

LOCAL ADAPTATION AND  
RESILIENCY PLANNING:  

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SB 379 SURVEY REPORT



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# INTRODUCTION

As climate change continues to affect communities throughout California, local governments must respond to increasingly frequent and severe climate impacts – from wildfire to drought to sea level rise – by incorporating climate adaptation and resiliency measures into local planning documents.

In October 2015, Governor Brown signed Senate Bill 379 (Jackson). This bill amended Government Code Section 65302(g) to require all cities and counties in California to incorporate climate adaptation and resiliency into the general plan safety element, or by reference to other documents. Generally, the requirements include:<sup>1</sup>

1. Review and update the safety element as necessary to address climate adaptation and resiliency strategies;
2. Complete a vulnerability assessment;
3. Develop adaptation and resilience goals, policies, and objectives; and
4. Develop feasible implementation measures.

SB 379 also allows other planning documents (e.g., climate adaptation plan, local hazard mitigation plan, or other similar plans) to be used to fulfill the climate adaptation planning requirements, provided that the separate plans are consistent with all of the statutory provisions and are adopted and incorporated by reference into the general plan safety element.

SB 379 also requires local governments to take action to update the safety element per the above requirements upon the next update to the local hazard mitigation plan on or after January 1, 2017; or, by January 1, 2022 for jurisdictions that do not have a local hazard mitigation plan.

SB 1035 (2018, Jackson), further amended Government Code Section 65302(g) to require local agencies to review and, if necessary, update the flood, fire hazards, and climate adaptation portions of the safety element following the housing element update at least every eight years, ensuring a regular update cycle to climate change considerations.

# PURPOSE AND INTENT

As California’s long-range land use planning agency, the Governor’s Office of Planning and Research (OPR) guides and monitors local government land use and planning efforts. Within OPR, the Integrated Climate Adaptation and Resiliency Program (ICARP) is charged with developing a cohesive and coordinated response to the impacts of climate change across the state. One way this is accomplished is through OPR’s distribution of an Annual Planning Survey (APS). The APS gathers basic information on the status of each jurisdiction’s planning efforts and explores, in greater depth, policies and programs of statewide concern that jurisdictions are implementing. Recent APSs have asked local governments for general information regarding climate adaptation and resiliency planning; however, they have not specifically inquired in detail about local efforts to meet SB 379 requirements. To glean more information about how local governments are meeting requirements under SB 379, OPR released a separate, informal survey in fall 2019, “Local Jurisdictions Adaptation and Resiliency Planning: Senate Bill 379.”

Given the various paths cities and counties may take to meet the SB 379 requirements, OPR conducted this informal survey with the intention of obtaining the following:

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<sup>1</sup> See Appendix A for codified SB 379 language.

Figure 1. Map depicting location of survey respondents



### Cities and Counties Surveyed



1. A snapshot of the progress local jurisdictions have made toward meeting SB 379 requirements;
2. Insight into the types of plans local governments are using to meet SB 379 requirements;
3. How jurisdictions define community assets and vulnerable communities (two topics on which OPR staff commonly receive questions);
4. Common obstacles jurisdictions encounter when meeting SB 379 requirements; and

5. Examples of successful implementation of adaptation planning and implementation strategies.

This report analyzes the results of the 2019 SB 379 survey. This report is *not* a comprehensive census of all adaptation and resiliency planning in California. Nor does this report endorse any specific planning document, strategy, or goal associated with meeting SB 379 requirements. Rather, it provides OPR and other interested stakeholders insight into a small sample of jurisdictions that are working to meet SB 379 requirements.

# METHODOLOGY:

## Outreach

OPR based the outreach for the SB 379 survey on the following four categories:

1. Type of planning documents being updated;
2. Jurisdictions self-identified level of capacity;
3. Geographic diversity; and
4. Jurisdiction size

OPR focused potential outreach on 294 jurisdictions that indicated they had “begun incorporating climate adaptation and resiliency into their planning documents” on the 2018 APS. To narrow the number of jurisdictions for targeted outreach, OPR considered the jurisdiction’s self-reported capacity “to address climate change and adaptation.” This narrowed the pool of potential jurisdictions to 71. The last screen performed achieved a cross-section of jurisdiction size and geographic location. This was accomplished by ensuring each region within the Adaptation Clearinghouse was represented in

the survey. The result was direct outreach to 60 jurisdictions.

