

SACADAPT

SACRAMENTO'S TRANSPORTATION INFRASTRUCTURE ADAPTATION PLAN

BACKGROUND

The Sacramento Transportation Infrastructure Adaptation Plan (SacAdapt) was developed to help the City of Sacramento (City) and the Sacramento Regional Transit District (SacRT) understand climate risks to the transportation infrastructure each agency manages, and to identify adaptation strategies to protect both transportation assets and the people who depend on them. SacAdapt was funded by a \$730,209 SB1 California Department of Transportation (Caltrans) Adaptation Planning Grant.

POLICY FOUNDATION

SacAdapt builds on a strong foundation of existing City and SacRT policies and plans, including the City's General Plan 2040, Climate Action and Adaptation Plan, Comprehensive Flood Management Plan, Local Hazard Mitigation Plan, and Urban Forest Plan, as well as SacRT's Transit Asset Management Plan, Zero-Emission Bus Rollout Plan, Bus Stop Improvement Plan, and Facilities Transition Plan.

CLIMATE HAZARDS

The SacAdapt Plan evaluates how Sacramento's climate is expected to change under multiple greenhouse gas emissions scenarios, with a focus on a high emissions scenario. The SacAdapt analysis evaluated the following climate hazards:

- **Extreme heat** was identified as the most widespread hazard affecting transportation infrastructure and users, with dramatic increases in extreme heat projected over the coming decades. Additionally, rising nighttime temperatures reduce opportunities for infrastructure and equipment to cool between events, increasing wear and maintenance needs. These conditions affect pavement performance, rail operations, vehicles, overhead power systems, and the health and safety of outdoor workers and travelers.
- **Rainstorm events** are projected to grow more severe as the climate warms, since a warmer atmosphere allows rainclouds to hold more water at once. More intense storms increase the pressure on Sacramento's drainage systems, raising the likelihood of localized flooding, roadway closures, and service disruptions.
- **Flood risk** from the Sacramento and American Rivers remains one of the most serious hazards due to the potential for rare but catastrophic consequences, especially as climate-driven increases in river flows increase expected risk over time. Large portions of the city lie within floodplains, underscoring the importance of planning for evacuation needs, emergency response, and long-term transportation system resilience.

- **Smoke** from regional fires poses increasing health risks.
- **Windstorms** that can damage infrastructure and compound other hazard impacts.

COMMUNITY AND AGENCY ENGAGEMENT

The project team collected community and agency feedback through:

- Interviews with 21 City and SacRT planning, engineering, and maintenance staff.
- A Technical Advisory Committee with staff from the City (Public Works, Utilities, Community Development, Police, Fire), SacRT (Planning, Facilities, Engineering, Maintenance, Environmental Health & Safety), Sacramento Municipal Utility District (SMUD), the Sac Metro Air District, the Sacramento Area Council of Governments (SACOG), and Caltrans.
- Engagement with over 1,600 residents through 37 in-person and online events.
- Two community surveys that received over 860 responses.
- Online engagement through websites, newsletters, social media, and email.

Community members identified discomfort at transit stops during hot weather, the need for more tree canopy investment, flooding from clogged drains, longer travel times, and reduced access to essential services as key concerns.

ADAPTATION STRATEGIES

SacAdapt identifies 10 City adaptation strategies with 59 implementing actions and 11 SacRT adaptation strategies with 23 implementing actions.

HAZARD	CITY OF SACRAMENTO - ADAPTATION STRATEGIES
Heat	Create built environments that reduce exposure to extreme heat and mitigate urban heat island effect.
Heat	Create built environments that are resilient to the impacts of extreme heat.
Flooding	Increase stormwater drainage capacity.
Flooding	Invest in infrastructure maintenance.
All	Increase community resilience to prepare for climate impacts.
All	Reduce the risk of power outages.
All	Strengthen City government capacity for climate resilience.
All	Support resilience of transit facilities.
Disaster Prep.	Strengthen City government disaster preparedness and capacity for emergency response.
Disaster Prep.	Consider evacuation needs in planning.

HAZARD	SACRT - ADAPTATION STRATEGIES
Heat	Mitigate high heat at bus stops, light rail stations, and along priority corridors.
Heat	Enhance resilience of transit to heat events.
Heat	Support critical transportation facility building resilience.
Heat	Continue meeting OSHA requirements for worker safety.
Storms	Enhance resilience of transit to flood events.
Storms	Continue addressing high wind at light rail crossings.
All	Improve communication channels.
All	Implement Zero Emission Bus subtask recommendations.
All	Secure funding for adaptation.
All	Invest in back-up power systems.
Disaster Prep.	Update existing or develop new emergency plans.

MORE INFORMATION

The SacAdapt Plan and appendices are available at cityofsacramento.gov/SacAdapt

- Appendix A: Literature Review and Existing Conditions Report
- Appendix B: Vulnerability Assessment
- Appendix C: Risk Assessment
- Appendix D: Implementation Guidance