - "Classification of Luminaire Lighting Distribution," from ANSI/IESNA RP-8-83
 - 12. TM-15-11 (or latest), Luminaire Classification System for Outdoor Luminaires
 - 13. TM-21-11 (or latest), Projecting Long Term Lumen Maintenance of LED Light Sources.

- F. Institute of Electrical and Electronics Engineers (IEEE)
 - 1. IEEE C62.41.2-2002 (or latest), IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits
 - 2. ANSI/IEEE C62.45-2002 (or latest), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and Less) AC Power Circuits
- G. National Electrical Manufacturers Association (NEMA)
 - 1. ANSI/NEMA/ANSI C78.377-2008 (or latest), American National Standard for the Chromaticity of Solid State Lighting Products
- H. National Fire Protection Association (NFPA)
 - 1. NFPA-70-14 – National Electrical Code (NEC)
- I. Underwriters Laboratories (UL)
 - 1. 1449, Surge Protective Devices
 - 2. 1598, Luminaires and Poles
 - 3. 8750, Light Emitting Diode (LED) Equipment for Use in Lighting Products
- J. City Standards for Street Lighting
- K. Southern California Edison
 - 1. Standards for services to customer-owned street lighting systems
 - 2. Standard specifications for Public Works Construction (Greenbook) (latest edition), Subsections 700 and 701 and all included cross references.

1.3. RELATED DOCUMENTS

- A. LightSuite 2, Design Standards for New and Relocated Street Lighting Systems.

1.4. DEFINITIONS

- A. Lighting terminology used herein is defined in IES RP-16. See referenced documents for additional definitions.
 - 1. Exception: The term “driver” is used herein to broadly cover both drivers and power supplies, where applicable.
 - 2. Clarification: The term “LED light source(s)” is used herein per IES LM-80 to broadly cover LED package(s), module(s), and array(s).

1.5. QUALITY ASSURANCE

- A. Before approval and purchase, furnish luminaire sample(s) identical to product configuration(s) submitted for inspection. Furnish IES LM-79 testing of luminaire sample(s) to verify performance is within manufacturer-reported tolerances.
- B. After installation, Owner may perform IES LM-50 field measurements to verify performance requirements outlined in Table A, considering measurement uncertainties outlined in IES LM-61.

1.6. LIGHTING SYSTEM PERFORMANCE

A. Energy Conservation

1. Lighting Controls

- a. See separate controls specification identified in section 1.2 above, if applicable.
- b. See section 2.1-B below for driver control interface and performance requirements.
- c. See section 2.1-K below for photocontrol receptacle requirements.

B. Photometric Requirements

1. Luminaires shall meet the general criteria provided in the body of this specification and the criteria for each luminaire type defined in Table A.

1.7. REQUIRED SUBMITTALS FOR EACH LUMINAIRE TYPE DEFINED IN TABLE A AND EACH PROPOSED MANUFACTURER

A. Use Table D attached hereto for each proposed luminaire.

B. General submittal content shall include

1. Completed Appendix E submittal form
2. Luminaire cutsheets
3. Cutsheets for LED light sources
4. Cutsheets for LED driver(s)
 - a. If dimmable LED driver is specified, provide diagrams illustrating light output and input power as a function of control signal.
5. Cutsheets for surge protection device, if applicable
6. Instructions for installation and maintenance
7. Summary of luminaire recycled content and recyclability per the FTC Green Guides, expressed by percentage of luminaire weight

C. LM-79 luminaire photometric report(s) shall be produced by the test laboratory and include

1. Name of test laboratory
 - a. The test laboratory must hold National Voluntary Laboratory Accreditation Program (NVLAP) accreditation for the IES LM-79 test procedure.
2. Report number
3. Date
4. Complete luminaire catalog number
 - a. Provide explanation if catalog number in test report(s) does not match catalog number of luminaire submitted
 - i. Clarify whether discrepancy does not affect performance, e.g., in the case of differing luminaire housing color.
 - ii. If nominal performance of submitted and tested products differ, submit additional LM-79 report(s) and derivation as indicated in Appendix C.
5. Description of luminaire, LED light source(s), and LED driver(s)
6. Goniophotometry
7. Colorimetry

8. IES TM-21-11 calculations that derive the lumen maintenance (lamp lumen depreciation or LLD) factor applied to photometric calculations specified herein. TM-21 calculations must apply to the maximum LED case temperature from ISTMT, shall not extrapolate beyond six times the duration of available LM-80 test data, and submitted in the spreadsheet format of the ENERGY STAR TM-21 calculator.
- D. Predicted dirt depreciation per IES RES-1-16 Page 72 Tables 7 and 8 for the optical system used.
 - E. Computer-generated point-by-point photometric analysis of maintained photopic light levels.
 1. Calculations shall be for maintained values, i.e. Light Loss Factor (LLF) < 1.0, where $LLF = LLD \times LDD \times LATF$, and
 - a. Lamp Lumen Depreciation (LLD)
 - i. Shall be 0.8 (L_{80}) for all luminaires
 - b. Luminaire Dirt Depreciation (LDD) per IES RES-1-16 and assuming 5-year cleaning cycle.
 - c. Luminaire Ambient Temperature Factor (LATF) = 1.00
 2. Use of IES HB-10 mesopic multipliers
 - a. Shall be disallowed herein, by assuming an S/P ratio of 1.00 for all luminaires.
 3. Calculation/measurement points shall be per IES RP-8.
 4. Software shall be AGI32 using roadway methods and insofar as possible, on representative sections of all planned new or relocated designs.
 - F. Summary of Joint Electron Devices Engineering Council (JEDEC) or Japan Electronics and Information Technology Industries (JEITA) reliability testing performed for LED packages
 - G. Summary of reliability testing performed for LED driver(s)
 - H. Written product warranty as per section 1.7 below
 - I. Safety certification and file number
 1. Applicable testing bodies are determined by the US Occupational Safety Health Administration (OSHA) as Nationally Recognized Testing Laboratories (NRTL) and include: CSA (Canadian Standards Association), ETL (Edison Testing Laboratory), and UL (Underwriters Laboratory).

1.8. WARRANTY

- A. Provide a minimum ten-year warranty covering maintained integrity and functionality of
 - 1. Luminaire housing, wiring, and connections
 - 2. LED light source(s)
 - a. Negligible light output from more than 10 percent of the LED packages constitutes luminaire failure.
 - 3. LED driver(s)
 - a. Failure to dim if connected to a control system and using proper components constitutes luminaire failure
- B. Warranty period shall begin upon installation, or as negotiated by owner such as in the case of an auditable asset management system.
- C. Warranty to provide for replacement of product with new product of equivalent appearance, CCT, CRI, and photometric performance.
- D. Upon request prior to approval, manufacturer may be required to provide proof of financial viability which may include any information deemed necessary to determine the manufacturer's ability to fully service their warranty.

PART 2 – PRODUCTS

2.1. LUMINAIRES

- A. General Requirements
 - 1. Luminaires shall be as specified for each type in Table B.
 - 2. Luminaire shall have an external label per ANSI C136.15
 - 3. Luminaire shall have an internal label per ANSI C136.22.
 - 4. Nominal luminaire input wattage shall account for nominal applied voltage and any reduction in driver efficiency due to sub-optimal driver loading.
 - 5. Luminaires shall start and operate in -20°C to +40°C ambient.
 - 6. Electrically test fully assembled luminaires before shipment from factory.
 - 7. Effective Projected Area (EPA) of the luminaire shall not exceed the EPA of the luminaire being replaced.
 - 8. Luminaires shall be designed for ease of component replacement and end-of-life disassembly.
 - 9. Luminaires shall be rated for the ANSI C136.31 Vibration Level indicated in Table A.
 - 10. LED light source(s) and driver(s) shall be RoHS compliant.
 - 11. Transmissive optical components shall be applied in accordance with OEM design guidelines to ensure suitability for the thermal/mechanical/chemical environment.

B. Driver

1. Rated case temperature shall be suitable for operation in the luminaire operating in the ambient temperatures indicated in section 2.1-A above.
2. Shall accept the voltage or voltage range indicated in Table A at 50/60 Hz, and shall operate normally for input voltage fluctuations of plus or minus 10 percent.
3. Shall have a minimum Power Factor (PF) of 0.90 at full input power and across specified voltage range.
4. Control signal interface
 - a. Luminaire types indicated "Required" in Table A shall accept a control signal as specified via separate controls specification referenced in section 1.2 above, e.g., for dimming.
 - b. Luminaire types indicated "Not Required" in Table A need not accept a control signal.

C. Electrical transient and surge immunity

1. Luminaire shall meet the "Elevated" requirements in Appendix D. Manufacturer shall indicate on submittal form (Appendix E) whether failure of the electrical immunity system can possibly result in disconnect of power to luminaire.

D. Electromagnetic interference

1. Shall have a maximum Total Harmonic Distortion (THD) of 20% at full input power and across specified voltage range.
2. Shall comply with FCC 47 CFR part 15 non-consumer RFI/EMI standards.

E. Electrical safety testing

1. Luminaire shall be listed for wet locations by an OSHA NRTL.
2. Luminaires shall have locality-appropriate governing mark and certification.

F. Painted or finished luminaire components exposed to the environment

1. Shall exceed a rating of six per ASTM D1654 after 1000hrs of testing per ASTM B117.
2. The coating shall exhibit no greater than 30% reduction of gloss per ASTM D523, after 500 hours of QUV testing at ASTM G154 Cycle 6.

G. Thermal management

1. Mechanical design of protruding external surfaces (heat sink fins) for shall facilitate hose-down cleaning and discourage debris accumulation.
2. Liquids or other moving parts shall be clearly indicated in submittals, shall be consistent with product testing, and shall be subject to review by Owner.

H. IES TM-15 limits for Backlight, Uplight, and Glare (BUG Ratings) shall be as specified for each luminaire type in Table A.

1. Calculation of BUG Ratings shall be for initial (worst-case) values, i.e., Light Loss Factor (LLF) = 1.0.

I. Minimum Color Rendering Index (CRI): 70.

- J. Correlated Color Temperature (CCT)
 - 1. Nominal 2700K (3000K for certain applications only).
 - 2. Allowable 2580 to 2870K per IES LM-79.
 - 3. Allowable -.006 to .006 D_{uv} per IES LM-79.
- K. The following shall be in accordance with corresponding sections of ANSI C136.37
 - 1. Wiring and grounding
 - a. All internal components shall be assembled and pre-wired using modular electrical connections.
 - 2. Mounting provisions
 - a. Specific configurations are indicated in Table A
 - 3. Terminal blocks for incoming AC lines
 - 4. Photo control receptacle
 - 5. Latching and hinging
 - 6. Ingress protection
- L. Luminaire Construction
 - 1. Weight
 - a. The net weight of each luminaires less than 46 (21 kg) pounds including mounting devices and backlight shields.
 - 2. Housing
 - a. Tool-less entry
 - b. Die-cast aluminum alloy meeting ASTM Specification A380. Alternate materials may be considered but shall be submitted to the Owner for review and approval.
 - c. Encloses the mounting hardware, LED arrays, control receptacle, terminal board, and electronic driver.
 - d. Includes a surface to facilitate leveling with a spirit level.
 - e. Integral heat sink characteristics, such that all enclosed components will operate within their designed operating temperatures under expected service conditions. No external or removable heat shields or heat sinks are permitted.
 - f. Designed to encourage water shedding.
 - g. Designed to minimize dirt and bug accumulation on the optic surface.
 - h. Permanently affixed easily-viewable nameplate inside of each luminaire housing containing the manufacturer's name, manufacturer's catalog number, date of manufacture (month and year), plant location, input power consumption, driver output current, IEC IP Rating, correlated color temperature (CCT), IES light distribution type, IESNA TM-15 BUG ratings, and serial number.

- i. City approved luminescent name plate meeting American National Standard for Roadway and Area Lighting Equipment-Luminaire Field Identification (ANSI C136.15-2015) shall be permanently affixed on the exterior of the Luminaire to be visible from the ground.
- 3. Mounting Provisions.
 - a. Standard heavy gauge slip fitter clamping assembly suitable for secure attachment over the end of a nominal two 2" IP (2.375" OD) steel pipe with an approved means of clamping it firmly in mounting bracket. The slip fitter mounting clamp must contain an approved shield around the pipe entrance to block the entry of birds.
 - b. Leveling adaptor to permit at least 15 degrees of correction to level luminaire with respect to normal to photometric nadir (straight down).
 - c. Adaptor fittings for nominal 1.5 inch IP, 1.75 inch IP, 2.25 inch IP and 2.5 inch IP mast arms.
- 4. Access Door-Panel.
 - a. Die-cast aluminum door-panel composed of aluminum alloy A380. Alternate materials may be considered but shall be submitted to the Owner for review and approval.
 - b. Provides access to the terminal strip and LED driver.
 - c. Hinged to the luminaire housing and suitably latched and fastened at the closing end.
 - d. Easily removed.
 - e. Captive hardware for the hinge and fastening devices.
- 5. Hardware.
 - a. Machine screws, locknuts, pins and set screws necessary to make a firm assembly, and for its secure attachment to the mast arm, must be furnished in place.
 - b. Hardware must be of stainless steel, zinc plated steel, copper silicon alloy or other non-corrosive metal, and where necessary must be suitably plated to prevent electrolytic action by contact with dissimilar metals.
- 6. Finish.
 - a. Polyester powder coat with a minimum 2.0 mil thickness.
 - b. Surface texture and paint quality subject to approval.
 - c. Color must be as specified in the order.
 - d. Finish must exceed a rating of six per ASTM D1654 after 1000 hours of testing per ASTM B117.
 - e. The coating must exhibit no greater than 30% reduction of gloss per ASTM D523 after 500 hours of QUV testing at ASTM G154 Cycle 6.

7. Ingress Protection.
 - a. Electric compartment housing must have an ingress protection rating of IP54 or better as described in ANSI C136.25-2013.
 - b. The optical system must have a minimum rating of IP 66.
 - c. Listed for wet locations by a U.S. Occupational Safety Health Administration (OSHA) Nationally Recognized Laboratory (NRTL) and have a safety certification and file number indicating compliance with UL 1598.
8. LED Optical Arrays
 - a. Factory installed.
 - b. No required field adjustment for specified photometric performance.
9. Terminal Block
 - a. High grade molded plastic of the barrier or safety type.
 - b. Within the water tight part of the housing in a readily accessible location.
 - c. Pre-wired to all luminaire components
 - d. Copper plated clamp-type pressure connector approved type for "line" connections, to accommodate wire sizes from #14 to #6 A.W.G.
 - e. Internal component connections either the screw-clamp or quick disconnect type.

2.2. PRODUCT MANUFACTURERS AND PRODUCTS

- A. Specific products proposed for a project should be submitted using Table D along with a physical sample.
- B. Specify products and companies meeting project requirements.
- C. Optimize performance for the existing conditions.

2.3. MANUFACTURER SERVICES

- A. The manufacturer shall provide full support for the project including, but not limited to, AGI-32 lighting calculations, required tests and certifications, and all other services necessary to permit products to be applied as intended by these specifications.
- B. The manufacturer shall notify the contractor immediately of product changes and bulletins and provide new specifications and test reports.
- C. Manufacturer or local sales representative shall provide installation and troubleshooting support in person and shall identify the name of a factory trained sales agent in Riverside County to service the Project.

TABLE A
Deleted.

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TABLE B

RECOMMENDED PHOTOMETRIC PERFORMANCE REQUIREMENTS

(Coordinate with LightSuite 4 Decisions)

Less than 5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	67% min.		
Backlight (B)	0 or 1		
Uplight (U)	0		
Glare (G)	0 or 1		
House Side Shield Required ¹	If B1, otherwise by request		
Cul-de-sac shield required ²	By request		

Nominal 5 to 7.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	73% min.	70% min.	63% min.
Backlight (B)	0 or 1		
Uplight (U)	0		
Glare (G)	0 or 1		
House Side Shield Required ¹	If B1, otherwise by request		
Cul-de-sac shield required ²	Yes		

Nominal 7.5 to 12.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	76% min.	74% min.	70% min.
Backlight (B)	0, 1 or 2		
Uplight (U)	0		
Glare (G)	0, 1, or 2	0, 1, 2 or 3	0, 1, 2 or 3
House Side Shield Required ¹	If B2, otherwise by request		
Cul-de-sac shield required ²	Yes		

Nominal 12.5 to 17.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	80% min.	76% min.	75% min.
Backlight (B)	0, 1 or 2		
Uplight (U)	0		
Glare (G)	0, 1, or 2	0, 1, 2 or 3	0, 1, 2 or 3
House Side Shield Required ¹	If B2 or B3; otherwise by request		
Cul-de-sac shield required ²	Yes		

Footnotes for all luminaires

¹ If installed on a residential street or residential collector; optional to install by request by Owner or as additional service

² If installed on a residential cul-de-sac or L intersection

³ Without detachable shields

THERE IS NO TABLE C

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TABLE D
PRODUCT SUBMITTAL FORM

Luminaire Type ¹		
Manufacturer		
Model number		
Housing finish color		
Tenon nominal pipe size (inches)		
Nominal luminaire weight (lb)		
Nominal luminaire EPA (ft ²)		
Nominal input voltage (V)		
ANSI vibration test level	☒ Level 1 (Normal)	☐ Level 2 (bridge/overpass)
Nominal BUG Ratings		
Make/model of LED light source(s)		
Make/model of LED driver(s)		
Dimmability	☒ Dimmable	☐ Not dimmable
Control signal interface		
Upon electrical immunity system failure	☐ Possible disconnect	☐ No possible disconnect
Thermal management	☐ Moving parts	☒ No moving parts
Lumen maintenance testing duration (hr)		
Reported lumen maintenance life (hr) ²		
Warranty period (yr)		
Parameter	Nominal value	Tolerance (%)
Initial photopic output (lm)		
Maintained photopic output (lm)		
Lamp lumen depreciation		
Initial input power (W)		
Maintained input power (W)		
Initial LED drive current (mA)		
Maintained LED drive current (mA)		
Drive current used		
In-situ LED T _c (°C)		
CCT (K)		
Additional product description		

¹ See Table A, and attach supporting documentation as required.

² Value shall be no less than as specified in section 1.6-C, and shall not exceed six times the testing duration indicated in the row above. Value shall be consistent with values submitted in the rows below for maintained light output, maintained input power, and maintained drive current.

DESIGN STANDARDS FOR NEW OR RELOCATED STREET LIGHTING

Section 1. INTENT

The purpose of this Standard is to provide standards for street lighting that will:

- A. Provide high quality street lighting for the community meeting or exceeding minimum national recommendations.
- B. Help mitigate light pollution, reduce skyglow and improve the nighttime environment for astronomy and the Palomar Observatory and the overall enjoyment of the naturally dark night sky;
- C. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light.
- D. Help protect human health and wellness and the natural environment from the adverse effects of man-made outdoor lighting.
- E. Conserve energy and resources to the greatest extent possible.

Section 2. CONFORMANCE WITH APPLICABLE LAWS, CODES, REGULATIONS and STANDARDS

All street lighting shall be installed in conformance with the provisions of this standard and the applicable provisions of the standards of the community regulating the installation of such fixtures, the California Building Code Title 24 Part 1, the California Electrical Code Title 24 Part 3, the California Building Energy Efficiency Standards Title 24 Part 6, the California Sustainability Standards Title 24 Part 11 "CalGreen", and all other applicable requirements.

Section 3. SCOPE

This standard shall apply to the construction, alteration, movement, enlargement, replacement and installation of street lighting and its related electrical service throughout the community including but not limited to:

- A. Street lighting for public streets, roadways, alleys and other rights of way including walkways and bikeways.
- B. Street lighting for private roadways, walkways and bikeways.
- C. Street lighting for private developments where the street lighting will be deeded to the community at some time in the future.

Exceptions to Section 3

- 1. Facilities, sites or roadways under the sole jurisdiction of the Federal or State Governments or within the jurisdiction of a sovereign nation.
- 2. Lighting specifically governed by a Federal or State regulation or statute.

3. Lighting subject to the terms of a Special Plan approved by the community.

Section 4. ALTERNATE MATERIALS AND METHODS OF INSTALLATION.

This standard is not intended to prevent the use of any design, material or method of installation not expressly forbidden, provided any such alternate has been approved if it:

- A. Provides at least approximate equivalence to the applicable specific requirements of this standard; and
- B. Is otherwise satisfactory and complies with the intent of this standard.

Section 5. DEFINITIONS.

- A. **Street Lighting** means luminaire(s), installed outdoors, and used to illuminate a street or roadway and/or any part of the public right of way including but not limited to, sidewalks, bikeways, alleys, intersections, ramps, underpasses, overpasses, curbs, medians, or shoulders.
- B. **Street** means major, collector and local roads where pedestrians and bicyclists are generally present.
- C. **Roadway** means, freeways, expressways, limited access roads, and roads on which pedestrians, cyclists and parked vehicles are generally not present.
- D. **Residential Street** means a street that is exclusively serving residential properties and for which the posted speed limit is 25 mph (40 kph) or less.
- E. **Luminaire** means a complete illuminating device, lighting fixture or other device that emits light, consisting of light source(s) together with the parts designed to distribute the light, to position and protect the light source(s), to regulate the electrical power, and to connect the light sources to the power supply.
- F. **IES** means the Illuminating Engineering Society of North America.
- G. **RP-8** means the current version of the IES Recommended Practice for Roadway Lighting, RP-8.
- H. **RP-22** means the current version of the IES Recommended Practice for Tunnel Lighting RP-22.
- I. **DG-21** means the current version of the IES Design Guide for Residential Street Lighting.
- J. **TM-15** means the current version of the IES Technical Memorandum, Luminaire Classification System for Outdoor Luminaires

- K. **Palomar Zone A** is established by Riverside County Ordinance 655 and means all properties and land uses in plan view within the circular area fifteen (15) miles in radius centered on Palomar Observatory.
- L. **Palomar Zone B** is established by Riverside County Ordinance 655 and means all properties and land uses in plan view the circular ring area between by two circles, one forty-five (45) miles in radius centered on Palomar Observatory, and the other the perimeter of Zone A.
- M. **Palomar Zone C** means the remainder of Riverside County outside of the perimeter of Zone B.
- N. **BUG rating of an outdoor luminaire** means the ranking of the luminaire using a photometric report to establish the Backlight (B), Uplight (U) and Glare (G) ranking per IES TM-15.
- O. **LED** means light emitting diode solid state lighting source.
- P. **Dedicated LED** means a luminaire with a hard-wired LED light generating module and a separate driver.
- Q. **Photometric Report** means a complete photometric report from a NVLAP certified test laboratory.
- R. **AASHTO** means the American Association of State Highway Traffic Officials.

Section 6. TITLE 24 LIGHTING ZONES

- A. For the purposes of complying California Code of Regulations, Title 24, Part 1, Section 10-114 and Title 24, Part 11, Section 5.106.8, Zone A as defined above shall be Lighting Zone 1 (LZ-1), Zone B as defined above shall be Lighting Zone 2 (LZ-2). The balance of the County shall be LZ-2 or LZ-3 per the statewide default zones or as set by the community.
- B. The community shall establish a method for applicant(s) to request and to set a different lighting zone per Title 24, Part 1 Section 10-114 for a specific parcel or project.

Section 7. GENERAL REQUIREMENTS.

- A. Streetlights shall utilize dedicated LED luminaries and shall be designed per these Standards, field inspected and approved prior to requesting energizing or acceptance.
- B. All wiring for street lighting shall be underground, per these standards and these specifications for power to be supplied from community owned service points from the utility.
- C. Street lighting on private roads shall be constructed per these Standards.

- D. Street lighting shall be designed and installed per the Title 24 Lighting Zones as described herein.
- E. Street lighting shall be fully shielded and emit no uplight (BUG rating U=0).

Exception to Section 7. (D.) Decorative street lights not meeting the BUG requirements for the Lighting Zone in which they are proposed and having uplight (BUG rating U≠0) are not permitted except by Special Plan or special permission of the community.

Section 8. ILLUMINATING ENGINEERING REQUIREMENTS FOR NEW STREET LIGHTING INSTALLATIONS

- A. Scope
 - 1. All streets and roadways unless otherwise directed by community.
 - 2. Walkways and sidewalks directly associated with streets and roadways to be illuminated.
- B. Not in scope
 - 1. Walkways and bikeways not directly associated with a street or roadway.
 - 2. Service roads for public facilities and parks, unless otherwise directed by community.
- C. Street and Roadway lighting requirements
 - 1. Lighting for all streets and roadways shall be per RP-8.
 - 2. The community shall establish whether the street to be lighted is a “major”, “collector”, or “local” for the purposes of designing street lighting.
 - 3. The pedestrian area classification shall be “LOW” conflict except for the following:
 - a. Within ¼ mile (400 m) of the property line of any school, library, city hall, retail shopping districts senior center, park, bus stop or hospital, the pedestrian area classification shall be “MEDIUM”.
 - b. Within 1/8 mile (200 m) of any transit station, the pedestrian area classification shall be “HIGH”
 - c. As determined by community.

EXCEPTION TO Section 8. (A.)

- 1) In Zone A and Lighting Zone 1 (LZ-1), for residential streets, street lighting shall be limited to (1) light at each residential street or residential street/residential minor collector intersection and (1) light mod block per DG-21. There shall be no requirements to meet illuminance, luminance or uniformity requirements.

Lighting for walkways and sidewalks may be incidental because of the street lights.

- 2) Exception 1 to Section 8. (A.), may be applied to any residential street with the approval of community.

D. Intersection lighting requirements

1. Unless otherwise permitted by community, provide at least four pedestrian crossing safety lights at each signaled intersection.
2. Light levels shall be per RP-8.
3. The pedestrian area classification shall be the highest of any of the intersecting streets or roadways within 1/8 mile (200m) of the intersection.

EXCEPTION to Section 8. (D.)

- 1) Partial lighting for isolated intersections per RP-8 when permitted by community.

E. Other lighting requirements

1. The following shall be illuminated per RP-8 unless otherwise directed by community.
 - a. Railroad grade crossings
 - b. Overpasses and bridges
 - c. Roundabouts
 - d. Ramps and similar elements
2. The pedestrian area classification shall be the highest of any of the connecting streets or roadways.
3. Tunnels and underpasses shall be illuminated per RP-22.

F. Chromaticity

1. Per Table 8-1.

	Palomar Zone A and Lighting Zone LZ-1	Palomar Area B and C and Lighting Zones LZ-2 through LZ-4
Maximum Color Temperature		
Intersection Safety Lights	2700K	2700K or 3000K
Highways, Arterials and Major Collectors	2700K	2700K or 3000K
Minor Collectors and Streets	2700K	2700K
Residential Streets	2700K	2700K

Table 8-1. Maximum Allowed Color Temperature Per Lighting Zones

Application Notes

- A. 2700K has been tested and accepted by WRCOG for intersection safety lights and highways, arterials and major collectors.
- B. Per IES there no significant difference in any performance characteristic involving safety or security between 2700K and 3000K.
- C. 2700K causes less light pollution per lumen than does 3000K.

Section 9. PRODUCT SPECIFICATIONS

- A. Luminaires shall comply with the current WRCOG LightSuite 1, Specification of LED Cobrahead Luminaires for New and Relocated Street Lighting Systems.
- B. Design shall include selection of luminaires, poles, mast arms, and other components affecting the performance of the street lighting system.
- C. Poles, mast arms, bases, electrification and all other parts of the street lighting system shall meet engineering standards of the community.

Application Note: LightSuite 4 Table 7-2 suggests a system for minimizing the number of different types of luminaires (SKU's) in order to simplify product ordering, replacement and stock management.

Section 10.SUBMITTALS FOR APPROVAL

A. Plan(s) of the proposed lighting installation clearly identifying:

1. The criteria for each roadway segment, intersection, and other elements as required in Section 8. (C.), (D.), and (E.), above. Information affecting criteria selection, such as proximity to a school or transit stop shall be included. Calculations representing typical stretches of roadways or streets may be permitted for each condition of Lighting Zone, pedestrian area classification, posted speed or other differences.
2. The AASHTO pavement type(s), e.g. R1, R2, etc.
3. Point-by point lighting calculations on a grid not larger than 2.5' x 2.5' (.75m x .75m).
4. Calculation summaries showing average, minimum, and maximum values and ratios as contained in the tables of criteria in RP-8.
5. Calculations to include roadways, intersections, walkways, and all other parts of the project for which criteria were developed under Section 9. (A.) 1.
6. Schedule of luminaires including mounting height, mast arm length, and pole base locations.

B. Specifications for each luminaire to include:

1. Product datasheet.
2. Photometric report.
 - a. Must clearly indicate BUG rating per TM-15.
3. Drawing of pole or standard including base details.
4. Drawing of mast arm if used.
5. Datasheet for driver and surge suppressor.
6. Datasheet for photocell.

END OF SECTION

SPECIFICATIONS OF LED LUMINAIRES FOR REPLACEMENT OF COBRAHEAD STREET LIGHTING SYSTEMS

PART 1 – GENERAL**1.9. SCOPE**

Luminaires to be used for replacement of legacy high intensity discharge street lighting systems.

1.10. REFERENCES

The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by their basic designation only. Versions listed shall be superseded by updated versions as they become available.

- A. American National Standards Institute (ANSI)
 - 3. C136.2-2004 (or latest), American National Standard for Roadway and Area Lighting Equipment—Luminaire Voltage Classification
 - 4. C136.10-2010 (or latest), American National Standard for Roadway and Area Lighting Equipment - Locking-Type Photocontrol Devices and Mating Receptacle Physical and Electrical Interchangeability and Testing
 - 5. C136.15-2011 (or latest), American National Standard for Roadway and Area Lighting Equipment – Luminaire Field Identification
 - 6. C136.22-2004 (R2009 or latest), American National Standard for Roadway and Area Lighting Equipment – Internal Labeling of Luminaires
 - 7. C136.25-2009 (or latest), American National Standard for Roadway and Area Lighting Equipment – Ingress Protection (Resistance to Dust, Solid Objects and Moisture) for Luminaire Enclosures
 - 8. C136.31-2010 (or latest), American National Standard for Roadway Lighting Equipment – Luminaire Vibration
 - 9. C136.37-2011 (or latest), American National Standard for Roadway and Area Lighting Equipment - Solid State Light Sources Used in Roadway and Area Lighting
- B. American Society for Testing and Materials International (ASTM)
 - 10. B117-09 (or latest), Standard Practice for Operating Salt Spray (Fog) Apparatus
 - 11. D1654-08 (or latest), Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
 - 12. D523-08 (or latest), Standard Test Method for Specular Gloss
 - 13. G154-06 (or latest), Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
- C. Council of the European Union (EC)
 - a. RoHS Directive 2002/95/EC, on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- D. Federal Trade Commission (FTC)
 - a. Green Guides, 16 CFR Part 260, Guides for the Use of Environmental Marketing Claims
- E. Illuminating Engineering Society of North America (IESNA or IES)

- a. DG-21-15, Design Guide for Residential Lighting
- b. DG-4-03 (or latest), Design Guide for Roadway Lighting Maintenance
- c. HB-10-11 (or latest), IES Lighting Handbook, 10th Edition
- d. LM-50-99 (or latest), IESNA Guide for Photometric Measurement of Roadway Lighting Installations
- e. IES RES-1-16, Measure and Report on Luminaire Dirt Depreciation (LDD) in LED Luminaires for Street and Roadway Lighting Applications
- f. LM-61-06 (or latest), Approved Guide for Identifying Operating Factors Influencing Measured Vs. Predicted Performance for Installed Outdoor High Intensity Discharge (HID) Luminaires
- g. LM-79-08 (or latest), IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
- h. LM-80-08 (or latest), IESNA Approved Method for Measuring Lumen Maintenance of LED Light Sources
- i. RP-8-14 ANSI / IESNA American National Standard Practice for Roadway Lighting
- j. RP-16-10 (or latest), ANSI/IES Nomenclature and Definitions for Illuminating Engineering
- k. TM-3-95 (or latest), A Discussion of Appendix E - "Classification of Luminaire Lighting Distribution," from ANSI/IESNA RP-8-83
- l. TM-15-11 (or latest), Luminaire Classification System for Outdoor Luminaires
- m. TM-21-11 (or latest), Projecting Long Term Lumen Maintenance of LED Light Sources
- F. Institute of Electrical and Electronics Engineers (IEEE)
 - a. IEEE C62.41.2-2002 (or latest), IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits
 - b. ANSI/IEEE C62.45-2002 (or latest), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and Less) AC Power Circuits
- G. National Electrical Manufacturers Association (NEMA)
 - a. ANSI/NEMA/ANSI C78.377-2008 (or latest), American National Standard for the Chromaticity of Solid State Lighting Products
- H. National Fire Protection Association (NFPA)
 - a. NFPA-70-14 – National Electrical Code (NEC)
- I. Underwriters Laboratories (UL)
 - a. 1449, Surge Protective Devices
 - b. 1598, Luminaires and Poles
 - c. 8750, Light Emitting Diode (LED) Equipment for Use in Lighting Products
- J. City Standards for Street Lighting
- K. Southern California Edison
 - a. Standards for services to customer-owned street lighting systems
 - b. Standard specifications for Public Works Construction (Greenbook) (latest edition), Subsections 700 and 701 and all included cross references.

1.11. RELATED DOCUMENTS

- A. LightSuite 2, Design Standards for New and Relocated Street Lighting Systems.

1.12. DEFINITIONS

- A. Lighting terminology used herein is defined in IES RP-16. See referenced documents for additional definitions.
 - 1. Exception: The term “driver” is used herein to broadly cover both drivers and power supplies, where applicable.
 - 2. Clarification: The term “LED light source(s)” is used herein per IES LM-80 to broadly cover LED package(s), module(s), and array(s).

1.13. QUALITY ASSURANCE

- A. Before approval and purchase, furnish luminaire sample(s) identical to product configuration(s) submitted for inspection. Furnish IES LM-79 testing of luminaire sample(s) to verify performance is within manufacturer-reported tolerances.
- B. After installation, Owner may perform IES LM-50 field measurements to verify performance requirements outlined in Table A, considering measurement uncertainties outlined in IES LM-61.

1.14. LIGHTING SYSTEM PERFORMANCE

- A. Energy Conservation
 - 1. Lighting Controls
 - a. See separate controls specification identified in section 1.2 above, if applicable.
 - b. See section 2.1-B below for driver control interface and performance requirements.
 - c. See section 2.1-K below for photocontrol receptacle requirements.
- B. Photometric Requirements
 - 1. Luminaires shall meet the general criteria provided in the body of this specification and the criteria for each luminaire type defined in Table A.

