



STAFF REPORT

MEETING DATE:	April 28, 2022
SUBJECT:	Approve ResilientShasta Extreme Climate Event Mobility and Adaptation Plan
AGENDA ITEM:	12
STAFF CONTACT:	Michael Kuker, Associate Transportation Planner

SUMMARY:

In order to create a safer and more resilient transportation system, the ResilientShasta Extreme Climate Event Mobility and Adaptation Plan (ResilientShasta) has been developed in consultation with regional partners and the public. The plan comprises a vulnerability assessment (presented to the board of directors in April 2021) and an adaptation strategy (presented to the board of directors in December 2021). Stakeholder feedback has been incorporated into the two documents, which have now been combined into a final plan for approval.

STAFF RECOMMENDATION:

It is recommended that the board of directors approve the ResilientShasta Extreme Climate Event Mobility and Adaptation Plan.

DISCUSSION:

Background – Following recent extreme weather events, SRTA applied for and received a Caltrans Adaptation Planning Grant for the ResilientShasta Extreme Climate Event Mobility and Adaptation Plan. The plan comprises two elements:

- A transportation system vulnerability assessment, which identifies current vulnerabilities based on historical events and future vulnerabilities based on projected conditions.
- An adaptation strategy, which provides practical strategies for mitigating the impacts of extreme weather events on the regional transportation system.

In addition to creating a more resilient transportation system, implementation of ResilientShasta will improve public safety and bolster efforts to attract state and federal funding for needed infrastructure improvements.

The draft vulnerability assessment was completed and presented to the board of directors in April 2021 (see [staff report on SRTA website](#)). It found that the Shasta Region needs to prepare for more frequent and severe extreme weather events in the coming years and decades. Five weather hazards were identified and evaluated: temperature and heat waves, wildfire, precipitation, flooding, and landslides.

Adaptation Planning – The draft adaptation plan was presented to the board in December 2021 (see [staff report on SRTA website](#)). To help regional partners prepare for the identified threats, the adaptation plan presents a catalogue of strategies, listed in Attachment B. One proposed

strategy is to conduct evacuation drills on key corridors that may be gridlocked during a wildfire or other emergency. This may include contraflow traffic management and/or other such measures. The proposed lead for this effort would be the Shasta County Sheriff's Office, with participation from Caltrans D2, local public works departments, local fire departments, California Highway Patrol, and local law enforcement. In 2016, a similar drill was practiced in the town of Paradise, which mitigated the loss of life during the 2018 Camp Fire.

Another strategy is to prepare an 'I-5 Shutdown Traffic Management Plan' to better manage congestion when I-5 is closed due to wildfire, snowfall, traffic collision, and/or other event. Specific actions may include staging northbound interregional and truck traffic on the left shoulder and inside lane(s) during extended closures, while keeping the right lane open to local/regional traffic, first responders, and transit vehicles. Arrangements with local partners for off-highway truck parking may also help mitigate impacts during extended closures.

Challenges – Stakeholder engagement with ResilientShasta has been limited. The ongoing COVID pandemic largely preempted the possibility of in-person meetings, and many stakeholders have had their attention and resources focused on coping with a series of catastrophic events (e.g., the Zogg Fire, the Dixie Fire, Salt Fire, and the current drought. SRTA sought and received approval from the grantor for a timeline extension to allow the opportunity for additional stakeholder input on the plan. The extension's deadline is June 30, 2022, and it is now necessary to finalize the plan so it may be implemented.

Implementation and Future Funding – Existing and new federal and state funding sources anticipated to become available are identified in the full report, including formula and discretionary funds in the recently authorized five-year Infrastructure Investment and Jobs Act 2021 (H.R. 3684). Some of the new resilience-focused funds include:

- \$1.4 billion in competitive grant funds for the federal Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) program;
- \$7.3 billion in federal formula funding programs for resilience and hazard mitigation;
- \$1 billion in additional funding for FEMA's Building Resilient Infrastructure and Communities (BRIC) program;
- \$600 million in American Rescue Plan Act (ARPA) funds to be distributed by California's Community Economic Resilience Fund (CERF) program to regional collaboratives;
- The California Regional Forest and Fire Capacity Program, established in 2021 to provide block grants to regional entities to help with community wildfire preparedness and mitigation; and
- A proposed \$300 million for developing and implementing climate adaption projects on California's state highway system.