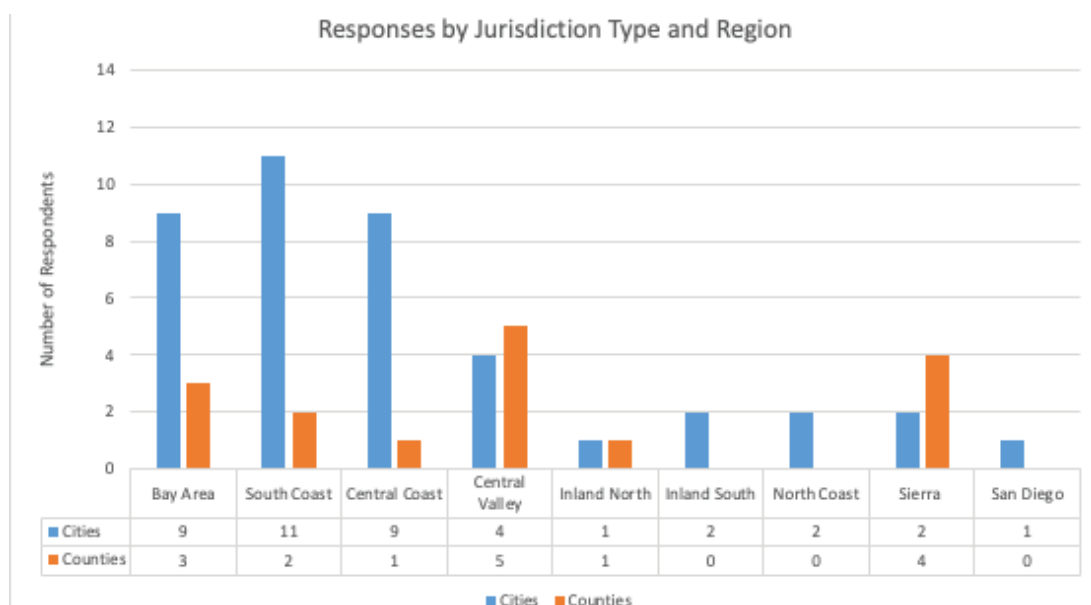
In addition to targeted outreach, OPR distributed the survey through other channels, including OPR and partner organization listservs. Given the limited nature of this outreach, the SB 379 survey should not be considered a comprehensive census of all local governments in California.

## Data Collection

OPR collected data in two forms: an online survey, conducted through SurveyMonkey, and in-person/remote interviews. The survey and interview respondents were asked 10 questions.<sup>2</sup> In order to encourage candid responses, SurveyMonkey participants were not asked to provide staff names or contact information. In some cases, jurisdictions requested that consultants or nonprofits working on contract to meet SB 379 requirements fill out the survey on their behalf. Therefore, these questionnaires were completed by nonprofits, consultants, and/or jurisdiction’s staff and should not be considered the jurisdiction’s official position. In total, OPR received 57 survey responses from cities and counties.

<sup>2</sup> A list of survey questions can be found in Appendix B.

Figure 2: Respondents by Region. Regions are defined by the ICARP Adaptation Clearinghouse.



# KEY FINDINGS

1. 23% of respondents have completed the requirements for SB 379.
2. 56% of respondents have completed a review of existing planning documents.
3. 84% of respondents plan on updating the general plan safety element to meet SB 379, though many of them have not started the update.
4. Of the 43 respondents who have begun the process 23% plan on finalizing the required documents after 2020, and 23% have an undetermined timeline for finalization or adoption.
5. 70% of the respondents have identified vulnerable communities.
6. 37% of respondents have defined community assets.
7. The majority of jurisdictions report the largest barrier to completing the requirements is a lack of funding and/or organizational capacity.