1.15. REQUIRED SUBMITTALS FOR EACH LUMINAIRE TYPE DEFINED IN TABLE A AND EACH PROPOSED MANUFACTURER

- A. Use Table D attached hereto for each proposed luminaire.
- B. General submittal content shall include
 - 1. Completed Appendix E submittal form
 - 2. Luminaire cutsheets
 - 3. Cutsheets for LED light sources
 - 4. Cutsheets for LED driver(s)
 - a. If dimmable LED driver is specified, provide diagrams illustrating light output and input power as a function of control signal.
 - 5. Cutsheets for surge protection device, if applicable
 - 6. Instructions for installation and maintenance
 - 7. Summary of luminaire recycled content and recyclability per the FTC Green Guides, expressed by percentage of luminaire weight
- C. LM-79 luminaire photometric report(s) shall be produced by the test laboratory and include
 - 1. Name of test laboratory
 - a. The test laboratory must hold National Voluntary Laboratory Accreditation Program (NVLAP) accreditation for the IES LM-79 test procedure.
 - 2. Report number
 - 3. Date
 - 4. Complete luminaire catalog number
 - a. Provide explanation if catalog number in test report(s) does not match catalog number of luminaire submitted
 - i. Clarify whether discrepancy does not affect performance, e.g., in the case of differing luminaire housing color.
 - ii. If nominal performance of submitted and tested products differ, submit additional LM-79 report(s) and derivation as indicated in Appendix C.
 - 5. Description of luminaire, LED light source(s), and LED driver(s)
 - 6. Goniophotometry
 - 7. Colorimetry

8. IES TM-21-11 calculations that derive the lumen maintenance (lamp lumen depreciation or LLD) factor applied to photometric calculations specified herein. TM-21 calculations must apply to the maximum LED case temperature from ISTMT, shall not extrapolate beyond six times the duration of available LM-80 test data, and submitted in the spreadsheet format of the ENERGY STAR TM-21 calculator.
- D. Predicted dirt depreciation per IES RES-1-16 Page 72 Tables 7 and 8 for the optical system used.
- E. Computer-generated point-by-point photometric analysis of maintained photopic light levels.
 1. Calculations shall be for maintained values, i.e. Light Loss Factor (LLF) < 1.0, where $LLF = LLD \times LDD \times LATF$, and
 - d. Lamp Lumen Depreciation (LLD)
 - ii. Shall be 0.8 (L_{80}) for all luminaires
 - e. Luminaire Dirt Depreciation (LDD) per IES RES-1-16 and assuming 5-year cleaning cycle.
 - f. Luminaire Ambient Temperature Factor (LATF) = 1.00
 2. Use of IES HB-10 mesopic multipliers
 - a. Shall be disallowed herein, by assuming an S/P ratio of 1.00 for all luminaires.
 3. Calculation/measurement points shall be per IES RP-8.
 4. Software shall be AGI32 using roadway methods and insofar as possible, on WRCOG standard test designs.
- F. Summary of Joint Electron Devices Engineering Council (JEDEC) or Japan Electronics and Information Technology Industries (JEITA) reliability testing performed for LED packages
- G. Summary of reliability testing performed for LED driver(s)
- H. Written product warranty as per section 1.7 below
- I. Safety certification and file number
 1. Applicable testing bodies are determined by the US Occupational Safety Health Administration (OSHA) as Nationally Recognized Testing Laboratories (NRTL) and include: CSA (Canadian Standards Association), ETL (Edison Testing Laboratory), and UL (Underwriters Laboratory).

1.16. WARRANTY

- A. Provide a minimum ten-year warranty covering maintained integrity and functionality of
 - 1. Luminaire housing, wiring, and connections
 - 2. LED light source(s)
 - a. Negligible light output from more than 10 percent of the LED packages constitutes luminaire failure.
 - 3. LED driver(s)
 - a. Failure to dim if connected to a control system and using proper components constitutes luminaire failure
- B. Warranty period shall begin upon installation, or as negotiated by owner such as in the case of an auditable asset management system.
- C. Warranty to provide for replacement of product with new product of equivalent appearance, CCT, CRI, and photometric performance.
- D. Upon request prior to approval, manufacturer may be required to provide proof of financial viability which may include any information deemed necessary to determine the manufacturer's ability to fully service their warranty.

PART 2 – PRODUCTS

2.4. LUMINAIRES

- A. General Requirements
 - 1. Luminaires shall be as specified for each type in Table B.
 - 2. Luminaire shall have an external label per ANSI C136.15
 - 3. Luminaire shall have an internal label per ANSI C136.22.
 - 4. Nominal luminaire input wattage shall account for nominal applied voltage and any reduction in driver efficiency due to sub-optimal driver loading.
 - 5. Luminaires shall start and operate in -20°C to +40°C ambient.
 - 6. Electrically test fully assembled luminaires before shipment from factory.
 - 7. Effective Projected Area (EPA) of the luminaire shall not exceed the EPA of the luminaire being replaced.
 - 8. Luminaires shall be designed for ease of component replacement and end-of-life disassembly.
 - 9. Luminaires shall be rated for the ANSI C136.31 Vibration Level indicated in Table A.
 - 10. LED light source(s) and driver(s) shall be RoHS compliant.
 - 11. Transmissive optical components shall be applied in accordance with OEM design guidelines to ensure suitability for the thermal/mechanical/chemical environment.

B. Driver

1. Rated case temperature shall be suitable for operation in the luminaire operating in the ambient temperatures indicated in section 2.1-A above.
2. Shall accept the voltage or voltage range indicated in Table A at 50/60 Hz, and shall operate normally for input voltage fluctuations of plus or minus 10 percent.
3. Shall have a minimum Power Factor (PF) of 0.90 at full input power and across specified voltage range.
4. Control signal interface
 - a. Luminaire types indicated "Required" in Table A shall accept a control signal as specified via separate controls specification referenced in section 1.2 above, e.g., for dimming.
 - b. Luminaire types indicated "Not Required" in Table A need not accept a control signal.

C. Electrical transient and surge immunity

1. Luminaire shall meet the "Elevated" requirements in Appendix D. Manufacturer shall indicate on submittal form (Appendix E) whether failure of the electrical immunity system can possibly result in disconnect of power to luminaire.

D. Electromagnetic interference

1. Shall have a maximum Total Harmonic Distortion (THD) of 20% at full input power and across specified voltage range.
2. Shall comply with FCC 47 CFR part 15 non-consumer RFI/EMI standards.

E. Electrical safety testing

1. Luminaire shall be listed for wet locations by an OSHA NRTL.
2. Luminaires shall have locality-appropriate governing mark and certification.

F. Painted or finished luminaire components exposed to the environment

1. Shall exceed a rating of six per ASTM D1654 after 1000hrs of testing per ASTM B117.
2. The coating shall exhibit no greater than 30% reduction of gloss per ASTM D523, after 500 hours of QUV testing at ASTM G154 Cycle 6.

G. Thermal management

1. Mechanical design of protruding external surfaces (heat sink fins) for shall facilitate hose-down cleaning and discourage debris accumulation.
2. Liquids or other moving parts shall be clearly indicated in submittals, shall be consistent with product testing, and shall be subject to review by Owner.

H. IES TM-15 limits for Backlight, Uplight, and Glare (BUG Ratings) shall be as specified for each luminaire type in Table A.

1. Calculation of BUG Ratings shall be for initial (worst-case) values, i.e., Light Loss Factor (LLF) = 1.0.

I. Minimum Color Rendering Index (CRI): 70.

- J. Correlated Color Temperature (CCT)
 - 1. Nominal 2700K (3000K for certain applications only).
 - 2. Allowable 2580 to 2870K per IES LM-79.
 - 3. Allowable -.006 to .006 D_{uv} per IES LM-79.
- K. The following shall be in accordance with corresponding sections of ANSI C136.37
 - 1. Wiring and grounding
 - a. All internal components shall be assembled and pre-wired using modular electrical connections.
 - 2. Mounting provisions
 - a. Specific configurations are indicated in Table A
 - 3. Terminal blocks for incoming AC lines
 - 4. Photocontrol receptacle
 - 5. Latching and hinging
 - 6. Ingress protection
- L. Luminaire Construction
 - 1. Weight
 - a. The net weight of each luminaires less than 46 (21 kg) pounds including mounting devices and backlight shields.
 - 2. Housing
 - a. Tool-less entry
 - b. Die-cast aluminum alloy meeting ASTM Specification A380. Alternate materials may be considered but shall be submitted to the Owner for review and approval.
 - c. Encloses the mounting hardware, LED arrays, control receptacle, terminal board, and electronic driver.
 - d. Includes a surface to facilitate leveling with a spirit level.
 - e. Integral heat sink characteristics, such that all enclosed components will operate within their designed operating temperatures under expected service conditions. No external or removable heat shields or heat sinks are permitted.
 - f. Designed to encourage water shedding.
 - g. Designed to minimize dirt and bug accumulation on the optic surface.
 - h. Permanently affixed easily-viewable nameplate inside of each luminaire housing containing the manufacturer's name, manufacturer's catalog number, date of manufacture (month and year), plant location, input power consumption, driver output current, IEC IP Rating, correlated color temperature (CCT), IES light distribution type, IESNA TM-15 BUG ratings, and serial number.
 - i. City approved luminescent name plate meeting American National Standard for Roadway and Area Lighting Equipment-Luminaire Field Identification (ANSI C136.15-2015) shall be permanently affixed on the exterior of the Luminaire to be visible from the ground. In addition, the name plate shall indicate nominal lumen package rounded to the nearest thousand lumens, e.g. 2800 lumens would read as "3KL" and 11200 lumens would read as "11KL".

3. Mounting Provisions.

- a. Standard heavy gauge slip fitter clamping assembly suitable for secure attachment over the end of a nominal two 2" IP (2.375" OD) steel pipe with an approved means of clamping it firmly in mounting bracket. The slip fitter mounting clamp must contain an approved shield around the pipe entrance to block the entry of birds.
- b. Leveling adaptor to permit at least 15 degrees of correction to level luminaire with respect to normal to photometric nadir (straight down).
- c. Adaptor fittings for nominal 1.5 inch IP, 1.75 inch IP, 2.25 inch IP and 2.5 inch IP mast arms.

4. Access Door-Panel.

- a. Die-cast aluminum door-panel composed of aluminum alloy A380. Alternate materials may be considered but shall be submitted to the Owner for review and approval.
- b. Provides access to the terminal strip and LED driver.
- c. Hinged to the luminaire housing and suitably latched and fastened at the closing end.
- d. Easily removed.
- e. Captive hardware for the hinge and fastening devices.

5. Hardware.

- a. Machine screws, locknuts, pins and set screws necessary to make a firm assembly, and for its secure attachment to the mast arm, must be furnished in place.
- b. Hardware must be of stainless steel, zinc plated steel, copper silicon alloy or other non-corrosive metal, and where necessary must be suitably plated to prevent electrolytic action by contact with dissimilar metals.

6. Finish.

- a. Polyester powder coat with a minimum 2.0 mil thickness.
- b. Surface texture and paint quality subject to approval.
- c. Color must be as specified in the order.
- d. Finish must exceed a rating of six per ASTM D1654 after 1000 hours of testing per ASTM B117.
- e. The coating must exhibit no greater than 30% reduction of gloss per ASTM D523 after 500 hours of QUV testing at ASTM G154 Cycle 6.

7. Ingress Protection.
 - a. Electric compartment housing must have an ingress protection rating of IP54 or better as described in ANSI C136.25-2013.
 - b. The optical system must have a minimum rating of IP 66.
 - c. Listed for wet locations by a U.S. Occupational Safety Health Administration (OSHA) Nationally Recognized Laboratory (NRTL) and have a safety certification and file number indicating compliance with UL 1598.
8. LED Optical Arrays
 - a. Factory installed.
 - b. No required field adjustment for specified photometric performance.
9. Terminal Block
 - a. High grade molded plastic of the barrier or safety type.
 - b. Within the water tight part of the housing in a readily accessible location.
 - c. Pre-wired to all luminaire components
 - d. Copper plated clamp-type pressure connector approved type for "line" connections, to accommodate wire sizes from #14 to #6 A.W.G.
 - e. Internal component connections either the screw-clamp or quick disconnect type.

2.5. PRODUCT MANUFACTURERS AND APPROVED PRODUCTS

- A. Approved manufacturers are listed in Table A.
- B. Select products to replace existing luminaires using Tables A and B, including application notes, as recommended in LightSuite 4.
- C. Specific products proposed for a specific project should be submitted using Table C along with a physical sample.
- D. Optimize performance for the existing conditions. For illuminating engineering, WRCOG will provide access to AGI32 models to determine best possible performance under common circumstances found throughout Western Riverside County.

2.6. MANUFACTURER SERVICES

- A. The manufacturer shall provide full support for the project including, but not limited to, AGI-32 lighting calculations, required tests and certifications, and all other services necessary to permit products to be applied as intended by these specifications.
- B. The manufacturer shall notify the contractor immediately of product changes and bulletins and provide new specifications and test reports.
- C. Manufacturer or local sales representative shall provide installation and troubleshooting support in person and shall identify the name of a factory trained sales agent in Riverside County to service the Project.

TABLE A
APPROVED MANUFACTURERS OF LIGHTING PRODUCTS
Section deleted.

DRAFT

TABLE B
MINIMUM PHOTOMETRIC PERFORMANCE REQUIREMENTS

Less than 5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	67% min.		
Backlight (B)	0 or 1		
Uplight (U)	0		
Glare (G)	0 or 1		
House Side Shield Required ¹	If B1, otherwise by request		
Cul-de-sac shield required ²	By request		

Nominal 5 to 7.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	73% min.	70% min.	63% min.
Backlight (B)	0 or 1		
Uplight (U)	0		
Glare (G)	0 or 1		
House Side Shield Required ¹	If B1, otherwise by request		
Cul-de-sac shield required ²	Yes		

Nominal 7.5 to 12.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	76% min.	74% min.	70% min.
Backlight (B)	0, 1 or 2		
Uplight (U)	0		
Glare (G)	0, 1, or 2	0, 1, 2 or 3	0, 1, 2 or 3
House Side Shield Required ¹	If B2, otherwise by request		
Cul-de-sac shield required ²	Yes		

Nominal 12.5 to 17.5 Kilolumens

	Type II	Type III	Type IV
Street-side Coefficient of Utilization ³	80% min.	76% min.	75% min.
Backlight (B)	0, 1 or 2		
Uplight (U)	0		
Glare (G)	0, 1, or 2	0, 1, 2 or 3	0, 1, 2 or 3
House Side Shield Required ¹	If B2 or B3; otherwise by request		
Cul-de-sac shield required ²	Yes		

Footnotes for all luminaires

- ¹ If installed on a residential street or residential collector; optional to install by request by Owner or as additional service
- ² If installed on a residential cul-de-sac or L intersection
- ³ Without detachable shields

TABLE C
PRODUCT SUBMITTAL FORM

Luminaire Type ³		
Manufacturer		
Model number		
Housing finish color		
Tenon nominal pipe size (inches)		
Nominal luminaire weight (lb)		
Nominal luminaire EPA (ft ²)		
Nominal input voltage (V)		
ANSI vibration test level	☒ Level 1 (Normal)	☐ Level 2 (bridge/overpass)
Nominal BUG Ratings		
Make/model of LED light source(s)		
Make/model of LED driver(s)		
Dimmability	☒ Dimmable	☐ Not dimmable
Control signal interface		
Upon electrical immunity system failure	☐ Possible disconnect	☐ No possible disconnect
Thermal management	☐ Moving parts	☒ No moving parts
Lumen maintenance testing duration (hr)		
Reported lumen maintenance life (hr) ⁴		
Warranty period (yr)		
Parameter	Nominal value	Tolerance (%)
Initial photopic output (lm)		
Maintained photopic output (lm)		
Lamp lumen depreciation		
Initial input power (W)		
Maintained input power (W)		
Initial LED drive current (mA)		
Maintained LED drive current (mA)		
Drive current used		
In-situ LED T _c (°C)		
CCT (K)		
Additional product description		

END OF SECTION

³ See Table A, and attach supporting documentation as required.

⁴ Value shall be no less than as specified in section 1.6-C, and shall not exceed six times the testing duration indicated in the row above. Value shall be consistent with values submitted in the rows below for maintained light output, maintained input power, and maintained drive current.

Section 1. INTENT

The purpose of this Standard is to provide standards for street lighting that will:

- A. Provide a high-quality conversion of existing street lighting that insofar as possible maintains essential qualities of the existing installation.
- B. Typically allow for reduced energy consumption of the existing street lighting by at least 50% compared to the existing legacy lighting system.
- C. Equip each luminaire with the means to communicate to a community-wide lighting network.
- D. Help mitigate light pollution, reduce skyglow and improve the nighttime environment for astronomy and the Palomar Observatory and the overall enjoyment of the naturally dark night sky;
- E. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light.
- F. Help protect human health and wellness and the natural environment from the adverse effects of man-made outdoor lighting.

Section 2. CONFORMANCE WITH APPLICABLE LAWS, CODES, REGULATIONS and STANDARDS

All street lighting shall be installed in conformance with the provisions of this standard and the applicable provisions of the standards of the community regulating the installation of such fixtures, the California Building Code Title 24 Part 1, the California Electrical Code Title 24 Part 3, the California Building Energy Efficiency Standards Title 24 Part 6, the California Sustainability Standards Title 24 Part 11 "CalGreen", and all other applicable requirements.

Section 3. SCOPE

This standard shall apply the conversion of legacy street lighting systems employing high intensity discharge (HID) lighting sources to light-emitting diode (LED) light sources for:

- A. Street lighting for public streets, roadways, alleys and other rights of way including walkways and bikeways.
- B. Street lighting for private roadways, walkways and bikeways.
- C. Street lighting for private developments where the street lighting will be deeded to the community at some time in the future.

Exceptions to Section 3

- 1. Facilities, sites or roadways under the sole jurisdiction of the Federal or State Governments or within the jurisdiction of a sovereign nation.

2. Lighting specifically governed by a Federal or State regulation or statute.
3. Lighting subject to the terms of a Special Plan approved by the community.

Section 4. ALTERNATE MATERIALS AND METHODS OF INSTALLATION.

This standard is not intended to prevent the use of any design, material or method of installation not expressly forbidden, provided any such alternate has been approved if it:

- A. Provides at least approximate equivalence to the applicable specific requirements of this standard; and
- B. Is otherwise satisfactory and complies with the intent of this standard.

Section 5. DEFINITIONS.

- A. **Street lights** means luminaire(s), installed outdoors, and used to illuminate a street or roadway and/or any part of the public right of way including but not limited to, sidewalks, bikeways, alleys, intersections, ramps, overpasses, curbs, medians, or shoulders.
- B. **Street** means major, collector and local roads where pedestrians and bicyclists are generally present.
- C. **Roadway** means, freeways, expressways, limited access roads, and roads on which pedestrians, cyclists and parked vehicles are generally not present.
- D. **Residential street** means a street that is exclusively serving residential properties and for which the posted speed limit is 25 mph (40 kph) or less.
- E. **Luminaire** means a complete illuminating device, lighting fixture or other device that emits light, consisting of light source(s) together with the parts designed to distribute the light, to position and protect the light source(s), to regulate the electrical power, and to connect the light sources to the power supply.
- F. **Legacy luminaire** means an existing cobrahead luminaire using a high intensity discharge light source including high pressure sodium (HPS), low pressure sodium (LPS), metal halide (MH), ceramic metal halide (CMH), or mercury vapor (MV).
- G. **IES** means the Illuminating Engineering Society of North America.
- H. **RP-8** means the current version of the IES Recommended Practice for Roadway Lighting, RP-8.
- I. **RP-22** means the current version of the IES Recommended Practice for Tunnel Lighting RP-22.
- J. **DG-21** means the current version of the IES Design Guide for Residential Street Lighting.
- K. **TM-15** means the current version of the IES Technical Memorandum, Luminaire Classification System for Outdoor Luminaires

- L. **Palomar Zone A** is established by Riverside County Ordinance 655 and means all properties and land uses in plan view within the circular area fifteen (15) miles in radius centered on Palomar Observatory.
- M. **Palomar Zone B** is established by Riverside County Ordinance 655 and means all properties and land uses in plan view the circular ring area between by two circles, one forty-five (45) miles in radius centered on Palomar Observatory, and the other the perimeter of Zone A.
- N. **Palomar Zone C** means the remainder of Riverside County outside of the perimeter of Zone B.
- O. **BUG rating of an outdoor luminaire** means the ranking of the luminaire using a photometric report to establish the Backlight (B), Uplight (U) and Glare (G) ranking per IES TM-15.
- P. **LED** means light emitting diode solid state lighting source.
- Q. **Dedicated LED** means a luminaire with a hard-wired LED light generating module and a separate driver.
- R. **Photometric Report** means a complete photometric report from a NVLAP certified test laboratory.
- S. **AASHTO** means the American Association of State Highway Traffic Officials.
- T. **Roadway lighting distribution types as defined by IES**
- a. **Type I** is a long, narrow symmetrical distribution having a preferred lateral width of 15 degrees in the cone of maximum candlepower. Typically, luminaires are located in the center of a roadway, such as in a median, where the mounting height is approximately equal to the roadway width on either side.
 - b. **Type II** is a mildly asymmetric distribution is used for wide walkways, on ramps and entrance roadways, and narrow streets. Typically, the width of the roadway does not exceed 1.75 times the mounting height.
 - c. **Type III** is an asymmetric distribution commonly used for lighting streets and roadways. Typically, the width of the roadway does not exceed 2.75 times the mounting height.
 - d. **Type IV** is the most asymmetric distribution, commonly used for intersection safety lighting and extremely wide roadways. Typically, the width of the roadway does not exceed 3.75 times the mounting height.

Section 6. TITLE 24 LIGHTING ZONES

- A. For the purposes of complying California Code of Regulations, Title 24, Part 1, Section 10-114 and Title 24, Part 11, Section 5.106.8, Zone A as defined above shall be Lighting Zone 1 (LZ-1), Zone B as defined above shall be Lighting Zone 2 (LZ-2). The balance of the County shall be LZ-2 or LZ-3 per the statewide default zones or as set by the community.
- B. The community shall establish a method for applicant(s) to request and to set a different lighting zone per Title 24, Part 1 Section 10-114 for a specific parcel or project.

Section 7. DESIGN OF REPLACEMENT LIGHTING

A. General

- 1. Obtain a GIS computer database of the community's street lighting system. Determine the extent to which the database is acceptably accurate for the determinations to be made in this section. If necessary, devise an alternative course of action acceptable to the community.
- 2. Determine whether any street lights are made unnecessary by an immediately adjacent street light. Typical situations include intersections where intersection safety lights were added after the street light system was already in place. As approved by the community, identify redundant lighting for removal.
- 3. Determine whether the community currently has street lighting standards, and determine the extent to which they are met.
- 4. Review the current lighting system's performance relative to RP-8. Discuss and determine the desired outcome with the community.
 - a. If the existing lighting system does not meet RP-8, it is unlikely that simply replacing legacy luminaires with LED luminaires will bring an existing installation into compliance without changing pole locations, mounting heights, or mast arm lengths.
 - b. If the existing lighting system exceeds RP-8, determine whether reducing light levels to RP-8 is acceptable.
- 5. Review a map of the community with the community. Make and confirm determinations of characteristics in RP-8 (regardless of whether complying or not) that are to be used to determine lighting levels, including but not limited to:
 - a. Which are streets and which are roadways.
 - b. Which streets and roadways are "major", "collector", or "local" as defined by RP-8.
 - c. Where pedestrian conflict levels are low, medium or high.

- d. Which streets are adjacent to or share the ROW with mass transit stops or bicycle paths.
 - e. Other considerations used to establish lighting requirements at the discretion of the community
 6. For each legacy luminaire in the system, determine the appropriate LED replacement per Section 7. (D.) or (E.) below.
- B. Street lighting shall be fully shielded and emit no uplight (BUG rating U=0).
- C. Street lighting chromaticity shall be determined from Table 7-1.
- D. Typical procedure for selecting appropriate LED luminaires without RP-8 compliance.
 1. Determine each legacy luminaire's primary characteristics
 - a. Light Source
 - b. Wattage of lamp
 - c. Photometric type (e.g. type II medium, type III short, etc.)
 2. Determine whether replacement is to be type a, b, or c as follows:
 - a. Most energy efficiency – recommended for most applications, generally maintains existing minimum light levels, improves uniformity. Typically considered acceptable when replacing HPS or LPS legacy systems with 2700K or 3000K LED lighting.
 - b. Compromise between energy efficiency and higher light levels – recommended for certain applications where the pedestrian area classification or some other factor suggests a modestly higher light level.
 - c. Most lighting - provides average light levels higher than existing lighting – in locations where community needs transcend energy and cost savings.

Application Notes:

- Most WRCOG communities should use types (a.) for most of their luminaires to maximize payback.
 - Kilolumen classification system takes lumen maintenance into account.
3. For intersection safety lighting, type IV luminaires may be considered in place of existing Type III or Type II.
 4. Note nominal LED kilolumen classifications in Table 7-2. To minimize the number of different luminaires to stock and maintain, this system is based on

nominal lumen packages for up to six lumen package groups (Small, Medium Small, Medium, Medium High, High, and Very High).

5. Select nominal LED luminaire kilolumens of matching photometric type from Table 7-3, column (a), (b), or (c).

EXCEPTION TO Section 7. (D.)

In Zone A and Lighting Zone 1 (LZ-1), for residential streets, street lighting shall be limited to (1) light at each residential street or residential street/residential minor collector intersection and (1) light mod block per DG-21. There shall be no requirements to meet illuminance, luminance or uniformity requirements. Lighting for walkways and sidewalks may be incidental because of the street lights. This exception may be applied to any residential street with the approval of community.

- E. Procedure for selecting appropriate LED luminaires where RP-8 or another similar standard is preferred or required.

1. Refer to LightSuite 2

Table 7-1. Maximum Allowed Color Temperature Per Lighting Zones

	Palomar Zone A and Lighting Zone LZ-1	Palomar Area B and C and Lighting Zones LZ-2 through LZ-4
Maximum Color Temperature		
Intersection Safety Lights	2700K	2700K or 3000K
Highways, Arterials and Major Collectors	2700K	2700K or 3000K
Minor Collectors and Streets	2700K	2700K
Residential Streets	2700K	2700K

Application Notes

- a) 2700K has been tested and accepted by WRCOG for intersection safety lights and highways, arterials and major collectors.
- b) Per IES there no significant difference in any performance characteristic involving safety or security between 2700K and 3000K.
- c) 2700K causes less light pollution per lumen than does 3000K.

TABLE 7-2

SUGGESTED KILOLUMEN (KL) CLASS REPLACEMENT LUMINAIRE SYSTEM FOR MINIMUM TYPES (SKU's) OF LED LUMINAIRES

Light Output LED Kilolumen (KL) Class	Application Group (a.)	Application Group (b.)	Application Group (c.)
Low (L)	Nominal 2 KL (~20 watt)	Nominal 2.5 KL (~25 watt)	Nominal 3 KL (~30 watt)
Medium low (ML)	Nominal 4.5 KL	Nominal 6 KL	Nominal 7.5 KL

	(~45 watt)	(~60 watt)	(~75 watt)
Medium (M)	Nominal 7.5 KL (~75 watt)	Nominal 10 KL (~100 watt)	Nominal 12.5 KL (~125 watt)
Medium High (MH)	Nominal 10 KL (~100 watt)	Nominal 12.5 KL (~125 watt)	Nominal 15 KL (~150 watt)
High (H)	Nominal 12.5 KL (~125 watt)	Nominal 15 KL (~150 watt)	Nominal 17.5KL (~175 watt)
Very High (VH)	Nominal 17.5 KL (~175 watt)	Nominal 20 KL (~200 watt)	Nominal 25 KL (~250 watt)

Application Notes

- Wattage values assume 100 luminaire lumens per watt. Efficacy of products will probably increase over time, reducing the watts for each KL package and increasing the energy savings.

TABLE 7-3

**RECOMMENDED NOMINAL DIRECT CONVERSION LED LUMINAIRE WHEN REPLACING
EXISTING LEGACY LUMINAIRES**

Refer to application notes, below and Section 7. (D.)

Incumbent Legacy Luminaire ¹				LED KL Class ⁵ of Replacement Luminaire			Approx. Watts Saved Each		
Source	Lamp Watts	System Watts ²	Luminaire Lumens ³	(a.)	(b.)	(c.)	(a.)	(b.)	(c.)
Low Pressure Sodium (LPS)	35	63	3360	L	L	L	43	38	33
	55	84	5600	L	L	L	64	59	54
	90	131	9450	ML	ML	ML	86	71	56
	135	182	15750	M	M	M	107	82	57
	180	229	23100	MH	MH	MH	129	104	79
High Pressure Sodium (HPS)	70	83	4060	L	L	L	63	58	53
	100	117	6650	ML	ML	ML	72	57	42
	150	193	11200	M	M	M	118	93	68
	200	246	15400	MH	MH	MH	146	121	96
	250	313	19250	H	H	H	188	163	138
	400	485	35000	VH	VH	VH	310	285	235
Metal Halide (MH)	70	90	3960	L	L	L	70	65	60
	100	129	6120	ML	ML	ML	84	69	54
	175	210	10800	M	M	M	135	110	85
	250	295	15800	MH	MH	MH	195	170	145
	400	458	27300	H	H	H	333	308	283
Mercury Vapor (MV)	100	120	2880	L	L	L	100	95	90
	175	205	6040	L	L	L	185	180	175
	250	285	9000	ML	ML	ML	240	225	210
	400	454	16500	MH	MH	MH	354	329	304

Footnotes

- ¹ Most street luminaires in Western Riverside County are either LPS or HPS.
- ² Lamp + Ballast watts
- ³ Initial lamp lumens x luminaire efficiency (approximate, varies with fixture type)
- ⁴ Nominal luminaire watts (Total of LED and driver)
- ⁵ See Table 7-3

Application Notes

- Column (a.) will produce the fastest payback and is recommended for community projects in which the purchase cost of light poles must be amortized.
- This conversion table is suggested for general purpose use in replacing legacy lighting systems with 2700K to 3000K LED's available in the winter of 2016-2017. To adjust for future improvement in luminous efficacy, be sure to provide approximately the same number of LED lumens. LED watts are typical for products available in spring, 2017.
- LED luminaire lumens are generally lower than legacy luminaires because of the ability of LED optical systems to achieve a greater percentage of utilization than legacy luminaires.
- Acceptable results will generally occur if care is taken to replace luminaire distribution types (e.g. Type III medium) with like.

- All values are nominal and represent average expected outcomes. Differences of less than 15-20% are probably not significant for this table.
- Use of this table does not ensure compliance with IES RP-8-14. In many cases, pole height, mast arm length and/or pole spacing may not permit compliance with RP-8-14 regardless of existing legacy source luminaires. If compliance with RP-8-14 is required, lighting calculations will be necessary and may result in different LED luminaire watts and lumens. Analysis using WRCOG standard AGI32 street models is recommended. See LightSuite 3 for recommended illuminating engineering standards.
- Lumen maintenance of the legacy light source as compared to LED lighting has been considered for each lamp type. Some legacy light sources have less lumen depreciation than others.

Section 8. PRODUCT SPECIFICATIONS

- A. Luminaires shall comply with the current WRCOG LightSuite 3, Specification of LED Products for Replacement of Cobrahead Street Lighting Luminaires.

Section 9. SUBMITTALS FOR APPROVAL

- A. Plan(s) of the proposed lighting installation clearly identifying:
1. The criteria for each roadway segment, intersection, and other elements as required in Section 8. (C.), (D.), and (E.), above. Information affecting criteria selection, such as proximity to a school or transit stop shall be included. Calculations representing typical stretches of roadways or streets may be permitted for each condition of Lighting Zone, pedestrian area classification, posted speed or other differences.
 2. The AASHTO pavement type(s), i.e. R1, R2, R3, or R4.
 3. Point-by point lighting calculations on a grid not larger than 2.5' x 2.5' (.75m x .75m).
 4. Calculation summaries showing average, minimum, and maximum values and ratios as contained in the tables of criteria in RP-8.
 5. Calculations to include roadways, intersections, walkways, and all other parts of the project for which criteria were developed under Section 9. (A.) 1.
 6. Schedule of luminaires including mounting height, mast arm length, and pole base locations.
- B. Specifications for each luminaire to include:
1. Product datasheet.
 2. Photometric report.
 - a. Must clearly indicate BUG rating per TM-15.
 3. Drawing of pole or standard including base details.

4. Drawing of mast arm if used.
5. Datasheet for driver and surge suppressor.
6. Datasheet for photocell.

END OF SECTION

DRAFT

Section 1. INTENT

The purpose of this Ordinance is to provide regulations for outdoor lighting that will:

- a. Ensure adequate outdoor illumination can be provided.
- b. Help mitigate light pollution, reduce skyglow and improve the nighttime environment for astronomy and the Palomar Observatory and the overall enjoyment of the naturally dark night sky;
- c. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light.
- d. Help protect human health and wellness and the natural environment from the adverse effects of man-made outdoor lighting.
- e. Conserve energy and resources to the greatest extent possible.

Section 2. CONFORMANCE WITH APPLICABLE LAWS, CODES, REGULATIONS and ORDINANCES.

All outdoor luminaires shall be installed in conformance with the provisions of this ordinance and the applicable provisions of the ordinances of the County of Riverside regulating the installation of such fixtures, the California Building Code Title 24 Part 2, the California Electrical Code Title 24 Part 3, the California Building Energy Efficiency Standards Title 24 Part 6, the California Sustainability Standards Title 24 Part 11 "CalGreen", and all other applicable requirements.

Section 3. SCOPE

The provisions of this code apply to the construction, alteration, movement, enlargement, replacement and installation of outdoor lighting throughout the unincorporated areas of Riverside County, including but not limited to:

- A. Lighting on private property, such structures, areas, features, security and advertising.
- B. Lighting for private roadways, walkways and bikeways.
- C. Lighting for public property such as structures, areas, features, security and advertising.

Exceptions to Section 3

1. Facilities, sites or roadways under the sole jurisdiction of the Federal or State Governments or within the jurisdiction of a sovereign nation.
2. Lighting specifically governed by a Federal or State regulation or statute.
3. Lighting subject to the terms of a special plan approved by the County.

Section 4.

APPROVED MATERIALS AND METHODS OF INSTALLATION.

This ordinance is not intended to prevent the use of any design, material or method of installation not specifically forbidden, provided any such alternate has been approved. The Planning Director may approve any such proposed alternate if it:

- A. Provides at least approximate equivalence to the applicable specific requirements of this ordinance; and
- B. Is otherwise satisfactory and complies with the intent of this ordinance.

Section 5. DEFINITIONS.

- A. **Luminaire** means a complete illuminating device, lighting fixture or other device that emits light, consisting of light source(s) together with the parts designed to distribute the light, to position and protect the light source(s), to regulate the electrical power, and to connect the light sources to the power supply.
- B. **Outdoor luminaire** means a luminaire, whether permanently installed or portable, that is installed outdoors, whether completely or partly exposed or under a canopy, and used for general or task illumination for any of the following applications:
 1. Lighting for and around buildings and structures.
 2. Lighting for parks and recreational facilities.
 3. Parking lots and garages.
 4. Landscape lighting.
 5. Outdoor advertising displays and other signs.
 6. General area lighting for commerce, industry or security.
 7. Street and roadway lighting.
 8. Walkway, bikeway and lighting.
- C. **Class I lighting** means all outdoor luminaires used for but not limited to outdoor sales or eating areas, assembly or repair area, outdoor advertising displays and other signs, recreational facilities and other similar applications when color rendition is important.
- D. **Class II lighting** means all outdoor lighting used for but not limited to illumination for walkways, private roadways and streets, equipment yards, parking lot and outdoor security when color rendering is not important.
- E. **Class III lighting** means that lighting not meeting Class I or Class II purposes and used primarily for decorative effects. Examples of Class III lighting include, but are not limited to, the illumination of flag poles, trees, fountains, statuary, and building walls.
- F. **Planning Director** means the Director of Planning of the County of Riverside or representative(s) designated by the Planning Director.
- G. **IES** means the Illuminating Engineering Society of North America.

