



STAFF REPORT

MEETING DATE:	December 13, 2021
SUBJECT:	Receive Presentation on the ResilientShasta Extreme Climate Event Adaptation Plan and Provide Comment
AGENDA ITEM:	10
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) is being developed in consultation with regional partners and the public. The plan comprises a vulnerability assessment presented to the board of directors in April and an adaptation strategy, now provided for review and comment. The two draft components will be combined and presented as one final plan for approval by the board of directors in February.

STAFF RECOMMENDATION:

It is recommended that the board of directors:

1. Receive a presentation on the adaptation strategy for ResilientShasta; and
2. Provide comments to staff for incorporation into the final 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 components:

- 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 (Attachment A) was completed and presented to the board of directors in April (see [staff report on SRTA website](#)). It found that the Shasta Region needs to prepare for more frequent and more 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 – To help regional partners prepare for these threats, the adaptation plan (Attachment B) presents a catalogue of strategies, listed in Attachment C. 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 truck traffic on the left shoulder and inside lane(s) during extended closures, while keeping the right lane open to exiting 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 has 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 a landslide at Jones Valley water intakes). Some key stakeholders have not yet provided any feedback. Caltrans grant deadlines state all work must be completed by February 28, 2022. SRTA is currently seeking an extension, but it is unclear if that will be approved.

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

- \$1.4 billion approved in competitive grant funds for the federal Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) program;
- \$7.3 billion approved in federal formula funding programs for resilience and hazard mitigation;
- \$1 billion approved 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 request staff to provide additional information at a future meeting.

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 has been established to help provide input on the development of the plan. Two surveys have been distributed to the task force to help inform the vulnerability assessment.

FISCAL IMPACT:

The ResilientShasta Extreme Climate Event Mobility and Adaptation Plan is funded primarily through a Caltrans Adaptation Planning Grant. 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.



Daniel S. Little, AICP, Executive Director

Attachments:

- A:** The ResilientShasta Extreme Climate Event Adaptation Plan
(<https://www.srta.ca.gov/DocumentCenter/View/5710/>)
- B:** The ResilientShasta Extreme Climate Event Mobility Vulnerability Assessment
(<https://www.srta.ca.gov/DocumentCenter/View/5465/>)
- C:** Summary Table of Proposed ResilientShasta Adaptation Strategies

Attachment C:

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