Stage 1 Business Analysis

California Department of Technology, SIMM 19A.3 (Ver. 3.0.8, 02/01/2022)

1.1   General Information

1. **Agency or State entity Name: 3980 - Environmental Health Hazard Assessment, Office of**

    If Agency/State entity is not in the list, enter here with the organization code.

    Click or tap here to enter text.

2. **Proposal Name and Acronym: Statewide Extreme Heat Ranking System web/mobile application (Heat Ranking System App)**

3. **Proposal Description: (Provide a brief description of your proposal in 500 characters or less.)**

    Assembly Bill 2238 requires CalEPA to develop a statewide extreme heat ranking system. In order to effectively implement the extreme heat ranking system, the Office of Environmental Health Hazard Assessment (OEHHA) proposes a mobile application to facilitate the sharing of critical, time-sensitive information to a wide audience. The app would include the heat ranking system and provide locally relevant information about upcoming heat events, such as resources for reducing heat exposures, and local resources such as cooling centers. A complementary webpage with similar information would also be developed to support the ranking system.

4. **Proposed Project Execution Start Date: 7/1/2023**

5. **S1BA Version Number: Version 1**

1.2   Submittal Information

1. **Contact Information**

    Contact Name: Steve Fong

    Contact Email: steve.fong@oehha.ca.gov

    Contact Phone: 916-324-6449

2. **Submission Type: New Submission**

If Withdraw, select Reason: Choose an item.

>If Other, specify reason here: Click or tap here to enter text.

Sections Changed, if this is a Submission Update: (List all sections changed.)

Click or tap here to enter text.

Summary of Changes: (Summarize updates made.)

Click or tap here to enter text.

3. Attach **Project Approval Executive Transmittal** to your email submission.

4. Attach **Stage 1 Project Reportability Assessment** to your email submission.

1.3   Business Sponsorship

1. **Executive Champion (Sponsor)**

>Title: Chief Deputy Director

>Name: David Edwards, Ph.D.

>Business Program Area: Executive Branch

2. **Business Owner**

>Title: Branch Chief

>Name: John Faust, Ph.D.

>Business Program Area: Community and Environmental Epidemiology Research Branch

3. **Product Owner**

>Title: Information Technology Manager I

>Name: Steve Fong

>Business Program Area: Information Technology Branch

TIP: Copy and paste or click the + button in the lower right corner on any section to add additional Executive Champions, Business Owners, or Product Owners with their related Business Program Areas as needed.

1.4   Stakeholder Assessment

The Stakeholder Assessment is designed to give the project team an overview of communication channels that the state entity needs to manage throughout the project. More stakeholders may result in increased complexity to a project.

1. **Indicate which of the following are interested in this proposal and/or the outcome of the project. (Select 'Yes' or 'No' for each.)**

   State Entity Only: No

   Other Departments/State Entities: Yes

   Public: Yes

   Federal Entities: Yes

   Governor's Office: Yes

   Legislature: Yes

   Media: Yes

   Local Entities: Yes

   Special Interest Groups: Yes

   Other: No

2. **Describe how each group marked 'Yes' will be involved in the planning process.**

   Other State Departments and Entities: AB 2238 requires CalEPA to develop the heat ranking system in coordination with the Integrated Climate Adaptation and Resiliency Program (ICARP), the State Department of Public Health, and the Department of Insurance. While these agencies may not be directly involved in developing the mobile application, OEHHA will consult with these agencies during the development of the ranking system and the design and features of the mobile application. ICARP, which is part of the Governor's Office of Planning and Research, is the lead for developing a public communication plan and will likely provide input on what should be included in the web and mobile application.

   Public: There will be a public engagement process for the development of the ranking system, which may include opportunities to provide feedback on the web and mobile application.

   Federal Entities: OEHHA will consult with federal entities such as the National Weather Service during the development of the ranking system and the use of the app. Federal entities are likely interested in the outcome of this project to assess the effectiveness of a heat ranking system in helping to reduce heat-related health impacts.

   Governor's Office: The Governor's Office will be briefed by OEHHA and CalEPA as work on the implementation of AB 2238 progresses.

   Legislature: Legislative staff will be briefed by OEHHA and CalEPA, as needed, as the ranking system is developed.

   Media: The media will not be involved during the planning process but will be interested in the outcome of the project and may be contacted to help share information to the public. With the passing of AB 2238, California will the first state in the nation to develop a statewide extreme heat ranking system.