- H. **Zone A** means the circular area fifteen (15) miles in radius centered on Palomar Observatory.
- I. **Zone B** means the circular ring area defined by two circles, one forty-five (45) miles in radius centered on Palomar Observatory, and the other the perimeter of Zone A.
- J. **Zone C** means the remainder of the County outside of the perimeter of Zone B.
- K. **Individual** means any private individual, tenant, lessee, owner or any commercial entity, including, but not limited to, companies, partnerships, joint ventures or corporations.
- L. **Installed** means any installation of outdoor luminaires after the effective date of this ordinance. Projects with construction plans approved by the County prior to the effective date of this ordinance are excluded from installation in compliance with this ordinance.
- M. **BUG rating of an outdoor luminaire** means the ranking of the luminaire using a photometric report to establish the Backlight (B), Uplight (U) and Glare (G) ranking according to IES TM-15-11.
- N. **Fully Shielded Luminaire** means an outdoor luminaire where no light is emitted at or above an angle of 90 degrees above the nadir as evidenced by a photometric test report from a NVLAP accredited testing laboratory in which the uplight value (U) is 0. Any structural part of the luminaire providing shielding shall be permanently attached.
- O. **Partly Shielded luminaire** means outdoor luminaires that have a U (uplight) rating between 1 and 4.
- P. **Unshielded luminaire** means outdoor luminaires that are not Fully Shielded or Partly Shielded and have a U (uplight) rating of 5 or no rating at all.
- Q. **Outdoor Advertising Display** means advertising structures and signs used for outdoor advertising purposes, not including onsite advertising signs, as further defined and permitted in Article XIX of Ordinance No. 348.
- R. **Outdoor Recreational Facilities** means public or private facilities designed and equipped for the conduct of sports, leisure time activities and other customary and usual recreational activities. Outdoor recreational facilities include, but are not limited to, fields for softball, baseball, football, soccer, and any other field sports, courts for tennis, basketball, volleyball, handball and other court sports, for which the level of play according to IES RP-6-15 Section 4.4 is Class III or Class IV.
- S. **Outdoor Sports Facilities** include fields for softball, baseball, football, soccer, and other field sports, courts for tennis, basketball, volleyball, handball and other court sports, and outdoor stadiums in which the level of play, according to RP-6-15 Section 4.4 is Class I or Class II.
- T. **Lamp or source.** Generic term for a man-made source of light. In the context of this Code, a lamp is the user-replaceable electrically powered light bulb, fluorescent or neon tube, or LED light source.
- U. **LED** means light emitting diode solid state lighting source.
 - 1. **LED Hybrid** means a dedicated LED luminaire employing LED devices of two or more different colors, typically a white LED and a colored LED. For the purposes of this Ordinance, the white LED shall not exceed 3000K and the other color LED(s) must be green, amber, orange and/or red. Blue or violet LEDs are not permitted.

- 2. **LED Amber** means an LED luminaire employing amber or yellow colored LED devices.
- 3. **Filtered LED (FLED)** means a dedicated LED luminaire employing white LED devices and has a permanently affixed color filter to remove blue light and giving the appearance of an amber or yellow-green light.
- V. **Curfew** means a time established for listed lighting systems to be automatically extinguished.
- W. **Dedicated LED** means a luminaire with a hard-wired LED light generating module and a separate driver.
- X. **Outdoor Luminaire Light Output** means the amount of light, measured in lumens, generated by a luminaire. The luminaire lumens shall be the rated lumens of the luminaire according to a photometric report from a NVLAP certified test laboratory.

Section 6. TITLE 24 LIGHTING ZONES

For the purposes of complying California Code of Regulations, Title 24, Part 1, Section 10-114 and Title 24, Part 6, Section 140.7, Zone A as defined above shall be Lighting Zone 1 (LZ-1), Zone B as defined above shall be Lighting Zone 2 (LZ-2) . The balance of the County shall be LZ-2 or LZ-3 per the statewide default zones.

The Planning Director shall establish a method for applicant(s) to request and for the Planning Director to set a different lighting zone per Title 24, Part 1 Section 10-114 for a specific parcel or project.

Section 7.
GENERAL REQUIREMENTS.

Light sources are restricted by lighting zone according to the following Tables:

TABLE 7-1 Class I Lighting (color rendering is important)

ALL LUMINAIRES SHALL BE FULLY SHIELDED			
Source	Zone A and LZ-1	Zone B and/or LZ-2	Zone C and/or LZ-3
LED >3000K	Not allowed	Not allowed	Not allowed
LED 3000K	Allowed	Allowed	Allowed
LED 2700K or less	Allowed	Allowed	Allowed
Incandescent or 2700K or lower LED replacement lamps	Allowed	Allowed	Allowed
LED amber, hybrid or filtered	Allowed ¹	Allowed ¹	Allowed ¹
Metal halide, fluorescent, compact fluorescent, induction	Not allowed	Allowed if 3000K or less	Allowed if 3000K or less
High pressure sodium	Allowed ¹	Allowed ¹	Allowed ¹
Low pressure sodium	Allowed ²	Allowed ²	Allowed ²
Neon or cold cathode	Not allowed	Not allowed	Not allowed
Other light sources ³	Not allowed	Not allowed	Not allowed

Notes

- ¹ Not recommended due to poor color rendering
- ² Not recommended – source is obsolete and has no color rendering
- ³ For light sources not listed, applicants may appeal as provided under Section 3.

TABLE 7-2 Class II Lighting (color rendering is not important)

ALL LUMINAIRES SHALL BE FULLY SHIELDED			
Source	Zone A and LZ-1	Zone B and LZ-2	Zone C and LZ-3 or 4
LED >3000K	Not allowed	Not allowed	Not allowed
LED 3000K	Not allowed	Allowed	Allowed
LED 2700K or less	Allowed	Allowed	Allowed
Incandescent or 2700K or lower LED replacement lamps	Allowed	Allowed	Allowed
LED amber, hybrid or filtered	Allowed	Allowed	Allowed
Metal halide, fluorescent, compact fluorescent, induction	Not allowed	Not allowed	Not allowed
High pressure sodium	Allowed	Allowed	Allowed
Low pressure sodium	Allowed ¹	Allowed ¹	Allowed ¹
Neon or cold cathode	Not allowed	Not allowed	Not allowed
Other light sources ²	Not allowed	Not allowed	Not allowed

Notes

- ¹ Not recommended – source is obsolete and has no color rendering
- ² For light sources not listed, applicants may appeal as provided under Section 3.

TABLE 7-3 Class III Lighting (decorative lighting)

LUMINAIRES SHALL BE FULLY SHIELDED EXCEPT AS NOTED			
Source	Zone A and LZ-1	Zone B and LZ-2	Zone C and LZ-3 or 4
LED >3000K	Not allowed	Not allowed	Not allowed
LED 3000K	Not allowed	Allowed	Allowed
LED 2700K or less	Allowed	Allowed	Allowed
LED amber, hybrid or filtered	May be partly shielded or unshielded up to 450 lumens	May be partly shielded or unshielded up to 600 lumens	May be partly shielded or unshielded up to 1000 lumens
Incandescent or 2700K or lower LED replacement lamps			
Metal halide, fluorescent, compact fluorescent, induction	Not allowed	Not allowed	Not allowed
High pressure sodium	Allowed	Allowed	Allowed
Low pressure sodium ¹	Allowed ¹	Allowed ¹	Allowed ¹
Neon or cold cathode	Not allowed	Not allowed	Not allowed
Other light sources ²	Not allowed	Not allowed	Not allowed

Notes

- ¹ Not recommended – source is obsolete and has no color rendering
- ² For light sources not listed, applicants may appeal as provided under Section 3.

Section 8.**SUBMISSION OF PLANS AND EVIDENCE OF COMPLIANCE.**

The application for any required County approval for work involving nonexempt outdoor luminaires shall include evidence that the proposed work will comply with this ordinance. The submission shall contain, but not be limited to, the following:

- A. The location of the site where the outdoor luminaires will be installed;
- B. Plans indicating the location and type of fixtures on the premises;
- C. A description of the outdoor luminaires, including, but not limited to, manufacturer's catalog cuts and drawings.
- D. Photometric reports from a NVLAP accredited laboratory indicating luminaire light source type, color temperature, and BUG rating.

The above required plans and descriptions shall be sufficiently complete to enable the County to readily determine whether compliance with the requirements of this ordinance will be secured. If such plans and descriptions cannot enable this ready determination, by reason of the nature or configuration of the devices, fixtures or lamps proposed, the applicant shall submit further evidence of compliance enabling such determination.

Section 9.
PROHIBITIONS.

- A. All lighting shall be off between 11:00 p.m. and one hour before sunrise, except as follows:
1. Motion sensors may be used for Class I lighting after 11:00 p.m.
 2. Class II lighting may remain on all night but shall employ motion sensors to turn lights off or dim lights when there is no motion after 11:00 p.m.
 3. On-premise advertising signs shall only be illuminated while the business facility is open to the public
 4. Outdoor advertising displays may remain lighted until midnight.
 5. Outside sales, commercial, assembly, repair, and industrial areas shall only be lighted when such areas are actually in use.
 6. Outdoor recreational facilities may remain lighted to complete recreational activities that are in progress and under illumination in conformance with this ordinance at 11:00 p.m.
- B. Operation of searchlights or aerial lasers for advertising purposes is prohibited.
- C. All external sign and billboard lighting shall be top-down. Bottom mounted signs are prohibited. Signs shall comply with the sign code.
- D. Use of mercury vapor lamps is prohibited.

Section 10.
PERMANENT EXCEPTIONS.

- A. Nonconformance. All outdoor luminaires existing and legally installed prior to the effective date of this ordinance are exempt from the requirements of this ordinance except that:
1. When existing luminaries are reconstructed or replaced, such reconstruction or replacement shall be in compliance with this ordinance.
 2. Sections 9 b, c, d and e regarding hours of operation shall apply.
- B. Fossil Fuel Light. All outdoor luminaires producing light directly by combustion of fossil fuels (such as kerosene lanterns, and gas lamps) are exempt from the requirements of this ordinance.
- C. Holiday Decorations. Lights used for holiday decorations are exempt from the requirements of this ordinance.

D. Outdoor Sports Facilities may employ either:

- a. Up to 6000K LED lighting systems provided (1) the lighting system employs shielding to completely prevent uplight; (2) the lighting is controlled by motion sensors or from a control booth; and (3) the lighting is dimmable and designed to use the least amount of light necessary for the activity; and (4) the lighting system has a fixed curfew of 11:00PM that can be overridden from the control booth.
- b. Up to 5700K Metal halide lighting systems provided (1) the lighting system employs shielding to completely prevent uplight; (2) the lighting is controlled from a control booth and does not automatically turn on; (3) the lighting system has a fixed curfew of 11:00PM that can be overridden from the control booth.

Section 11.
TEMPORARY EXEMPTIONS.

- A. Information Required. Any individual may submit a written request to the Planning Director for a temporary exemption from the requirements of this ordinance. The filing fee for the temporary exemption shall be \$50.00. The Request for Temporary Exemption shall contain the following information:
1. Name, address and telephone number of the applicant;
 2. Location of the outdoor luminaires for which the exemption is requested;
 3. Specific exemption(s) requested;
 4. Use of the outdoor luminaires involved;
 5. Duration of the requested exemption(s);
 6. Type of outdoor light fixture to be used, including the light source and color temperature, total lumen output, character of the shielding, if any;
 7. Previous temporary exemptions, if any;
 8. Such other data and information as may be required by the Planning Director. The Planning Director shall have ten (10) business days from the date of receipt of the Request for Temporary Exemption to approve or disapprove the request. The applicant will be notified of the decision in writing.
- B. Duration of Approval. The exemption shall be valid for not more than thirty (30) consecutive days from the date of issuance of approval. Exemptions are renewable for a period of not more than fifteen (15) consecutive days. Requests for renewal of a temporary exemption shall be processed in the same manner as the original request. No outdoor luminaires shall be exempted from this ordinance for more than forty-five days during any twelve (12) month period.

Exception to Section 11 (B.): An exemption for portable lighting for construction shall be valid for one year and may be renewable on an annual basis.

- C. Appeals. An applicant or any interested person may file an appeal from the decision of the Planning Director within 10 days of the date of mailing of the notice of decision to the applicant. The appellant may appeal that decision, in writing, to the Board of Supervisors, on forms provided by the Planning Department, which shall be accompanied by a filing fee of \$25.00. Upon receipt of a completed appeal, the Clerk of the Board shall set the matter for hearing before the Board of Supervisors not less than five days nor more than 30 days thereafter and shall give written notice of the hearing to the appellant and the Planning Director. The Board of Supervisors shall render its decision within 30 days following the close of the hearing on the appeal.

Section 12. EMERGENCY EXEMPTIONS.

This ordinance shall not apply to portable temporary lighting used by law enforcement or emergency services personnel to protect life or property.

Section 13. CONFLICTS.

Where any provision of the statutes, codes or laws of the United States of America or the State of California conflicts with any provision of this ordinance, the most restrictive shall apply unless otherwise required by law.

Section 14. VIOLATIONS AND PENALTIES.

It shall be unlawful for any individual to operate, erect, construct, enlarge, alter, replace, move, improve, or convert any lighting structure, or cause the same to be done, contrary to or in violation of any provision of this ordinance.

Any individual violating any provision of this ordinance shall be deemed guilty of an infraction or misdemeanor as hereinafter specified. Such individual shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this ordinance is committed, continued, or permitted.

Any individual convicted of a violation of this ordinance shall be (1) guilty of an infraction offense and punished by a fine not exceeding one hundred dollars (\$100) for a first violation: (2) guilty of an infraction offense and punished by a fine not exceeding two hundred fifty dollars (\$250) for a second violation on the same site and perpetrated by the same individual. The third and any additional violations on the same site and perpetrated by the same individual shall constitute a misdemeanor offense and shall be punishable by a fine not exceeding one thousand dollars (\$1,000) or six months in jail, or both. Payment of any penalty herein shall not relieve an individual from the responsibility for correcting the violation.

Section 15.
VIOLATIONS CONSTITUTE PUBLIC NUISANCE.

Any lighting structure erected, constructed, enlarged, altered, replaced, moved, improved, or converted contrary to the provisions of this ordinance shall be, and the same is hereby declared to be, unlawful and a public nuisance and subject to abatement in the manner provided by law. Any failure, refusal or neglect to obtain a permit as required by this ordinance shall be prima facie evidence of the fact that a public nuisance has been committed in connection with the erection, construction, enlargement, alteration, replacement, improvement, or conversion of a lighting structure erected, constructed, enlarged, altered, repaired, moved, improved, or converted contrary to the provisions of this ordinance.

Section 16.
SEVERABILITY.

If any provision of this ordinance or the application thereof to any individual or circumstance is invalid, the invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are severable.

Section 17.
EFFECTIVE DATE.

This ordinance shall take effect and be in force thirty (30) days after the date of its adoption.

PROPOSED MODERNIZATION OF RIVERSIDE COUNTY ORDINANCE NO.915P REGULATING
OUTDOOR LIGHTING

Proposed changes are underlined and in bold.

The Board of Supervisors of the County of Riverside ordains as follows:

Section 1. FINDINGS

The Board of Supervisors finds that inadequately shielded outdoor lighting results in a waste of natural resources and **causes** light trespass. The Board of Supervisors further finds that ~~at certain levels, light trespass, and associated glare, may jeopardize the health, safety or general welfare of Riverside County residents and degrade their quality of life.~~ **The Board of Supervisors also finds that these concerns are sufficiently different from the negative impacts of light pollution that are currently regulated by Ordinance 655 to warrant this specific Ordinance.**

Section 2. PURPOSE

The purpose of this Ordinance is to provide minimum requirements for outdoor lighting in order to reduce light trespass, and to protect the health, property, and well-being of residents in the unincorporated areas of the County.

Section 3. AUTHORITY

This Ordinance is adopted pursuant to the Board of Supervisors' police power as set forth under Article XI, section 7 of the California Constitution.

Section 4. DEFINITIONS

As used in this Ordinance, the following terms shall have the following meanings:

- a. Adequately shielded. ~~Shielding of an outdoor luminaire by opaque components or materials, such that light rays are limited to the parcel of origin and the light source is not visible from another property or public right-of-way.~~ A luminaire using a combination of internal or attached shielding and/or aiming to control light radiation onto the property on which is it located.
- b. Glare. Light emitting from an outdoor luminaire that causes ~~reduced vision or momentary blindness.~~ visual disability or discomfort.
- c. Light source (lamp). An electrical bulb, tube, diode, or other device that produces artificial light or illumination.
- d. ~~Light trespass.~~ **Trespassing Light.** Light falling across a property line onto another lot or parcel of land or onto a public right-of-way. The presence of ~~light trespass~~ **trespassing light** shall be determined in accordance with Section 7 of this Ordinance.

e. Luminaire. A complete lighting unit consisting of one or more lamps, **LED arrays or other light sources**, ~~the lamp~~ **light source mounting** or holder, any reflector or lens, and any other components or accessories.

f. Outdoor Luminaire. ~~Outdoor luminaires~~, A luminaire, whether permanent or portable, ~~including general light fixtures, searchlights, spotlights, and floodlights; and the light cast by such fixtures installed outdoors.~~

Section 5. STANDARD

- a. All outdoor luminaires ~~in~~ shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way, **except as allowed in Section 7.** Outdoor luminaires shall not blink, flash, or rotate.

EXCEPTION TO Section 5.(a.). Less than fully shielded decorative luminaires permitted by Ordinance 655 Table 7-3.

- b. **All outdoor luminaires shall be rated 3000K or less correlated color temperature (CCT).**

EXCEPTION TO Section 5(b.) New luminaires shall comply with Ordinance 655.

- c. **All outdoor luminaires shall be turned off or dimmed at least 50% after a curfew time, defined as the later of either (1) 10:00PM or (2) 1 hour after the close of business. Luminaires may be controlled by motion sensors after curfew.**

Section 6. EXEMPTIONS

The following outdoor luminaires shall be exempt from the provisions of this Ordinance when properly installed and in compliance with all County ordinances:

- a. Luminaires used or otherwise required by law enforcement or other emergency personnel.
- b. Luminaires used to illuminate publicly-owned property, including but not limited to, parks, recreation areas, schools, streets, street signs and sidewalks.
- c. Luminaires used to illuminate authorized public and private monuments.
- d. Luminaires authorized by a provision of state or federal law as long as that lighting conforms to the requirements of the state or federal law.
- e. Luminaires used for holiday decoration.
- f. Luminaires producing light directly by the combustion of fossil fuels (such as kerosene lanterns, and gas lamps).
- g. Neon luminaires.
- h. Luminaires used to illuminate agricultural activities, operations or facilities as defined in Section 5 of Riverside County Ordinance No. 625.

i. Luminaires used to illuminate for parking areas and other outdoor spaces directly serving a facility operating 24 hours are not required to be turned down or off as required under Section 5 (c.).

j. Luminaires used to illuminate sports courts and fields, provided that they are equipped with controls to prevent operation after 10PM Sunday through Thursday and 11PM Friday and Saturday.

Section 7. DETERMINATION OF LIGHT TRESPASS

A determination of light trespass shall be made by observation of the allegedly non-conforming luminaire(s) **measurement of the allegedly trespassing light onto** from the complaining party's property. A "complaining party" may be either an owner or occupant of private property or a public entity. **Trespassing light occurs when the amount of light measured at the property line in any plane caused by one or more luminaires exceeds the following limits:**

<u>Maximum Light Limit</u>	<u>Pre-curfew</u>	<u>Post-curfew</u>
<u>Onto any residential property, in-patient health care facility, dormitory, hotel or motel</u>	<u>3 lux (0.3 foot-candle)</u>	<u>1 lux (0.1 foot-candle)</u>
<u>Onto any non-residential property or public right of way</u>	<u>8 lux (0.8 foot-candle)</u>	<u>3 lux (0.3 foot-candle)</u>

Section 8. SECURITY LIGHTING

Security lighting **solely** triggered by motion or noise shall be allowed subject to all of the provisions of this Ordinance except Section 5 (c.).

Section 9. NON-CONFORMING OUTDOOR LUMINAIRES

Outdoor luminaires existing on the effective date of this Ordinance that do not meet the requirements as set forth herein shall be brought into compliance or removed as follows:

- a. Within three (3) months of the effective date of this Ordinance, where redirection of the light fixture is feasible and will bring the light fixture into compliance; or
- b. Within six (6) months of the effective date of this Ordinance, in all other cases.

Section 10. COMPLIANCE METHODS

Outdoor luminaires not meeting the standards of Section 5 be brought into compliance in any of the following ways:

- a. Redirection of the luminaire;
- b. Shielding of the light source;
- c. Redesign or relocation of the luminaire;
- d. Replacement of the luminaire with a conforming luminaire; or

- e. Removal of the luminaire.

Section 11. ENFORCEMENT

The Riverside County Sheriff and Code Enforcement Departments shall have the primary responsibility for enforcing this Ordinance.

Section 12. VIOLATIONS AND PENALTIES

Any person who violates any provision of this Ordinance once or twice within a one hundred and eighty (180) day period shall be guilty of an infraction. Any person who violates any provision of this Ordinance more than twice within a one hundred and eighty (180) day period shall be guilty of a misdemeanor. Each day a violation is committed or allowed to continue shall constitute a separate offense and shall be punishable as such. Penalties shall not exceed the following amounts.

- a. For the first violation within a one hundred and eighty (180) day period the minimum mandatory fine shall be one hundred dollars (\$100).
- b. For the second violation within a one hundred and eighty (180) day period the minimum mandatory fine shall be two hundred and fifty dollars (\$250).
- c. For any further violations within a one hundred and eighty (180) day period the minimum mandatory fine shall be five hundred dollars (\$500) or imprisonment in the County jail for a period not exceeding six (6) months, or both.

Section 13. CONFLICT BETWEEN ORDINANCE REQUIREMENTS

This Ordinance shall neither replace the requirements of the zoning Ordinance or any other County ordinances, including but not limited to County Ordinance No. 655, nor supersede the terms of any private Covenants, Conditions and Restrictions (CC&Rs). However, when there is a conflict in the requirements of this and any other ordinance, the more stringent requirements shall apply. The County of Riverside does not enforce private CC&Rs.

Section 14. SEVERABILITY.

If any provision of this Ordinance or the application thereof to any person or circumstance, is held invalid, such invalidity shall not affect the remainder of the Ordinance or the application of such provision(s) to other persons or circumstances.

Section 15. SAVINGS CLAUSE

The adoption of this Ordinance shall not in any manner affect the prosecution of ordinance violations, which violations were committed prior to the effective date of this Ordinance, nor be construed as a waiver of any permit, license, penalty or penal provisions applicable to such violations. The provisions of this Ordinance, insofar as they are substantially the same as ordinance provisions previously adopted by Riverside County relating to the same subject matter, shall be construed as restatements and continuations, and not as new enactments.

Section 16. EFFECTIVE DATE

This Ordinance shall take effect 30 days after its adoption.

DRAFT

SUGGESTED COMMUNITY OUTDOOR LIGHTING ORDINANCE

Section 1. Purpose.

The purpose of this ordinance is to implement the goals of the General Plan and protect and promote public health, safety, welfare, and quality of life by establishing regulations and a process for review of outdoor lighting that will accomplish the following:

- A. Protect against light pollution in all its forms, thereby reclaiming the ability to view the night sky and thereby help preserve the quality of life and scenic value of this desirable visual resource;
- B. Help protect and enhance human health and wellness and wildlife habitation and migration by minimizing light pollution and its impact on all forms of life, consistent with the June 2016 position on outdoor lighting by the American Medical Association.
- C. Promote lighting practices and systems to conserve energy, decrease dependence on fossil fuels and limit greenhouse gas emissions consistent with the California Global Warming Solutions Act and other applicable state and federal law.
- D. Ensure that sufficient lighting can be provided where needed to promote safety and security on public and private property, and to allow for reasonable lighting for commercial properties and activities,
- E. Provide easily understood regulations for residential lighting that help minimize obtrusive light and mitigate neighbor-to-neighbor lighting issues;
- F. *Provide practical regulations for non-residential lighting that are consistent with the California Code of Regulations, Title 24, Parts 1, 2, 6 and 11.*
- G. Allow reasonable flexibility in the style of lighting fixtures and the technology used to generate and control light; and,
- H. Permit appropriate lighting employing historic and current technology, evolving advancements, energy use and economic needs.

Section 2. Applicability

- A. Except as described below, all outdoor lighting installed or modified after the date of effect of this Ordinance shall comply with these requirements. This includes, but is not limited to, new lighting, replacement lighting, additions and alterations, or any other lighting whether attached to structures, poles, the earth, or any other location, including lighting installed by any third party.

Exception to Section 2. (A.): Any lighting-specific requirements in the following shall take precedence over this ordinance.

- a. Specific use permit.
- b. Federal, state, or county laws or regulations.

Exemptions from Section 2. (A.) The following are not regulated by this Ordinance:

- 1. Indoor lighting.
- 2. Lighting within public right-of-way or easement for the principal purpose of illuminating streets, roads, sidewalks, walkways, bikeways, bridges, tunnels and other public means of conveyance and travel.
- 3. Lighting permitted prior to the effective date of this Ordinance
- 4. Lighting solely for signs (lighting for signs is regulated by the Sign Ordinance).

5. Repairs to existing luminaires, but not including new replacement luminaires or modifications to existing luminaires.
 6. Temporary lighting for one-time events.
 7. Underwater lighting in swimming pools and other water features.
 8. Temporary lighting and seasonal lighting, except that temporary lighting and seasonal lighting are not permitted in or within 100 feet (30.5 meters) of Public Open Space.
 9. Short-term lighting associated with activities authorized by a valid temporary use permit, special event permit or film permit.
 10. Construction or emergency lighting provided such lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency necessitating said lighting.
- B. Applications for land use entitlements after the effective date of this ordinance shall include compliance with this chapter as a condition of approval.

Section 3. General Requirements for all Outdoor Lighting.

- A. **Compliance with State Code** All lighting and controls shall comply with the California Title 24 California Code of Regulations, Title 24, Parts 1, 2, 6 and 11.
- B. **Shielding** All luminaires shall be fully shielded and shall not emit light into the upper hemisphere around the luminaire once installed. Support and mounting systems for luminaires shall not allow post-installation adjustments that could defeat compliance of this requirement.

Exceptions to Section 3. (A.)

- a. Decorative lighting as permitted herein.
 - b. Landscape lighting as permitted herein.
 - c. Architectural floodlighting and outlining as permitted herein.
- C. **Turned off or reduced after curfew** Automated control systems, such as motion sensors, astronomic timer switches and lighting control systems, shall be used to meet the curfew requirements of 17.41.050 and the technical and energy efficiency requirements of California Code of Regulations Title 20 Section 1605.1(I) and Title 24 Part 6 Sections 130.2, 140.7 and 150.1. Manual initiation switches are permitted as long as they do not defeat the automatic shut off function.

Exceptions to Section 3. (B.)

- a. Egress lighting as required by Title 24 Part 2 Section 1006.
 - b. Lighting for facilities having 24 hour operations or business.
 - c. Lighting required for accessibility.
 - d. Lighting required by statute, law or ordinance to operate all night.
 - e. One luminaire per residence that illuminates the address or apartment number.
 - f. Lighting by special permit.
- D. **Lighting Color (Chromaticity).** The correlated color temperature of all outdoor lighting shall be 3000 Kelvin or less, with tolerance within the ANSI standard C78.377 of LED sources.

Exceptions to 17.41.040 (C.)

- a. Amber sources necessary to protect beach and environmentally sensitive habitat areas, as determined by the planning director.

- b. Legally required monochromatic light sources including but not limited to, aviation obstruction lighting, traffic signal lighting, and marine lighting
 - c. As allowed by a special use permit.
- E. **Prevention of Light Trespass** All lighting shall be designed and implemented to mitigate light trespass onto adjacent properties. The maximum allowable light trespass shall be per Table 1 and Table 2.
- F. **Lighting Not Permitted** None of the following are permitted except by special permit:
 - 1. Dynamic lighting, such as moving lights, color changing lighting,
 - 2. Luminaires exceeding 500,000 peak candelas or 500,000 lumens
 - 3. Laser lighting
 - 4. Unshielded lighting such as string lights, light rope, neon lighting, or LED tubing.
 - 5. Lighting within Public Open Space areas.

Section 4. Lighting Zones

- A. **Lighting Zones** The Planning Director shall develop and maintain a lighting zone map of the community identifying the following zones as defined and required by the California Code of Regulations, Title 24, Part 1, Section 10-114 as follows:
 - Lighting Zone 0 (Zero)**, which shall include Environmentally Sensitive Habitat Area (ESHA), Public Open Space (POS) Area, and other areas within the community that are undeveloped or intended to be preserved in a natural state and for which lighting is only provided for safety or to meet applicable Federal, State or community requirements.
 - Lighting Zone 1 (One)**, which shall include all areas of the community that are adjacent to Lighting Zone 0, rural in character, and/or which are determined by the Planning Director to be suitable for low levels of exterior lighting at night.
 - Lighting Zone 2 (Two)**, which shall include all areas of the community that are semi-urban or urban in character, and/or which are determined by the Planning Director to be suitable needs for modest levels of exterior lighting at night.
 - Lighting Zone 3 (Three)**, which shall include all areas of the City that are urban in character or have high night light level requirements for specific property uses which are determined by the Planning Director to be suitable needs for medium to high levels of exterior lighting at night.
 - Lighting Zone 4 (Four)** shall not be used in the community except by special permit.
- B. **Posting of Zoning Map** The Lighting Zone Map shall be posted on the Web Site of the City and made available to the public.
- C. **Administration of Lighting Zones** The Planning Director shall develop a process to review proposed changes and appeals to the Lighting Zone map, which shall be approved

by City Council. Approved changes and appeals shall be updated onto the Lighting Zone Map. The Planning Director shall notify the California Energy Commission according to California Code of Regulations, Title 24, Part 1, Section 10-144(d).

Section 5. Lighting Zone Specific Lighting Requirements

- A. **Applicability** In addition to the foregoing, all outdoor lighting must meet the following requirements per Lighting Zone and whether the property being lighted is residential or non-residential. Residential properties shall comply with Table 1 and non-residential properties shall comply with Table 2 as described below. For the purposes of these requirements, multi-family residential properties of 8 domiciles or more shall be considered non-residential.
- B. **Curfew**
1. **Residential lighting** All exterior lighting shall be extinguished at the curfew time by an automatic shut off device. Motion sensor controlled lighting may be used after curfew if it is fully shielded and located within 10 feet of a building entrance.
 2. **Non-residential lighting** All exterior lighting shall be extinguished or dimmed 50% at the curfew time under the control of an automatic device. Motion sensor controlled lighting may be used to turn on or increase the light level for fully shielded lighting at building entrances, exits, parking lots and walkways.
- C. **Maximum Lumens** For a dedicated fluorescent, LED or HID luminaire, the allowed maximum rated lumens per a photometric report or manufacturer's product literature. For a line voltage socket luminaire or a low voltage socket luminaire, the rated lumens of the lamp installed in it.
- D. **Maximum Mounting Height** The maximum mounting height above adjacent grade. See Figure 2.
- Exception 1 to 17.41.060 (D):** There is no maximum mounting height for fully recessed luminaires.
- Exception 1 to 17.41.060 (D):** For multi-story residential buildings and motels with exterior entrance doors, the maximum mounting height shall be 8 feet above adjacent floor unless recessed into an adjacent ceiling, soffit or overhang.
- E. **Landscape lighting** Landscape lighting is permitted per Table 1 and Table 2. Downlight only means that the luminaire emits no light above 90 degrees relative to nadir (no light upwards). Shielded uplight means a luminaire aimed upward within 30 degrees of straight up that employs a baffle or louver to prevent glare. See Figure 3.
- F. **Architectural Floodlighting and Outlining** The use of lighting to illuminate building facades, statuary, and similar edifices for appearance or other needs not involving visual tasks such as walking or driving may be permitted in lighting zones 2 and 3 if all the following conditions are met:
1. A plan and rendering is submitted for review and approval by the Planning Director.

2. The amount of exposed light sources does not exceed 20,000 lumens per acre of the site.
3. The average illumination of a façade or edifice shall not exceed 5 footcandles (50 lux).
4. Such lighting shall be extinguished at curfew.

No such lighting may be used without a permit, and shall not be allowed in lighting zones 0 and 1 under any conditions.

Section 6. Plan Review and Permitting

- A. **Plan Review** All outdoor lighting installations or installations involving new lighting or the modification, alteration, or replacement of outdoor lighting shall submit plans and related information as listed below and receive a permit prior to proceeding with any work.
1. Plans depicting the proposed luminaires.
 2. Product specification data such as manufacturer's data sheets for each luminaire and control device(s) or systems being used.
 3. For non-residential properties, signed pages of required documents for Title 24 – Part 6 Section 140.7 and Title 24 – Part 11 Section 5.106.8 demonstrating compliance.
 4. Details, elevations, summaries or calculations as required to demonstrate compliance with this Ordinance.
- B. **Alternative Means and Methods** Deviations from the lighting standards provided in this chapter may be approved pursuant to a site plan review in accordance with Section 17.62.040. The request shall state the circumstances and conditions relied upon for the site plan review and shall be accompanied by accurate plans and a legal description of the subject property. In addition, the following information shall be submitted:
1. Plans depicting the proposed light fixtures;
 2. Detailed description of the circumstances which necessitate the deviation;
 3. Details on the use of the proposed light fixtures for which the deviation is requested, including the type of outdoor light fixture(s) to be used, the total light output and character of the shielding, if any; and
 4. Such other data and information as may be required by the planning director.
- C. **Appeals** The site plan review may be granted if the community makes the following findings:
1. There are special circumstances or conditions applying to the land, buildings or outdoor light fixtures for which the site plan review is sought, which are peculiar to the project and do not apply generally to the land, buildings, or

outdoor light fixtures in the surrounding area.

2. The strict application of this chapter would deprive the applicant of the reasonable use of the land or buildings, and the proposed deviation is the most restrictive means that will accomplish the purpose.
3. The proposed deviation will achieve the purpose and intent of this chapter, including light trespass, and will not adversely affect neighborhood character or the public health, safety or welfare.
4. The proposed project will not be contrary to or in conflict with the general purposes and intent of this title, nor the goals, objectives and policies of the general plan.

Section 7. Lighting Allowed by Temporary Use Permit Only (RESERVED)

Section 8. Conflicts with other Laws

In the event the provisions in this Ordinance conflict with other laws, this Ordinance shall be applied in a manner intended to carry out all provisions of law to the maximum extent feasible. When there is an irreconcilable conflict between the provisions of this Ordinance and the provisions of federal or state law, the provisions of federal or state law shall prevail over the provisions contained in this Ordinance only to the extent necessary to avoid a violation of those other laws or code provisions.

Section 9. Application of Ordinance to Legal Non-Conforming Lighting.

A. Amortization. A property owner shall comply with the requirements of this Ordinance by (date.) Any non-compliant lighting still in place after this compliance deadline shall become and remain extinguished. A property owner may apply for an extension of this deadline by submitting a request to the planning director thirty days before the compliance deadline detailing why an extension is needed. Any non-compliant lighting shall remain extinguished while the request is pending. Upon demonstration of good cause for providing a property owner additional time to comply with the requirements of this section, the planning director may extend the property owner's time to comply and/or may require a plan for compliance that required partial compliance in advance of full compliance. For purposes of this section, the term "good cause" shall mean a significant financial or other hardship which warrants an extension or conditional extension of the time limit for compliance established herein. In no instance, shall the planning director issue an extension of the compliance period in excess of one year's time. The planning director's decision shall be appealable.

B. Change of Use. If a property with non-compliant lighting changes use, then all outdoor lighting shall be brought into compliance with this chapter before the new use begins. Any uncorrected non-compliant lighting shall be removed or remain extinguished.

