

2019 Hazard Mitigation Plan Update – Cost Estimate

Detailed Cost Estimate

	Position Title	Principal Resilience Analyst (PM)	Emergency Planner II	City Planner III	City Planner II	Climate Program Manager	Climate Analyst	Public Health Analyst	Consultant Fees			
	Code	1824	8602	5291	5278	5644	5638	1822				
	Direct Cost Rate	\$ 63.79	\$ 48.31	\$ 54.04	\$ 48.31	\$ 59.58	\$ 39.16	\$ 47.29				
	Direct Cost Rate + Benefits (1.41 multiplier)	\$ 89.94	\$ 68.12	\$ 76.20	\$ 68.12	\$ 84.01	\$ 55.22	\$ 66.68				
Item	Item Name									Hours	Unit Cost	Total Cost
1	Develop and Engage Planning Team	72	24	24	48	48	24	24		264	\$ 76.39	\$ 20,167
2	Develop Stakeholder and Public Engagement Strategy	16	6	6	6	16		6		56	\$ 79.61	\$ 4,458
3	Implement Engagement Strategy - Staff Time	40	16	40	16	16	40	16		184	\$ 73.07	\$ 13,445
4	Implement Engagement Strategy - Consultant Fee								\$ 100,000			\$ 100,000
5	Update Hazard Profiles	24	100		8			16		148	\$ 71.50	\$ 10,582
6	Vulnerability and Risk Assessment	40	40		40	12	120	40		292	\$ 66.26	\$ 19,348
7	Mitigation Strategy Development	24	24	4	16	16	80	16		180	\$ 66.76	\$ 12,016
8	Maintenance Plan Development	8	16	2		2				28	\$ 76.07	\$ 2,130
9	Develop Draft Plan	40			24	8	120			192	\$ 65.26	\$ 12,531
10	CalOES/FEMA Review/Revisions	16	16				8			40	\$ 74.27	\$ 2,971
11	Local Plan Adoption	16	8	8		8				40	\$ 81.64	\$ 3,266
12	Grant Closeout	16								16	\$ 89.94	\$ 1,439
	<b>Total Hours</b>	<b>312</b>	<b>250</b>	<b>84</b>	<b>158</b>	<b>126</b>	<b>392</b>	<b>118</b>		<b>1,440</b>		<b>\$ 202,352</b>

## Cost Estimate Narrative

### Staff Roles

The staff listed on the detailed cost estimate represent an interdepartmental team who will be leading development of the 2019 Hazard Mitigation Plan Update. Below are the key roles that these team members will play:

- Principal Resilience Analyst from the Office of Resilience and Capital Planning is serving as the Project Manager (PM) for this effort. She will lead interdepartmental coordination, including engagement with the Planning Team and oversee the development deliverables, and local adoption.
- Emergency Planner II from the Department of Emergency Management will play a major role in updating the hazard profiles, including updating hazard maps. She participated in the 2014 Hazard Mitigation Plan update so she will also provide context from this previous planning effort. She will also participate in the vulnerability assessment and strategy development for emergency response facilities, such as the Emergency Operations Center, Police, and Fire.
- City Planner III from the Planning Department will participate in engagement with the citywide Planning Team and implementation of the stakeholder and public engagement strategy. She will participate in strategy development particularly relating to planning process and regulations.
- City Planner II from the Planning Department will participate in engagement with the citywide Planning Team, and implantation of the stakeholder and public engagement strategy. She lead the city's sea level rise planning work, so she will provide key expertise on flooding impacts for the hazard profile updates and vulnerability and risk assessment.
- Climate Program Manager from the Department of the Environment will play a leading role in climate hazards and making connections between this effort and the City's Climate Action Strategy. She will play a key role in engaging the citywide Planning Team, developing the stakeholder and public engagement strategy, and mitigation strategy development.
- Climate Analyst from the Department of the Environment will play a lead role in the vulnerability and risk assessment, particularly the impacts of climate hazards, including flooding, extreme heat, drought, and fire. This person will also play a lead role in drafting and revising the plan.
- Public Health Analyst from the Department of Public Health will play a key role in assessing the health impacts of hazards and strategy development related to health.

### Descriptions of Cost Items

#### 1. Develop and Engage Planning Team

The PM will review the Planning Team roster from 2014 and identify additional participations. There will be an estimated six Planning Team meetings over the course of the project. For each meeting, the PM will spend approximately 12 hours per meeting preparing content and agenda, delivering the meeting, and with follow up. City Planner II and Climate Program Manager will play leading roles in these meetings, spending approximately eight hours in preparation and delivery of each meeting. Emergency

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Planner II, Planner II, Climate Analyst, and Public Health Analyst will spend three hours each per meeting to support with facilitation.