# RESULTS

## Process of Updating/Reviewing for SB 379

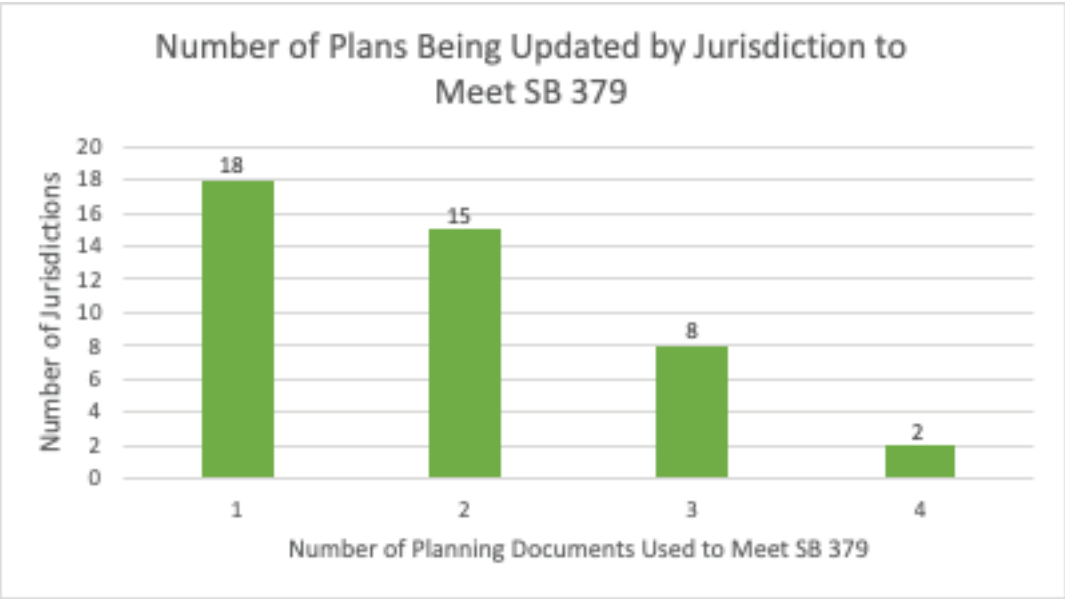
As of August 2019, 43 (75%) of respondents had begun the process of reviewing and updating documents to meet SB 379. Of those 43, 13 (23%) had fully completed the review, update, and adoption process.

## Planning Documents Used to Meet SB 379

Per Government Code Section 65302(g) local governments have the flexibility to different documents to meet SB 379 requirements, including:

- General Plan Safety Element
- Local Hazard Mitigation Plan
- Climate Action Plan
- Adaptation Plan
- Other documents

Figure 4: Number of plans being used by a single jurisdiction to meet SB 379 requirements.



Most respondents plan to update the general plan safety element and/or a Local Hazard Mitigation Plan (LHMP) to meet SB 379 requirements. Of the 43 respondents who stated they have begun reviewing or updating a plan, 36 indicated they plan to update the general plan safety element. Further, most jurisdictions plan on updating multiple documents.

### Completed Steps of the Process

Forty-three respondents have started the process, and most completed a review of their existing planning documents to determine whether those documents meet the requirements. Many jurisdictions have also completed a vulnerability assessment. However, fewer than half have developed adaptation strategies, and the majority have not developed feasible implementation measures. A total of 13 jurisdictions have completed the entire process and updated the general plan safety element. Figure 5 shows the number of jurisdictions that have completed each step; however, the total number does not add up to 43 because many of the jurisdictions have completed numerous steps or have completed them non-sequentially.

While not required to be completed sequentially by Government Code Section 65302(g), the stepwise process outlined in the statute generally follows common practice for adaptation planning.