C. Resumption of Use after Abandonment. If a property with non-compliant lighting is abandoned for a period of six months or more, then all outdoor lighting shall be brought into compliance with this chapter before any resumption of use of the property occurs. Any uncorrected non-compliant lighting shall be removed or remain extinguished.

Section 10. Enforcement and Penalties. (RESERVED)

Section 11. Definitions.

For the purposes of this Chapter only, the following words and phrases are defined as follows:

1. “Curfew” means the time of day when lighting restrictions, based on zoning district, are in effect.
2. “Directional lighting” means methods of directing light downward, rather than upward or outward, with the intention of directing light where it is needed.
3. “Fully shielded” means a light fixture constructed and installed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the fixture’s lowest light-emitting part.
4. “Glare” means lighting entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.
5. “Hardscape” means permanent surface improvements to the site including parking lots, driveways, entrances, curbs, ramps, stairs, steps, medians, walkways and non-vegetated landscaping that is 10 feet or less in width, that are made of materials such as, but not limited to, concrete, asphalt, stone and gravel.
6. “Lamp” means, in generic terms, a source of optical radiation (i.e., “light”), often called a “bulb” or “tube”. Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.
7. “Light pollution” means the material adverse effect of artificial light including, but not limited to, glare, light trespass, sky glow, energy waste, compromised safety and security, and impacts on the nocturnal environment, including light sources that are left on when they no longer serve a useful function.
8. “Light trespass” means light that falls beyond the property it is located on. Permissible levels of light trespass shall be limited to those specific, quantitative thresholds of light intensity set forth in Tables 1 and 2. Light trespass shall be measured in the vertical plane of the property line on which the lighting in question is located. Field measurements to determine light trespass compliance shall not include the effect of light produced by street lights or other lighting not produced by luminaires under the jurisdiction of this Ordinance or produced by luminaires on other properties.
9. “Lumen” means the unit of measure used to quantify the amount of visible light produced by a lamp or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).
10. “Luminaire” means outdoor electrically powered illuminating devices, including a light source, outdoor reflective or refractive surfaces, lenses, electrical connectors and

components, and all parts used to mount the assembly, distribute the light and/or protect the lamp, whether permanently installed or portable.

11. "Seasonal lighting" means lighting installed and operated in connection with holidays or traditions. Seasonal lighting must be temporary lighting as defined herein and removed within 30 days of the date of installation, and shall not be re-installed within the same calendar year.
12. "Sky glow" means the brightening of the nighttime sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Sky glow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky.
13. "Temporary lighting" means lighting that (a) employs a cord and plug and is not permanently wired and (b) is installed and removed when the temporary need is over, not to exceed 30 days without a special use permit.
14. "Shielded Uplighting" means landscape lighting illuminating trees and landscape features employing an extended tube baffle or louver and aimed at least 60 degrees above horizontal.
15. "Outlining" means exposed light sources attached to structures for the primary purpose of attraction, branding or decoration.
16. "Dynamic lighting" means lighting that flashes, chases, changes color, or changes intensity for any purpose other than serving as a traffic signal, safety light, or aviation or marine marker.
17. "Light trespass" means light from one property also lighting an adjacent property. The amount of trespass is calculated and measured in the vertical plane at 5' above grade at the property line of the site on which the light(s) is located. If the adjacent property is a public street or sidewalk, then the point at which trespassing light is calculated and measured shall be the center of the public property or right-of-way between the property on which the light originates and any adjacent property.

Section 12 Tables

Continued on Next Page

Table 1 – Residential Lighting Limits

Restriction	Lighting Zone 0 (Zero)	Lighting Zone 1 (One)	Lighting Zone 2 (Two)	Lighting Zone 3 (Three)
Curfew	1 hour after sunset	11:00PM	11:00PM	11:00PM
Maximum lumens per fully shielded luminaire	600 Must be 2700K or lower	900	900	900
Unshielded and decorative lighting	None allowed	One per residence not to exceed 300 lumens	Two per residence not to exceed 300 lumens	Three per residence not to exceed 600 lumens
Maximum mounting height above adjacent grade	8 feet	12 feet	12 feet	15 feet
Landscape lighting	None allowed	Downlight only not to exceed 300 lumens	Downlight and/or shielded uplight not to exceed 450 lumens per luminaire	Downlight and/or shielded uplight not to exceed 600 lumens per luminaire
Maximum landscape lighting lumens per acre	0	6000	12000	18000
Maximum allowable light trespass pre-curfew	0	0.1 footcandle (1 lux)	0.2 footcandle (2 lux)	0.5 footcandle (5 lux)

Table 2 – Non Residential and Multi-family Residential Lighting Limits

Restriction	Lighting Zone 0 (Zero)	Lighting Zone 1 (One)	Lighting Zone 2 (Two)	Lighting Zone 3 (Three)
Curfew	1 hour after sunset	11:00PM	11:00PM	11:00PM
Maximum lumens per fully shielded luminaire	600	2500	5000	15000
Unshielded and decorative lighting	None allowed	None allowed	Maximum 600 lumens per luminaire not to exceed 12000 lumens per acre.	Maximum 900 lumens per luminaire not to exceed 18000 lumens per acre
Maximum mounting height above adjacent grade	8 feet	20 feet	25 feet	35 feet
Landscape lighting	None allowed	Downlight only not to exceed 450 lumens	Downlight and/or shielded uplight not to exceed 600 lumens per luminaire	Downlight and/or shielded uplight not to exceed 900 lumens per luminaire
Maximum landscape lighting lumens per acre	0	9000	12000	18000
Maximum allowable light trespass pre-curfew	0	0.1 footcandle (1 lux)	0.2 footcandle (2 lux)	0.5 footcandle (5 lux)

END OF ORDINANCE



Western Riverside Council of Governments

Planning Directors' Committee

Staff Report

Subject: Senate Bill (SB) 1 Update

Contact: Shirley Medina, Director of Planning and Programming, Riverside County Transportation Commission, smedina@rctc.org, (951) 787-7141

Date: August 10, 2017

The purpose of this item is to provide the Committee with an update on the provisions of SB 1 and highlight funding opportunities impacted by the bill.

Requested Action:

1. Receive and file.

Background

SB 1 (Beall) was passed by both legislative houses on April 6, 2017 and signed by Governor Brown on April 28, 2017. Also known as the Road Repair and Accountability Act of 2017, SB 1 estimates over the next 10 years \$26.575 billion will be allocated to local agencies and \$25.895 billion will be allocated within the state for transportation purposes. In addition, the bill sets preliminary performance outcomes for state highway investments to ensure the existing transportation system is brought into a state of good repair.

Revenues raised by SB 1 come from the following sources:

- 12 cent gasoline excise tax increase and annual adjustment for inflation (starting November 2017)
- Resets price-based excise tax on gasoline and annual adjustment for inflation (starting July 2019)
- Transportation improvement fee on registered vehicles - ranges from \$25 - \$175 depending on vehicle value (starting Spring 2018)
- 20 cent diesel excise tax increase and annual adjustment for inflation (starting November 2017)
- 4 percent increase on diesel sales tax (starting November 2017)
- \$100 vehicle registration fee on zero emission vehicles (starting July 2020)
- \$706 million Transportation Congestion Relief Program (TCRP) loan repayments

Funding Available from SB 1

Local Streets and Roads (LSR) and State Transit Assistance (STA) funds to Riverside County are anticipated to be \$38.7 million annually and \$15 million annually, respectively. Additionally, Caltrans District 8 will receive approximately \$226 million annually for the State Highway Operations and Protection Program (SHOPP) and the Riverside County Transportation Commission (RCTC) will have \$4.7 million annually to program in the State Transportation Improvement Program (STIP). Metrolink may receive approximately \$4 million annually for the next three years. The statewide Freeway Service Patrol (FSP) program will receive \$25 million annually of which RCTC expects to receive approximately \$1.2 million annually.

The rest of the funds available under SB 1 are expected to be distributed on a competitive basis. These funds include:

- Caltrans Sustainable Planning Grant – Applications Due Friday, October 20, see Attachment 1;
- Caltrans Adaptation Planning Grant – Applications Due Friday, October 20, see Attachment 2;
- Transit and Intercity Rail Capital Program (TIRCP) at \$273 million annually;
- Active Transportation Program (ATP) at \$96 million annually;
- Trade Corridor Enhancement Account (TCEA) at \$300 million annually;
- Local Partnership Program (LPP) at \$200 million annually; and
- Congested Corridor Program (CCP) at \$250 million annually.

The full text of the legislation can be found here:

http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB1.

Prior Action:

None.

Fiscal Impact:

This item is informational; therefore there is no fiscal impact.

Attachments:

1. Caltrans Sustainable Transportation Planning Grant Program Final Draft Grant Application Guide (Comments due by August 31, 2017).
2. Caltrans Adaptation Planning Grant Program Final Draft Grant Application Guide (Comments due by August 31, 2017).

Item 5.A

Senate Bill (SB) 1 Update

Attachment 1

Caltrans Sustainable Transportation
Planning Grant Program Final Draft
Grant Application Guide (Comments
due by August 31, 2017)

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CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT PROGRAM



-FINAL DRAFT- FY 2017-2018 Grant Application Guide

Additional Sustainable Communities Grants from
Senate Bill 1 – The Road Repair &
Accountability Act of 2017



Application Deadline

October 20, 2017 at 5:00 PM

California Department of Transportation
Division of Transportation Planning

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Table of Contents

Sustainable Transportation Planning Grant Program.....	1
Sustainable Transportation Planning Grant Summary Chart.....	2
Integrating Objectives and Considerations.....	3
Sustainable Communities – Grant Specific Objectives.....	11
General Information and Requirements.....	15
Application Preparation.....	22
• Tips and Pointers for Writing a Successful Grant Application.....	24
• Application Submittal Instructions.....	25
• Grant Application Checklist and Sample.....	26
• Scope of Work Checklist and Sample.....	36
• Project Timeline Checklist and Sample.....	41
• Third Party In-Kind Valuation Plan Checklist and Sample.....	43
• Local Resolution Checklist and Sample.....	45
Caltrans District and Regional Agency Boundaries Map.....	47
Caltrans Sustainable Transportation Planning Grant District Contact List.....	48

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Sustainable Transportation Planning Grant Program

The Sustainable Transportation Planning Grant Program was created to support the California Department of Transportation's (Caltrans') Mission: *Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.*

The California Legislature recently passed, and Governor Brown signed into law, Senate Bill (SB) 1 - The Road Repair and Accountability Act of 2017, a transportation funding bill that will provide a reliable source of funds to maintain and integrate the State's multi-modal transportation system. As a result of this new transportation funding, an additional \$25 million in Sustainable Communities Grants is available for the Fiscal Year (FY) 2017-2018 grant cycle. The additional grant funding is intended to support and implement Regional Transportation Plan (RTP) Sustainable Communities Strategies (SCS) (where applicable) and to ultimately achieve the State's greenhouse gas (GHG) reduction target of 40 and 80 percent below 1990 levels by 2030 and 2050, respectively.

Eligible planning projects must have a transportation nexus per Article XIX Sections 2 and 3 of the California Constitution. Therefore, successful planning projects are expected to directly benefit the multi-modal transportation system. Sustainable Communities Grants will also improve public health, social equity, environmental justice, and provide other important community benefits.

Sustainable Communities - Competitive Grants

\$12.5 million will be distributed through a competitive program to Metropolitan Planning Organizations (MPOs) with a sub-applicant(s), Regional Transportation Planning Agencies (RTPAs), cities and counties, transit agencies, and Native American Tribal Governments. MPOs can apply to the Sustainable Communities Competitive Grants only in collaboration with a sub-applicant(s). Funding distribution for the competitive program will depend on the quality and number of applications.

Sustainable Communities - Formula Grants

\$12.5 million will be distributed to the MPOs on a formula basis. The formula funds for the MPOs will reflect the same formula used to distribute Federal Highway Administration (FHWA) Metropolitan Planning PL funds. The FHWA PL formula has three components:

1. A base allocation
2. A two-part population component which distributes funds by the proportion of the total population of each MPO based on California Department of Finance estimates each January
3. An Air Quality component based on the proportion of federal Congestion Mitigation Air Quality funds to total programmatic FHWA PL funds

Sustainable Transportation Planning Grant Summary Chart

GRANT	FUND SOURCE	PURPOSE	WHO MAY APPLY	LOCAL MATCH
Sustainable Communities Competitive	State Highway Account (SHA) Budget State funds \$12.5 million Grant Min \$50,000 for Disadvantaged Communities; \$100,000 for All Others Grant Max \$1,000,000	Funds local and regional multimodal transportation and land use planning projects that further the region's RTP SCS (where applicable), contribute to the State's GHG reduction targets, and also assist in achieving the Caltrans Mission and Grant Program Overarching Objectives (See Page 3).	The following are eligible to apply as a primary applicant: • MPOs with sub-applicants • RTPAs • Transit Agencies; • Cities and Counties; • Native American Tribal Governments The following are eligible to apply as a sub-applicant: • MPOs/RTPAs • Transit Agencies • Universities and Community Colleges • Native American Tribal Governments • Cities and Counties • Community-Based Organizations • Non-Profit Organizations (501.C.3) • Other Public Entities**	11.47% minimum (in cash or an in-kind* contribution). The entire minimum 11.47% local match may be in the form of an eligible in-kind contribution. Staff time from the primary applicant counts as cash match.
Sustainable Communities Formula	State Highway Account (SHA) Budget State funds \$12.5 million	Funds local and regional multimodal transportation and land use planning projects that further the region's RTP SCS (where applicable), contribute to the State's GHG reduction targets, and also assist in achieving the Caltrans Mission and Grant Program Overarching Objectives (See Page 3).	The following are eligible to apply as a primary applicant: • MPOs	11.47% minimum (in cash or an in-kind* contribution). The entire minimum 11.47% local match may be in the form of an eligible in-kind contribution. Staff time from the primary applicant counts as cash match.

* For in-kind contribution requirements, refer to Page 20 of this Guide.

** Public entities include state agencies, the Regents of the University of California, district, public authority, public agency, and any other political subdivision or public corporation in the State (Government Code Section 811.2).

Integrating Objectives and Considerations

Successful grant applications address and articulate how the project relates to the Caltrans Mission, Grant Program Overarching Objectives, Grant Program Considerations, and the region's RTP SCS (where applicable). The Grant Specific Objectives on Page 11 indicate the specific purpose of the Sustainable Communities Grants, and must also be considered when preparing an application.

Grant Program Overarching Objectives

The following Grant Program Overarching Objectives are provided to guide grant application development, including:

Sustainability – Promote reliable and efficient mobility for people, goods, and services, while meeting the State's GHG emission reduction goals, preserving the State's natural and working lands, and preserving the unique character and livability of California's communities.

Preservation – Preserve the transportation system through protecting and/or enhancing the environment, promoting energy conservation, improving the quality of life, and/or promoting consistency between transportation improvements and State and Local planning growth and economic development patterns.

Mobility – Increase the accessibility of the system and mobility of people and freight.

Safety – Increase the safety and/or security of the transportation system for motorized and active transportation users.

Innovation – Promote the use of technology and innovative designs to improve the performance of our transportation system and provide sustainable transportation options.

Economy – Support the economic vitality of the area (i.e. enables global competitiveness, enables increased productivity, improves efficiency, etc.).

Health – Decrease exposure to local pollution sources, reduce serious injuries and fatalities on the transportation system, and promote physical activity especially through transportation means.

Social Equity – Promote transportation solutions that balance and integrate community values with transportation safety and performance, focusing on communities most affected by air pollution and climate change, while encouraging greater than average public involvement in the transportation decision making process.

Grant Program Considerations

The Grant Program also supports related State sustainability initiatives, explained further in the following pages and should be considered in grant application development, including:

- California Transportation Plan (CTP) 2040
- 2017 Regional Transportation Plan (RTP) Guidelines & Promoting Sustainable Communities in California
- Addressing Environmental Justice & Disadvantaged Communities
- Proposed 2017 Climate Change Scoping Plan Update, Appendix C
- Complete Streets & Smart Mobility Framework
- Climate Ready Transportation
- Planning for Housing

California Transportation Plan 2040

The *California Transportation Plan (CTP) 2040* vision is focused on sustainability: California's transportation system is safe, sustainable, universally accessible, and globally competitive. It provides reliable and efficient mobility and accessibility for people, goods, and services while meeting the State's GHG emission reduction goals and preserving the unique character of California's communities. This integrated, connected, and resilient multimodal system supports a thriving economy, human and environmental health, and social equity. *CTP 2040* is the umbrella plan that pulls together the State's long-range modal plans to envision the future system:

- Interregional Transportation Strategic Plan
- California Freight Mobility Plan
- California State Rail Plan
- California State Bicycle and Pedestrian Plan
- California High-Speed Rail Business Plan
- Statewide Transit Strategic Plan
- California Aviation System Plan

Competitive Sustainable Communities grant applications will integrate the appropriate *CTP 2040 Transportation Greenhouse Gas Reduction Strategies* (CTP 2040, Table 13 and Appendix 7 Technical Analysis). There are four categories of transportation GHG reduction strategies – demand management, mode shift, travel cost, and operational efficiency – that were developed based on input from the CTP 2040 advisory committees, and with input gathered from all of the State's 18 MPOs and 26 RTPAs.

CTP 2040 (CTP 2040 Table 13, Page 75; Appendix 7, Page 40):

<http://www.dot.ca.gov/hq/tpp/californiatrnsportationplan2040/2040.html>

2017 RTP Guidelines and Promoting Sustainable Communities in California

The California Transportation Commission recently adopted the *2017 RTP Guidelines for RTPAs and 2017 RTP Guidelines for MPOs* which now includes *Appendix K – Promoting Health & Health Equity in MPO RTPs* and *Appendix L – Planning Practice Examples*. These appendices highlight planning practices that are undertaken by large, medium, and small MPOs in both rural and urban areas throughout the State. The intent of additional Sustainable Communities grant funding, pursuant to SB 1 - The Road Repair and Accountability Act of 2017, is to encourage local and regional planning that furthers state goals, including but not limited to, the goals and best practices cited in the RTP Guidelines. Competitive applications will incorporate these cutting-edge planning practices into their proposed planning projects.

2017 RTP Guidelines (Appendix K, Page 273; Appendix L, Page 309):

<http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index.html>

Caltrans supports SB 375 (Steinberg, Statutes of 2008) RTP SCS efforts. Successful applications must be compatible with an existing adopted SCS, where applicable, that meets the region's GHG targets, and must strongly support and aim to implement regional SCS efforts. The SCS planning process is intended to help communities reduce transportation related GHG emissions, coordinate land use and transportation planning, and assist local and regional governments in creating sustainable communities for residents throughout the State. Information on SB 375-related planning efforts can be found at: <http://www.arb.ca.gov/cc/sb375/sb375.htm>.

Although most rural areas of the State are not subject to SB 375 SCS requirements, Caltrans still promotes the development of sustainable communities in these areas of the State and efforts to match GHG reduction targets and other goals embodied in SCSs under SB 375. Eligible rural agencies are strongly encouraged to apply for Sustainable Communities Competitive Grants.

Addressing Environmental Justice and Disadvantaged Communities^{1,2}

Caltrans integrates environmental justice in all of its activities. In the past, low-income and minority communities disproportionately bore many of the negative impacts of transportation projects. It is the goal of environmental justice to ensure that when transportation decisions are made, low-income and minority communities have a full opportunity to participate in the decision-making process, and they receive an equitable distribution of benefits and not a disproportionate share of burdens, which contribute to poor health outcomes.

Caltrans encourages eligible applicants to apply for Sustainable Communities Competitive Grants to address transportation needs and deficiencies in disadvantaged communities. Supporting planning projects that benefit a disadvantaged community is a priority; therefore, a minimum threshold of 50 percent of Sustainable Communities Competitive Grants has been identified for projects that benefit disadvantaged communities, also including Native American Tribal Governments and rural communities. As such, special consideration will be given to planning projects that benefit disadvantaged communities. Grant applicants are required to provide justification in their grant application for how the project area meets their definition of a disadvantaged community. The optional tools below, related to environmental justice and health, are intended to help applicants define a very context-dependent definition of a disadvantaged community. Regionally and/or locally defined disadvantaged communities are acceptable. Applicants may also include other population characteristics, such as income or level of education. Information about environmental justice and disadvantaged communities can be found at:

Desk Guide – Environmental Justice in Transportation Planning Investments:

http://www.dot.ca.gov/hq/tpp/offices/ocp/documents/ej_titlevi_files/EnvironmentalJusticeDeskGuideJan2003.pdf

Community Primer on Environmental Justice & Transportation Planning:

http://www.dot.ca.gov/hq/tpp/offices/ocp/documents/ej_titlevi_files/EJ_Primer_4_10_WEB.pdf

SB 535 (De Leon, Statutes of 2012):

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535

Senate Bill 535 tasked the California Environmental Protection Agency with defining disadvantaged communities in order to meet the statutory requirements to invest a quarter of Greenhouse Gas Reduction Fund (GGRF) to projects benefiting disadvantaged communities and ten percent to projects located within a disadvantaged communities. SB 535 may assist applicants with defining disadvantaged communities and the many factors to consider.

Assembly Bill (AB) 1550 (Gomez, Statutes of 2016):

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1550

AB 1550 further refined the GGRF statutory requirements to invest in disadvantaged communities. AB 1550 provides definitions for low income households and low income communities that may also be considered in application development.

¹ Source: Desk Guide – Environmental Justice in Transportation Planning Investments (2003)

² Source: Community Primer on Environmental Justice & Transportation Planning (2008)

SB 1000 (Leyva, Statutes of 2016):

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1000

SB 1000 requires local jurisdictions to develop environmental justice elements in their next general plan updates. Specifically, the environmental justice element, or the environmental justice goals, policies, and objectives in other elements, must be adopted or reviewed upon the adoption or next revision of 2 or more elements concurrently on or after January 1, 2018. Grant applicants are encouraged to describe efforts to comply with this new general plan requirement.

Displacement/Gentrification

Transportation improvements, especially new rail lines and stations to low-income communities, can increase access to opportunities. But they can also result in much higher property values and an increase in the cost of owning and renting property, inadvertently displacing existing residents and businesses. Being forced to leave a home is a stressful, costly and traumatic life event, especially when affordable housing is so limited. There is a growing recognition of tools and strategies that can be implemented alongside community investments to reduce displacement. Grant applicants are encouraged to reference the *2017 RTP Guidelines, Appendices K and L*, for best practices in addressing displacement of low income and disadvantaged communities.

CalEnviroScreen Version 3.0:

<http://oehha.maps.arcgis.com/apps/View/index.html?appid=c3e4e4e1d115468390cf61d9db83efc4>

CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution.

The tools below provide additional criteria and indicators for climate vulnerability and community health disadvantage that CalEnviroScreen does not. The tools can help reduce health inequities. The tools include:

California Health Disadvantage Index (HDI): <http://phasocal.org/ca-hdi/>

The California Health Disadvantage Index (HDI) is an interactive data and mapping tool that provides a detailed snapshot of the social determinants of health across California, mapped down to the Census tract level. HDI provides comparison rankings of Census tracts statewide and an accompanying policy action guide. Therefore, the HDI can be a useful tool in prioritizing areas with high levels of social and economic disadvantage for funding, policy, and planning interventions. HDI was developed by the Public Health Alliance of Southern California in collaboration with health departments and data experts across the state. Because the HDI focuses on the social and environmental conditions that contribute to health, policy makers and local agencies can use it to identify actionable policies that would improve health in their community, such as improving transportation access, housing affordability and quality, or access to parks and open space. The tool will soon be updated with a new map and additional indicators, and will be renamed the California Healthy Places Index (HPI).

Understanding the HDI Score

The HDI includes a composite score for each Census tract in the State. The higher the score, the greater the disadvantages to health. Each Census tract's score is converted to a percentile, which allows it to be compared to other California Census tracts. For example, an HDI percentile of 79 indicates that a Census tract would face more cumulative social challenges to health than 79% of the Census tracts in California. HDI percentile rankings are further broken into quartiles, with percentiles above 75 typically used to indicate disadvantaged communities. Thus, higher scores can be used to

demonstrate a community, or project/service area, is disadvantaged for purposes of qualifying for the minimum threshold of 50% for disadvantaged communities in this program.

In addition to the composite score and percentile ranking, applicants can review the individual domain scores or indicators themselves and explain how their project will improve one or more of these public health challenges. The numeric value and percentile ranking for these component indicators can be found either by using the [live map](#) or by accessing the [data directly](#).

HDI Examples:

Indicator	HDI Percentile	How will project improve this health challenge?
<i>Domain (Composite) Scores</i>		
Complete Communities Score	Percentile ranking of all complete communities-related indicators	Demonstrate how this plan will address health and transportation challenges related to complete communities indicators (park access, supermarket access, retail density and tree canopy)
Economic Resources Score	Percentile ranking of all economic-related indicators	Demonstrate how this plan will address health and transportation challenges related to economic indicators such as households without auto access, median income, high housing costs and unemployment rate
<i>Individual Indicators</i>		
No Auto Access	XX%	Describe how plan will increase and improve transportation access to vital destinations, goods and services for those without auto access.
Traffic density	XX%	Describe how the plan will improve traffic safety, including for people walking and bicycling in the project area.
No Park Access	XX%	Demonstrate how project will improve transportation access to parks/ open space.

For more information on the HDI, including how to calculate a score for your project area and suggested project types for improving public health, visit <http://phasocal.org/ca-HDI/>.

CDPH Climate Change and Health Profile Reports (CHPRs):

<https://www.cdph.ca.gov/Programs/OHE/Pages/ClimateHealthProfileReports.aspx>

The Climate Change and Health Profile Reports are designed to help counties in California prepare for the health impacts related to climate change through adaptation planning. The reports present projections for county and regional climate impacts, the climate-related health risks, and local populations that could be vulnerable to climate effects. The information is based on available science compiled from previously published, state-sponsored research and plans.

Proposed 2017 Climate Change Scoping Plan Update, Appendix C

The California Air Resources Board (ARB) proposed *2017 Climate Change Scoping Plan Update* includes *Appendix C, Vibrant Communities & Landscapes – A Vision for California in 2050*, to guide how the State develops communities, preserves and protects its landscapes, and ensures that all Californians have equitable access to housing, health care, jobs, and opportunity. Competitive Sustainable Communities grant applications will demonstrate a linkage to this land use vision.

The ARB proposed 2017 Climate Change Scoping Plan Update, Appendix C, also includes *Potential State-Level Strategies to Advance Sustainable, Equitable Communities and Reduce Vehicle Miles of Travel (VMT)* which outlines a list of potential additional strategies that the State could pursue to help

achieve further VMT reduction, support local and regional actions already underway, and advance multiple additional goals. While this document is intended to guide State-level actions, many of the potential strategies can also be implemented at a regional and local level. Sustainable Communities grant applicants are encouraged to explore these strategies and apply them, as appropriate, to proposed planning projects.

Proposed 2017 Climate Change Scoping Plan Update, Appendix C:

https://www.arb.ca.gov/cc/scopingplan/app_c_vibrant_comm_vmt_measures.pdf

Complete Streets and Smart Mobility Framework

Caltrans also supports complete streets and the Smart Mobility Framework (SMF). If applicable, Caltrans encourages applicants to consider the tools and techniques contained in the SMF as well as typical components of complete streets. Specifically, this might include how the project addresses components of community design, regional accessibility, place types, and priority activities to achieve smart mobility outcomes, community transition, and associated multimodal performance measures for the appropriate context of the problem. Information on these efforts can be found at:

Complete Streets: http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets.html

SMF: <http://www.dot.ca.gov/hq/tpp/offices/ocp/smf.html>

Climate-Ready Transportation

California's six key climate change strategy pillars provide a framework for reducing California's GHG emissions and increasing resiliency to the anticipated effects of global warming:

(1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing to 50 percent our electricity derived from renewable sources; (3) doubling the efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of short-lived climate pollutants; (5) managing farm and rangelands, forests and wetlands so they can store carbon; and, (6) updating the Safeguarding California Plan - California's climate adaptation strategy. Climate change poses many threats to our communities' health, well-being, environment, and property. Extreme weather, rising sea levels, shifting snowpack, among other impacts will touch every part of peoples' lives in the next century. Planning key actions now will help lessen impacts and cope with changes. Government, at every level, must work together to safeguard our State by taking steps to reduce our own impacts and increase our resilience in the future.

Executive Order B-30-15 specifically addresses the need for all of the State's planning and investments to consider the exposures and risks from a changing climate, anticipating current and future impacts and disruptions that are likely to occur. The order establishes a California GHG emissions reduction target of 40 percent below 1990 levels by 2030, directs state government to take climate change into account in all planning and investment decisions, and employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives.

Executive Order B-30-15 describes four guiding principles when making planning and investment decisions:

- Priority should be given to actions that both build climate preparedness and reduce GHG emissions
- Where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts
- Actions should protect the state's most vulnerable populations
- Natural infrastructure solutions should be prioritized

The Governor's Office of Planning and Research led a Technical Advisory Group to develop guidance to help State agency personnel decide when to take climate change into account when planning infrastructure and investments, and how to do so while implementing the four above principles, including how to increase social equity and health for vulnerable communities in the course of planning and operations. The Guidance to implement Executive Order B-30-15 is available here: (to be provided at a later date when complete).

Community Climate Resiliency

Grant applicants are encouraged to consider if the surrounding community is experiencing any specific climate vulnerabilities and how the proposed planning project aims to address specific concerns. Grant applicants should also describe how potential climate impacts are taken into consideration in the proposed planning project, such as the incorporation of natural infrastructure, and, if applicable, how the project conforms with the local implementation of SB 379 (Jackson, Statutes of 2015), Government Code Section 65302(g)(4), where cities and counties are required to address climate adaptation and resiliency strategies in the safety element of their general plan.

Climate Action Plans: <http://www.ca-ilg.org/climate-action-plans>

Many California cities and counties are developing Climate Action Plans to reduce their GHG emissions. The website above provides a host of resources, including example Climate Action Plans and templates.

Safeguarding California: <http://resources.ca.gov/climate/safeguarding/>

Safeguarding California is the strategy that organizes state government climate change adaptation activities.

California Climate Adaptation Planning Guide:

http://resources.ca.gov/climate/safeguarding/adaptation_policy_guide/

The Adaptation Planning Guide provides guidance to support regional and local communities in proactively addressing the unavoidable consequences of climate change. It provides a step-by-step process for local and regional climate vulnerability assessment and adaptation strategy development.

Planning for Housing

Development patterns directly impact the emissions of greenhouse gases, including those from transportation between jobs and housing. Improved coordination between housing and transportation can reduce commute times, increase transit ridership, lower vehicle miles traveled, lower pollution and GHG, provide greater economic opportunity, and other positive outcomes. Adding coordination with housing planning as part of the Sustainable Communities grants furthers the State's planning goals, including the goals of SB 375, which supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

To support planning for housing California's growing population, the State's Department of Housing and Community Development (HCD) reviews local housing elements of general plans, which identifies capacity for projected housing needs and addresses governmental constraints on housing supply and cost. Local governments are further required to annually submit progress reports on the implementation the housing element and provide a detail of production toward their projected housing needs.

Special consideration will be given to city and county grant applicants with a housing element that has been adopted by the jurisdiction's governing body and subsequently determined to be in substantial compliance with State housing element law pursuant to Government Code Section 65585. The jurisdiction's adopted housing element will be deemed to have met this requirement if the adopted element is received by HCD by the grant application deadline; and, HCD subsequently determines the adopted housing element to be in substantial compliance pursuant to Government Code Section 65585 without further amendment by the date of the award recommendation. A jurisdiction's current housing element compliance status can be obtained at <http://www.hcd.ca.gov/community-development/housing-element/docs/status.pdf>.

In order to receive special consideration during the grant evaluation process, the city or county grant applicant must also provide a justification in their grant application and submit to HCD the Annual Progress Report (APR) required by Government Code Section 65400 for calendar years 2013, 2014, 2015, and 2016. For the purposes of the Grant Program, required APRs must be submitted by the date of award recommendation. Please note that charter cities are not exempt from this specific program requirement and must submit an Annual Progress Report for the calendar years mentioned above. More detail on APRs is at <http://www.hcd.ca.gov/community-development/housing-element/index.shtml> under Housing Elements - Annual Progress Reports.

In future grant cycles, Sustainable Communities grant applicants will be required to have a compliant housing element and submit APRs in order to be eligible for Sustainable Communities grant awards.

Sustainable Communities – Grant Specific Objectives

Competitive Grants

The grant specific objective of the Sustainable Communities Competitive Grants is to encourage local and regional multimodal transportation and land use planning that furthers the region's RTP SCS (where applicable), contributes to the State's GHG reduction targets and other State goals, including but not limited to, the goals and best practices cited in the 2017 RTP Guidelines, address the needs of disadvantaged communities, and also assist in achieving the Caltrans Mission and Grant Program Overarching Objectives (See Page 3).

Applicants should demonstrate how the proposed effort would:

- Integrate Grant Program Considerations (See Pages 3-10)
- Advance transportation related GHG emission reduction project types/strategies (i.e., mode shift, demand management, travel cost, operational efficiency, accessibility, and coordination with future employment and residential land use, etc.)
- Identify and address deficiencies in the multimodal transportation system, including the needs of environmental justice and disadvantaged communities
- Encourage stakeholder collaboration
- Involve active community engagement
- Coordinate transportation, housing, and land use planning
- Promote the region's RTP SCS (where applicable), State planning priorities (Government Code Section 65041.1, and climate adaptation goals (Safeguarding California)
- Ultimately result in funded and programmed multimodal transportation system improvements

Formula Grants

The grant specific objectives, eligibility requirements, and performance considerations for the Sustainable Communities Formula Grants awarded to MPOs are consistent with the Sustainable Communities Competitive Grants. The intent of the Sustainable Communities Formula Grants is to carry out the objectives of the region's RTP SCS (where applicable) and the RTP Guidelines Appendices K & L. In addition, MPOs are strongly encouraged to administer Sustainable Communities Formula funding in a transparent manner and maintain non-profit eligibility, consistent with the legislative intent of Senate Bill 1 – The Road Repair & Accountability Act of 2017. MPOs should meet the following minimum eligibility criteria to apply for Sustainable Communities Formula Grants:

- Consolidated Planning Grant Carryover is at, or below 100% of the annual FHWA PL allocation
- Have an RTP SCS that meets the SB 375 GHG reduction targets
- Meet civil rights and environmental justice obligations, as summarized in Section 4.2 of the RTP Guidelines

MPOs have flexibility for how the Formula Grant allocation is administered. For example, MPOs may use these funds for a regional competitive grant program, integrated land use and transportation planning activities related to developing their SCS, carrying out the best practices cited in the RTP Guidelines, or a combination thereof.

If an MPO uses Formula Grant funds to administer a regional grant program, the MPO must submit their grant program criteria and list of eligible applicants and sub-applicants to the Caltrans District

and Caltrans Office of Regional Planning (ORP). This step is to ensure it aligns with the Caltrans Sustainable Communities Competitive Grants, including city and county housing element compliance. MPOs will also submit a list of awarded grants to the Caltrans District and ORP. MPOs should coordinate the submittal of this information with the Caltrans District and ORP to avoid delays for releasing the call-for-projects and grant awards.