<u>Local Entities:</u> Local and tribal governments may also provide feedback during the public engagement process and/or potential training workshops on the heat ranking system.

<u>Special interest groups</u>: OEHHA will seek input from communities based organizations and other special interest groups during the public engagement process. Insurance companies and utility companies that may be impacted by extreme heat events may also participate in the public engagement process and may be interested in the outcome of this project.

1.5   Business Program

1. **Business Program Name:** Office of Environmental Health Hazard Assessment

2. **Program Background and Context:** (Provide a brief overview of the entity's business program(s) current operations.)

For almost two decades, OEHHA has conducted studies on the health effects of heat. These studies have shown associations between heat and a variety of adverse health outcomes, including deaths, adverse birth outcomes (i.e. preterm delivery, low birth weight, and stillbirth), and increased emergency room visits and hospitalizations for cardiovascular, respiratory, mental health, kidney, liver, and urinary system outcomes. OEHHA's studies have also identified populations that may be more vulnerable to heat-related deaths and illnesses, including older adults, pregnant people, infants and children, and people of color. OEHHA has contributed to California's extreme heat response efforts through the following reports: Preparing California for Extreme Heat: Guidelines and Recommendations (2013), CalEPA Urban Heat Island Index report (2015), OEHHA Climate Change Indicators Report, CA Climate Adaptation Strategy (2021), and the Extreme Heat Action Plan (2022). In addition, OEHHA also has expertise in developing tools that synthesize environmental and demographic data into statewide maps, such as CalEnviroScreen.

OEHHA will lead the development of the statewide extreme heat ranking system, which AB 2238 has tasked CalEPA with developing. OEHHA will also be consulting with other state agencies in the development of a public communication plan and guidance for preparing and planning for extreme heat events.

3. **How will this proposed project impact the product or services supported by the state entity?**

This project supports OEHHA's mission to protect and enhance the health of Californians and our state's environment through scientific evaluations that inform, support and guide regulatory and other actions. The extreme heat ranking tool will be based on the best available scientific evidence and is intended to provide information at an individual level and to guide state and local policy with respect to extreme heat preparedness, response, and recovery. The proposed project will help the state raise awareness of the extreme heat ranking system and allow people throughout the state to easily find locally relevant information about upcoming heat waves, tips for reducing heat exposure, and local resources.

TIP: Copy and paste or click the + button in the lower right corner to add Business Programs, with background and context and impact descriptions as needed.

1.6   Project Justification

1. **Strategic Business Alignment**

   Enterprise Architect

   Title: IT Manager I

   Name: Steve Fong

   Strategic Business Goal:

   Goal 1: Improve the quality of public health and our environment
   Goal 2: Advance the science for the evaluation of risks posed to the public health and environment, and provide risk assessment leadership for the State of California
   Goal 3: Provide high quality information about environmental health hazards to the public

   Alignment:
   Goal 1: Improve the quality of public health and our environment
   -        Alignment: The statewide extreme heat ranking system will include recommendations for thresholds or triggers for public policies to reduce the health impacts of heat. A web and mobile phone application will allow government agencies, tribal organizations, community-based organizations, other stakeholders and the public to access the ranking system to inform their heat adaptation and resilience measures to improve public health.

   Goal 2: Advance the science for the evaluation of risks posed to the public health and environment, and provide risk assessment leadership for the State of California
   -        Alignment: This will be the first statewide extreme heat ranking system in the nation. The system will be developed using the best available science and data and will include health-based heat thresholds that are protective across diverse populations. The web and mobile phone application will help disseminate the statewide extreme heat ranking system to a wide audience and provide an example for other states and the entire nation.

   Goal 3: Provide high quality information about environmental health hazards to the public
   -        Alignment: Use of mobile device has become commonplace, and a web and mobile application would enable the sharing of critical, time-sensitive information to a wide audience. An application for the statewide extreme heat ranking system could effectively provide locally relevant information about upcoming heat events, tips for reducing heat exposures, and local resources.

   TIP: Copy and paste or click the + button in the lower right corner to add Strategic Business Goals and Alignments as needed.