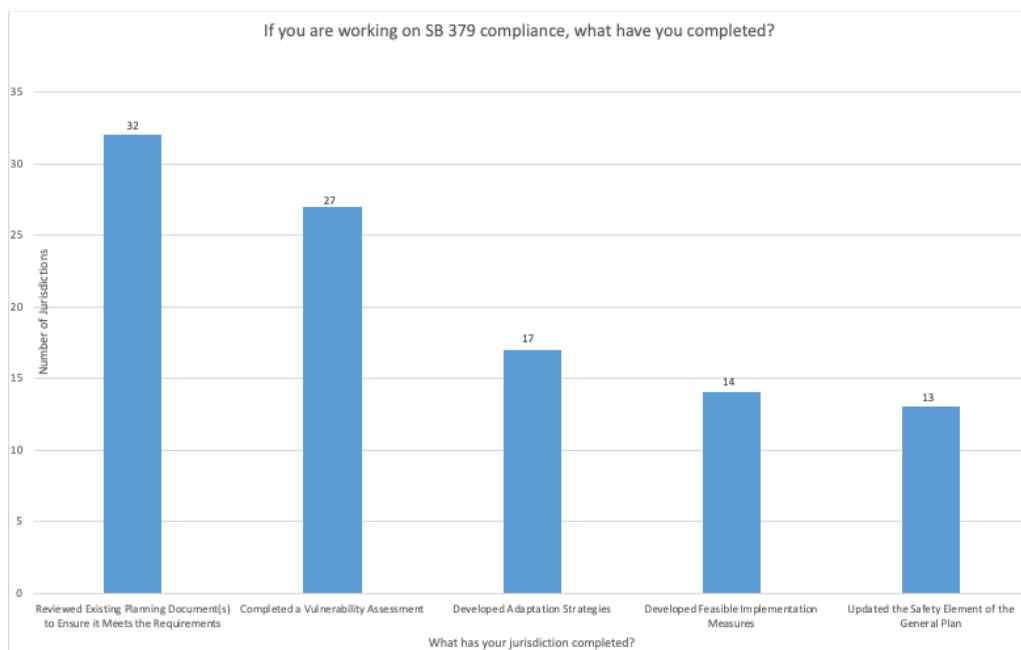
1. Review existing planning documents
2. Complete a vulnerability assessment
3. Develop adaptation strategies
4. Develop feasible implementation measures

The survey found that several jurisdictions approached this sequencing differently through the planning process. 16 of the 43 respondents had completed one of the four steps in a non-sequential order.

### Timing of Finalization and Adoption

Though many jurisdictions have begun steps to comply with SB 379, most do not plan to finalize an update to the safety element or other document within the next year – many anticipate taking multiple years to finalize.

Figure 5: Phases of the Planning Process completed.





The timing requirements of SB 379 have been a topic of confusion that has been raised to OPR. SB 379 initially established a trigger to incorporate climate change into the General Plan upon the next update to the local hazard mitigation plan on or after January 1, 2017; or, by January 1, 2022 for jurisdictions that do not have a local hazard mitigation plan.

In 2018, Government Code Section 65302(g) was further updated (SB 1035, Jackson), to amend the update trigger after 2022. Following the initial 2022 deadline, local agencies need to review and, if necessary, update the flood, fire hazards, and climate adaptation portions of the safety element upon an update to the housing element, or at least every eight years.

## Defining Community Assets

To gain insight into how local jurisdictions define community assets in their adaptation planning process, respondents were asked a qualitative question regarding how they define and apply this term as part of their compliance with SB 379. Responses highlight significant variation in how this term is defined and applied by local jurisdictions. Most respondents have not defined community assets. Of the jurisdictions that had adopted a definition most used a “sphere of influence” approach, defining community assets as physical assets owned or controlled by the jurisdiction. These jurisdictions’ answers included built infrastructure, cultural and heritage assets, as well as natural infrastructure and resources. Six jurisdictions used definitions from other documents including existing LHMPs or vulnerability assessments, or guidance from Federal entities, such as FEMA.

## Vulnerable Communities

Jurisdictions also provided their definition of vulnerable communities in the context of SB 379. Of the 57 total respondents, 70% stated they had defined vulnerable communities. Though the responses were open ended, certain themes emerged. First, 30% of respondents identified vulnerable communities in a manner that included socio-economic and demographic factors. Second,

10% defined vulnerable communities as those more vulnerable to natural disasters. Finally, another 10% of respondents referenced reaching out to community stakeholders or the jurisdiction’s public health departments to better understand how to define vulnerable communities.

While SB 379 does not require local governments to define vulnerable communities, the specific language in the statute does require that the vulnerability assessment include “information from local agencies on the types of assets, resources, and populations that will be sensitive to various climate change exposures”, as well as “information from the most recent version of the California Adaptation Planning Guide.”<sup>3</sup> Further, OPR’s General Plan Guidelines and the Adaptation Planning Guide strongly advise that local governments consider vulnerable communities in order to adequately plan and prepare for the impacts of climate change. There is a growing body of guidance and resources to better understand vulnerability in an adaptation context. OPR, through ICARP, published *Defining Vulnerable Communities in the Context of Climate Adaptation*, this is a resource that jurisdictions can leverage in order to better understand how to define vulnerable communities.

