

ATTACHMENT A
SCOPE OF WORK

I. VENTURA COUNTY MULTIMODAL TRANSPORTATION NETWORK CLIMATE VULNERABILITY ASSESSMENT AND ACTION PLAN SCOPE OF WORK

Background and Context

VCTC serves as the regional transportation planning agency for Ventura County. To address climate-related infrastructure challenges facing Ventura County, the Project will produce: (1) Countywide Multimodal Vulnerability Assessment; (2) Outreach Plan; (3) Climate Adaptation Strategy and Funding Plan; (4) Adaptation Assessment and Action Plan; and (5) a Transportation Emergency Preparedness Guide for Individual & Families. The project will be developed with input from an Advisory Team consisting of VCTC, co-grant recipient Ventura County Community Foundation (VCCF), project partners (such as Caltrans, County of Ventura, The Nature Conservancy), and VCTC's standing advisory committees (inc. all local jurisdictions and transit operators in Ventura County). VCCF will lead engagement with vulnerable communities and act as a convener for outreach activities. The Project should utilize Caltrans Climate Change Adaptation Strategy Report guidance, align with California Climate Adaptation Strategy priorities, make decisions based on best available climate science, facilitate partnerships and collaboration to leverage resources, and consider nature-based solutions to identify and address vulnerabilities associated with climate change and other natural hazards, and build on planning efforts by VCTC and partner agencies, such as VCTC & SBCAG's Transportation Emergency Preparedness Plan (TEPP), County of Ventura's VC Resilient Coastal Adaptation Project, and Caltrans' Climate Resilience & Transportation Safety Plan for PCH (SR1).

Natural hazards due to climate change continue to have a major impact on transportation infrastructure in Ventura County, from a washed-out railroad bridge to road closures and damage from flooding, mud slides, and wildfires, including a Feb. 2024 landslide that closed the only direct route between Ojai and Santa Paula (SR-150) and the Nov. 2024 Mountain Fire, which actively threatened critical transportation infrastructure, including US-101, SR-118, SR-126, and the Camarillo, Somis, Moorpark, Ventura, and Santa Paula communities. During the 2017 Thomas Fire, 38.8 state highway miles in Ventura County were in the fire perimeter causing road closures, impacting travel and the local economy. Caltrans predicts the number of centerline roadway miles exposed to the risk of wildfire may grow to 155.6 miles in Ventura County by 2055 affecting all major state and local roads, rail, transit and active transportation. Heavy rains that occur after fires have caused devastating mudslides resulting in significant highway, roadway, and active transportation closures. The Project will build on prior climate change planning documents, going beyond macro-level analysis of climate change strategies, by identifying and prioritizing specific multimodal adaptation projects that also reduce greenhouse gas emissions with priority given to vulnerable communities. Based on feedback from disability advocates that the Ventura & Santa Barbara Counties Transportation & Emergency Preparedness Plan (TEPP) is heavily focused on agency response and lacks practical information for the public to understand and act upon, the Project includes an easy-to-use transportation emergency preparedness guide for individuals and families that builds upon the TEPP, with a focus on persons with access and functional needs and their caregivers, and would include a one-page form with transportation information for use during emergencies.

Significant scientific data and information on known and anticipated climate change impacts and vulnerabilities in Ventura County is available. Climate change data provided below is consistent with best scientific data included in local and regional documents such as the Watersheds Coalition of Ventura County's "Projected Changes in Ventura County Climate" and The Nature Conservancy's "Coastal Resilience Project." The temperature in Ventura County is projected to rise between 3.6 to 6.0 degrees Fahrenheit by 2099 compared to the projected statewide average of between 1 and 2.3 degrees (Climate Change and Health Profile Report for Ventura County, CDPH, Feb. 2017). Ventura County Communities in Fire Hazard Severity Zones categorized as Very High by the CDPH report include: Piru, Fillmore, Santa Paula, and Ventura north of SR 126 between the LA County Line and US 101; Santa