MPOs are responsible for drafting a formal amendment to the current Overall Work Program (OWP) and OWP Agreement (OWPA), including a scope of work and timeline, for adding Sustainable Communities Formula Grant funds that will serve as the grant application, due October 20, 2017. The draft OWP/OWPA amendment process includes meaningful consultation with Caltrans district staff and Caltrans Office of Regional Planning. Once Caltrans concurs with the draft OWP/OWPA amendment, the MPO may seek board approval of the amendment. Caltrans district staff will issue formal approval of the OWP/OWPA amendment and Caltrans Office of Regional Planning will complete the programming process for these funds. For future years, Sustainable Communities Formula Grants will be a part of the annual draft OWP development and approval process.

The following funding table shows how formula funds will be distributed to each MPO:

MPO	Total Allocation
Tahoe Metropolitan Planning Organization	\$160,750
Madera County Transportation Commission	\$164,209
Kings County Association of Governments	\$162,943
Shasta Regional Transportation Agency	\$163,172
Butte County Association of Governments	\$180,569
Merced County Association of Governments	\$197,424
San Luis Obispo Council of Governments	\$195,962
Tulare County Association of Governments	\$246,944
Santa Barbara County Association of Governments	\$224,579
Stanislaus Council of Governments	\$291,053
San Joaquin Council of Governments	\$341,671
Kern Council of Governments	\$374,899
Association of Monterey Bay Area Governments	\$315,267
Fresno Council of Governments	\$407,484
Sacramento Area Council of Governments	\$774,991
San Diego Association of Governments	\$1,021,553
Metropolitan Transportation Commission	\$2,106,140
Southern California Association of Governments	\$5,170,390
Total	\$12,500,000

Example Sustainable Communities Grant Project Types

These examples include projects that explore and plan for reductions in GHG and VMT, and/or integrate Land Use and Transportation planning.

- Studies, plans or planning mechanisms that advance a community's effort to reduce single occupancy vehicle trips and transportation related GHG through strategies including, but not limited to, advancing mode shift, demand management, travel cost, operational efficiency, accessibility, and coordination with future employment and residential land use
- Studies, plans or planning mechanisms that assist transportation agencies in creating sustainable communities and transit oriented development
- SCS development
- Community to school studies or safe routes to school plans
- Studies, plans or planning mechanisms that advance a community's effort to address the impacts of climate change and sea level rise

- Studies that promote greater access between affordable housing and job centers
- Context-sensitive streetscapes or town center plans
- Complete street plans
- Active transportation plans, including bicycle, pedestrian and trail master plans
- Bike and pedestrian plans with a safety enhancement focus, including Vision Zero plans
- Traffic calming and safety enhancement plans
- Corridor enhancement studies
- Health and transportation studies, including health equity transportation studies and other plans that incorporate health into transportation planning
- Climate change adaptation plans for transportation facilities
- Identification of policies, strategies, and programs to preserve transit facilities and optimize transit infrastructure
- Studies that evaluate accessibility and connectivity of the multimodal transportation network
- Studies to improve access to social services and other community destinations for disadvantaged communities
- Studies, plans or planning mechanisms that address environmental justice issues in a transportation related context
- Station area planning
- Student internships for rural agencies and/or disadvantaged communities
- First Mile/Last Mile project development planning
- Planning for zero or near zero emission vehicles
- Planning for autonomous vehicles Integration of transportation and environmental planning
- Shared mobility services planning studies
- Road or parking pricing studies
- Transportation Demand Management Studies
- Congestion pricing studies and plans
- Commute trip reduction studies and plans
- Planning to remove or reduce barriers created by transportation infrastructure such as highways, overpasses and underpasses, that create disconnected communities

Land use planning activities ***in coordination with a transportation project***. Examples include:

- An update to a general plan land use element or zoning code that increases development opportunities around key transportation corridors or nodes
- Creation of a Transit-Oriented Development overlay zone or other special zoning district around key transportation corridors or nodes
- Studies, plans, and policies that address land use conflicts with major transportation corridors such as major highways, ports, shipping and freight corridors, etc. that are near sensitive land uses such as homes, schools, parks, etc. or potentially impacted by climate change

Eligible Activities and Expenses

Eligible activities must have a transportation nexus per the California Constitution, Article XIX Section 2 and 3. Please consult with Caltrans district staff for more information on whether costs are eligible for funding. Some examples of eligible costs include:

- Data gathering and analysis
- Planning consultants
- Conceptual drawings and design
- Community surveys, meetings, charrettes, focus groups
- Bilingual services for interpreting and/or translation services for meetings
- Community/stakeholder advisory groups
- Project administration (up to 5% of the grant is allowed, e.g., quarterly reports, invoicing, project management)

Ineligible Activities and Expenses

Some activities, tasks, project components, etc. are not eligible under these grant programs. If an application has any of the following elements, it will be disqualified. Ineligible activities and expenses include:

- Environmental studies, plans, or documents normally required for project development under the National Environmental Policy Act or the California Environmental Quality Act
- Engineering plans and design specification work
- Project Initiation Documents (PIDs)
- Regional Transportation Plans (RTP) or updates to the RTP, excluding SCS development
- Construction projects, capital costs, such as the building of a facility, or maintenance
- Purchasing of office furniture, or other capital expenditures
- Decorations, e.g., for public workshop events
- Acquisition of vehicles or shuttle programs
- Organizational membership fees
- Unreasonable incentives such as prizes for public participation
- Charges passed on to sub-recipient for oversight of awarded grant funds
- Other items unrelated to the project

General Information and Requirements

This section provides a brief overview of the grant application review process, financial, contracting, subcontracting, and legal requirements pertaining to the competitive grant program. The content of this section should be notably considered in the development of grant applications as it lays the foundation for what to expect when applying for these grant funds. Upon award, grantees will receive more specific guidelines including administrative and reporting requirements.

Application Review Process and Evaluation Considerations

Review Process

All applications submitted to the Sustainable Transportation Planning Grant Program go through multiple levels of review including reviews by Caltrans District and HQ staff, and State interagency review committees. District staff reviews all applications for content, submission of proper documentation, and overall relationship to regional and local planning efforts. The district rates each application and provides comments to inform the State interagency review committee. The grant review committees evaluate applications for content, completeness, meeting technical requirements, overall relationship to statewide planning efforts, and compliance with state and federal planning requirements. Grant applications that address every aspect of the grant specific objective will score higher overall. Once the grant review committees evaluate, rank, and select the best applications for grant funding, final recommendations are presented to Caltrans management and California State Agency for approval.

Community Engagement

Sustainable Communities Competitive Grant applications must include an explanation of how local residents and community-based organizations will be meaningfully engaged in developing the final product, especially those from disadvantaged and low-income communities, and how the final product will address community-identified needs. Below are some best practices in community engagement that applicants are encouraged to implement, as applicable and appropriate, in their transportation planning projects:

- Utilize a Participatory Budgeting (PB) planning process, as appropriate. PB is a democratic approach to public spending that meaningfully and deeply engages people in government and the community. During PB, community members democratically decide how to spend part of a public budget, enabling them to make the fiscal decisions that affect their lives and the health of their communities.
- Seek out existing community-based organizations or agencies that organize vulnerable populations, to be able to reach out and form collaborative relationships.
- Involve local health departments which can provide assistance in reaching community-based organizations and vulnerable community members.
- Collaborate with vulnerable communities to design and implement programs, plans and policies. Robust engagement of vulnerable communities in significant agency decisions brings about better decisions through increased input from different perspectives, increases buy-in and acceptance of decisions and support for their implementation.
- Make opportunities for input accessible in terms of formats (online, in public meetings, one on one, by mail, etc.), venues (at school and community events, community centers, libraries, transit hubs, etc.), hours (evening or weekend), and language (accessible to lay people and translated into the principle languages of the relevant communities, including accessible media such as caption videos).

- Utilize the International Association for Public Participation (IAP2) tool, a [Spectrum of Public Participation](#) that can help agencies define how much power they are offering communities over decisions.
- Develop a written collaboration agreement or memorandum of understanding that defines respective roles, expectations, desired outcomes, and agreements for how to work together.
- Establish an advisory group of representatives of vulnerable communities, including community leaders and give them worthwhile roles to design the public engagement process, so that community capacity is built during the collaboration process.

Performance Considerations

Previous grantee performance will be considered during the evaluation process. Applicants with a history of inadequate performance such as poor grant project management, failure to achieve grant project milestones, untimely invoice submittals, or an overall poor quality of the final grant product may be at a competitive disadvantage in the application review process. Grant funds may not be awarded to prior grant recipients with unresolved past grant performance issues. Additionally, applicants that have an excessive balance of or consistently relinquish any transportation funds administered by Caltrans Planning and/or have unresolved audit issues or findings will also be at a competitive disadvantage in the application review process. Applicants that have also failed to satisfy the required state and federal planning requirements, including submittal and administration of the Overall Work Program, RTPs, and Transportation Improvement Program, may not be awarded grants.

Award Terms

Caltrans is committed to being an active partner. If awarded a grant, the applicant should include Caltrans district staff when planning both technical advisory and community meetings. In addition, Caltrans district staff will help to ensure that the approved Scope of Work, Project Timeline, and project funding will be maintained throughout the life of the contract. Applicants are also recommended to engage Caltrans District Staff throughout the entire grant life, when applicable.

If an agency does not demonstrate adequate performance and timely use of funds, Caltrans may take appropriate actions, which can include termination of the grant.

Contracting with Caltrans and Project Timelines

Project Start Dates

All awarded grant funds must be programmed during the State FY 2017-2018. The project start date depends on the method of contracting with Caltrans. For MPOs and RTPAs with a current Master Fund Transfer Agreement (MFTA), work may begin as early as January 2018. For awarded grantees that do not have a current MFTA with the Caltrans Office of Regional Planning (i.e. cities, counties, transit agencies, Tribal Governments), Caltrans will contract directly with the primary grant recipients through the Restricted Grant Agreement (RGA) process. For grant recipients that undergo the RGA contracting process, work may begin as early as April 2018, assuming the grantee has received a fully executed contract and has been notified by Caltrans district staff to begin work. It is important for applicants to reflect the estimated project start date in the Scope of Work and Project Timeline. Project Timeline constraints for both methods of contracting with Caltrans are provided below. Awardees are required to submit all supporting materials and a signed agreement or risk forfeiting the grant award.

Restricted Grant Agreement (RGA) Project Timeline

Consider these dates when developing the Scope of Work and Project Timeline:

April 2018

- Anticipated start date

February 28, 2020

- Contract expires **(no time extensions will be granted)**
- Reimbursable work must be completed

April 28, 2020

- All final invoices must be submitted to Caltrans for approval and reimbursement. This allows Caltrans sufficient time to comply with the State Controller's Office payment requirements.

Master Fund Transfer Agreement Project Timeline (MPOs/RTPAs Only)

Consider these dates when developing the Scope of Work and Project Timeline:

January 2018

- Anticipated start date

February 28, 2020

- Project end date
- Reimbursable work must be completed

April 28, 2020

- A Final Request for Reimbursement must be submitted to Caltrans for approval and reimbursement. This allows Caltrans sufficient time to comply with the State Controller's Office payment requirements.

Contract Options for Native American Tribal Governments

Native American Tribal Governments have the following options for contracting with Caltrans:

- (1) Contracting with Tribes Directly – The authority Caltrans uses to contract with tribes directly comes from California Streets and Highways Code section 94, and is extremely limited. Caltrans Legal requires the tribes to provide a limited waiver of sovereign immunity. However, Caltrans Native American Liaison Branch makes sure that any waiver is very specifically limited in scope and in time to only applies to the contract itself (and to any possible audits). In an effort to streamline the RGA contracting process, there is a Sustainable Communities RGA boilerplate template for Native American Tribal Governments, available upon request.
- (2) Partnering with a Regional Agency – Another mechanism for contracting with Caltrans is to collaborate with an MPO or RTPA. Caltrans can pass through grant funding to tribes for planning projects where options or time are limited. This option uses the three-part contract, MFTA/OWP/OWPA, and is usually the quickest option to allow planning projects to get started.
- (3) Transferring Funds Pursuant to 23 U.S.C. 202(a)(9) – *Section 202(a)(9) of title 23, United States Code encourages cooperation between States and Tribes by allowing any funds received from a State, county, or local government to be credited to appropriations available for the Tribal Transportation Program (TTP). One potential source of such funding is funds apportioned or allocated to a State under title 23. Section 104(f)(3) allows the Secretary of Transportation to,*

at the request of a State, transfer among States, or to the FHWA, funds that have been so apportioned or allocated. This provision, used in conjunction with the authority under 23 U.S.C. 209(a)(9), allows State funds to be transferred to FHWA, which in turn would provide the funds to the specified Tribe. Please view [this document](#) for more information.

Caltrans has successfully used the federal *Section 202(a)(9)* process to transfer Sustainable Communities Grant funds to a Native American Tribal Government. In order to use this transfer process, an agreement would need to be in place with FHWA or Bureau of Indian Affairs, the Tribe, and the State that clearly identifies the project and the roles and responsibilities of all parties. Each interagency fund transfer includes 1) a fund transfer template and 2) an addendum lining out the specifics of the terms. This option requires involvement and approval by Caltrans Legal and the funds must be used for the intended purpose of the awarded Sustainable Communities grant.

Grant Project Administration Requirements

Overall Work Program (for MPOs/RTPAs Only)

All MPOs and RTPAs must have the entire grant award and local match programmed in the FY 2017-2018 OWP no later than May 1, 2018. Approved grant projects must be identified as **individual** Work Elements in the current OWP and in future OWPs until the project is completed.

Quarterly Reporting

For MPOs and RTPAs, the progress of each awarded grant project must be included as part of the OWP Quarterly Progress and Expenditure Report. If this method of reporting is not adequately satisfied, Caltrans staff will require separate quarterly reports for each awarded grant project.

All other primary grant recipients shall submit progress reports every quarter for each awarded grant project. Caltrans district staff will provide the brief report form and due dates.

Final Product

All final reports funded through the Sustainable Transportation Planning Grant Program shall credit the Caltrans' financial participation on the cover or title page. An electronic copy of all final reports shall be forwarded to the Caltrans District Office responsible for the administration and oversight of the grant.

Ownership

Any technologies or inventions that may result from the use of these grants are in the public domain and may not be copyrighted, sold, or used exclusively by any business, organization, or agency. Caltrans reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use for public purposes.

Third Party Contracts

The agreements between a grantee and a sub-recipient, consultant, or sub-consultant are often referred to as "third party contracts." An eligible sub-applicant will be identified by an eligible applicant on the onset of the application. If a grantee or a sub-recipient is going to hire a consultant to perform work during the project, then proper procurement procedures must always be used.

Grantees may use their agency's procurement procedures as long as they comply with the Local Assistance Procedures Manual, Chapter 10. In addition, work can only be contracted if it has been stated in the applicant's Scope of Work and Project Timeline. A grantee is fully responsible for all work performed by its sub-recipient, consultant, or sub-consultant. Caltrans solely enters into a contract directly with the grantee; therefore the grantee is responsible to ensure that all third parties adhere to the same provisions included in the contractual agreement between Caltrans and the grantee.

All government funded consultant procurement transactions must be conducted using a fair and competitive procurement process that is consistent with the Local Assistance Procedures Manual, Chapter 10. All documentation of third party contract procurements must be retained and copies of all agreements must be submitted to Caltrans. For more information on third party contracting, visit the following link:

Local Assistance Procedures Manual: <http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm>

Non-Discrimination Requirements

Title VI Non-Discrimination Requirement

Title VI of the U.S. Civil Rights Act prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving federal financial assistance. A similar prohibition applies to recipients of state funds under California Government Code section 11135, which prohibits discrimination on the basis of race, color or national origin, as well as ethnic group identification, religion, age, sex, sexual orientation, genetic information, or disability. Specifically Title VI provides the following:

No person in the United States shall, on the ground of race, color, national origin, religion, sex, age, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Federal government.

The FHWA and the Federal Transit Administration (FTA) each have requirements that recipients of Metropolitan Planning federal funds must demonstrate continued compliance with Title VI. Compliance with Title VI includes conducting meetings in a fair and reasonable manner that are open to all members of a community. Compliance reflects not only the law, but is also a good policy that builds the kind of trust and information sharing upon which successful planning is done. Even where a city or county may not be receiving federal funding for transportation, the Civil Rights Restoration Act of 1987 also obligates that a city or county comply with Title VI, if it receives any other federal funding for any program.

Disadvantaged Business Enterprises

The Road Repair and Accountability Act of 2017 requires Caltrans to develop a plan to increase, up to 100 percent, the dollar value of contracts/procurements awarded to Small Businesses, Disadvantaged Business Enterprises (DBEs), and Disabled Veteran Business Enterprises (DVBEs). Caltrans is required to have this plan by January 1, 2020. Until then, successful grant applicants are expected to market contracting opportunities to all small businesses, including DBEs and DVBEs.

For details about DBE requirements, visit the Office of Regional Planning DBE website at: <http://www.dot.ca.gov/hq/tpp/offices/orip/DBE/DBE.html>.

Invoicing and Financial Requirements

Requests for Reimbursements

Grant payments are made only as reimbursements. Invoices or Requests for Reimbursements (RFR) need to be submitted no more frequently than monthly or at a minimum quarterly. Grantees must pay sub-recipients and subcontractors prior to submitting a RFR to Caltrans. A one-time, **lump sum RFR for the entire grant is not allowed**. Local match (cash and third party in-kind contributions) must be expended on a proportional basis coinciding with each grant Work Element (MPOs/RTPAs only) and/or tasks in each RFR. The proportional expenditure of local match must be clearly identified in the Project Timeline. The minimum required local match (i.e., 11.47%) must be rendered during the invoicing period to which the matching requirement applies. The minimum required local match must also be satisfied with each RFR.

Local Match Contribution

All grants require a local match. Revenue sources for a local match can include local sales tax, special bond measures, private donations, private foundations, etc. The Sustainable Communities grants require the applicant to provide a minimum 11.47 percent local match—any source of funds may be used for the local match. The minimum local match is a percentage of the total project cost (i.e., minimum local match amount plus the grant amount). The local match can be all cash, all third party in-kind contributions, or a combination of the two.

To better assist applicants, the Local Match Calculator can be found at:

http://www.dot.ca.gov/hq/tpp/offices/orip/Grants/2015/Match_Calculator.xlsx

Third Party In-Kind Contributions

Third party in-kind contributions are typically goods and services donated from outside the primary grantee's agency. Examples of third party in-kind contributions include donated printing, facilities, interpreters, equipment, advertising, time and effort, staff time, and other goods and services. The value of third party in-kind contributions must be directly benefiting and specifically identifiable to the project. Third party in-kind contribution information must be identified on the Grant Application Cover Sheet, the Project Timeline, and the project specific Work Element in the OWP (if applicable).

If third party in-kind contributions are used to satisfy the local match requirements, a third party in-kind valuation plan must also be submitted to Caltrans for approval as a condition of grant acceptance. The third party in-kind valuation plan is an itemized breakdown by task and serves as documentation for the goods and/or services to be rendered. The Third Party In-Kind Valuation Plan Checklist and Sample are provided on Pages 43-44.

Accounting Requirements

Grantees are required to maintain an accounting and record system that properly accumulates and segregates incurred project costs and matching funds by line item. The accounting system of the grantee, including its sub-applicants and subcontractors, must conform to Generally Accepted Accounting Principles that enable the determination of incurred costs at interim points of completion and provides support for reimbursement payment vouchers or invoices sent to or paid by Caltrans. Allowable project costs must comply with 2 Code of Federal Regulations (CFR), Part 200. It is the grantee's responsibility, in conjunction with Caltrans district staff, to monitor work and expenses to ensure the project is completed according to the contracted Scope of Work and Project Timeline. Grantees must monitor work and costs to ensure invoices are submitted on a regular and timely basis

(monthly or quarterly as milestones are completed). Grantees must communicate with their local Caltrans District Office to ensure any issues are addressed early during the project period.

Indirect and Direct Costs

Indirect costs require an Indirect Cost Allocation Plan (ICAP). For example, reproduction costs, computer rental and office supplies are considered indirect costs. However, if these costs are tied to a specific task or activity, they are considered direct costs.

If a grantee, including sub-recipients and third party contractors/consultants, are seeking reimbursement of indirect costs, they must annually submit an ICAP or an Indirect Cost Rate Proposal (ICRP) to Caltrans Audits and Investigations for review and approval prior to reimbursement. An ICAP or ICRP must be prepared and submitted in accordance with 2 CFR, Part 200. For more information visit the following website:

Indirect Cost Allocation Plan: http://www.dot.ca.gov/hq/audits/icap_icrp.html

Due to the competitive nature of the grant award process, applications must include any indirect costs in the Project Timeline. Indirect costs can only be reimbursed if they are identified in the Project Timeline submitted with the initial application.

Travel Expenses

Grantees may be eligible to claim travel expenses if they have been approved in the Scope of Work and Project Timeline. Travel expenses and per diem rates are not to exceed the rate specified by the State of California Department of Personnel Administration for similar employees (i.e. non-represented employees). For more information on eligible travel expenses, visit the following website:

Caltrans Travel Guide: <http://www.dot.ca.gov/hq/asc/travel/>

Pre-Award Audit

The Sustainable Communities grants are available in amounts up to \$1 million. However, any awarded grant in excess of \$250,000 may require a pre-award audit. The pre-award audit is to ensure that recipients of state funds maintain adequate financial management systems prior to receiving the funds. Pre-award audits may be required of new grantees, agencies that have not recently been audited, agencies that have undergone prior audits with significant weaknesses or deficiencies in their financial management systems, or those determined to be a higher risk to Caltrans. If a pre-award audit is needed, the local Caltrans District Office will contact the grantee to facilitate the appropriate action.

Application Preparation

The Sustainable Transportation Planning Grant Program is highly competitive. This section provides applicants with supplemental information as well as details on required documents that must accompany an application at the time of submittal. All applicants are strongly encouraged to adhere to these requirements in order to score competitively during the application evaluation process.

Early Coordination with Primary Applicants

Sub-applicants are encouraged to work far in advance of the application deadline with the appropriate primary applicant to coordinate application development. It is also beneficial for sub-applicants to be informed of the appropriate primary applicant process and schedule, as they may differ slightly from those of Caltrans. RTPAs residing within MPO boundaries should also coordinate application development with the MPO, as it is critical to ensure that proposed studies align with the RTP/SCS for the entire MPO region and do not duplicate efforts being applied for or already awarded to the MPO.

Technical Assistance

Caltrans District Office staff (See Pages 48-49) will be available during the application period to answer questions and help interested groups complete their applications.

For questions specific to the Grant Application Guide, applicants are also welcomed to contact the Caltrans Office of Regional Planning:

Erin Thompson Email: Erin.Thompson@dot.ca.gov Phone: (916) 654-2596	Priscilla Martinez-Velez Email: Priscilla.Martinez-Velez@dot.ca.gov Phone: (916) 651-8196
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For questions about the “Planning for Housing” (See Pages 9-10) special consideration, please contact the Department of Housing and Community Development:

Paul McDougall Email: Paul.McDougall@hcd.ca.gov Phone: (916) 263-7420
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Required Documents

Use the samples and checklists provided for the following required documents:

- Application
- Scope of Work
- Project Timeline

A **map of the project area** is also required to clearly identify the boundaries of the project area and to context for the project.

Additional Documents

The following documents are not required, but enhance the overall application and typically result in a more competitive application during the evaluation process:

- **Letters of Support**
 - If submitted, letters of support must be included with the application package. Letters received separate from the application package may not be considered. The letters should be addressed to the applicant. Such letters can come from community-based organizations, local governments, Native American Tribal governments, service agencies, and elected officials.
- **Graphics**
 - Photographs, maps, planning diagrams, land use or design illustrations, or other relevant graphic representations of the proposed project area convey existing conditions and help to further explain the need for the grant and the priority of the proposed planning project with respect to community need.
- **Safety Data**
 - Statistical data such as pedestrian-vehicle injuries/crashes or fatalities resulting from lack of safe infrastructure, or other road conditions that contribute to possible injuries. This information may be obtained from police reports, transit agencies, National Highway Traffic Administration or the Governor's Highway Safety Association.
- **Travel Mode Data**
 - Data on mode share, commute patterns, accessibility for low-income and disadvantaged populations, access to job centers, or other data to show the need and potential for mode shift to non-auto transportation modes.
- **Other Data**
 - As applicable, to indicate the need and potential for reducing VMT and GHG, where available.

Tips and Pointers for Writing a Successful Grant Application

- ✓ Consult with your district representative for technical assistance before the application deadline.
- ✓ Use the Samples and Checklists provided for the Application, Scope of Work, and Project Timeline.
- ✓ Include Caltrans as an active partner in the study.
- ✓ Provide letters of support and project area photographs to enhance the application.
- ✓ **Overall Grant Application:** Clearly demonstrate how the project promotes State Planning Goals, *without stating the goals verbatim*. Also demonstrate how the project fits **every** aspect of the Grant Specific Objective.
- ✓ **Project Summary:** Concisely describe the project in less than 100 words. Explain the “Who, what, when, where, and why.”
- ✓ **Project Justification:** Clearly define and explain the transportation problem or deficiency that the project will attempt to address. Why is it critical to address the problem now? Make the case for a critical need that the project will address and support it with verifiable data, if available.
- ✓ **Scope of Work:** Identify the project area demographics, public participation, and project implementation.
- ✓ **Project Timeline:** Identify the current indirect cost rate *if* indirect costs will be sought for reimbursement. If FY 2017-2018 indirect cost rates are not available, the rate will be an estimate based on the currently approved rate.
- ✓ Keep administrative project tasks below 5 percent of the grant amount requested.
- ✓ Ensure the correct minimum local match amount, calculated as a percentage of the total project cost (grant plus local match), is provided.

Application Submittal Instructions

All grant application packages are required to be submitted **via e-mail**. **An agency may only submit one application package per e-mail**. The Caltrans District Office contact must be copied (refer to the **District Contact List** on Pages 48-49) and the subject line needs to identify the district number, grant program, and *brief* project title (e.g., D1, SC, City of Can Do Planning Project). The required items outlined on the Grant Application Checklist on Page 26 must be attached to the e-mail as separate documents.

Please submit your application package to: Regional.Planning.Grants@dot.ca.gov

**APPLICATIONS MUST BE SUBMITTED VIA E-MAIL NO LATER THAN
FRIDAY OCTOBER 20, 2017
BY 5:00 PM**

**HARD COPIES WILL NOT BE ACCEPTED &
LATE APPLICATIONS WILL NOT BE REVIEWED**

The Grant Application Guide and application form are available at the following website:
<http://www.dot.ca.gov/hq/tpp/grants.html>

Anticipated award announcements: **December 2017**

Download the latest version of [Adobe Reader DC ®](#) to complete the application form. This version of Adobe is available free of charge.

Caltrans District Office staff will be available during the application period to answer questions and help interested groups complete their applications. Refer to the District Contact List on Pages 48-49 for contact information.

Grant Application Checklist

The following documents are required and must be submitted via e-mail as separate attachments. Please do not combine documents into a single attachment. Please keep file names brief, as files become corrupted when the names are too long. Refer to the Grant Application Guide for additional information and/or samples. Failure to include any of the required documents will result in a reduced application score.

Required Application Documents:

- ☐ Application (Complete and submit the PDF form in the exact format provided online at <http://www.dot.ca.gov/hq/tpp/grants.html> - Scanned or hard copies of the application will not be accepted)
- ☐ Application Signature Page (print, sign, and scan this page in PDF format)
- ☐ Scope of Work (Microsoft Word format)
- ☐ Project Timeline (Microsoft Excel format)
- ☐ Map of Project Area

Supplemental Information:

- ☐ Graphics of Project Area (when applicable) - see description on Page 23
- ☐ Letter(s) of Support
- ☐ Data – see description on Page 23

Sample Grant Application

SAMPLE Fiscal Year 2017-18 **CALTRANS SUSTAINABLE TRANSPORTATION PLANNING** **SUSTAINABLE COMMUNITIES GRANT APPLICATION**

PROJECT TITLE			
PROJECT LOCATION (city and county)			
	APPLICANT	SUB-APPLICANT	SUB-APPLICANT
Organization			
Mailing Address			
City			
Zip Code			
Executive Director/designee and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
E-mail Address			
Contact Person and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
Contact E-mail Address			
Phone Number			
FUNDING INFORMATION Use the Match Calculator to complete this section. Match Calculator			
Grant Funds Requested	Local Match - Cash	Local Match - In-Kind	Total Project Cost
\$	\$	\$	\$
Specific Source of Local Cash Match (i.e. local transportation funds, local sales tax, special bond measures, etc.)			

SAMPLE

Fiscal Year 2017-18

CALTRANS SUSTAINABLE TRANSPORTATION PLANNING SUSTAINABLE COMMUNITIES GRANT APPLICATION

LEGISLATIVE INFORMATION*			
Information in this section must directly be tied to the applicant's address.			
All legislative members in the project area do not need to be listed.			
State Senator(s)		Assembly Member(s)	
Name(s)	District	Name(s)	District

*Use the following link to determine the legislators.
<http://findyourrep.legislature.ca.gov/> (search by address)

Please identify the best practices cited in the 2017 Regional Transportation Plan (RTP) Guidelines, Appendices K and L, that would be employed in the proposed transportation planning grant project. Select all that apply and provide an explanation. For future grant cycles, this section may be considered for points and/or threshold requirements.

☐ Coordination with Other Planning Processes

Please explain how: _____

☐ Regional Travel Demand Modeling & Analysis

Please explain how: _____

☐ RTP Consultation and Coordination

Please explain how: _____

☐ Integrating Ecological Considerations into Transportation Planning

Please explain how: _____

☐ RTP Financial Overview

Please explain how: _____

☐ RTP Modal Discussion

Please explain how: _____

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION**

☐ Transportation System Management and Operations

Please explain how: _____

☐ Future of Transportation and New Technology

Please explain how: _____

☐ Sustainable Communities Strategy (SCS) Contents and Development

Please explain how: _____

☐ Land Use and Transportation Strategies to Address Regional GHG Emissions

Please explain how: _____

☐ Adaptation of the Regional Transportation System to Climate Change

Please explain how: _____

☐ Performance Measures

Please explain how: _____

☐ Policies and Programs that Promote Health and Health Equity

Please explain how: _____

Please identify the Grant Program Overarching Objectives (Grant Application Guide, Page 3) that the proposed transportation planning grant project will address. Select all that apply and provide an explanation.

☐ Sustainability – Promote reliable and efficient mobility for people, goods, and services, while meeting the State’s GHG emission reduction goals, preserving the State’s natural and working lands, and preserving the unique character and livability of California’s communities.

Please explain how: _____

☐ Preservation – Preserve the transportation system through protecting and/or enhancing the environment, promoting energy conservation, improving the quality of life, and/or promoting consistency between transportation improvements and State and Local planning growth and economic development patterns.

Please explain how: _____

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION**

- ☐ Mobility – Increase the accessibility of the system and mobility of people and freight.

Please explain how: _____

- ☐ Safety – Increase the safety and/or security of the transportation system for motorized and active transportation users.

Please explain how: _____

- ☐ Innovation – Promote the use of technology and innovative designs to improve the performance of our transportation system and provide sustainable transportation options.

Please explain how: _____

- ☐ Economy – Support the economic vitality of the area (i.e. enables global competitiveness, enables increased productivity, improves efficiency, etc.).

Please explain how: _____

- ☐ Health – Decrease exposure to local pollution sources, reduce serious injuries and fatalities on the transportation system, and promote physical activity especially through transportation means. .

Please explain how: _____

- ☐ Social Equity – Promote transportation solutions that balance and integrate community values with transportation safety and performance, focusing on communities most affected by air pollution and climate change, while encouraging greater than average public involvement in the transportation decision making process.

Please explain how: _____

SAMPLE
Fiscal Year 2017-18
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION

1. Project Description (100 words maximum) (20 points): Briefly summarize project.

A good project description is one that can summarize the project in a clear and concise manner, including major deliverables and any connections to state or regional planning efforts.

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION**

- 2. Project Justification (Do not exceed the space provided.) (25 points):** Describe the problems or deficiencies the project is attempting to address, as well as how the project will address the identified problems or deficiencies. Additionally, list the ramifications of not funding this project.

This section needs to clearly define the existing issues surrounding the project (e.g., transportation issues, inadequate transit services, impacts of heavy trucking on local streets, air pollution, etc.). Competitive applications support the need for the project with empirical data, describe how this project addresses issues raised, and describe the impact of not funding the project.

SAMPLE
Fiscal Year 2017-18
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION

- 3. Grant Specific Objective (Do not exceed the space provided.) (25 points):** Explain how the proposed project addresses the grant specific objective of the Sustainable Communities grant program: to encourage local and regional multimodal transportation and land use planning that furthers the region's RTP SCS (where applicable), contributes to the State's GHG reduction targets and other State goals, including but not limited to, the goals and best practices cited in the 2017 RTP Guidelines, and also assist in achieving the Caltrans Mission and Grant Program Overarching Objectives (Grant Application Guide, Page 3).

Applicants should demonstrate how the proposed effort would:

- Integrate Grant Program Considerations (Grant Application Guide, Pages 3-10) –
 - California Transportation Plan (CTP) 2040
 - 2017 Regional Transportation Plan (RTP) Guidelines & Promoting Sustainable Communities in California
 - Addressing Environmental Justice & Disadvantaged Communities
 - Proposed 2017 Climate Change Scoping Plan Update, Appendix C
 - Complete Streets & Smart Mobility Framework
 - Climate Ready Transportation
 - Planning for Housing
- Advance transportation related GHG emission reduction project types/strategies (i.e., mode shift, demand management, travel cost, operational efficiency, accessibility, and coordination with future employment and residential land use, etc.)
- Identify and address mobility deficiencies in the multimodal transportation system including the mobility needs of environmental justice and disadvantaged communities
- Encourage stakeholder collaboration
- Involve active community engagement
- Coordinate transportation, housing, and land use planning components of the project to inform one another (i.e., regular coordination meetings between responsible entities, joint community meetings, letters of commitment from all relevant implementing agencies, etc. Examples of transportation components include, but are not limited to, planning for:
 - New or expanded transit service
 - New or expanded bike or pedestrian infrastructure
 - Complete Streets
 - Removing or reducing barriers created by transportation infrastructure such as highways, overpasses and underpasses, that create disconnected communities

Examples of land use components include but are not limited to:

- An update to a general plan land use element or zoning code that increases development opportunities around key transportation corridors or nodes;
- Creation of a transit-oriented development overlay zone or other special zoning district around key transportation corridors or nodes;
- Studies, plans and policies that address land use conflicts with major transportation corridors such as major highways, ports, shipping and freight corridors, etc. that are near sensitive land uses such as homes, schools, parks, etc. or potentially impacted by climate change.
- Promote the region's RTP SCS (where applicable), State planning priorities (Government Code Section 65041.1) and climate adaptation goals (Safeguarding California)
- Ultimately result in funded and programmed multimodal transportation system improvements

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION**

4. Project Management (30 points)

- A. Scope of Work in required Microsoft Word format (15 points)
- B. Project Timeline in required Microsoft Excel format (15 points)

See Scope of Work and Project Timeline samples and checklists for requirements.

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
SUSTAINABLE COMMUNITIES GRANT APPLICATION**

Application Signature Page

If selected for funding, the information contained in this application will become the foundation of the contract with Caltrans.

To the best of my knowledge, all information contained in this application is true and correct. If awarded a grant with Caltrans, I agree that I will adhere to the program guidelines.

Signature of Authorized Official (Applicant)

Print Name

Title

Date

Signature of Authorized Official (Sub-Applicant)

Print Name

Title

Date

Scope of Work Checklist

The Scope of Work is the official description of the work that is to be completed during the contract. **The Scope of Work must be consistent with the Project Timeline. Applications with missing components will be at a competitive disadvantage.** Please use this checklist to make sure your Scope of Work is complete.