## Barriers and Successes

Given the novelty of climate adaptation for many jurisdictions, respondents were asked an open-ended question about the challenges faced while meeting SB 379 requirements. Given the diversity of answers received, OPR organized responses into the following categories:

- Cost or Capacity – Answers that involve or reference a lack of funding, resources, or staff.
- Coordination – Answers that mention difficulty coordinating either within departments or with outside entities.
- Lack of Guidance – Answers that indicate more guidance is needed to meet an aspect of Government Code Section 65302(g).

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3 Government Code Section 65302(g)(4)(A)

Of the 40 respondents that provided a response over 77% stated that limited staff time and funding have been the largest barrier faced. Challenges with coordination among partner agencies and within departments also created barriers for over 7% of the respondents. About 8% stated they needed more guidance and examples of how documents should be filled out or topics these documents should address. Some of the lack of guidance comes from this being a new topic for jurisdictions and a lack of previous baseline documents or studies. Other jurisdictions noted a lack of guidance from the state.

Some respondents shared recent successes within their planning and adaptation efforts. Two jurisdictions noted they were able to obtain a CivicSpark fellow to assist with their efforts in completing SB 379 requirements. Other jurisdictions had success at obtaining grant funding for various projects. One jurisdiction found multiple avenues for funding by receiving "[a] C[alifornia] C[oastal] C[ommission] grant for [a] vulnerability assessment. Received Caltrans [SB1] grant for Transportation adaptation, applying for round 6 C[alifornia] C[oastal] C[ommission] grant for adaptation for non-transportation assets."

Further, several jurisdictions noted that their success came in the form of reaching out and connecting with their community members and stakeholders to gain a better understanding of the adaptation concerns and measures that could be implemented in the future. One jurisdiction found different avenues to connect with the local community members - "Reaching out to students on campus. Pop-up meetings, meetings in a box. If you can get one or two staff to go out to a grocery store after work, you can talk to people about a plan. Get one or two minutes of people's time instead of hours of their time after work."

## Special districts

Throughout the outreach process 14 special districts responded to the 2019 SB 379 survey, despite not being subject to requirements in State law to prepare general plans or any of the SB 379 requirements for general plans per Government Code Section 65302(g). Respondents included water districts, and regional transit districts. This level of interest among special districts was unexpected given that SB 379 only applies to those jurisdictions required to prepare general plans, which are cities and counties. While OPR staff cannot conclusively determine the reason these special districts chose to respond to the survey, staff anticipate it could be a combination of confusion or misunderstanding around Government Code Section 65302(g), but also a reflection that many special districts are undertaking similar climate adaptation and resilience planning activities and may be looking to the state for guidance and resources. Special districts can often play an important role as a partner or supporting agency in local hazard mitigation or climate adaptation planning and implementation efforts, and thus they may see themselves as having a role in local city- or county-driven SB 379 compliance efforts within their service area. However, additional research is needed before definitive conclusions can be drawn from these responses.

# CONCLUSIONS

Overall, the survey responses provide information regarding jurisdictions' ability to fulfill SB 379 requirements, and insight into local jurisdictions' planning processes. First, jurisdictions are at different phases within the process. Second, jurisdictions are updating a variety of documents to comply with SB 379. Many are updating their safety element, but other jurisdictions are taking the "other document" approach and completing local hazard mitigation plans and/or climate action plans and referencing them in their general plan. Third, though many respondents have begun the process, most do not plan on finalizing or adopting the required documents for several years. Fourth, jurisdictions have encountered problems or confusion around defining vulnerable communities and/or community assets. Lastly, most jurisdictions have experienced barriers finding funding and capacity to meet these requirements and based on the open-ended answers may also be a problem with completing other planning tasks as well.

Given the information gathered through this survey, OPR may assist in various ways in order to alleviate some of the problems faced by jurisdictions. First, OPR will take this information into consideration when developing General Plan Guideline updates as well as the next iteration of the APS. Further, OPR will continue to use ICARP's programmatic work to keep improving the support to local jurisdictions including providing resources and guidance on the Adaptation Clearinghouse. Lastly, considering the responses from special districts, OPR may explore developing resources specifically for special districts, and/or sharing information with special districts about the State's Adaptation Planning Guide, Adaptation Clearinghouse, and other available resources.