Paula and Ojai along SR 150 at various locations; between Ventura and Ojai on SR 33 and north of Ojai; between Ventura and the Santa Barbara County Line along US 101 and SR 1; Moorpark along SR 23 and SR 118; and Simi Valley along SR 118 at the LA County line. The amount of acreage burned due to wildfire is projected to increase by 1.49 in 2085. Caltrans predicts that the number of centerline roadway miles exposed to the risk of wildfire in Ventura County will grow to 155.6 miles in 2055 (high scenario) affecting state highways, local roads, rail, transit and active transportation facilities. Strong winter storms have caused transportation infrastructure to erode and mudslides especially in areas that have experienced wildfires. Ventura County is also at risk of hazards posed by sea level rise and coastal flooding. In 2010, approximately 7,266 residents lived on coastal blocks at risk of inundation from a 100-year flood. With an additional 55 inches of sea level rise, the inundation zone would potentially include 13,481 residents. A 69-inch sea level rise would expose 4.24 centerline miles of SR 1 to cliff retreat and would flood several miles of local roads in Oxnard and Port Hueneme that include the County's most disadvantaged communities.

The Project will produce: (1) A Multimodal Vulnerability Assessment and report that identifies climate change and other natural hazards most likely to occur in Ventura County, which multimodal transportation facilities are at risk (highways and roads, airports, ports, rail facilities, active transportation facilities, and transit routes, centers, and stops), and the location of disadvantaged communities vulnerable to climate change impacts including potential health outcomes and social conditions; (2) An Outreach Plan to implement a robust public engagement process that includes in-person and online public workshops and meetings, webpage, and digital outreach with priority emphasis on vulnerable communities; (3) A Climate Adaptation Strategy and Funding Plan that prioritizes vulnerable communities, identifies and prioritizes projects that provide both climate change mitigation and adaptation, considers nature-based solutions, and links projects with state and federal infrastructure grants; and (4) a draft and final Adaptation Assessment and Action Plan fully vetted by stakeholders including the public and adopted by the VCTC policy board.

Study Area

The study area encompasses all of Ventura County.

0. Project Management

0.1. Meetings

The Consultant shall report the status of the work effort, progress, and schedule on a monthly basis. Any modification to the frequency of project meetings shall be approved by both VCTC and the Consultant. The Consultant shall use systems that are compatible with already established VCTC systems, policies, software, procedures, and practices. Reports shall provide the necessary information to assure VCTC that the work is being accomplished as required and to facilitate invoice review and approval. The Consultant's project management system shall feature safeguards for the early identification of issues and their effective resolution.

0.2. Project Reporting

The Consultant's Project Manager is responsible for monitoring project performance and, if necessary, adjusting project resources to accomplish activities in a manner consistent with the adopted scope, budget, and schedule. The Consultant's Project Manager shall notify VCTC Project Manager or designee of any modification requests to the project scope, budget, and/or schedule and will adhere to the project requirements that are mutually agreed upon between VCTC and the Consultant. The base project schedule shall be submitted prior to the project kick-off meeting and will be reviewed and finalized within seven (7) business days of the kick-off meeting. The Consultant shall also report all corrective measures to the VCTC Project Manager for review and approval. The deliverables are anticipated to be completed no later than May 5, 2028.

The Consultant shall provide a minimum of fourteen (14) calendar days to VCTC staff to thoroughly review each deliverable. More complex deliverables may require up to three (3) to four (4) additional weeks for VCTC review. A deliverable is not accepted until formal written notice is provided by VCTC's Project Manager or designee. This process shall ensure that quality is achieved through checking, reviewing, and managing work activities for both VCTC and the Consultant. The status of the work efforts shall be reflected in monthly progress reports documenting the Consultant's effort during the billing period, tasks to be accomplished over the next 30 days as well as any forthcoming challenges and issues and potential methods for resolution.