The Scope of Work must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided and in Microsoft Word format.
- ☐ List all tasks and sub-tasks using the same title as stated in the project timeline.
- ☐ Have task and sub-task numbers in accurate and proper sequencing; consistent with the project timeline.
- ☐ List the responsible party for each task and subtask and ensure that it is consistent with the project timeline (i.e. applicant, sub-applicant, or consultant).
- ☐ Have a thorough Introduction to describe the project and project area demographics, including a description of the disadvantaged community involved with the project, if applicable.
- ☐ Have a thorough and accurate narrative description of each task and sub-task.
- ☐ Include a task for a kick-off meeting with Caltrans at the start of the grant.
- ☐ Include a task for procurement of consultants, if consultants are needed.
- ☐ Include a task for invoicing.
- ☐ Include a task for quarterly reporting to Caltrans.
- ☐ Include detailed public participation and services to diverse communities.
- ☐ Include project implementation/next steps.
- ☐ List the project deliverable for each task in a table following each task and ensure that it is consistent with the project timeline.
- ☐ NOT include environmental, complex design, engineering work, and other ineligible activities.

Sample Scope of Work

City of Can Do Complete Street Plan

The City of Can Do Complete Street Plan will provide a conceptual multi-modal planning foundation for the City's downtown main street corridor. The Plan will be used to evaluate how different complete street features enhance or detract from the vision of the community. The city intends to gather public input through interactive community workshops which will be the driving factor of the planning process. The City of Can Do Complete Street Plan will contain conceptual design only. It is the City of Can Do's intent that once this plan is complete, it will lead to implementation and development.

The scope of work shown below reflects the anticipated process and deliverables for the City of Can Do Complete Street Plan.

RESPONSIBLE PARTIES

The City of Can Do with the assistance of a consulting firm will perform this work. The City has not yet selected a consulting firm and the proper procurement procedures will be used through a competitive RFP process. City staff anticipates these figures will not differ substantially and will not exceed the grant request amount.

OVERALL PROJECT OBJECTIVES

- Reduce street crown and replace surface with enhanced and/or porous street pavers.
- Sidewalk widening and fully accessible ramp improvements at intersections.
- Add and improve bicycle lanes.
- Improve bike and pedestrian connectivity for residents of nearby apartments and homes.
- Installation of street trees with grates and tree grates for existing trees that can be preserved.
- Installation of pedestrian-scale street lighting at intersections.
- Installation of street furniture and other design features.
- Application of "green street" concepts, such as storm water planter boxes and porous pavement where possible.
- Conceptual designs for underground utilities.
- Conceptual designs to improve drainage conveyance.

1. Project Initiation

Task 1.1: Project Kick-off Meeting

- The City will hold a kick-off meeting with Caltrans staff to discuss grant procedures and project expectations including invoicing, quarterly reporting, and all other relevant project information. Meeting summary will be documented.
- Responsible Party: The City

Task 1.2: Staff Coordination

- Monthly face-to-face project team meetings with consultants to ensure good communication on upcoming tasks and to make sure the project remains on time and within budget. Caltrans staff will be invited to the project team meetings.
- Responsible Party: The City

Task 1.3: RFP for Consultant Services

- Complete an RFP process for selection of a consultant using the proper procurement procedures.
- Responsible Party: The City

Task 1.4: Identify Existing Conditions

- Gather existing conditions and background data by identifying opportunities and constraints as well as standards that should be used to guide preparation of the plan such as existing and planned land uses, population characteristics, and travel projections within the City.
- Inventory and evaluate existing bicycle and pedestrian facilities and nearby apartments and homes.
- Responsible Party: Consultant

<i>Task</i>	<i>Deliverable</i>
<i>1.1</i>	<i>Meeting Notes</i>
<i>1.2</i>	<i>Monthly Meetings Notes</i>
<i>1.3</i>	<i>Copy of Procurement Procedures and Executed Consultant Contract</i>
<i>1.4</i>	<i>Existing Conditions Report</i>

2. Public Outreach

Note: All meetings will be publically noticed to ensure maximum attendance. All public notices will be in English and Spanish. Spanish translators and sign language interpreters will be present at all workshops.

Task 2.1: Community Workshop #1

- Walking tour and workshop. This workshop will introduce the project to the public, define project parameters, inform the community of project opportunities and constraints, and solicit opinions from the community to shape Task 3.1, Develop Streetscape Concept.
- Responsible Party: Consultant

Task 2.2: Community Workshop #2

- An interactive workshop that will use clicker technology, modeling tools, and maps to present the streetscape design concept alternatives. Community will decide on preferred alternatives. Continue to solicit feedback from the community to shape Task 3.3, Draft Complete Street Plan.
- Responsible Party: Consultant

Task 2.3: Community Workshop #3

- Present Draft Design Concept and Report and continue to solicit feedback for public comments to shape Task 3.3, Draft Complete Street Plan and Task 3.6, Final Complete Street Plan.
- Responsible Party: Consultant

Task	Deliverable
2.1	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
2.2	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
2.3	<i>PowerPoint Presentation, Workshop Summary, Photos</i>

3. Streetscape Plan

Task 3.1: Develop Streetscape Concept

- Based on the existing conditions report and the community input from Workshop #1, a streetscape concept will be developed. Streetscape conceptual design will incorporate complete streets concepts and will include plans, sketches, and photos.
- Responsible Party: Consultant

Task 3.2: Develop Conceptual Design Concept Alternatives

- Up to three complete street conceptual design alternatives will be developed. Illustrations will be made in plan view, as street cross sections, and as sketches. A model simulation will be developed for each alternative. The alternatives will be prepared and presented at Community Workshop #2.
- Responsible Party: Consultant

Task 3.3: Draft Complete Street Plan

- Based on the preferred design alternative chosen in Workshop #2, a draft report will be prepared. The draft report will be presented at Workshop #3 for public comment.
- Responsible Party: Consultant

Task 3.4: Identify Potential Funding Sources

- Review and identify potential funding sources for future implementation of the preferred alternative.
- Responsible Party: Consultant

Task 3.5: Joint Planning/Parking and Safety/Bicycle/Housing Advisory Commission Meeting

- Coordinate a joint session among the four commissions to review the draft report and conceptual design alternative. Solicit feedback, respond to any questions, and resolve any critical issues.
- Responsible Party: The City/Consultant

Task 3.6: Final Complete Street Plan

- Complete the final report that addresses the comments given from Workshop #3 and the Joint Commission Meeting. Four hard-copies and four electronic copies of the final report will be submitted to Caltrans. Credit of the financial contribution of the grant program will be credited on the cover of the report.
- Responsible Party: Consultant

Task 3.7: City Council Adoption

- Present the final Complete Street Plan at the City Council meeting. Resolve any critical issues. Adopt final City of Can Do Complete Street Plan.
- Responsible Party: The City/Consultant

Task	Deliverable
3.1	<i>Sketches, illustrations</i>
3.2	<i>Sketches, illustrations</i>
3.3	<i>Draft Report</i>
3.4	<i>Funding Source Report</i>
3.5	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
3.6	<i>Final Report</i>
3.7	<i>Meeting Notes</i>

4. Fiscal Management

Task 4.1: Invoicing

- Submit complete invoice packages to Caltrans District staff based on milestone completion—at least quarterly, but no more frequently than monthly.
- Responsible Party: The City

Task 4.2: Quarterly Reports

- Submit quarterly reports to Caltrans District staff providing a summary of project progress and grant/local match expenditures.
- Responsible Party: The City

Task	Deliverable
4.1	<i>Invoice Packages</i>
4.2	<i>Quarterly Reports</i>

Project Timeline Checklist

The Project Timeline is the official documentation of the budget and time frame of the project. **The Project Timeline must be consistent with the Scope of Work and the Grant Application Cover Sheet. Applications with missing components will be at a competitive disadvantage.**

The Project Timeline must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided (do not alter the template) and submitted in Microsoft Excel format.
- ☐ List all tasks and sub-tasks with the same title as stated in the scope of work.
- ☐ Have task and sub-task numbers in proper sequencing, consistent with the scope of work.
- ☐ Include a task for a kick-off meeting with Caltrans at the start of the grant.
- ☐ Include a task for procurement of consultants, if consultants are needed.
- ☐ Include a task for quarterly reporting to Caltrans.
- ☐ Include a task for invoicing.
- ☐ List the responsible party for each task and sub-task, and ensure that it is consistent with the scope of work (i.e. applicant, sub-applicant, or consultant).
- ☐ Complete all budget columns as appropriate: Total Cost, Grant Amount, Local Cash Match, and if applicable, Local In-Kind Match.
- ☐ State a realistic total cost for each task based on the work that will be completed. Project management/administration costs should not exceed 5% of the grant amount requested.
- ☐ Include a proportional spread of local match amongst each task. The match amount must be at least the minimum amount required by the grant program.
- ☐ Identify the indirect cost rate if indirect costs will be reimbursed.
- ☐ Have a best estimate of the amount of time needed to complete each task.
- ☐ Have the timeframe start at the beginning of the grant period (January 2018 for MPO/RTPAs; April 2018 for non-MPO/RTPAs).
- ☐ Have the timeframe extend all the way to the end of the grant period (February 2020 for all grantees).
- ☐ List the deliverable for each task as stated in the scope of work.

Sample Project Timeline

California Department of Transportation Sustainable Transportation Planning Grants Fiscal Year 2017-18

SAMPLE PROJECT TIMELINE

Project Title			City of Can Do Complete Street Plan						Grantee		The RTPA of Can Do											
Task Number	Task Title	Responsible Party	Budget				Local In-Kind Match	FY 2017/18				FY 2018/19				FY 2019/20				Deliverable		
			Total Cost	Grant Amount	Local Cash Match	Local In-Kind Match		J	A	S	O	N	D	J	F	M	A	M	J			
Project Initiation																						
1.0																						
1.1	Project Kick-off Meeting	The City	\$970	\$776	\$194	\$0														Meeting Notes		
1.2	Staff Coordination	The City	\$3,000	\$2,400	\$600	\$0														Monthly Meeting Notes		
1.3	RFP for Consultant Services	The City	\$1,500	\$1,200	\$300	\$0														Copy of Procurement Procedures and Executed Consultant Contract		
1.4	Identify Existing Conditions	Consultant	\$2,400	\$1,920	\$480	\$0														Existing Conditions Report		
Public Outreach																						
2.0																						
2.1	Community Workshop #1	Consultant	\$17,743	\$13,949	\$3,200	\$349														PowerPoint Presentation, Workshop Summary, Photos		
2.2	Community Workshop #2	Consultant	\$17,744	\$13,995	\$3,199	\$350														PowerPoint Presentation, Workshop Summary, Photos		
2.3	Community Workshop #3	Consultant	\$17,743	\$14,194	\$3,530	\$18														PowerPoint Presentation, Workshop Summary, Photos		
Streetscape Plan																						
3.0																						
3.1	Develop Streetscape Concept	Consultant	\$25,000	\$20,000	\$5,000	\$0														Sketches, Illustrations		
3.2	Develop Conceptual Design Concept Alternatives	Consultant	\$12,000	\$9,600	\$2,400	\$0														Sketches, Illustrations		
3.3	Draft Complete Street Plan	Consultant	\$16,000	\$14,400	\$3,600	\$0														Draft report		
3.4	Identify Potential Funding Sources	Consultant	\$1,500	\$1,200	\$300	\$0														Funding Source Report		
3.5	Joint Planning/Parking and Safety/Bicycle Advisory Commission Meeting	The City/Consultant	\$2,200	\$1,760	\$440	\$0														PowerPoint Presentation, Workshop Summary, Photos		
3.6	Final Complete Street Plan	Consultant	\$7,000	\$5,600	\$1,400	\$0														Final Report		
3.7	City Council Adoption	The City/Consultant	\$500	\$400	\$100	\$0														Meeting Notes		
Fiscal Management																						
4.0																						
4.1	Invoicing	The City	\$1,000	\$800	\$200	\$0														Invoice Packages		
4.2	Quarterly Reports	The City	\$1,200	\$960	\$240	\$0														Quarterly Reports		
TOTALS			\$128,054	\$103,154	\$25,183	\$717																

Reimbursement of indirect costs is allowable upon approval of an Indirect Cost Allocation Plan for each year of project activities. Provide rate if indirect costs are included in the project budget. Approved Indirect Cost Rate: _____ %

This sample timeline is for illustrative purposes only. Your scope of work and timeline will include different tasks, funding amounts, deliverables, etc. The project timeline must be consistent with the scope of work. **Note:** Each task must contain a grant amount and a local cash match amount. Local cash match must be proportionally distributed by the at least the minimum required match percentage throughout each task. Local in-kind match needs to be indicated where in-kind services will be used. Please review the grant program section that you are applying to for details on local match requirements.

Third Party In-Kind Valuation Plan Checklist

The Third Party In-Kind Valuation Plan is an itemized breakdown by task and sub-task and serves as documentation for the goods and/or services to be donated. **The Third Party In-Kind Valuation Plan must be consistent with the information provided on the Project Timeline and Grant Application Cover Sheet.**

This document is required upon grant award as a condition of grant acceptance.

The third party in-kind valuation plan must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided (do not alter the format).
- ☐ Name the third party in-kind local match provider.
- ☐ Describe how the third party in-kind local match will be tracked and documented for accounting purposes.
- ☐ Describe the fair market value of third party in-kind contributions and how the values were determined.
- ☐ Include an itemized breakdown by task and sub-task consistent with the project timeline.
- ☐ Be consistent with the in-kind local match amount reflected on the grant application cover sheet.

Sample Third Party In-Kind Valuation Plan

Sample Third Party In-Kind Valuation Plan

Task	Activity	Title	Name of In-Kind Match Provider	Fair Market Value Determination	Fair Market Value or Hourly Rate	Number or Hours	Estimated Cost	
2.1	Community Workshop #1	Donated Workshop Conference Room	CBO	The rental rate is established by CBO.	\$50	4	\$200	
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170	
2.2	Community Workshop #2	Use of Projector and Laptop	CBO	The rental rate is established by CBO.	\$50	4	\$200	
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170	
2.3	Community Workshop #3	Copies and Flyers	CBO	Average Copy Costs	\$0.35	570	\$200	
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170	
		Total In-kind Match :						\$1,111

How the third party in-kind match will be documented for accounting purposes:	The third party in-kind provider will submit a statement for donated services rendered to the City of Can Do with the value of the estimated cost for each task noted.
--	--

Local Resolution Checklist (Not Applicable to MPO/RTPAs)

A Local Resolution is NOT required at the grant application stage; however, it is required upon award, as a condition of grant acceptance.

The Local Resolution must:

- ☐ State the title of the project. ①
- ☐ State the job title of the person authorized to enter into a contract with Caltrans on behalf of the applicant. ②
- ☐ NOT be more than a year old or will not be accepted. ③
- ☐ Be signed by the governing board of the grant applicant. ④

Sample Local Resolution

CITY OF CAN DO RESOLUTION NO. 009-2012

RESOLUTION OF THE BOARD OF DIRECTORS OF THE CITY OF CAN DO AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AGREEMENTS WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR THE CITY OF CAN DO COMPLETE STREET PLAN

1

WHEREAS, the Board of Directors of the City of Can Do is eligible to receive Federal and/or State funding for certain transportation planning related plans, through the California Department of Transportation; and

WHEREAS, a Restricted Grant Agreement is needed to be executed with the California Department of Transportation before such funds can be claimed through the Transportation Planning Grant Programs; and

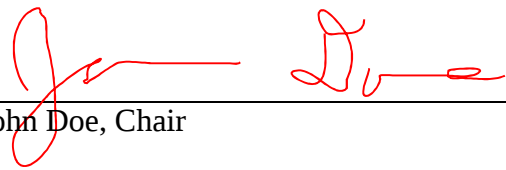
WHEREAS, the City of Can Do wishes to delegate authorization to execute these agreements and any amendments thereto;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the City of Can Do, authorize the Executive Director, or designee, to execute all Restricted Grant Agreements and any amendments thereto with the California Department of Transportation.

APPROVED AND PASSED this 4th day of August, 2015.

3

4


John Doe, Chair

ATTEST:


Eileen Wright, Executive Director

[illegible]

Caltrans Sustainable Transportation Planning Grants District Contact List

DISTRICT	CONTACT	MPO/RTPA
DISTRICT 1 1656 Union Street P.O. Box 3700 Eureka, CA 95502	Mendocino and Lake Counties— Rex Jackman (707) 445-6412 Email: rex.jackman@dot.ca.gov Del Norte and Humboldt Counties— Kevin Tucker (707) 441-5770 Email: kevin.tucker@dot.ca.gov	• Del Norte LTC • Humboldt CAOG • Lake CCAPC • Mendocino COG
DISTRICT 2 1657 Riverside Drive Redding, CA 96001	Kathy Grah (530) 229-0517 Email: kathy.grah@dot.ca.gov	• Lassen CTC • Tehama CTC • Modoc LTC • Trinity CTC • Plumas CTC • Siskiyou CLTC • Shasta RTA
DISTRICT 3 703 B Street Marysville, CA 95901	Kevin Yount (530) 741-4286 Email: kevin.yount@dot.ca.gov	• Butte CAG • Sierra LTC • Colusa CTC • Glenn CTC • El Dorado CTC • Nevada CTC • Placer CTPA • Sacramento Area COG • Tahoe MPO
DISTRICT 4 111 Grand Avenue P.O. Box 23660 Oakland, CA 94623-0660	Becky Frank (510) 286-5536 Email: becky.frank@dot.ca.gov Blesilda Gebreyesus (510) 286-5575 Email: blesilda.gebreyesus@dot.ca.gov	• Metropolitan Transportation Commission
DISTRICT 5 50 Higuera Street San Luis Obispo, CA 93401-5415	Hana Mengsteab (805) 549-3130 Email: hana.mengsteab@dot.ca.gov	• Monterey TAMC • Santa Cruz CCRTC • San Benito COG • Association of Monterey County Bay Area Governments • Santa Barbara CAG • San Luis Obispo COG

Caltrans Sustainable Transportation Planning Grants District Contact List

DISTRICT	CONTACT	MPO/RTPA
DISTRICT 6 1352 W. Olive Avenue P.O. Box 12616 Fresno, CA 93778-2616	Paul Marquez (559) 445-5867 Email: paul.marquez@dot.ca.gov	- Fresno COG - Tulare CAG - Kern COG - Kings CAG - Madera CTC
DISTRICT 7 100 S. Main Street Los Angeles, CA 90012	Charles Lau (213) 897-0197 Email: charles.lau@dot.ca.gov	Southern California Association of Governments
DISTRICT 8 464 W. 4 th Street Mail Station 722 San Bernardino, CA 92401	Rebecca Forbes (909) 388-7139 Email: rebecca.forbes@dot.ca.gov	Southern California Association of Governments
DISTRICT 9 500 S. Main Street Bishop, CA 93514	Ryan Dermody (760) 872-0691 Email: ryan.dermody@dot.ca.gov	- Inyo LTC - Mono LTC - Eastern Kern (COG)
DISTRICT 10 1976 E. Dr. Martin Luther King Boulevard P.O. Box 2048 Stockton, CA 95201	Mountain Counties— Carl Baker (209) 948-7325 Email: carl.baker@dot.ca.gov Merced, San Joaquin, Stanislaus Counties— Tom Dumas (209) 941-1921 Email: tom.dumas@dot.ca.gov	- Alpine CTC - Amador CTC - Calaveras COG - Mariposa LTC - Merced CAG - Tuolumne CCAPC - San Joaquin COG - Stanislaus COG
DISTRICT 11 4050 Taylor Street Mail Station 240 San Diego, CA 92110	San Diego County— Barby Valentine (619) 688-6003 Email: barbara.valentine@dot.ca.gov Imperial County— Beth Landrum (619) 403-3217 Email: bethlandrum@dot.ca.gov	- San Diego Association of Governments - Southern California Association of Governments
DISTRICT 12 1750 E. 4 th Street Santa Ana, CA 92705	Yatman Kwan (657) 328-6277 Email: yatman.kwan@dot.ca.gov Marlon Regisford (657) 328-6288 Email: marlon.regisford@dot.ca.gov	Southern California Association of Governments

Item 5.A

Senate Bill (SB) 1 Update

Attachment 2

Caltrans Adaptation Planning Grant
Program Final Draft Grant
Application Guide (Comments due by
August 31, 2017)

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CALTRANS ADAPTATION PLANNING GRANT PROGRAM

-FINAL DRAFT- FY 2017-2018 Grant Application Guide

Adaptation Planning Grants from Senate Bill 1 –
The Road Repair &
Accountability Act of 2017



Application Deadline

October 20th at 5:00 PM

California Department of Transportation
Division of Transportation Planning

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DRAFT

Table of Contents

Adaptation Planning Grant Program.....	1
Funding.....	2
Grant Program Considerations.....	3
Grant Program Overview.....	6
Tools and Resources.....	9
General Information and Requirements.....	10
Application Preparation.....	17
• Tips and Pointers for Writing a Successful Grant Application.....	19
• Application Submittal Instructions.....	20
• Grant Application Checklist and Sample.....	21
• Scope of Work Checklist and Sample.....	29
• Project Timeline Checklist and Sample.....	34
• Third Party In-Kind Valuation Plan Checklist and Sample.....	36
• Local Resolution Checklist and Sample.....	38
Caltrans District and Regional Agency Boundaries Map.....	40
Caltrans Sustainable Transportation Planning Grant District Contact List.....	41

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Adaptation Planning Grant Program

The California Legislature recently passed, and Governor Brown signed into law, Senate Bill 1 - The Road Repair and Accountability Act of 2017, a transportation funding bill that will provide a reliable source of funds to maintain and integrate the State's multi-modal transportation system. As a result of this new transportation funding, \$20 million in climate change adaptation planning grants has been allocated to local and regional agencies for adaptation planning. Seven million dollars are available for the Fiscal Year 2017-2018 grant cycle, seven million dollars will be available in 2018-2019, and six million dollars in 2019-2020. This funding will advance adaptation planning on California's transportation infrastructure, including but not limited to roads, railways, bikeways, trails, bridges, ports, and airports. Eligible projects must have a transportation nexus per Article XIX Section 2 and 3 of the California Constitution. Funded projects are expected to not only adapt the transportation system to climate change impacts but also to benefit the multimodal transportation system. Applicants who have adaptation planning efforts underway as well as those who have not yet started adaptation work are encouraged to apply.

Table 1: Available Funds by Fiscal Year

Fiscal Year Grant Cycle	Adaptation Planning Grant Funds
2017-18	\$7 million
2018-19	\$7 million
2019-20	\$6 million

Purpose

California is leading the way on greenhouse gas emissions reductions to avoid the worst consequences of climate change, but no matter how quickly we reduce our polluting emissions, climate impacts will still occur. Climate change poses many threats to our communities' health, well-being, environment, and property. Many impacts – increased wildfires, droughts, landslides, rising sea levels, floods, severe storms and heat waves – are occurring already and will only become more frequent and severe.

Climate change is increasingly impacting the state's transportation system. Adaptation efforts will enhance the resiliency of the transportation system to help protect against climate impacts. The overarching goal of this grant program is to support planning actions at local and regional levels that advance climate change adaptation efforts, especially efforts that serve the communities most vulnerable to climate change impacts. Taking steps now to adapt to climate change will protect public health and safety, infrastructure, our economy, and our future.

Funding

The Adaptation Planning grants are funded by the State Highway Account (SHA). The fiscal year 2017-2018 funding amount is seven million dollars, and will be entirely be competitively awarded. The minimum application amount is \$100,000 and the maximum application amount is \$1,000,000. The required local match is 11.47%.

GRANT	FUND SOURCE	PURPOSE	WHO MAY APPLY	LOCAL MATCH
Adaptation Planning	State Highway Account (SHA) Budget State funds \$7,000,000 Grant Min \$100,000 Grant Max \$1,000,000	Support planning actions at local and regional levels that advance climate change adaptation efforts on the transportation system, especially efforts that serve the communities most vulnerable to climate change impacts.	The following are eligible to apply as a primary applicant: • MPOs • RTPAs • Transit Agencies • Cities and Counties • Native American Tribal Governments • Local and Regional Agencies • Special Districts The following are eligible to apply as a sub-applicant: • Transit Agencies • Universities and Community Colleges • Native American Tribal Governments • Cities and Counties • Community-Based Organizations • Non-Profit Organizations (501.c.3) • Other Public Entities**	11.47% minimum (in cash or an in-kind* contribution). The entire minimum 11.47% local match may be in the form of an eligible in-kind contribution. Staff time from the primary applicant counts as cash match.

* For in-kind contribution requirements, refer to Page 14 of this Guide.

** Public entities include state agencies, the Regents of the University of California, district, public authority, public agency, and any other political subdivision or public corporation in the State (Government Code Section 811.2).

Grant Program Considerations

The Grant Program supports related State initiatives, explained further below. Competitive applicants will reference in their application as many of the identified State initiatives as possible and how the proposed project advances these initiatives, including:

- California Climate Adaptation Planning Guide
- Executive Order S-13-08
- Executive Order B-30-15
- Assembly Bill 2800 Climate Safe Infrastructure Working Group
- California Transportation Plan (CTP) 2040
- Safeguarding California Plan (2017) Update – California’s Adaptation Strategy
- Regional Transportation Plan Guidelines
- Integrate Climate Adaptation and Resiliency Program (ICARP)
- Addressing Disadvantaged Communities

California Climate Adaptation Planning Guide

The Adaptation Planning Guide provides guidance to support regional and local communities in proactively addressing the unavoidable consequences of climate change. It provides a step-by-step process for local and regional climate vulnerability assessment and adaptation strategy development.

<http://resources.ca.gov/climate/safeguarding/local-action/>

State Policy

Executive Order S-13-08

EO-S-13-08 directs state agencies to plan for sea level rise and climate impacts through coordination of the state Climate Adaptation Strategy (Safeguarding California).

<https://www.gov.ca.gov/news.php?id=11036>

Executive Order B-30-15

EO-B-30-15 sets a greenhouse gas (GHG) emissions target for 2030 at 40 percent below 1990 levels. It also requires state agencies to “take climate change into account in their planning and investment decisions.” Flexible and adaptive approaches should be taken to prepare for uncertain climate impacts.

<https://www.gov.ca.gov/news.php?id=18938>

AB 2800 Climate Safe Infrastructure Working Group

State agencies shall take into account the current and future impacts of climate change when planning, designing, building, operating, maintaining and investing in state infrastructure. A Climate-Safe Infrastructure Working Group has been established for the purpose of examining how to integrate scientific data concerning projected climate change impacts into state infrastructure engineering, including oversight, investment, design, and construction.

<http://resources.ca.gov/climate/climate-safe-infrastructure-working-group/>

California Transportation Plan 2040

Applications should align with the goals and best practices cited in the California Transportation Plan 2040 (specifically, Goal 2 “Preserve the Multimodal Transportation System,” Policy 3 “Adapt the transportation system to reduce impacts from climate change”).

<http://www.dot.ca.gov/hq/tpp/californiatrnsportationplan2040/Final%20CTP/FINALCTP2040-Report-WebReady.pdf>

Safeguarding California

Safeguarding California is the State's climate adaptation strategy that organizes state government climate change adaptation activities. Assembly Bill (AB) 1482 (Gordon, 2015) requires the California Natural Resources Agency (CNRA) to update Safeguarding California every three years. AB 1482 directs State agencies to promote climate adaptation in planning decisions and ensure that state investments consider climate change impacts, as well as the use of natural systems and natural infrastructure (Public Resources Code Section 71153).

<http://resources.ca.gov/wp-content/uploads/2017/05/DRAFT-Safeguarding-California-Plan-2017-Update.pdf>

2017 RTP Guidelines

The California Transportation Commission recently adopted the *2017 RTP Guidelines for Metropolitan Planning Organizations (MPOs)* and the *2017 RTP Guidelines for RTPAs*. Chapter 6.30 in the *RTP Guidelines for MPOs* (or Chapter 6.25 in the *RTP Guidelines for RTPAs*) focuses on "Adaptation of the Regional Transportation System to Climate Change."

<http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index.html>

Integrated Climate Adaptation and Resiliency Program (ICARP)

Senate Bill (SB) 246 (Wieckowski, 2015) established the Integrated Climate Adaptation and Resiliency Program (ICARP) within the Governor's Office of Planning and Research to coordinate regional and local efforts with state climate adaptation strategies to adapt to the impacts of climate change (Public Resources Code Section 71354). In support of these efforts, grantees will provide periodic reports to the ICARP Technical Advisory Council (see reporting requirements on page 12).

Addressing Disadvantaged Communities

Caltrans encourages applicants to address transportation needs and deficiencies in disadvantaged communities, including communities vulnerable to climate change impacts. The optional tools below are intended to help applicants define a very context-dependent definition of a disadvantaged community. Regionally and/or locally defined disadvantaged communities are acceptable. Applicants may also include other population characteristics, such as income or level of education. Information about disadvantaged communities can be found at:

SB 535 (De Leon, Statutes of 2012):

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535

Senate Bill 535 tasked the California Environmental Protection Agency with defining disadvantaged communities in order to meet the statutory requirements to invest a quarter of Greenhouse Gas Reduction Funds (GGRF) to projects benefiting disadvantaged communities and ten percent to projects located within a disadvantaged community. SB 535 may assist applicants with defining disadvantaged communities and the many factors to consider.

Assembly Bill (AB) 1550 (Gomez, Statutes of 2016):

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1550

AB 1550 further refined the GGRF statutory requirements to invest in disadvantaged communities. AB 1550 provides definitions for low income households and low income communities that may also be considered in application development.

CalEnviroScreen Version 3.0:

<http://oehha.maps.arcgis.com/apps/View/index.html?appid=c3e4e1d115468390cf61d9db83efc4>

CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution.

The tools below provide additional criteria and indicators for climate vulnerability and community health disadvantage that CalEnviroScreen does not. The tools can help reduce health inequities and include:

California Health Disadvantage Index (HDI): <http://phasocal.org/ca-hdi/>

The Public Health Alliance developed an interactive composite index to identify cumulative health disadvantage in California. HDI includes diverse non-medical economic, social, political and environmental factors that influence physical and cognitive function, behavior and disease. Indicator data used for HDI comes from publicly available sources and is produced at a census tract level. The tool will soon be updated with a new map and additional indicators, and will be renamed the California Healthy Places Index (HPI).

CDPH Climate Change and Health Profile Reports (CHPRs):

<https://www.cdph.ca.gov/Programs/OHE/Pages/ClimateHealthProfileReports.aspx>

The Climate Change and Health Profile Reports are designed to help counties in California prepare for the health impacts related to climate change through adaptation planning. The reports present projections for county and regional climate impacts, the climate-related health risks, and local populations that could be vulnerable to climate effects.

Grant Program Overview

The objective of the Adaptation Planning grant program is to support local and regional adaptation planning efforts on the transportation system. Applicants who have adaptation planning efforts underway as well as those who have not yet started adaptation work are encouraged to apply.

Grant Specific Objectives

Applicants must demonstrate how the proposed effort will accomplish the following:

- Demonstrate on-going collaboration and partnerships between sectors and jurisdictions, across levels of government at a regional scale
- Identification of co-benefits of adaptation work, such as benefits to public health, natural ecosystems, air quality, social equity, or the economy

Applicants should demonstrate how the proposed effort will accomplish one or more of the following:

- Identify system-wide climate change impact risks to multimodal transportation infrastructure in the project area
- Identify specific transportation infrastructure vulnerabilities¹ to climate change impacts
- Identify adaptation strategies and specific actions to remedy identified climate related vulnerabilities
- Advance the planning of specific climate adaptation projects, such as developing a cost estimate or conceptual design
- Include the evaluation and/or incorporation of natural and green infrastructure adaptation solutions
- Include economic analysis and/or cost-benefit analysis of identified adaptation strategy or strategies

Competitive applications should include one or more of the following:

- Identification of and benefit to disadvantaged communities, including transit-dependent populations² (when applicable)
- Identification of vulnerable populations and their mobility needs and demonstration of how the proposed project responds to these needs
- Demonstration of collaboration and partnerships with diverse external stakeholders such as businesses, non-governmental agencies, community-based organizations, and community residents

¹ Transportation infrastructure includes, but is not limited to, roads, railways, bikeways, trails, bridges, ports, and airports. Vulnerable transportation infrastructure is transportation infrastructure that is susceptible to the impacts of climate change (e.g. a pedestrian-use trail that cuts through a forested area that is expected to see increased fire risk due to climate change).

² Transit-dependent individuals are defined as individuals who are “too young, too old, cannot afford or do not have access to an automobile or rely on transit to reach their destinations” (*Westside Transportation Access Needs Assessment – Short and Long Term Improvements*, Papandreou, 2014).

Example Adaptation Planning Grant Project Types

Please consult with Caltrans District staff with questions on appropriate project types. Some examples of eligible project types include:

- **Climate vulnerability assessments**
- **Extreme weather event evacuation planning**, which may include, but is not limited to, identifying communities and individuals with inadequate access to transportation as a result of long-term climactic changes or extreme climate-related events
- **Resilience planning**
- **Transportation infrastructure adaptation plans**
- **Natural and green infrastructure planning** (e.g. wetlands restoration along transportation corridors to protect transportation infrastructure from flooding and storm impacts)
- **Integration of transportation adaptation planning considerations into existing plans**, such as a climate mitigation or adaptation plan, Local Coastal Program (LCP), Local Hazard Mitigation Plan (LHMP), General Plan (including meeting Senate Bill 379 requirements), or other related planning efforts
- **Evaluation of or planning for other adaptation strategies**, such as:
 - Survey to determine number and location of transit dependent residents
 - Roadway warning systems for extreme weather events
 - Providing transit shelters with shade, water, or other means of cooling in locations expected to see temperature increases
 - Increasing transportation options in evacuation corridors
 - Planning for distributed energy and storage to provide decentralized energy system for safeguarding against loss of power and impacts to electric vehicles due to climate-related grid disruptions

Eligible Activities and Expenses

Please consult with Caltrans District staff for more information on whether costs are eligible for funding. Some examples of eligible costs include:

- Staff time
- Consultant time
- Conceptual drawings and design
- Data and geospatial analysis
- Community surveys, meetings, charrettes, focus groups
- Bilingual services for interpreting and/or translation services for meetings
- Community/stakeholder advisory groups

Ineligible Activities and Expenses

Some activities, tasks, project components, etc. are not eligible under this grant program. If an application has any of the following elements, it will be disqualified. Ineligible activities and expenses include:

- Advanced design, engineering, or construction work
- Projects without a transportation nexus
- Project Initiation Documents (PIDs)
- Environmental studies, plans, or documents normally required for project development under the National Environmental Policy Act or the California Environmental Quality Act
- Engineering plans and design specification work

- Regional Transportation Plans (RTP) or updates to the RTP, excluding SCS development
- Construction projects, capital costs, such as the building of a facility, or maintenance
- Purchasing of office furniture, or other capital expenditures
- Decorations, e.g., for public workshop events
- Acquisition of vehicles or shuttle programs
- Organizational membership fees
- Unreasonable incentives such as prizes for public participation
- Charges passed on to sub-recipient for oversight of awarded grant funds
- Other items unrelated to the project

Tools and Resources

It is not required that applicants consult the tools and resources below; however, this information is included to provide applicants with existing data sources and support applicants who may want to delve deeper into certain topics. Notable climate adaptation tools and resources include:

CalAdapt: <http://cal-adapt.org/>

California Adaptation Planning Guide

<http://resources.ca.gov/climate/safeguarding/local-action/>

Safeguarding California – California’s Climate Adaptation Strategy (under development)

<http://resources.ca.gov/climate/safeguarding/>

Vibrant Communities and Landscapes

<https://www.arb.ca.gov/cc/scopingplan/meetings/091316/vibrant%20communities.pdf>

General Plan Guidelines (under development)

https://www.opr.ca.gov/s_generalplanguidelines.php

Caltrans Vulnerability Assessments (under development)

http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

Addressing Climate Change Adaptation in Regional Transportation Plans:

http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/documents/FR3_CA_Climate_Change_Adaptation_Guide_2013-02-26_.pdf

Ocean Protection Council Sea-Level Rise Guidelines: <http://www.opc.ca.gov/2013/04/update-to-the-sea-level-rise-guidance-document/>. The State of California is in the process of updating the State Sea-Level Rise Guidance Document. Until the new guidance is released, please refer to the 2013 update.