# APPENDIX A - GOVERNMENT CODE 65302(G)

(4) Upon the next revision of a local hazard mitigation plan, adopted in accordance with the federal Disaster Mitigation Act of 2000 (Public Law 106-390), on or after January 1, 2017, or, if a local jurisdiction has not adopted a local hazard mitigation plan, beginning on or before January 1, 2022, the safety element shall be reviewed and updated as necessary to address climate adaptation and resiliency strategies applicable to the city or county. This review shall consider advice provided in the Office of Planning and Research's General Plan Guidelines and shall include all the following:

(A) A vulnerability assessment that identifies the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts, including, but not limited to, an assessment of how climate change may affect the risks addressed pursuant to paragraphs (2) and (3).

(ii) Information that may be available from federal, state, regional, and local agencies that will assist in developing the vulnerability assessment and the adaptation policies and strategies required pursuant to subparagraph (B), including, but not limited to, all the following:

(I) Information from the Internet based Cal-Adapt tool.

(II) Information from the most recent version of the California Adaptation Planning Guide.

(III) Information from local agencies on the types of assets, resources, and populations that will be sensitive to various climate change exposures.

(IV) Information from local agencies on their current ability to deal with the impacts of climate change.

(V) Historical data on natural events and hazards, including locally prepared maps of areas subject to previous risk, areas that are vulnerable, and sites that have been repeatedly damaged.

(VI) Existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities.

(VII) Federal, state, regional, and local agencies with responsibility for the protection of public health and safety and the environment, including special districts and local offices of emergency services.

(B) A set of adaptation and resilience goals, policies, and objectives based on the information specified in subparagraph (A) for the protection of the community.

(C) A set of feasible implementation measures designed to carry out the goals, policies, and objectives identified pursuant to subparagraph (B) including, but not limited to, all the following:

(i) Feasible methods to avoid or minimize climate change impacts associated with new uses of land.

(ii) The location, when feasible, of new essential public facilities outside of at-risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas.

(iii) The designation of adequate and feasible infrastructure located in an at-risk area.

(iv) Guidelines for working cooperatively with relevant local, regional, state, and federal agencies.

(v) The identification of natural infrastructure that may be used in adaptation projects, where feasible. Where feasible, the plan shall use existing natural features and ecosystem processes, or the restoration of natural features and ecosystem processes, when developing alternatives for consideration. For the purposes of this clause, "natural infrastructure" means the preservation or restoration of ecological systems, or utilization of engineered systems that use ecological processes, to increase resiliency to climate change, manage other environmental hazards, or both. This may include, but is not limited to, floodplain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days.

(D) (i) If a city or county has adopted the local hazard mitigation plan, or other climate adaptation plan or document that fulfills commensurate goals and objectives and contains the information required pursuant to this paragraph, separate from the general plan, an attachment of, or reference to, the local hazard mitigation plan or other climate adaptation plan or document.

(ii) Cities or counties that have an adopted hazard mitigation plan, or other climate adaptation plan or document that substantially complies with this section, or have substantially equivalent provisions to this subdivision in their general plans, may use that information in the safety element to comply with this subdivision, and shall summarize and incorporate by reference into the safety element the other general plan provisions, climate adaptation plan or document, specifically showing how each requirement of this subdivision has been met.

# APPENDIX B – LIST OF SURVEY QUESTIONS

1. Please list the name of your jurisdiction or company.
2. Have you begun your General Plan Safety Element update (or other local plan that you plan to incorporate by reference) to meet SB 379 requirements?
3. What planning document(s) are you updating to meet the requirement?
4. If you are working on SB 379 compliance, what have you completed?
5. When do you anticipate finalizing the plan?
6. When do you anticipate the plan will be adopted?
7. How have you defined “community assets”?
8. Are you identifying vulnerable communities or populations? If so, what are the factors you are using to identify vulnerable communities or populations?
9. What are the major barriers your jurisdiction faces when meeting SB 379 requirements?
10. What innovations or successful actions has your jurisdiction taken to meet SB 379?