Prior to acceptance and finalization, **ALL** deliverables shall be submitted to VCTC at 90% completion for review. Work deliverables should be proofread before submission to VCTC and include minimal to no grammatical or spelling errors. Incomplete deliverables and/or deliverables submitted with excessive errors may be rejected until errors have been fixed.

DELIVERABLES:

1. Project schedule – Updated on monthly basis
2. Meeting agendas
3. Meeting minutes
4. Monthly Invoices and Progress Reports

1. Develop and Implement a Public Outreach Plan

1.1. Public Engagement Plan and Report

The Consultant shall prepare a public engagement plan that includes in-person and online public workshops and meetings, webpage, and digital outreach with emphasis on vulnerable communities. The Consultant is expected to provide outreach materials in both English and Spanish. As part of the Plan, the Consultant shall propose a range of community meetings, totaling no fewer than ten (10) community meetings to be facilitated throughout the Project.

1.2. Engage vulnerable communities to ensure full participation in the project.

The Project will include robust public engagement with emphasis on under-resourced and vulnerable communities. The Consultant shall prepare a public engagement plan, that utilizes methods including in-person and online public workshops and meetings, web page, and digital outreach with emphasis on vulnerable communities. Co-grant recipient VCCF will leverage its considerable experience engaging vulnerable and under-resourced communities to document the needs as expressed by under-resourced communities, and the action plan will address how those needs will be met. Additional engagement methods should include multi-lingual volunteer recruitment to mobilize nonprofit, government, faith-based organizations, businesses and service clubs; using culturally relevant approaches and language diversity; and representation of our diverse community on the leadership team guiding project development. VCCF will act as a convener to contact community groups and host meetings and the Consultant shall be responsible for preparing the engagement plan and draft outreach materials related to community engagement (including emails and flyers).

The multi-modal transportation climate vulnerability assessment shall be based on best available science that identifies climate and other natural hazards most likely to occur in Ventura County, which multi-modal transportation facilities are at risk, the location of under-resourced communities vis-à-vis at-risk facilities, and the unique needs of vulnerable and under-resourced communities. The adaptation strategy shall identify a comprehensive range of specific mitigation actions and potential projects that reduce the effects of climate change and other natural hazards, with an emphasis on protecting

vulnerable communities, human health and preventing exacerbation of existing health, social and economic inequities. Planning-level cost estimates and a benefit-cost analysis shall be developed by the Consultant for each potential project to determine cost-effectiveness and co-benefits. A scoring system shall be developed by the Consultant to prioritize potential projects with the needs of under-resourced communities at the forefront of project selection and implementation.

1.3. Participate in Project Meetings

The Consultant shall participate in project meetings including community engagement meetings and workshops to gather information to assist in development of project deliverables.

DELIVERABLES:

1. Public Engagement Plan and Report (Materials will be provided in English and Spanish)
2. Project website
3. Project Print and Electronic material (In English and Spanish)
4. Notes from Project Meetings and Workshops
5. Monthly reports on vulnerable community engagement

2. Complete a Multimodal Transportation Vulnerability Network Assessment and Report

2.1. Multimodal Vulnerability Assessment and Report

The Consultant shall prepare an assessment identifying climate and natural hazards likely to occur and infrastructure and communities at risk. The Consultant shall refer to the Resiliency Guidebook Equity Checklist as part of the assessment.