Mandate(s): State

Bill Number/Code, if applicable: AB 2238

Add the Bill language that includes system-relevant requirements:

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For information on the heat ranking system to be developed:

(b) On or before January 1, 2025, the agency, in coordination with the ICARP, the State Department of Public Health, and the Department of Insurance, shall develop a statewide extreme heat ranking system to be based upon, but not limited to, all of the following:

(1) Available meteorological data from government and academic sources, including maximum temperature, minimum temperature, and duration of extreme heat events.

(2) Information and data on health impacts of heat established through best available science or data from past heat and extreme heat events, including available mortality and morbidity information.

(3) Measures of extreme heat severity, including the severity of the outcome of extreme heat on human health.

(4) Locally relevant information, such as urban heat island effects, or cooling effects from urban tree canopies or other cooling measures.

(5) Comments and suggestions obtained from public input received at a minimum of one public workshop, as appropriate.

(c) The statewide extreme heat ranking system shall include all of the following:

(1) Recommendations on thresholds or triggers for public policies that reduce the risk of extreme heat impacts and prioritize reducing the impacts of extreme heat to human health.

(2) Recommendations for metrics to measure the short-term and long-term impacts of extreme heat on human health.

(3) A consideration of the information reported by the Department of Insurance, including the results of the study prepared pursuant to subdivision (f).

(d) The statewide extreme heat ranking system shall be adaptable for use at locally relevant scales.

For information on the public communication plan:

(e) After the statewide extreme heat ranking system is finalized, the ICARP shall do all of the following:

(1) Develop, in consultation with the Office of Emergency Services, the State Department of Public Health, the Department of Insurance, and other state agencies, and with input from local governments, local health departments, tribal organizations, labor organizations, environmental organizations, and community groups from disadvantaged and vulnerable communities, a public communication plan for the statewide extreme heat ranking system with a focus on strategies that target communications to populations that are most at risk of public health and emergency impacts from extreme heat events, including, but not limited to, the most vulnerable populations. The communication plan shall include both of the following:

(A) Outreach plans for reaching diverse and vulnerable populations.

(B) Recommendations for targeted communications by local governments that include the use of culturally appropriate materials translated into multiple languages based on the common languages spoken in the locality.

(2) Recommend partnerships with local health departments and local and tribal governments, and develop statewide guidance for local and tribal governments in the preparation and planning for extreme heat events.

(3) Review the extreme heat ranking system and, in consultation with the State Department of Public Health, recommend to local governments specific and locally relevant heat adaptation, preparedness, and resilience measures that could be linked to the statewide extreme heat ranking system and identify how the statewide extreme heat ranking system aligns with additional extreme heat adaptation policies pursuant to Section 71354.

> *TIP: Copy and paste or click the + button in the lower right corner to add Bill Numbers/Codes and relevant language as needed.*

2. **Business Driver(s)**

    Financial Benefit: No

    Increased Revenue: No

    Cost Savings: No

    Cost Avoidance: No

    Cost Recovery: No

    Will the state incur a financial penalty or sanction if this proposal is not implemented? No

    > If the answer to the above question is "Yes," please explain:

    > Click or tap here to enter text.

    Improvement

    Better Services to the People of California: Yes

Efficiencies to Program Operations: Yes

Improved Equity, Diversity, and/or Inclusivity: Yes

Improved Health and/or Human Safety: Yes

Improved Information Security: No

Improved Business Continuity: No

Improved Technology Recovery: No

Technology Refresh: No

Technology End of Life: No

1.7   Business Outcomes Desired

Executive Summary of the Business Problem or Opportunity:

Develop a web and mobile application to facilitate information sharing for the heat ranking system and upcoming heat events.

Objective ID: 1

Objective: Compile and integrate external data sources into a single data system for the app.

Metric: Percent coverage of data sources to be compiled in final app.

Baseline: NA.

Target Result: Development of an app that can automatically pull data from multiple external sources into a single data system and be updated on an hourly basis.

Objective ID: 2

Objective: Calculate and display heat rankings across the state based on most recent data in a web and mobile phone app.

Metric: Spatial and temporal scale of the heat ranking system. The frequency at which the app can update heat rankings for a given location.

Baseline: NA.

Target Result: The app can internally calculate and display locally relevant, health-based heat rankings based on the current, local environmental conditions for locations throughout the state that is based upon the user's location.

Objective ID: 3

Objective: Compile local resources and guidelines to share in the app.

Metric: Percent coverage of localities with available information in the app.

Baseline: Local resources and guidelines may not be easily accessible and located in multiple, online locations.