California Coastal Commission Sea Level Rise Policy Guidance

https://documents.coastal.ca.gov/assets/slr/guidance/August2015/0_Full_Adopted_Sea_Level_Rise_Policy_Guidance.pdf

Cal-Fire

<http://calfire.ca.gov/index>

California Department of Conservation – Landslide Hazards

http://www.conservation.ca.gov/cgs/geologic_hazards/landslides

General Information and Requirements

This section provides a brief overview of the grant application review process, financial, contracting, subcontracting, and legal requirements pertaining to the grant program. The content of this section should be notably considered in the development of grant applications as it lays the foundation for what to expect when applying for these grant funds. Upon award, grantees will receive more specific guidelines including administrative and reporting requirements.

Application Review Process & Evaluation Considerations

Review Process

All applications submitted to the Adaptation Planning Grant Program go through multiple levels of review including reviews by Caltrans District and HQ staff, and State interagency review committees. District staff reviews all applications for content, submission of proper documentation, and overall relationship to regional and local planning efforts. The District rates each application and provides comments to inform the State interagency review committee. The grant review committees evaluate applications for content, completeness, meeting technical requirements, overall relationship to statewide planning efforts, and compliance with state and federal planning requirements. Grant applications that address every aspect of the grant specific objective will score higher overall. Once the grant review committees evaluate, rank, and select the best applications for grant funding, final recommendations are presented to Caltrans management for approval.

Award Terms

Caltrans is committed to being an active partner. If awarded a grant, the applicant should include Caltrans District staff when planning both technical advisory and community meetings. In addition, Caltrans District staff will help to ensure that the approved Scope of Work, Project Timeline, and project funding will be maintained throughout the life of the contract. Applicants are also recommended to engage Caltrans District Staff throughout the entire grant life, when applicable.

If an agency does not demonstrate adequate performance and timely use of funds, Caltrans may take appropriate actions, which can include termination of the grant.

Contracting with Caltrans & Project Timelines

Project Start Dates

All awarded grant funds must be programmed during the State's 2017-2018 Fiscal Year. The project start date depends on the method of contracting with Caltrans. For MPOs and RTPAs with a current Master Fund Transfer Agreement (MFTA), work may begin as early as January 2018. For awarded grantees that do not have a current MFTA with Office of Regional Planning (i.e. cities, counties, transit agencies, Tribal Governments), Caltrans will contract directly with the primary grant recipients through the Restricted Grant Agreement (RGA) process. For grant recipients that undergo the RGA contracting process, work may begin as early as April 2018, assuming the grantee has received a fully executed contract and has been notified by Caltrans District Staff to begin work. It is important for applicants to reflect the estimated project start date in the Scope of Work and Project Timeline. Project Timeline constraints for both methods of contracting with Caltrans are provided below. Awardees are required to submit all supporting materials and a signed agreement or risk forfeiting the grant award.

Restricted Grant Agreement Project Timeline

Consider these dates when developing the Scope of Work and Project Timeline:

April 2018

- Anticipated start date

February 28, 2020

- Contract expires (**no time extensions will be granted**)
- Reimbursable work must be completed

April 28, 2020

- All final invoices must be submitted to Caltrans for approval and reimbursement. This allows Caltrans sufficient time to comply with the State Controller's Office payment requirements.

Master Fund Transfer Agreement Project Timeline (MPOs/RTPAs Only)

Consider these dates when developing the Scope of Work and Project Timeline:

January 2018

- Anticipated start date

February 28, 2020

- Project end date
- Reimbursable work must be completed

April 28, 2020

- A Final Request for Reimbursement must be submitted to Caltrans for approval and reimbursement. This allows Caltrans sufficient time to comply with the State Controller's Office payment requirements.

Contract Options for Native American Tribal Governments

Native American Tribal Governments have the following options for contracting with Caltrans:

(1) Contracting with Tribes Directly – The authority Caltrans uses to contract with tribes directly comes from California Streets and Highways Code section 94, and is extremely limited. Caltrans Legal requires the tribes to provide a limited waiver of sovereign immunity. However, Caltrans Native American Liaison Branch makes sure that any waiver is very specifically limited in scope and in time to only applies to the contract itself (and to any possible audits). In an effort to streamline the RGA contracting process, there is a Sustainable Communities RGA boilerplate template available upon request.

(2) Tribes can partner with a local agency – Another mechanism for contracting with Caltrans is to collaborate with an MPO or RTPA. Caltrans can pass through grant funding to tribes for planning projects where options or time are limited. This option uses the three-part contract, MFTA/OWP/OWPA, and is usually the quickest option to allow planning projects to get started.

(3) Funds Transfer Procedures pursuant to 23 U.S.C. 202(a)(9) (From Federal Lands Highway Website) – *Section 202(a)(9) of title 23, United States Code encourages cooperation between States and Tribes by allowing any funds received from a State, county, or local government to be credited to appropriations available for the Tribal Transportation Program (TTP). One potential source of such funding is funds apportioned or allocated to a State under title 23. Section 104(f)(3) allows the Secretary of Transportation to, at the request of a State, transfer among States, or to the FHWA,*

funds that have been so apportioned or allocated. This provision, used in conjunction with the authority under 23 U.S.C. 209(a)(9), allows State funds to be transferred to FHWA, which in turn would provide the funds to the specified Tribe. Please view [this document](#) for more information.

Caltrans has successfully used the federal Section 202(a)(9) process to transfer Sustainable Communities Grant funds to a Native American Tribal Government. In order to use this transfer process, an agreement would need to be in place with FHWA or Bureau of Indian Affairs, the Tribe, and the State that clearly identifies the project and the roles and responsibilities of all parties. Each interagency fund transfer includes 1) a fund transfer template and 2) an addendum lining out the specifics of the terms. This option requires involvement and approval by Caltrans Legal and the funds must be used for the intended purpose of the awarded Adaptation Planning grant.

Grant Project Administration Requirements

Overall Work Program (for MPOs/RTPAs Only)

All MPOs and RTPAs must have the entire grant award and local match programmed in the Fiscal Year 2017-2018 OWP no later than May 1, 2018. Approved grant projects must be identified as **individual** Work Elements in the current OWP and in future OWPs until the project is completed.

Reporting

For MPOs and RTPAs, the progress of each awarded grant project must be included as part of the OWP Quarterly Progress and Expenditure Report. If this method of reporting is not adequately satisfied, Caltrans staff will require separate quarterly reports for each awarded grant project.

All other primary grant recipients shall submit progress reports every quarter for each awarded grant project. Caltrans District staff will provide the brief report form and due dates.

Because this is the first State Adaptation Planning grant of its kind, Caltrans and the Governor's Office of Planning and Research are looking to identify and share the lessons learned from this grant opportunity to inform other existing or new state grant programs. To this end, all primary grant recipients will prepare a short write-up to be included in the Integrated Climate Adaptation and Resiliency Program (ICARP) Clearinghouse, which was developed to share information, resources, and case studies with local and regional jurisdictions. At a minimum, grantees will be asked to prepare a case study describing the application and proposed project and a case study on the completed project or plan, including a PowerPoint presentation deck and GIS files of maps where applicable. Case studies should emphasize processes or results that can be adapted or replicated for use in multiple jurisdictions or in various parts of the state. These studies will be used to develop guidance for adaptation work in the future. Caltrans will share progress reports with the ICARP Technical Advisory Council at regular intervals.

Grantees are also invited and encouraged to request technical assistance support from the ICARP program, including bringing key challenges or lessons learned to the Technical Advisory Council for their input.

Final Product

All final reports funded through the Adaptation Planning Grant Program shall credit Caltrans' financial participation on the cover or title page. An electronic copy of all final reports shall be forwarded to the Caltrans District Office responsible for the administration and oversight of the grant.

Ownership

Any technologies or inventions that may result from the use of these grants are in the public domain and may not be copyrighted, sold, or used exclusively by any business, organization, or agency. Caltrans reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use for public purposes.

Third Party Contracts

The agreements between a grantee and a sub-recipient, consultant, or sub-consultant are often referred to as "third party contracts." An eligible sub-applicant will be identified by an eligible applicant on the onset of the application. If a grantee or a sub-recipient is going to hire a consultant to perform work during the project, then proper procurement procedures must always be used.

Grantees may use their agency's procurement procedures as long as they comply with the Local Assistance Procedures Manual, Chapter 10. In addition, work can only be contracted if it has been stated in the applicant's Scope of Work and Project Timeline. A grantee is fully responsible for all work performed by its sub-recipient, consultant, or sub-consultant. Caltrans solely enters into a contract directly with the grantee; therefore the grantee is responsible to ensure that all third parties adhere to the same provisions included in the contractual agreement between Caltrans and the grantee.

All government funded consultant procurement transactions must be conducted using a fair and competitive procurement process that is consistent with the Local Assistance Procedures Manual, Chapter 10.

All documentation of third party contract procurements must be retained and copies of all agreements must be submitted to Caltrans. For more information on third party contracting, visit the following links:

Local Assistance Procedures Manual: <http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm>

Non-Discrimination Requirements

Non-Discrimination Requirements

Title VI of the U.S. Civil Rights Act prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving federal financial assistance. A similar prohibition applies to recipients of state funds under California Government Code section 11135, which prohibits discrimination on the basis of race, color or national origin, as well as ethnic group identification, religion, age, sex, sexual orientation, genetic information, or disability. Specifically Title VI provides the following:

No person in the United States shall, on the ground of race, color, national origin, religion, sex, age, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Federal government.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) each have requirements that recipients of Metropolitan Planning federal funds must demonstrate continued compliance with Title VI. Compliance with Title VI includes conducting meetings in a fair and reasonable manner that are open to all members of a community. Compliance reflects not only the law, but is also a good policy that builds the kind of trust and information sharing upon which successful planning is done. Even where a city or county may not be receiving federal funding for transportation, the Civil Rights Restoration Act of 1987 also obligates that a city or county comply with Title VI, if it receives any other federal funding for any program.

Disadvantaged Business Enterprises

The Road Repair and Accountability Act of 2017 requires Caltrans to develop a plan to increase, up to 100 percent, the dollar value of contracts/procurements awarded to Small Businesses, Disadvantaged Business Enterprises (DBEs), and Disabled Veteran Business Enterprises (DVBES). Caltrans is required to have this plan by January 1, 2020. Until then, successful grant applicants are expected to market contracting opportunities to all small businesses, including DBEs and DVBES.

For details about DBE requirements, visit the Office of Regional Planning (ORP) DBE website at: <http://www.dot.ca.gov/hq/tpp/offices/orip/DBE/DBE.html>.

Invoicing & Financial Requirements

Requests for Reimbursements

Grant payments are made only as reimbursements. Invoices or Requests for Reimbursements (RFR) need to be submitted no more frequently than monthly or at a minimum quarterly. Grantees must pay sub-recipients and subcontractors prior to submitting a RFR to Caltrans. A one-time, **lump sum RFR for the entire grant is not allowed**. Local match (cash and third party in-kind contributions) must be expended on a proportional basis coinciding with each grant Work Element (MPOs/RTPAs only) and/or tasks in each RFR. The proportional expenditure of local match must be clearly identified in the Project Timeline. The minimum required local match (i.e., 11.47%) must be rendered during the invoicing period to which the matching requirement applies. The minimum required local match must also be satisfied with each RFR.

Local Match Contribution

All grants require a local match. Revenue sources for a local match can include local sales tax, special bond measures, private donations, private foundations, etc. The Adaptation Planning grants require the applicant to provide a minimum 11.47 percent local match—any source of funds may be used for the local match. The minimum local match is a percentage of the total project cost (i.e., minimum local match amount plus the grant amount). The local match can be cash, staff time, third party in-kind contributions, or a combination.

To better assist applicants, the Local Match Calculator can be found at:

http://www.dot.ca.gov/hq/tpp/offices/orip/Grants/2015/Match_Calculator.xlsx

Third Party In-Kind Contributions

Third party in-kind contributions are typically goods and services donated from outside the primary grantee's agency. Examples of third party in-kind contributions include donated printing, facilities, interpreters, equipment, advertising, time and effort, staff time, and other goods and services. The value

of third party in-kind contributions must be directly benefiting and specifically identifiable to the project. Third party in-kind contribution information must be identified on the Grant Application Cover Sheet, the Project Timeline, and the project specific Work Element in the OWP (if applicable).

If third party in-kind contributions are used to satisfy the local match requirements, a third party in-kind valuation plan must also be submitted to Caltrans for approval as a condition of grant acceptance. The third party in-kind valuation plan is an itemized breakdown by task and serves as documentation for the goods and/or services to be rendered. The Third Party In-Kind Valuation Plan Checklist and Sample are provided on Pages 37-38.

Accounting Requirements

Grantees are required to maintain an accounting and record system that properly accumulates and segregates incurred project costs and matching funds by line item. The accounting system of the grantee, including its sub-applicants and subcontractors, must conform to Generally Accepted Accounting Principles that enable the determination of incurred costs at interim points of completion and provides support for reimbursement payment vouchers or invoices sent to or paid by Caltrans. Allowable project costs must comply with 2 Code of Federal Regulations (CFR), Part 200. It is the grantee's responsibility, in conjunction with Caltrans District staff, to monitor work and expenses to ensure the project is completed according to the contracted Scope of Work and Project Timeline. Grantees must monitor work and costs to ensure invoices are submitted on a regular and timely basis (monthly or quarterly as milestones are completed). Grantees must communicate with their local Caltrans District Office to ensure any issues are addressed early during the project period.

Indirect and Direct Costs

Indirect costs require an Indirect Cost Allocation Plan (ICAP). For example, reproduction costs, computer rental and office supplies are considered indirect costs. However, if these costs are tied to a specific task or activity, they are considered direct costs.

If a grantee, including sub-recipients and third party contractors/consultants, are seeking reimbursement of indirect costs, they must annually submit an ICAP or an Indirect Cost Rate Proposal (ICRP) to Caltrans Audits and Investigations for review and approval prior to reimbursement. An ICAP or ICRP must be prepared and submitted in accordance with 2 CFR, Part 200. For more information visit the following website:

Indirect Cost Allocation Plan: http://www.dot.ca.gov/hq/audits/icap_icrp.html

Due to the competitive nature of the grant award process, applications must include any indirect costs in the Project Timeline. Indirect costs can only be reimbursed if they are identified in the Project Timeline submitted with the initial application.

Travel Expenses

Grantees may be eligible to claim travel expenses if they have been approved in the Scope of Work and Project Timeline. Travel expenses and per diem rates are not to exceed the rate specified by the State of California Department of Personnel Administration for similar employees (i.e. non-represented employees). For more information on eligible travel expenses, visit the following website:

Caltrans Travel Guide: <http://www.dot.ca.gov/hq/asc/travel/>

Pre-Award Audit

The Adaptation Planning grants are available in amounts up to \$1 million. However, any awarded grant in excess of \$250,000 may require a pre-award audit. The pre-award audit is to ensure that recipients of state funds maintain adequate financial management systems prior to receiving the funds. Pre-award audits may be required of new grantees, agencies that have not recently been audited, agencies that have undergone prior audits with significant weaknesses or deficiencies in their financial management systems, or those determined to be a higher risk to Caltrans. If a pre-award audit is needed, the local Caltrans District Office will contact the grantee to facilitate the appropriate action.

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Application Preparation

The Adaptation Planning Grant Program is highly competitive. This section provides applicants with supplemental information as well as details on required documents that must accompany an application at the time of submittal. All applicants are strongly encouraged to adhere to these requirements in order to be competitive during the application evaluation process. Because this is a new grant program, applications will be evaluated qualitatively, at least for the first cycle.

Early Coordination with Primary Applicants

Sub-applicants are encouraged to work far in advance of the application deadline with the appropriate primary applicant to coordinate application development. It is also beneficial for sub-applicants to be informed of the appropriate primary applicant process and schedule, as they may differ slightly from those of Caltrans. RTPAs residing within MPO boundaries should also coordinate application development with the MPO (if applicable), as it is critical to ensure that proposed studies align with the RTP/SCS for the entire MPO region and do not duplicate efforts being applied for or already awarded to the MPO.

Technical Assistance

Caltrans District Office staff (see Page 41) will be available during the application period to answer questions and help interested groups complete their applications.

For questions specific to the Grant Application Guide, applicants are also welcomed to contact the Caltrans Office of Regional Planning:

Julia Biggar Email: Julia.Biggar@dot.ca.gov Phone: (916) 654-6344	Brigitte Driller Email: Brigitte.Driller@dot.ca.gov Phone: (916) 653-0426
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Required Documents

Use the samples and checklists provided for the following required documents:

- Application
- Scope of Work
- Project Timeline

A **map of the project area** is also required to clearly identify the boundaries of the project area and to context for the project.

Additional Documents

The following documents are not required, but enhance the overall application and typically result in a more competitive application during the evaluation process.

- **Letters of Support**
 - If submitted, letters of support must be included with the application package. Letters received separate from the application package may not be considered. The letters should be addressed to the applicant. Such letters can come from community-based organizations, local governments, Native American Tribal governments, service agencies, and elected officials.
- **Graphics**
 - Photographs, maps, planning diagrams, land use or design illustrations, or other relevant graphic representations of the proposed project area convey existing conditions and help to further explain the need for the grant.

Tips and Pointers for Writing a Successful Grant Application

- ✓ Consult with your District representative for technical assistance before the application deadline.
- ✓ Use the Samples and Checklists provided for the Application, Scope of Work, and Project Timeline.
- ✓ Include Caltrans as an active partner in the study.
- ✓ Provide letters of support and project area photographs to enhance the application.
- ✓ **Overall Grant Application:** Clearly demonstrate how the project promotes climate change adaptation planning on the California transportation system. Also demonstrate how the project aligns with the Grant Specific Objectives.
- ✓ **Project Summary:** Concisely describe the project in less than 100 words. Explain the “Who, what, when, where, and why.”
- ✓ **Project Justification:** Clearly define and explain how the project will enhance the resiliency of the transportation system to help protect against climate impacts. Make the case for critical need(s) that the project will address and support it with verifiable data, if available.
- ✓ **Scope of Work:** Identify the project area demographics, public participation, and project implementation.
- ✓ **Project Timeline:** Identify the current indirect cost rate *if* indirect costs will be sought for reimbursement. If Fiscal Year 2017-2018 indirect cost rates are not available, the rate will be an estimate based on the currently approved rate.
- ✓ Keep administrative project tasks below 5 percent of the grant amount requested.
- ✓ Ensure the appropriate minimum local match amount, calculated as a percentage of the total project cost (grant plus local match), is provided.
- ✓ Demonstrate achievable project goals and milestones within the grant timeframe.

Application Submittal Instructions

All grant application packages are required to be submitted **via e-mail**. **An agency may only submit one application package per e-mail**. The Caltrans District Office contact must be copied (refer to the **District Contact List** on Page 41) and the subject line needs to identify the district number, grant program, and *brief* project title (e.g., D1, SC, City of Can Do Planning Project). The required items outlined on the Grant Application Checklist on Page 21 must be attached to the e-mail as separate documents.

Please submit your application package to: Regional.Planning.Grants@dot.ca.gov

**APPLICATIONS MUST BE SUBMITTED VIA E-MAIL NO LATER THAN
FRIDAY OCTOBER 20, 2017
BY 5:00 PM**

**HARD COPIES WILL NOT BE ACCEPTED &
LATE APPLICATIONS WILL NOT BE REVIEWED**

The Grant Application Guide and application form are available at the following website:
<http://www.dot.ca.gov/hq/tpp/grants.html>

Anticipated award announcements: **December 2017**

Download the latest version of [Adobe Reader DC](#)® to complete the application form. This version of Adobe is available free of charge.

Caltrans District Office staff is a valuable resource and will be available during the application period to answer questions and help interested groups complete their applications. Refer to the District Contact List on Page 41 for contact information.

Grant Application Checklist

The following documents are required and must be submitted via e-mail as separate attachments. Please do not combine documents into a single attachment. Please keep file names brief, as files become corrupted when the names are too long. Refer to the Grant Application Guide for additional information and/or samples. Failure to include any of the required documents will result in a reduced application score.

Required Application Documents:

- ☐ Application (Complete and submit the PDF form in the exact format provided online at <http://www.dot.ca.gov/hq/tpp/grants.html> - **Scanned or hard copies of the application will not be accepted**)
- ☐ Application Signature Page (print, sign, and scan this page in PDF format)
- ☐ Scope of Work (Microsoft Word format)
- ☐ Project Timeline (Microsoft Excel format)
- ☐ Map of Project Area

Supplemental Information:

- ☐ Graphics of Project Area (when applicable)
- ☐ Letter(s) of Support

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION**

PROJECT TITLE			
PROJECT LOCATION (city and county)			
	APPLICANT	SUB-APPLICANT	SUB-APPLICANT
Organization			
Mailing Address			
City			
Zip Code			
Executive Director/designee and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
E-mail Address			
Contact Person and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
Contact E-mail Address			
Phone Number			

FUNDING INFORMATION

Use the Match Calculator to complete this section.

[Match Calculator](#)

Grant Funds Requested	Local Match - Cash	Local Match - In-Kind	Total Project Cost
\$	\$	\$	\$

Specific Source of Local Cash Match (i.e. local transportation funds, local sales tax, special bond measures, etc.)

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SAMPLE
 Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
 ADAPTATION PLANNING GRANT APPLICATION**

LEGISLATIVE INFORMATION*			
Information in this section must directly be tied to the applicant's address.			
All legislative members in the project area do not need to be listed.			
State Senator(s)		Assembly Member(s)	
Name(s)	District	Name(s)	District

*Use the following link to determine the legislators.
<http://findyourrep.legislature.ca.gov/> (search by address)

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION**

1. Project Description (100 words maximum): Briefly summarize project.

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SAMPLE
Fiscal Year 2017-18
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION

2. **Project Justification:** Describe the problems or deficiencies the project is attempting to address, as well as how the project will address the identified problems or deficiencies. Additionally, list the ramifications of not funding this project.

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SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION**

3. Grant Specific Objective: Explain how the proposed project addresses the grant specific objectives of the Adaptation Planning grant program.

Applicants should demonstrate how the proposed effort would integrate grant program considerations:

- California Climate Adaptation Planning Guide
- Executive Order S-13-08
- Executive Order B-30-15
- Assembly Bill 2800 Climate Safe Infrastructure Working Group
- California Transportation Plan (CTP) 2040
- Safeguarding California Plan (2017) Update – California’s Adaptation Strategy
- Regional Transportation Plan Guidelines
- Integrate Climate Adaptation and Resiliency Program (ICARP)
- Addressing Disadvantaged Communities

Applicants must demonstrate how the proposed effort will accomplish the following:

- Demonstrate on-going collaboration and partnerships between sectors and jurisdictions, across levels of government at a regional scale
- Identification of co-benefits of adaptation work, such as benefits to public health, natural ecosystems, air quality, social equity, or the economy

Applicants should demonstrate how the proposed effort will accomplish one or more of the following:

- Identify system-wide climate change impact risks to multimodal transportation infrastructure in the project area
- Identify specific transportation infrastructure vulnerabilities to climate change impacts
- Identify adaptation strategies and specific actions to remedy identified climate related vulnerabilities
- Advance the planning of specific climate adaptation projects, such as developing a cost estimate or conceptual design
- Include the evaluation and/or incorporation of natural and green infrastructure adaptation solutions
- Include economic analysis and/or cost-benefit analysis of identified adaptation strategy or strategies

Competitive applications should include one or more of the following:

- Identification of and benefit to disadvantaged communities, including transit-dependent populations (when applicable)
- Identification of vulnerable populations and their mobility needs and demonstration of how the proposed project responds to these needs
- Demonstration of collaboration and partnerships with diverse external stakeholders such as businesses, non-governmental agencies, community-based organizations, and community residents

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION**

4. Project Management (See Scope of Work and Project Timeline samples and checklists for requirements)

- A. Scope of Work in required Microsoft Word format
- B. Project Timeline in required Microsoft Excel format

DRAFT

SAMPLE
Fiscal Year 2017-18
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
ADAPTATION PLANNING GRANT APPLICATION**

Application Signature Page

**If selected for funding, the information contained in this application will become the foundation
of the contract with Caltrans.**

**To the best of my knowledge, all information contained in this application is true and correct.
If awarded a grant with Caltrans, I agree that I will adhere to the program guidelines.**

Signature of Authorized Official (Applicant)

Print Name

Title

Date

Signature of Authorized Official (Sub-Applicant)

Print Name

Title

Date

Scope of Work Checklist

The scope of work is the official description of the work that is to be completed during the contract. The scope of work must be consistent with the project timeline. Applications with missing components will be at a competitive disadvantage. Please use this checklist to make sure your scope of work is complete.

The scope of work must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided and in Microsoft Word format.
- ☐ List all tasks and sub-tasks using the same title as stated in the project timeline.
- ☐ Have task and sub-task numbers in accurate and proper sequencing; consistent with the project timeline.
- ☐ List the responsible party for each task and subtask and ensure that it is consistent with the project timeline (i.e. applicant, sub-applicant, or consultant).
- ☐ Have a thorough Introduction to describe the project and project area demographics, including a description of the vulnerable populations involved with the project, if applicable.
- ☐ Have a thorough and accurate narrative description of each task and sub-task.
- ☐ Include a task for a kick-off meeting with Caltrans at the start of the grant.
- ☐ Include a task for procurement of consultants, if consultants are needed.
- ☐ Include a task for invoicing.
- ☐ Include a task for quarterly reporting to Caltrans.
- ☐ Include detailed public participation and services to diverse communities.
- ☐ Include project implementation/next steps.
- ☐ List the project deliverable for each task in a table following each task and ensure that it is consistent with the project timeline.
- ☐ NOT include environmental, complex design, engineering work, and other ineligible activities.

City of Can Do Adaptation Plan

The City of Can Do Adaptation Plan will provide a conceptual climate change adaptation planning foundation for integration into the City's General Plan (per the requirements of 379). The Plan will develop a framework for addressing known existing climate change vulnerabilities of the community. The city intends to gather public input through interactive community workshops which will be the driving factor of the planning process, and will provide co-benefits including outreach and discussion with disadvantaged communities. The City of Can Do Adaptation Plan will contain planning information and projections, recommended strategies, and create conceptual designs. It is the City of Can Do's intent that once this plan is complete, it will lead to implementation and development of adaptation projects.

The scope of work shown below reflects the anticipated process and deliverables for the City of Can Do Adaptation Plan.

RESPONSIBLE PARTIES

The City of Can Do with the assistance of a consulting firm will perform this work. The City has not yet selected a consulting firm and the proper procurement procedures will be used through a competitive RFP process. City staff anticipates these figures will not differ substantially and will not exceed the grant request amount.

OVERALL PROJECT OBJECTIVES

- Develop and analyze climate change vulnerability maps to identify at-risk transportation assets, resources, and transit-dependent populations within the city boundary.
- Identify interdependencies between the transportation system and other infrastructure and community services to highlight vulnerable areas with greatest possible consequences if damaged/impacted.
- Develop strategies to increase both physical and social resilience of the community's transportation system to climate change.
- Improve early warning systems for extreme weather events.
- Facilitate meetings between community residents, infrastructure owners/operators, and businesses to determine adaptation priorities, implementation timelines, and possible funding sources to increase the resilience of the transportation system.
- Conceptual designs for green adaptation solutions for transportation infrastructure

1. Project Initiation

Task 1.1: Project Kick-off Meeting

- The City will hold a kick-off meeting with Caltrans staff to discuss grant procedures and project expectations including invoicing, quarterly reporting, and all other relevant project information. Meeting summary will be documented.

- Responsible Party: The City

Task 1.2: Staff Coordination

- Monthly face-to-face project team meetings with consultants to ensure good communication on upcoming tasks and to make sure the project remains on time and within budget. Caltrans staff will be invited to the project team meetings.
- Responsible Party: The City

Task 1.3: RFP for Consultant Services

- Complete an RFP process for selection of a consultant using the proper procurement procedures.
- Responsible Party: The City

Task 1.4: Identify Existing Data and Conditions

- Gather existing vulnerabilities and background data by identifying opportunities and constraints as well as standards that should be used to guide preparation of the plan such as climate change projections (precipitation, sea level rise and storm surge, wildfires, and temperature), asset locations and information, existing and planned land uses, population characteristics, and travel projections within the City.
- Inventory and evaluate vulnerable transportation infrastructure, resources, and transit-dependent communities.
- Responsible Party: Consultant

Task	Deliverable
1.1	Meeting Notes
1.2	Monthly Meetings Notes
1.3	Copy of Procurement Procedures and Executed Consultant Contract
1.4	Available Data/Existing Conditions Report

2. Public Outreach

Note: All meetings will be publically noticed to ensure maximum attendance. All public notices will be in English and Spanish. Spanish translators and sign language interpreters will be present at all workshops.

Task 2.1: Community Workshop #1

- Workshop. This workshop will introduce the project to the public, define project parameters, inform the community of project opportunities and constraints, and solicit opinions from the community to shape Task 3.1, Develop Adaptation Concept.
- Responsible Party: Consultant

Task 2.2: Community Workshop #2

- An interactive workshop that will use clicker technology, modeling tools, and maps to present adaptation strategies and project alternatives. Community will decide on preferred alternatives, where specific adaptation plans are possible. Continue to solicit feedback from the community to shape Task 3.3, Draft.
- Responsible Party: Consultant

Task 2.3: Community Workshop #3

- Present Draft Concept and Report and continue to solicit feedback for public comments to shape Task 3.3, Draft Adaptation Plan and Task 3.6, Final Adaptation Plan.
- Responsible Party: Consultant

Task	Deliverable
2.1	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
2.2	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
2.3	<i>PowerPoint Presentation, Workshop Summary, Photos</i>

3. Streetscape Plan

Task 3.1: Develop Adaptation Concept

- Based on the existing data and conditions report and the community input from Workshop #1, priorities for analysis and concept adaptation strategies will be developed. Conceptual adaptation designs will incorporate natural infrastructure planning and will include plans, sketches, and photos.
- Responsible Party: Consultant

Task 3.2: Develop Concept Alternatives

- A sample project with up to three adaptation alternatives will be developed. Illustrations will be made in plan view, as street cross sections, and as sketches. A model simulation will be developed for each alternative. The alternatives will be prepared and presented at Community Workshop #2.
- Responsible Party: Consultant

Task 3.3: Draft Adaptation Plan

- Based on the adaptation priorities and strategies agreed upon in Workshop #2, a draft report will be prepared. The draft report will be presented at Workshop #3 for public comment.
- Responsible Party: Consultant

Task 3.4: Identify Potential Funding Sources

- Review and identify potential funding sources for future implementation of priority projects.
- Responsible Party: Consultant

Task 3.5: Joint Planning/Emergency Management Advisory Commission Meeting

- Coordinate a joint session among the three commissions to review the draft report and adaptation strategies. Solicit feedback, respond to any questions, and resolve any critical issues.
- Responsible Party: The City/Consultant

Task 3.6: Final Adaptation Plan

- Complete the final report that addresses the comments given from Workshop #3 and the Joint Commission Meeting. Four hard-copies and four electronic copies of the final report will be submitted to Caltrans. Credit of the financial contribution of the grant program will be credited on the cover of the report.
- Responsible Party: Consultant

Task 3.7: City Council Adoption

- Present the final Adaptation Plan at the City Council meeting. Resolve any critical issues. Adopt final City of Can Do Adaptation Plan.
- Responsible Party: The City/Consultant

Task	Deliverable
3.1	<i>Sketches, illustrations</i>
3.2	<i>Sketches, illustrations</i>
3.3	<i>Draft Report</i>
3.4	<i>Funding Source Report</i>
3.5	<i>PowerPoint Presentation, Workshop Summary, Photos</i>
3.6	<i>Final Report</i>
3.7	<i>Meeting Notes</i>

4. Fiscal Management

Task 4.1: Invoicing

- Submit complete invoice packages to Caltrans District staff based on milestone completion—at least quarterly, but no more frequently than monthly.
- Responsible Party: The City

Task 4.2: Quarterly Reports

- Submit quarterly reports to Caltrans District staff providing a summary of project progress and grant/local match expenditures.
- Responsible Party: The City

Task	Deliverable
4.1	<i>Invoice Packages</i>
4.2	<i>Quarterly Reports</i>

Project Timeline Checklist

The project timeline is the official documentation of the budget and time frame of the project. The project timeline must be consistent with the scope of work. Applications with missing components will be at a competitive disadvantage.

The project timeline must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided (do not alter the template) and submitted in Microsoft Excel format.
- ☐ List all tasks and sub-tasks with the same title as stated in the scope of work.
- ☐ Have task and sub-task numbers in proper sequencing, consistent with the scope of work.
- ☐ Include a task for a kick-off meeting with Caltrans at the start of the grant.
- ☐ Include a task for procurement of consultants, if consultants are needed.
- ☐ Include a task for quarterly reporting to Caltrans.
- ☐ Include a task for invoicing.
- ☐ List the responsible party for each task and sub-task, and ensure that it is consistent with the scope of work (i.e. applicant, sub-applicant, or consultant).
- ☐ Complete all budget columns as appropriate: Total Cost, Grant Amount, Local Cash Match, and if applicable, Local In-Kind Match.
- ☐ State a realistic total cost for each task based on the work that will be completed. Project management/administration costs should not exceed 5% of the grant amount requested.
- ☐ Include a proportional spread of local match amongst each task. The match amount must be at least the minimum amount required by the grant program.
- ☐ Identify the indirect cost rate if indirect costs will be reimbursed.
- ☐ Have a best estimate of the amount of time needed to complete each task.
- ☐ Have the timeframe start at the beginning of the grant period (January 2018 for MPO/RTPAs; April 2018 for non-MPO/RTPAs).
- ☐ Have the timeframe extend all the way to the end of the grant period (February 2020 for all grantees).
- ☐ List the deliverable for each task as stated in the scope of work.

**California Department of Transportation
Adaptation Planning Grants
Fiscal Year 2017-18**

PROJECT TIMELINE (Template)

[illegible]

Reimbursement of indirect costs is allowable upon approval of an Indirect Cost Allocation Plan for each year of project activities. Provide rate if indirect costs are included in the project budget. Approved Indirect Cost Rate: %

Note: Each task must contain a grant amount and a local cash match amount. Local cash match must be proportionally distributed by the same percentage throughout each task. Local in-kind match needs to be indicated where in-kind services will be used. Please review the grant program section that you are applying to for details on local match requirements. The project timeline must be consistent with the scope of work.