The Assessment and Report shall be informed by and consistent with the priorities, goals, and actions of the California State Adaptation Strategy and follow State guidance on adaptation planning, including all six Adaptation Strategy priorities: Build a Climate Resilient Economy, Bolster Public Health and Safety to Protect Against Increasing Climate Risks, Accelerate Nature-Based Climate Solutions and Strengthen Climate Resilience of Natural Systems, Make Decisions Based on the Best Available Climate Science, and Partner to Collaborate and Leverage Resources. The Project shall build on prior climate change planning documents, going beyond macro-level analysis of climate change strategies by identifying and prioritizing specific multimodal adaptation projects that also reduce GHG emissions with priority given to vulnerable communities. The Project shall align with local and regional planning documents, such as: (1) Ventura County General Plan adaptation strategies, to relocate or reinforce bike trails, parking lots, and other beach access amenities away from the shoreline, reinforce roads and bridges from flooding through protection activities, and implement landslide stabilization and/or protection measures; (2) Ventura County Comprehensive Transportation Plan (VCTC, 2023), which supports multimodal transportation and reduction in vehicle miles traveled; (3) Port of Hueneme Strategic Plan (2020), which recommends developing long-range policy to incorporate climate change, sea level rise adaptation and resiliency with infrastructure investments; (4) Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, which supports the development of local climate adaptation and hazard mitigation plans, improves community resiliency to climate change and natural hazards (SCAG Connect SoCal, Ch. 3); (5) Southern California Regional Climate Adaptation Framework, and Planning Guide (SCAG, 2021), which supports climate adaptation planning across the six-county SCAG region; and (6) County of Ventura Climate Action Plan (CAP) program and policies. For example, CAP program PFD-D Sea Level Rise Adaptation Response states that the County shall identify funding and create an action plan to protect, accommodate, or manage the retreat of County facilities to areas of

higher elevation or reduced flood exposure. Further, the Project shall build on and advance the following: (1) Ventura County Multi-Jurisdictional Hazard Mitigation Plan (Ventura County, 2022) to improve transportation infrastructure and services to adapt to the effects of climate change and other hazards (i.e., wildfire, flood, landslide, drought); (2) Transportation Emergency Preparedness Plan (VCTC/SBCAG, 2020) to address challenges related to disasters by outlining roles and responsibilities of transit providers, emergency response agencies, government/nongovernment agencies, Communication procedures, and Summarize transit resources; and (3) Climate Change Vulnerability Assessment Summary Report (Caltrans D7), among others.

2.2. Project Evaluation

The Consultant should use a systematic approach to prioritize strategies and outcomes that provide direct and measurable climate change adaptation co-benefits across sectors and climate issues especially for the benefit of vulnerable communities. The Consultant will establish a mission statement, goals and objectives to guide development of the Project, and performance standards and criteria to assist in the evaluation and prioritization of proposed projects. The mission statement will be presented to the project advisory committees for feedback and consensus. Since the mission statement establishes the overall direction and vision of the Project, the mission statement would give priority to projects that provide multiple benefits especially for the benefit of under-resourced communities while ensuring that the Project will serve all communities and populations in Ventura County. The Consultant will develop a set of goals that support the mission statement and further address the desired results to enhance climate and community resilience across climate change and other natural hazards (such as wildfire, flooding, mudslides and earthquakes) and across sectors (such as social equity, improving health and daily living conditions, protecting the environment, and improving air quality especially in disadvantaged communities). The objectives that accompany each goal will describe how the goals will be met. The Consultant will develop performance standards derived from the mission statement, goals and objectives that define the criteria and methodology to assist in the evaluation of potential projects including the scoring of projects. Measurable co-benefits for each potential project can be estimated using readily accessible on-line tools provided by Caltrans and the California Air Resources Board.

The project team and consultant will work with project partner The Nature Conservancy (TNC) to identify and incorporate nature-based solutions, informed by TNC's Coastal Resilience Ventura project (<https://coastalresilience.org/project/ventura-county/>). Nature-based solutions will be evaluated according to established valuation methodologies, such as those from The World Bank, White House Council on Environmental Quality, and The Nature Conservancy. Other non-measurable co-benefits will be given priority based on whether potential projects include those strategies. The adaptation needs of environmental resources in proximity to the transportation system, including coastal resources, wildlife connectivity, and wetlands, will be considered in the proposed project. Co-benefits to environmental resources will be identified and incorporated into the transportation projects evaluation and prioritization criteria.