Target Result: The app can share local resources (ex. locations of nearby cooling centers, community resilience hubs, emergency contact information) and guidelines for locations throughout the state.

Objective ID: 4

Objective: Develop push notification system in app to provide location-based alerts of upcoming heat events.

Metric: Number of different types of push notifications that the app can display.

Baseline: N/A (app does not currently exist)

Target Result: Development of relevant push notifications that can help people stay safe from the health effects of heat.

Objective ID: 5

Objective: Develop a way to capture and export data analytics and app usage to evaluate the effectiveness of the app in communicating with communities across the state.

Metric: Identification of data analytics to gather from the app.

Baseline: N/A (app does not exist yet)

Target Result: Ability to export data analytics from the app to evaluate the usage of the app and to evaluate the effectiveness of the heat ranking system in communicating information related to heat events and protecting public health.

TIP: Copy and paste or click the + button in the lower right corner to add Objectives as needed. Please number for reference.

TIP: Objectives should identify WHAT needs to be achieved or solved. Each objective should identify HOW the problem statement can be solved and must have a target result that is specific, measurable, attainable, realistic, and time-bound. Objective must cover the specific. Metric and Baseline must detail how the objective is measurable. Target Result needs to support the attainable, realistic, and time-bound requirements.

1.8   Project Management

1. **Project Management Risk Score:** Click or tap here to enter text.

   (Attach a completed Statewide Information Management Manual (SIMM) Section 45 Appendix A Project Management Risk Assessment Template to the email submission.)

2. **Project Approval Lifecycle Completion and Project Execution Capacity Assessment**

   Does the proposal development or project execution anticipate sharing resources (state staff, vendors, consultants, or financial) with other priorities within the Agency/state entity (projects, PALs, or programmatic/technology workload)?

   Answer: No

   Does the Agency/state entity anticipate this proposal will result in the creation of new business processes or changes to existing business processes?

   Answer (No, New, Existing, or Both)**:** New Processes

1.9   Initial Complexity Assessment

1. **Business Complexity Score:** Business Complexity 2.5 and Technical Complexity 3.0
   Medium Complexity/Risk - Zone II, Zone III

   (Attach a completed SIMM Section 45 Appendix C to the email submission.)

2. **Noncompliance Issues:** (Indicate if your current operations include noncompliance issues and provide a narrative explaining how the business process is noncompliant.)

   Programmatic regulations: No

   HIPAA/CIIS/FTI/PII/PCI: No

   Security: No

   ADA: No

   Other: No

   Not Applicable: No

   Noncompliance Description:

   Click or tap here to enter text.

3. **Additional Assessment Criteria**

   If there is an existing Privacy Threshold Assessment/Privacy Information Assessment, include it as an attachment to your email submission.

   How many locations and total users is the project anticipated to affect?

   Number of locations: Click or tap here to enter text.

   Estimated Number of Transactions/Business Events (per cycle): Click or tap here to enter text.

   Approximate number of internal end-users: Click or tap here to enter text.

   Approximate number of external end-users: Click or tap here to enter text.

1.10 Funding

Planning

1. Does the Agency/state entity anticipate requesting additional resources through a budget action to **complete planning** through the project approval lifecycle framework? Yes

   If Yes, when will a budget action be submitted to your Agency/DOF for planning dollars?

   7/18/2022

2. Please provide the Funding Source(s) and dates funds for planning will be made available:

   General Fund - 07/01/2023

Project Implementation Funding

1. Has the funding source(s) been identified for **project implementation**? Yes

   If known, please provide the Funding Source(s) and dates funds for implementation will be made available:

   General Fund; 7/1/2023

   Will a budget action be submitted to your Agency/DOF? Yes

   If "Yes" is selected, specify when this BCP will be submitted: September 2022

2. Please provide a rough order of magnitude (ROM) estimate as to the total cost of the project: Less than $10 Million

End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 1 and all attachments in an email to ProjectOversight@state.ca.gov.

Department of Technology Use Only

Original "New Submission" Date: 3/9/2023

Form Received Date: 3/9/2023

Form Accepted Date: 3/9/2023

Form Status: Completed

Form Status Date: 3/9/2023

Form Disposition: Approved

   If Other, specify: Click or tap here to enter text.

Form Disposition Date: 3/9/2023

Department of Technology Project Number (0000-000): 3980-004