Third Party In-Kind Valuation Plan Checklist

The third party in-kind valuation plan is an itemized breakdown by task and sub-task and serves as documentation for the goods and/or services to be donated. The third party in-kind valuation plan must be consistent with the information provided on the Project Timeline and Grant Application Cover Sheet.

This document is required upon grant award as a condition of grant acceptance.

The third party in-kind valuation plan must:

- ☐ Be completed using the Fiscal Year 2017-18 template provided (do not alter the format).
- ☐ Name the third party in-kind local match provider.
- ☐ Describe how the third party in-kind local match will be tracked and documented for accounting purposes.
- ☐ Describe the fair market value of third party in-kind contributions and how the values were determined.
- ☐ Include an itemized breakdown by task and sub-task consistent with the project timeline.
- ☐ Be consistent with the in-kind local match amount reflected on the grant application cover sheet.

Sample Third Party In-Kind Valuation Plan

**Sample
Third Party In-Kind Valuation Plan**

Task	Activity	Title	Name of In-Kind Match Provider	Fair Market Value Determination	Fair Market Value or Hourly Rate	Number or Hours	Estimated Cost
2.1	Community Workshop #1	Donated Workshop Conference Room	CBO	The rental rate is established by CBO.	\$50	4	\$200
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170
2.2	Community Workshop #2	Use of Projector and Laptop	CBO	The rental rate is established by CBO.	\$50	4	\$200
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170
2.3	Community Workshop #3	Copies and Flyers	CBO	Average Copy Costs	\$0.35	570	\$200
		Workshop Volunteer	Joe Smith, CBO	City of Can Do researched the cost for workshop facilitators and determined the average rate.	\$43	4	\$170
		Total In-kind Match :					\$1,111

How the third party in-kind match will be documented for accounting purposes:	The third party in-kind provider will submit a statement for donated services rendered to the City of Can Do with the value of the estimated cost for each task noted.
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Local Resolution Checklist (Not Applicable to MPO/RTPAs)

A local resolution is NOT required at the grant application stage; however, it is required upon award, as a condition of grant acceptance.

The local resolution must:

- ☐ State the title of the project.
- ☐ State the job title of the person authorized to enter into a contract with Caltrans on behalf of the applicant.
- ☐ NOT be more than a year old or will not be accepted.
- ☐ Be signed by the governing board of the grant applicant.

**CITY OF CAN DO
RESOLUTION NO. 009-2012**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE CITY OF CAN DO
AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AGREEMENTS
WITH THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION
FOR THE CITY OF CAN DO COMPLETE STREET PLAN**

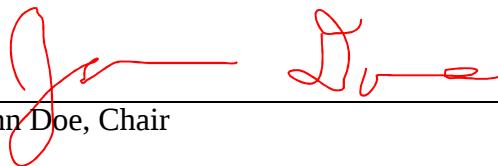
WHEREAS, the Board of Directors of the City of Can Do is eligible to receive Federal and/or State funding for certain transportation planning related plans, through the California Department of Transportation; and

WHEREAS, a Restricted Grant Agreement is needed to be executed with the California Department of Transportation before such funds can be claimed through the Transportation Planning Grant Programs; and

WHEREAS, the City of Can Do wishes to delegate authorization to execute these agreements and any amendments thereto;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the City of Can Do, authorize the Executive Director, or designee, to execute all Restricted Grant Agreements and any amendments thereto with the California Department of Transportation.

APPROVED AND PASSED this 4th day of August, 2015.



John Doe, Chair

ATTEST:


Eileen Wright, Executive Director

Caltrans District and Regional Agency Boundaries Map



Caltrans Sustainable Transportation Planning Grants

District Contact List

DISTRICT	CONTACT	MPO/RTPA
DISTRICT 1 1656 Union Street P.O. Box 3700 Eureka, CA 95502	Mendocino and Lake Counties— Rex Jackman (707) 445-6412 Email: rex.jackman@dot.ca.gov Del Norte and Humboldt Counties— Kevin Tucker (707) 441-5770 Email: kevin.tucker@dot.ca.gov	• Del Norte LTC • Humboldt CAOG • Lake CCAPC • Mendocino COG
DISTRICT 2 1657 Riverside Drive Redding, CA 96001	Kathy Grah (530) 229-0517 Email: kathy.grah@dot.ca.gov	• Lassen CTC • Tehama CTC • Modoc LTC • Trinity CTC • Plumas CTC • Siskiyou CLTC • Shasta RTA
DISTRICT 3 703 B Street Marysville, CA 95901	Kevin Yount (530) 741-4286 Email: kevin.yount@dot.ca.gov	• Butte CAG • Sierra LTC • Colusa CTC • Glenn CTC • El Dorado CTC • Nevada CTC • Placer CTPA • Sacramento Area COG • Tahoe MPO
DISTRICT 4 111 Grand Avenue P.O. Box 23660 Oakland, CA 94623-0660	Becky Frank (510) 286-5536 Email: becky.frank@dot.ca.gov Blesilda Gebreyesus (510) 286-5575 Email: blesilda.gebreyesus@dot.ca.gov	• Metropolitan Transportation Commission
DISTRICT 5 50 Higuera Street San Luis Obispo, CA 93401-5415	Hana Mengsteab (805) 549-3130 Email: hana.mengsteab@dot.ca.gov	• Monterey TAMC • Santa Cruz CCRTC • San Benito COG • Association of Monterey County Bay Area Governments • Santa Barbara CAG • San Luis Obispo COG

Caltrans Sustainable Transportation Planning Grants District Contact List

DISTRICT	CONTACT	MPO/RTPA
DISTRICT 6 1352 W. Olive Avenue P.O. Box 12616 Fresno, CA 93778-2616	Paul Marquez (559) 445-5867 Email: paul.marquez@dot.ca.gov	- Fresno COG - Tulare CAG - Kern COG - Kings CAG - Madera CTC
DISTRICT 7 100 S. Main Street Los Angeles, CA 90012	Charles Lau (213) 897-0197 Email: charles.lau@dot.ca.gov	Southern California Association of Governments
DISTRICT 8 464 W. 4 th Street Mail Station 722 San Bernardino, CA 92401	Rebecca Forbes (909) 388-7139 Email: rebecca.forbes@dot.ca.gov	Southern California Association of Governments
DISTRICT 9 500 S. Main Street Bishop, CA 93514	Ryan Dermody (760) 872-0691 Email: ryan.dermody@dot.ca.gov	- Inyo LTC - Mono LTC - Eastern Kern (COG)
DISTRICT 10 1976 E. Dr. Martin Luther King Boulevard P.O. Box 2048 Stockton, CA 95201	Mountain Counties— Carl Baker (209) 948-7325 Email: carl.baker@dot.ca.gov Merced, San Joaquin, Stanislaus Counties— Tom Dumas (209) 941-1921 Email: tom.dumas@dot.ca.gov	- Alpine CTC - Amador CTC - Calaveras COG - Mariposa LTC - Merced CAG - Tuolumne CCAPC - San Joaquin COG - Stanislaus COG
DISTRICT 11 4050 Taylor Street Mail Station 240 San Diego, CA 92110	San Diego County— Barby Valentine (619) 688-6003 Email: barbara.valentine@dot.ca.gov Imperial County— Beth Landrum (619) 403-3217 Email: bethlandrum@dot.ca.gov	- San Diego Association of Governments - Southern California Association of Governments
DISTRICT 12 1750 E. 4 th Street Santa Ana, CA 92705	Yatman Kwan (657) 328-6277 Email: yatman.kwan@dot.ca.gov Marlon Regisford (657) 328-6288 Email: marlon.regisford@dot.ca.gov	Southern California Association of Governments

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Western Riverside Council of Governments Planning Directors' Committee

Staff Report

Subject: Assembly Bill (AB) 52: Tribal Consultation Requirements and Best Practices

Contact: Terrie L. Robinson, General Counsel, Native American Heritage Commission,
terrie.robinson@nahc.ca.gov, (916) 373-3716

Date: August 10, 2017

The purpose of this item is to inform the Committee of the consultation requirements under AB 52 pertaining to Native American tribal lands.

Requested Action:

1. Receive and file.

Background

The California Legislature adopted AB 52 in 2014 and established that a project that may cause a substantive adverse change in the significance of a tribal cultural area is a project that may have a significant effect on the environment, and therefore be subject to the California Environmental Quality Act (CEQA). The purpose of the bill was to protect tribal cultural lands from being impacted by developments and inform lead agencies of the consequences relating to altering or disturbing protected cultural lands under the American Historic Resource Protection Act. AB 52 mandates compliance with CEQA guidelines in addition to requiring tribal consultation in some instances. In addition to other specifications, AB 52 identifies mitigation measures that can be taken to avoid or minimize the effect on the tribal cultural land.

Presentation from Speaker:

Terrie Robinson, General Counsel for the Native American Heritage Commission, will outline the timeline for AB 52 tribal consultation, the mandatory and discretionary topics of consultation, cover requirements needed to conclude a consultation, and provide best practices for jurisdictions to follow.

Prior Action:

None.

Fiscal Impact:

This item is informational only; therefore, there is no fiscal impact.

Attachment:

1. Governor's Office of Planning and Research: AB 52 and Tribal Cultural Resources in CEQA.

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Item 5.B

Assembly Bill (AB) 52: Tribal
Consultation Requirements and Best
Practices

Attachment 1

Governor's Office of Planning and
Research: AB 52 and Tribal Cultural
Resources in CEQA

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TECHNICAL ADVISORY

AB 52 AND TRIBAL CULTURAL RESOURCES IN CEQA

June, 2017





Technical Advisory:
AB 52 and Tribal Cultural Resources in CEQA
(June, 2017)

Table of Contents

I. Purpose.....	2
II. Legislative Intent	2
III. Summary of New Requirements for Consultation and Tribal Cultural Resources.....	3
A. Definition of Tribal Cultural Resources.....	3
B. Consultation.....	6
C. Timing in the CEQA Process and Consultation Steps	6
D. Confidentiality.....	7
E. Mitigation.....	9
IV. Updating Appendix G	9
V. Compliance Timeline and Consultation Process Flowchart	12
VI. Bibliography of Resources	13
A. California Government Resources	13
B. Federal Government Resources	13
C. Selected California Cases.....	14
D. Selected Federal Cases	15

I. Purpose

This technical advisory is one in a series of advisories provided by the Governor's Office of Planning and Research (OPR) as a service to professional planners, land use officials and California Environmental Quality Act (CEQA) practitioners. OPR creates and updates technical advisories as needed on current issues in environmental law and land use planning that broadly affect the practice of CEQA and land use planning in California.

The purpose of this technical advisory is to provide guidance to lead agencies regarding recent changes to CEQA requiring consultation with California Native American tribes and consideration of tribal cultural resources. It summarizes the reasons for the legislative changes, and explains the substantive and procedural requirements that go into effect on July 1, 2015. Finally, it summarizes relevant case law, and provides a list of additional resources.

II. Legislative Intent

The legislature added the new requirements regarding tribal cultural resources in [Assembly Bill 52 \(Gatto, 2014\)](#). By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflict in the environmental review process. ((AB 52 § 1 (b)(7).)¹

¹ Assembly Bill 52 (Gatto, 2014). Section 1 of the bill states the legislature's intent as follows:

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of the Legislature, in enacting this act, to accomplish all of the following:(1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.(2) Establish a new category of resources in the California Environmental Quality Act called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.(3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.(4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because the California Environmental Quality Act calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.(5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the California Environmental Quality Act environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.(6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to the California Environmental Quality Act (Division 13 (commencing with § 21000) of the Public Resources Code).(7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in the California Environmental Quality Act environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce

Page | 2

To accomplish those goals, the legislature added or amended the following sections in the Public Resources Code: [21073](#), [21074](#), [21080.3.1](#), [21080.3.2](#), [21082.3](#), [21083.09](#), [21084.2](#), and [5097.94](#). These changes are summarized in Section III.

III. Summary of New Requirements for Consultation and Tribal Cultural Resources

The Public Resources Code now establishes 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](#).)

To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. ([Pub. Resources Code, § 21080.3.1](#).)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. [Public Resources Code §20184.3 \(b\)\(2\)](#) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

Specific provisions of the new law are described in more detail below.

A. Definition of Tribal Cultural Resources

New section [21074](#) of the Public Resources Code defines “tribal cultural resources.” In brief, a resource is a “tribal cultural resource” if it is either:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources; or

(2) a resource that the lead agency determines, in its discretion, is a tribal cultural resource.²

the potential for delay and conflicts in the environmental review process.(8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.(9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

² Pub. Resources Code, § 21074

(a) “Tribal cultural resources” are either of the following:

Page | 3

Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA.

When a lead agency chooses to treat a resource as a tribal cultural resource, that determination shall be supported with substantial evidence,³ applying the criteria in the historical register,⁴ and considering the significance of the resource to a California Native American Tribe. (PRC § 5024.1, PRC § 21074). California Native American tribes traditionally and culturally affiliated with the geographic area of a project may have expertise concerning their tribal cultural resources. (PRC § 21080.3.1). Courts will defer to a lead agency’s factual determination that a resource is a tribal cultural resource if that decision is supported by substantial evidence in the record.⁵

Evidence that may support such a finding could include, among other evidence, elder testimony, oral history, tribal government archival information, testimony of a qualified archaeologist certified by the relevant tribe, testimony of an expert certified by the Tribal Government, official tribal government declarations or resolutions, formal statements from a certified Tribal Historic Preservation Officer, and historical notes, such as those found in the [Harrington Papers](#) and other anthropological records⁶.

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of §5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in §21084.1, a unique archaeological resource as defined in subdivision (g) of §21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of §21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

³ Public Resources Code § 21080 (e)(1) states “...substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”

⁴ Pub. Resources Code § 5024.1 (c): A resource may be listed as historical resources in the California Register if it meets any of the following National Register of Historic Places criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

⁵ *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal. 4th 1086, 1117; *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072.

⁶ For example, the Harrington Papers are a collection of linguistic and cultural materials in the National Anthropological Archives housed in the Smithsonian National Museum of Natural History. The collection represents ethnological and linguistic fieldwork in California and with Native people.

Federal law also provides examples of potential sources of tribal knowledge. For example, the federal Native American Graves Repatriation Act recognizes the following types of evidence of cultural affiliation: geographical, kinship, biological, archeological, anthropological, linguistic, folklore, oral tradition, historical, or other relevant information or expert opinion. (43 C.F.R. § 10.14 (d).) Similarly, the Tenth Circuit discussed tribal knowledge in the *Pueblo of Sandia* case. Specifically, the court in *Pueblo of Sandia* observed that the affidavit of a tribal elder and religious leader which listed religious practices and alluded to sacred sites, minutes of a working group meeting that showed a site was used for ceremonial, religious, and medicinal purposes, and an anthropologists' report on a tribe's religious and cultural affiliation with a site that noted ceremonial paths and herbs uses, were all forms of evidence. (*Pueblo of Sandia v. United States* (1995) 50 F.3d 856.)

B. Consultation

Public Resources Code [§ 21080.3.1\(a\)](#) defines “consultation” with a cross-reference to [Government Code § 65352.4](#), which applies when local governments consult with tribes on certain planning documents. That section states:

“consultation” means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance. (Gov. Code, [§ 65352.4](#).)

OPR’s SB 18 [Tribal Consultation Guidelines](#) provide further explanation of what “consultation” means.⁷ For example, the *Guidelines* explain that consultation “is a process in which both the

tribe and local government invest time and effort into seeking a mutually agreeable resolution for the purpose of preserving or mitigating impacts to a cultural place, where feasible.” (At p. 15.) It further states:

Effective consultation is an ongoing process, not a single event. The process should focus on identifying issues of concern to tribes pertinent to the cultural place(s) at issue – including cultural values, religious beliefs, traditional practices, and laws protecting California Native American cultural sites – and on defining the full range of acceptable ways in which a local government can accommodate tribal concerns. (At p. 16.)

The new provisions in the Public Resources Code enumerate topics that may be addressed during consultation. If the California Native American Tribe requests consultation regarding alternatives to the project, recommended mitigation measures, or significant effects, the consultation shall include those topics. (Pub. Resources Code, [§ 21080.3.2\(a\)](#).)

C. Timing in the CEQA Process and Consultation Steps

The new provisions in the Public Resources Code proscribe specific steps and timelines governing the notice and consultation process.

Those steps are summarized below and in the graphic entitled Compliance Timeline and Consultation Process Flowchart in Section V.

⁷ Since 2004, cities and counties have had to consult with California Native American Tribes before adoption or amendment of a general plan, specific plan or designation of open space. (Gov. Code, § 65352.4., “Senate Bill 18” (Burton, Chapter 905, Statutes of 2004).) The Tribal Consultation Guidelines explain those requirements in detail. The new requirements in the Public Resources Code do not change those ongoing responsibilities. In instances in which the requirements of both the Government Code and the Public Resources Code apply to a project, while there may be substantial overlap, the lead agency must ensure that it complies with the requirements of both statutes.

- 1) The Native American Heritage Commission will provide each tribe with a list of all public agencies that may be lead agencies under CEQA within the geographic area with which the tribe is traditionally and culturally affiliated, the contact information of those public agencies, and information on how the Tribe may request consultation. This list must be provided on or before July 1, 2016. (Pub. Resources Code, [§ 5097.94](#) (m).)
- 2) If a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency. (Pub. Resources Code, [§ 21080.3.1](#) (b).) The Native American Heritage Commission website includes a sample template for an [AB 52 notice list request letter](#) from a California Native American tribe to a lead agency.
- 3) Within 14 days of determining that a private project application is complete, or to undertake a public agency project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects as described in step 2, above. The 14 day notification must include a description of the project, its location, and must state that the tribe has 30 days to request consultation. OPR's AB 52 website includes a [sample template for an AB 52 notice letter](#) from a lead agency to a California Native American tribe.
- 4) If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification described in step 3, above. The tribe's response must designate a lead contact person. If the tribe does not designate a lead contact person, or designates multiple people, the lead agency shall defer to the individual listed on the contact list maintained by the Native American Heritage Commission. The [NAHC website](#) includes a sample template for an AB 52 [response letter](#) from a California Native American tribe to a lead agency and other implementation resources for tribal governments and lead agencies.
- 5) The lead agency must *begin* the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation.
- 6) Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code, [§ 21080.3.2](#) (b)(1) & (2).) Note that consultation can also be ongoing throughout the CEQA process.

D. Confidentiality

Under existing law, environmental documents must not include information about the location of an archeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act. ([Cal. Code Regs. § 15120\(d\)](#); *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 220).⁸ Native American graves,

⁸ In *Clover Valley*, the trial court denied petitions for writ of mandate challenging a city's approval of a subdivision project. Revisions to the project included transferring prehistoric Native American artifacts for preservation. The city prepared a recirculated draft environmental impact report to analyze the revised project. The locations and specific characteristics of the cultural resources were not described. The city provided additional information briefly describing the characteristics of the cultural resources, the project's effects on them, and

Page | 7

cemeteries, and sacred places and records of Native American places, features, and objects are also exempt from disclosure. (Pub. Resources Code, [§§ 5097.9, 5097.993](#).) This exclusion reflects California's strong policy in favor of protecting Native American artifacts. Confidential cultural resource inventories or reports generated for environmental documents should be maintained by the lead agency under separate cover and shall not be available to the public. (*Clover Valley* at 221, citing Governor's Office of Planning and Research, Cal. Tribal Consultation Guidelines, (Nov. 14, 2005 supp. p. 27).)

The new provisions in the Public Resources Code include additional rules governing confidentiality during tribal consultation. (Pub. Resources Code, [§21082.3\(c\)](#).)

First, information submitted by a California Native American tribe during the environmental review process may not be included in the environmental document or disclosed to the public without the prior written consent of the tribe. Consistent with current practice, confidential information may be included in a confidential appendix. A lead agency may exchange information confidentially with other public agencies that have jurisdiction over the environmental document. (Pub. Resources Code, [§ 21082.3\(c\)\(1\)](#).) This confidentiality protection extends to a tribe's comment letter on an environmental document. A lead agency can summarize tribal comment letters in a general way, while still maintaining confidentiality consistent with the holding in *Clover Valley Foundation v. City of Rocklin* (2011) 197Cal.App.4th 200.

Second, an exception to the general rule prohibiting disclosure is that the lead agency and the tribe may agree to share confidential information regarding tribal cultural resources with the project applicant and its agents. In that case, the project applicant is responsible for keeping the information confidential, unless the tribe consents to disclosure in writing, in order to prevent looting, vandalism, or damage to the cultural resource. The project applicant must use a reasonable degree of care to protect the information. Additionally, information that is already publically available, developed by the project applicant, or lawfully obtained from a third party that is not the tribe, lead agency, or another public agency may be disclosed during the environmental review process. (Pub. Resources Code, [§ 21082.3\(c\)\(2\)](#).)

Third, the new law does not affect any existing cultural resource or confidentiality protections. (Pub. Resources Code, [§ 21082.3\(c\)\(3\)](#).)

Fourth and finally, the lead agency or another public agency may describe the information in general terms in the environmental document. This is so that the public is informed about the basis of the decision, while confidentiality is maintained. (Pub. Resources Code, [§ 21082.3\(c\)\(4\)](#).) The decision in *Clover Valley* provides a useful description of how a lead agency may balance the need for confidentiality with disclosure obligations under CEQA.

planned mitigation measures. The Court of Appeal affirmed the trial court's ruling, holding that the changes were not significant in light of disclosure restrictions pertaining to cultural resources. (Gov. Code, § 6254(r); Pub. Resources Code, §§ 5097.9, 5097.993; Cal. Code Regs., (d)).

E. Mitigation

Public agencies shall, when feasible, avoid damaging effects to any Tribal cultural resource. (Pub. Resources Code, [§21084.3](#) (a).)

Culturally appropriate mitigation for a Tribal cultural resource is different than mitigating impacts to archeological resources and appropriate mitigation measures should be identified through consultation with the tribal government. If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the Public Resources Code describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts. (Pub. Resources Code, [§ 21084.3](#) (b).) Examples include:

- (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- (2) 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:
 - (A) Protecting the cultural character and integrity of the resource
 - (B) Protecting the traditional use of the resource
 - (C) Protecting the confidentiality of the resource
- (3) 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
- (4) Protecting the resource (*Ibid.*)

IV. Updating Appendix G

The statute directs OPR to develop, and the California Natural Resources Agency to adopt, proposed updates to the sample initial study checklist in Appendix G of the CEQA Guidelines to do both of the following: (a) separate the consideration of paleontological resources from tribal cultural resources and update the relevant sample questions, and (b) add consideration of tribal cultural resources with relevant sample questions.

As noted above, the substantive and procedural requirements added in AB 52 went into effect on July 1, 2015. Because the environmental checklist in Appendix G is a *sample* checklist and not mandatory, lead agencies need not wait for the Appendix G update before updating their own procedures.

In January 2016, OPR transmitted a draft update to Appendix G of the CEQA Guidelines related to tribal cultural resources to the California Natural Resources Agency. On June 3, 2016 the agency

released a revised proposal to include tribal cultural resources in Appendix G. Up to date information can be found here: <http://resources.ca.gov/ceqa/>.

On September 27, 2016 the Office of Administrative Law endorsed/approved the suggested changes. Appendix G now contains a statement in the Environmental Checklist Form at the beginning of Appendix G regarding notice and consultation between lead agencies and California Native American Tribes. Appendix G also has a new section called Tribal Cultural Resources, which asks two questions related to the presence of tribal cultural resources. One question asks whether there is a potential adverse change in the significance of a listed tribal cultural resource, and the other asks whether there is a substantial adverse change in the significance of a resource determined by a lead agency to be a tribal cultural resource. In making the second determination, a lead agency must use its discretion while supporting the decision with substantial evidence, applying the criteria of the historic register, and taking into account the significance of the resource to a California Native American Tribe. Consultation with California Native American Tribes is a key way to obtain the information necessary to understand the significance of the resource.

Appendix G contains the following prompt for lead agencies to consider whether the substantive and procedural requirements for consultation with tribal governments have been followed in accordance with the changes to CEQA made by AB 52.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Appendix G of the CEQA Guidelines now contains the following questions:

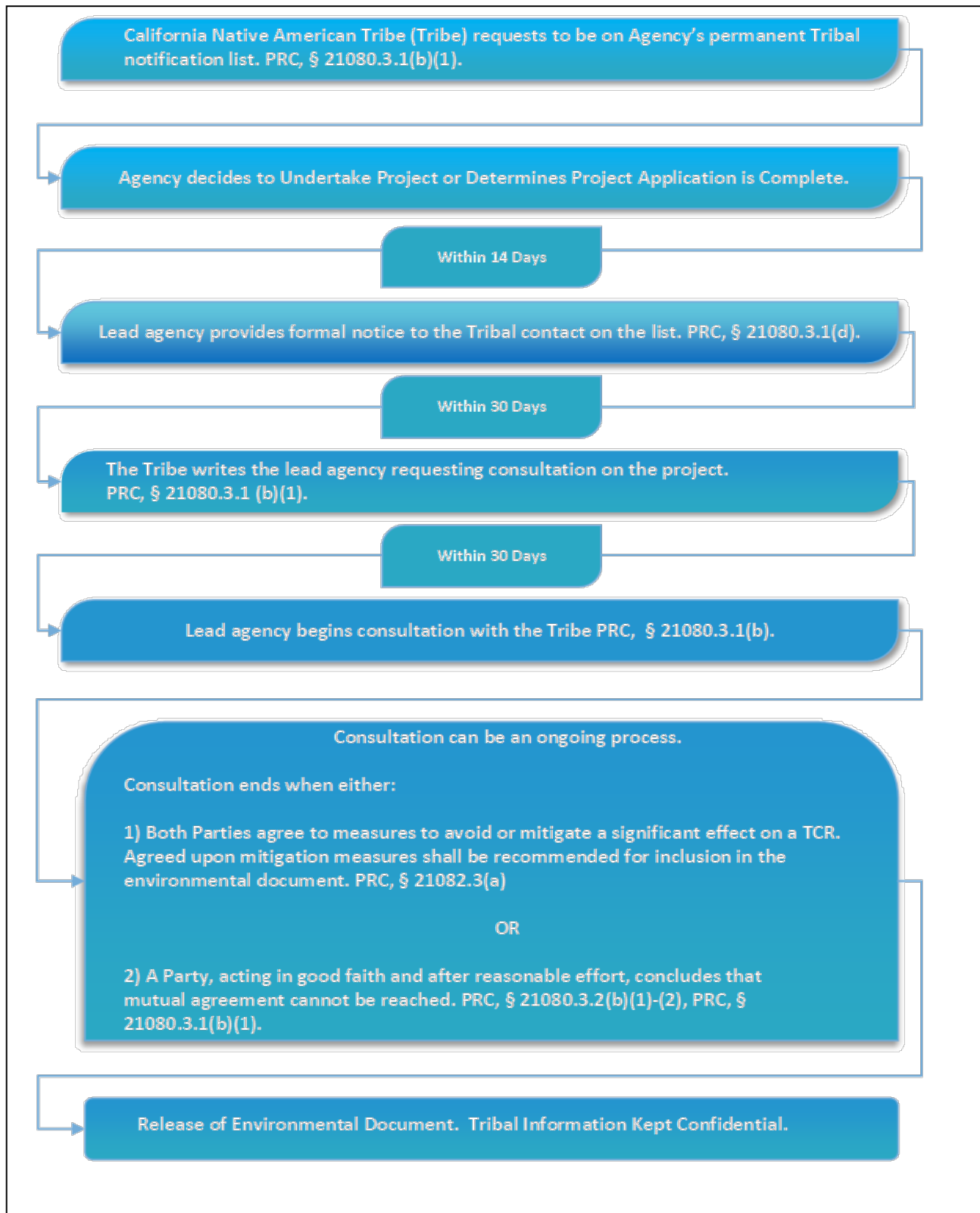
XVII. TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources

Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

V. Compliance Timeline and Consultation Process Flowchart



VI. Bibliography of Resources

A. California Government Resources

Assembly Bill No. 52 (2013- 2014 Reg. Sess.)

<http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52> (as of Feb. 17, 2015).

Senate Bill No. 18 (2003-2004 Reg. Sess.) <http://www.leginfo.ca.gov/pub/03-04/bill/sen/sb_0001-0050/sb_18_bill_20040930_chaptered.html> (as of Feb. 17, 2015).

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California Native American Heritage Commission Web Site and Implementation Resources (2015) <<http://www.nahc.ca.gov>> (as of Jul. 14, 2016).

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California Department of Transportation, Native American Liaison Web Site (2007)

<<http://dot.ca.gov/hq/tpp/offices/ocp/nalb/>> (as of Feb. 17, 2015).

B. Federal Government Resources

Executive Order 13175, 65 Federal Register 67249 (Nov. 9, 2009) regarding Consultation and Coordination with Indian Tribal Governments <<http://www.whitehouse.gov/the-press-office/memorandum-Tribal-consultation-signed-president>> (as of Feb. 17, 2015).

Executive Order 13007, 61 Federal Register 26771 (May 24, 1996), regarding Tribal Sacred Sites <<http://www.achp.gov/EO13007.html>> (as of Feb. 17, 2015).

U.S. Department of the Interior, National Parks Service, Guidelines for Evaluating and Registering Archeological Properties (2000) (“Bulletin 36”) <http://www.nps.gov/nr/publications/bulletins/pdfs/nrb36.pdf> (as of Feb. 17, 2015).

U.S. Department of the Interior, National Parks Service, Guidelines for Evaluating and Documenting Traditional Cultural Properties (1990, revised 1998) (“Bulletin 38”) <http://www.nps.gov/nr/publications/bulletins/pdfs/nrb38.pdf> (as of Feb. 17, 2015).

Advisory Council on Historic Preservation, Working With §106 Web Site (Feb. 13, 2015) <http://www.achp.gov/work106.html> (as of Feb. 17, 2015).

C. Selected California Cases

Berkeley Hillside Preservation v. City of Berkeley (2015) 60 Cal. 4th 1086, 1117 [holding that an agency’s factual determination of whether unusual circumstances exist is reviewed under the substantial evidence standard, and favorably citing the holding in *Valley Advocates*].

Citizens for the Restoration of L Street v. City of Fresno (2014) 229 Cal.App.4th 340 [holding that the fair argument standard does not apply to a lead agency’s discretionary determination of whether a non-listed building or district is an historical resource for purposes of CEQA]

Madera Oversight Coalition, Inc. v. County of Madera (2011) 199 Cal.App.4th 48 [holding that the phrase “preservation in place is the ‘preferred manner’ of mitigating impacts to archaeological sites” means that feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of impacts. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site. (Cal. Code Regs. § 15126.4(b)(3)(A)). Overruled in part on other grounds.]

Clover Valley Foundation v. City of Rocklin (2011) 197 Cal.App.4th 200 [holding that CEQA does not require a lead agency to disclose confidential information regarding the location and nature of cultural resources sites and that a lead agency need only provide a general description of those resources and mitigation measures in an EIR.]

Valley Advocates v. City of Fresno (2008) 160 Cal.App.4th 1039 [holding that the substantial evidence standard of review applies to an agency’s determination of whether a building that is not listed, or eligible for listing, in a historic register qualifies as an historical resource, and further holding that once a lead agency determines the resource to be an historical resource, the fair argument standard applies to the question of whether the proposed project may cause a substantial adverse change in the significance of that historical resource].

D. Selected Federal Cases

Pueblo of Sandia v. United States (1995) 50 F.3d 856 [Federal case regarding traditional cultural properties under the National Historic Preservation Act and the National Environmental Policy Act, including an example of a reasonable and good faith effort at consultation between a lead agency and a tribe. This case includes a discussion on cumulative impact analysis and a reasonable range of alternatives analysis under NEPA and Section 106 of the NHPA. This case recognizes as evidence the affidavit of a tribal elder and religious leader.]

Muckleshoot Indian Tribe v. United States Forest Service (1999) 177 F. 3d 800 [Federal case regarding traditional cultural properties under the National Historic Preservation Act and the National Environmental Policy Act, including a discussion of how adequate mitigation for a tribally significant historic property may be different than mitigation for an historic resource. This case includes examples of tribal evidence]



Western Riverside Council of Governments

Planning Directors' Committee

Staff Report

Subject: Assembly Bill (AB) 52: Tribal Perspective

Contact: Raymond Huaute, Cultural Resource Specialist, Morongo Band of Mission Indians, rhuaute@morongo-nsn.gov, (951) 755-5025

Date: August 10, 2017

The purpose of this item is to provide members with an understanding of the AB 52 tribal consultation process from the tribal perspective.

Requested Action:

1. Receive and file.

Raymond Huaute, Morongo Band of Mission Indians Cultural Resource Specialist, will discuss the AB 52 tribal consultation process from the tribal perspective. The topics of Mr. Huaute's presentation will include timing; coordination; cultural sensitivity; working with multiple consulting tribes; the intent, or spirit of AB 52; and "meaningful consultation."

Prior Action:

None.

Fiscal Impact:

This item is informational; therefore there is no fiscal impact.

Attachment:

None.

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Western Riverside Council of Governments Planning Directors' Committee

Staff Report

Subject: Western Riverside Energy Partnership Update

Contact: Anthony Segura, Staff Analyst, asegura@wrcog.us, (951) 955-8389

Date: August 10, 2017

The purpose of this item is to provide the Committee with an update on Southern California Edison's Direct Install (DI) Program.

Requested Action:

1. Receive and file.

The Western Riverside Energy Partnership (WREP) responds to Executive Committee direction for WRCOG, Southern California Edison (SCE), and Southern California Gas Company (SoCal Gas) to seek ways to improve marketing and outreach to the WRCOG subregion regarding energy efficiency. WREP is designed to assist local governments set an example for their communities to increase energy efficiency, reduce greenhouse gas emissions, increase renewable energy usage, and improve air quality.

2017 Direct Install Program

SCE's DI program can help municipal facilities and businesses identify ways to save electricity by having trained energy efficiency contractors perform energy consultations and recommend improvements that can help the building use less energy, and reduce the utility bill. In coordination with SCE, WREP is working with its member jurisdictions to promote SCE's Direct Install Program at municipal facilities. The DI program provides interested jurisdictions with a no-cost energy consultation and installation of identified energy measures.

Participation in this program is simple. Interested jurisdictions first provide a list of their current facilities and their respective SCE account number to SCE's DI contractor (this is something that WRCOG staff can support in compiling). Upon receiving the list, SCE will coordinate with jurisdictional staff to schedule an energy consultation. Each consultation takes about 5 minutes per facility to identify all eligible energy efficiency measures. After the consultation findings have been compiled and reported to SCE, the DI vendor will schedule a date to come back and install the approved energy efficiency measures.

For 2017, SCE allocated over \$2 million in funding to provide energy efficiency consultations and installation of interior LED lights, which are only available at municipal facilities. WRCOG staff is working with jurisdictional staff to identify interest in participating in the Program and develop a list of municipal facilities for inclusion in the Program. In addition to interior LED lights, measures include plug load occupancy sensors, LED 'open/closed' signs, and wall-mounted lighting occupancy motion sensors.

SCE's DI Program is also available to qualified commercial businesses that use under 200 kWh.

Recent DI Involvement: In June 2017, the City of Moreno Valley received audits for 12 of their municipal facilities. Over 3,000 interior LED lighting measures were identified and approved for installation. SCE, and

their DI team, will coordinate with City staff to identify a date for installation of these identified measures within the coming months.

WRCOG staff will continue to coordinate with the interested member jurisdictions to schedule audits and receive their identified energy efficiency measures.

Prior Action:

None.

Fiscal Impact:

This item is informational only; therefore, there is no fiscal impact.

Attachment:

None.