Adoption of the ResilientShasta plan will support ongoing and future efforts to seek these and other funds.

ALTERNATIVES:

The board of directors may defer approval of the plan. However, failure to complete and approve the plan by June 30, 2022 may result in difficulty receiving reimbursement from the state.

OTHER AGENCY INVOLVEMENT:

SRTA's Technical Advisory Committee (TAC) was consulted to help identify potential areas of study as part of the grant application process. A task force of agencies and local jurisdictions was established to help provide input on the development of the plan. Two surveys were distributed to the task force to help inform the vulnerability assessment, and drafts of each element were distributed at each milestone for feedback. The Technical Advisory Committee (TAC) concurs with the staff recommendation.

FISCAL IMPACT:

The ResilientShasta Extreme Climate Event Mobility and Adaptation Plan is funded primarily through a Caltrans Adaptation Planning Grant of \$289,850 with a local match of \$37,533 in FHWA planning funds. The plan has no direct fiscal impact to the agency. However, climate resiliency is now a key criterion in many state funding programs. Existing and potential new funding sources are being identified that could help implement approved strategies.



Sean Tiedgen, AICP, Executive Director

Attachments:

A: The ResilientShasta Extreme Climate Event Mobility and Adaptation Plan

(<https://www.srta.ca.gov/DocumentCenter/View/5762/>)

B: Summary Table of Proposed ResilientShasta Adaptation Strategies

Attachment B:

Summary Table of Proposed Resilient Shasta Adaptation Strategies

Wildfire:

- W.1 – Prioritize fire safety and road protection projects through the Regional Transportation Plan
- W.2 – Convene stakeholder Hazardous Fuels Reduction Working Group
- W.3 – Convene private landowners for collaborative hazardous fuels reduction
- W.4 – Proactively plan road resurfacing following heavy firefighting activity as part of recovery grants

Evacuation Planning:

- E.1 – Plan for the evacuation of mobility-challenged populations
- E.2 – Evaluate evacuation bottlenecks and secondary access constraints
- E.3 – Promote pooling of fleet transportation assets among public, private, and non-profit entities in the region.
- E.4 – Plan evacuation corridor network and install CMS signage
- E.5 – Conduct evacuation drills (including contraflow traffic management) on key corridors
- E.6 – Pre-stage evacuation resources
- E.7 – Explore advanced evacuation notification and information systems.

Average and Extreme Temperatures:

- T.1 – Integrate extreme temperature hazards into complete streets planning
- T.2 – Ensure fleet investments and management are designed for future extreme temperatures
- T.3 – Promote proactive fleet management to prepare for hot summers
- T.4 – Convene Caltrans, county, and city public works departments to set upgraded design temperatures for roads

Extreme Precipitation

- P.1 – Convene public works stakeholders to identify and accelerate clearing of priority culverts
- P.2 – Prepare I-5 Shutdown Traffic Management Plan
- P.3 – Improve I-5 management with resource sharing
- P.4 – Optimize complete streets for extreme precipitation impacts

Flooding

- F.1 – Harden road segments subject to inundation hazards
- F.2 – Evaluate unknown flood risks
- F.3 – Upgrade undersized culverts
- F.4 – Access dam flood hazard maps and integrate them into regional evacuation planning

Landslides

- L.1 – Enhanced monitoring of potentially hazardous landslide slopes following wildfires
- L.2 – Highway 299 Corridor Landslide Assessment

Crosscutting Strategies

- C.1 – Integrate resilient approaches into all recovery/reconstruction projects
- C.2 – Plan for interdependencies with vulnerable interconnected infrastructure systems