### 2. Develop Stakeholder and Public Engagement Strategy

The PM and Climate Program Manager will lead the development of the Engagement Strategy, reviewing the engagement process from 2014, and successful engagement models from other cities and counties (16 hours per staff member). Two meetings will be held with the additional team members from Emergency Planning, City Planning, and Public Health to develop the strategy and they will review and provide feedback on the draft strategy (6 hours per staff member).

### 3. Implement Stakeholder and Public Engagement Strategy – Staff Time

Team members will contribute to implementation of the engagement strategy. The PM, City Planner III, and Climate Program Manager will develop the request for proposal, review consultant submissions, and select a consultant with whom to contract (20 hours per staff member). The PM, City Planner III, and Climate Analyst will develop stakeholder contact lists, review meeting agendas, make presentations, and attend public meetings (20 hours per staff member). The Emergency Planner II, City Planner II, and Climate Analyst will attend the public meetings (16 hours per staff member).

### 4. Implement Stakeholder and Public Engagement Strategy

A consultant will be hired to implement the public engagement strategy, including developing and maintaining a project website, developing and analyzing a survey, developing communications materials, and planning and facilitating several public meetings. The consultant fee will be an estimated \$100,000. For a detailed breakdown of the estimated consultant fee, please see Supporting Document B.

### 5. Update Hazard Profiles

The hazard profiles will be updated to reflect any new hazard identified, any hazard events since 2014 and the latest hazard mapping. Emergency Planner II will lead this effort spending approximately 10 hours on each of the 10 hazard profiles (100 hours). The PM will also support this effort, particularly for climate hazards (24 hours). City Planner II will support with flooding (8 hours), and the Public Health Analyst with extreme heat and pandemic (16 hours).

### 6. Vulnerability and Risk Assessment

A major effort of the vulnerability and risk assessment will be to expand the asset inventory beyond just City facilities, to include vulnerable populations, critical infrastructure, critical community services, and open space. The PM will oversee the development on the asset database with support from Emergency Planner II (40 hours each). The Climate Analyst will collection information on the vulnerabilities and risks of the assets to hazards and developing vulnerability profiles, (120 hours). City Planner II will provide information on vulnerabilities to the privately owned building stock and community services (40 hours). The Public Health analyst will provide an assessment of vulnerable populations related to hazards and an assessment of the vulnerability of hospitals and other critical health facilities for approximately (40 hours). The Climate Program Manager will support the development of a vulnerability profile template, analyzing examples from other cities and counties (12 hours).

#### 7. Mitigation Strategy Development

Emergency Planner II will provide information on the implementation status of actions from the 2014 strategy and support strategy development related to emergency response facilities (24 hours). City Planner III and City Planner II will support with strategy development related to the privately owned buildings, community services, and the Planning and Zoning Codes (4 hours and 16 hours, respectively). The Climate Analyst will develop a Strategy Idea Form to be distributed to the Planning Team to collect new ideas. The Climate Analyst will also lead the development of evaluation criteria to develop a short-list of strategies from all of the ideas collected. The Climate Analyst will also support with development of implementation considerations, such as funding and policy, for the prioritized strategies. The Climate Analyst is expected to provide approximately 80 hours of work for these tasks. The Public Health Analyst will support with strategy development related to health (16 hours). The Climate Program Manager will support the strategy development that connects hazard mitigation with climate change mitigation actions, e.g. building retrofits, transportation improvements, and energy resilience (16 hours).

#### 8. Maintenance Plan Development

Emergency Planner II will review the maintenance plan from 2014 and identify any needed improvements (16 hours). City Planner III and Climate Program Manager will identify ways to align maintenance with other planning efforts, including the Safety Element and Climate Action Strategy (2 hours and 2 hours). The Project Manager will provide overall support to this task (8 hours).

#### 9. Develop Draft Plan

The drafting of the plan will be led by the Climate Analyst, who will compile deliverables developed for the hazard profiles, vulnerability and risk assessment, and the mitigation strategy into a single document that is easy to read for decision makers and the public (120 hours). City Planner II will also provide graphic support (24 hours). The PM will oversee the revision process based on feedback from the Planning Team and public comments (40 hours). The Climate Program Manager will provide copyediting support (8 hours).

#### 10. CalOES/FEMA Review/Revisions

The PM will oversee revisions to the plan based on CalOES and FEMA review (16 hours) with support from the Emergency Planner (16 hours) and Climate Analyst (8 hours).

#### 11. Local Plan Adoption

The PM will oversee adoption of the Plan by the Board of Supervisors and Mayor (16 hours) with support from Emergency Planner II (8 hours). City Planner III will help make connections between the hazard mitigation plan and the Safety Element Update (8 hours) and Climate Program Manager will help make connections with the Climate Action Strategy Update (8 hours).

#### 12. Grant Close Out

The PM will oversee grant close out activities (16 hours).