2.3. Project Meetings and Workshops

The consultant will participate in project meetings including community engagement meetings and workshops to gather information to assist in development of project deliverables.

DELIVERABLES:

1. Multimodal Vulnerability Assessment and Report
2. Comments on Task 2 project activities and deliverables
3. Attendance at Task 2 project meetings and workshops

3. Recommend a Climate Adaptation Strategy and Funding Plan

3.1. Climate Adaptation Strategy and Funding Plan

Based on input from Task 2, recommend a draft multimodal transportation network climate adaptation strategy and funding plan. Prepare a report summarizing the findings and recommendations.

To advance planning of specific climate adaptation projects, the assessment will utilize the California Life-Cycle Benefit/Cost Analysis Model (Cal-B/C) to estimate the reduction in: (1) greenhouse gas emissions and other pollutants that reduce the impacts of climate change, improve air quality and health; (2) person-hours of time saved that improve the quality of life; (3) accident cost savings as a measure of improved safety; and (4) travel and vehicle cost savings as a measure of reducing the cost of travel and improving the regional economy. In addition, the Cal-B/C model will be used to measure the cost-effectiveness of projects by comparing estimated life-cycle benefits to total life-cycle costs.

For active transportation projects, Cal-B/C will be used to produce estimated benefits for reduction in greenhouse gas emissions and other pollutants, journey quality, delay savings, and safety and health benefits. Under-resourced communities can be given priority based on whether potential projects serve these communities (based on data from CEJST, CES 4.0 and HPI) and the number of disadvantaged communities served based on the number of census tracts.

3.2. Project Evaluation

Evaluate project activities including review and comment on project activities and deliverables.

3.3. Project Meetings and Workshops

Participate in Task 3 project meetings including community engagement meetings and workshops to gather information to assist in development of project deliverables.

DELIVERABLES:

1. Draft Climate Adaptation Strategy and Funding Plan
2. Attendance and Notes for Task 3 project meetings and workshops

4. Prepare a Final Adaptation Assessment and Action Plan

4.1. Adaptation and Action Plan

Based on input from Task 3, finalize the adaptation assessment and prepare an action plan for adoption by the VCTC (lead agency) Board.

4.2. Project Evaluation

Evaluate project Task 4 activities including review and comment on project activities and deliverables.

4.3. Project Meetings

Participate in Task 4 project meetings.

DELIVERABLES:

1. Final Adaptation Strategy and Funding Plan

5. Prepare a Transportation Emergency Preparedness Guide for Individual/Families/Households

5.1. Develop TEPP Guide for individuals, families, and households

The Consultant will assist VCTC and VCCF to engage with under-resourced and vulnerable communities, with a particular emphasis on the disability community and caregivers to prepare an easy-to-use transportation emergency preparedness guide for individuals and families that builds upon the Ventura & Santa Barbara Counties Transportation & Emergency Preparedness Plan (TEPP). The Consultant will prepare tools that include practical information for the public to understand and act upon and will consider the needs of persons with access and functional needs and their caregivers. The Consultant will develop a one-page form with transportation information for use during emergencies. The tools will be specific to Ventura County but can be adapted and applied to other communities across the state.

DELIVERABLES:

1. TEPP Guide for Individuals/Families/Households, One-Page Emergency Transportation Information Form

6. VCTC Board Review and Approval

6.1. Commission Review / Approval

The Consultant will prepare a Final Draft Report for the VCTC Board, and include public review integration of VCTC Board feedback into a Final report. Following the approval of the Final Report by the Commission, the prioritized projects list and Adaptation Plan will be incorporated into local and regional plans, including the Ventura County Comprehensive Transportation Plan and Connect SoCal RTP/SCS.

DELIVERABLES:

1. Draft and Final Report for a Ventura County Transportation Network Climate Vulnerabilities and Adaptation Assessment and Action Plan
2. PowerPoint Presentation