# Investing In Our Future: Resilient Infrastructure for a Stronger Capital Region

We rarely consider our infrastructure – the buildings, highways, power lines that keep our lives running smoothly – until they fail. But climate change is bringing new threats such as bigger storms and more intense heat waves. We must build, repair, and invest wisely so that our critical infrastructure will continue to keep communities safe, support our businesses, and protect our quality of life now and for generations to come.

### How will climate change affect our infrastructure?

**Roads and Rails** 

Extreme heat can expand and damage pavement and steel on bridges, roads, airport runways, and rail lines. Wildfires, landslides and increased precipitation can also damage our regional infrastructure and disrupt our transportation system.

### Power Supply and Communication Lines

On very hot days, electricity generation, transmission lines, and other grid components become less efficient, risking power outages. Bigger and more intense storms, as well as

wildfires, can also damage power and communication lines.

## Homes, Businesses and Other Critical Infrastructure

Stronger storms can overwhelm waste- and stormwater systems, flood neighborhoods, and – in a

worst-case scenario – overtop levees. Stronger, faster wildfires can also damage buildings and other critical infrastructure, endangering public safety and disrupting businesses.

#### **A Local Perspective**

As the Capital Region faces more extreme weather events, the electricity grid must adapt to meet the challenges. SMUD is proactively working to ensure that Sacramento continues to benefit from a reliable and

climate ready energy system.

— Arlen Orchard, Chief Executive Officer

& General Manager, Sacramento Municipal

**Utility District** 

By integrating climate adaptation strategies into our regional planning efforts, we can ensure that resources are invested wisely and that the region's critical transportation infrastructure remains effective –

not just in 10 years but for the next 60 years.

 Michael McKeever, Former Executive Director, Sacramento Area Council of Governments

The Capital Region Climate Readiness Collaborative is exploring strategies and solutions to strengthen the climate resiliency of our region. Join us to learn more! www.climatereadiness.info



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### Local Solutions for a Stronger Community

Sacramento Region Transportation Climate Adaptation Plan

Developed by the Sacramento Area Council of Governments (SACOG), this high-level action plan identifies key vulnerabilities to climate change in the region's transportation infrastructure. The SACOG Board officially adopted the plan as part of its 2016 Metropolitan Transportation Plan / Sustainable Communities Strategy update, affirming the importance of climate adaptation in future planning. With recommendations for best practices and strategies, this action plan builds a foundation for future work such as stakeholder engagement, in-depth asset-level assessments, funding, and monitoring.

#### CLIMATE CHANGE BY THE NUMBERS



PROPERTY DAMAGE

Smart growth policies can reduce property damage from wildfire by **35%.** 

(Source: California's 3rd Climate Assessment)



**\$1** spent on mitigation saves an average of **\$4** 

in recovery costs.
(Source: Dept. of Housing & Urban Development)



**1.3 million** customers lost power when over 2,000 distribution line transformers failed during the 2006 California heat wave.

(Source: Dept. of Energy)



There is a **64%** chance of catastrophic levee failure in Sacramento in the next 50 years.

(Source: VV BRI project)

### Become a Leader



**Spend now, save later:** Resilient infrastructure delivers long-term savings. Designing for

savings. Designing for the future can prevent significant damages, avoid expensive repairs, and have a longer lifespan.

**Update building codes:** Ensure that schools, offices, apartments, and homes are built to conserve energy and support occupants' health and comfort, while withstanding floods, storms, and other hazards.

#### Enlist nature's help:

Green infrastructure such as raingardens, parks, and green rooftops can help cities absorb and channel stormwater, reducing flood risk at a fraction of the cost of traditional gray infrastructure.





Image courtesy of SMUD

### Embrace new technologies:

Distributed generation, energy storage, and microgrids can help increase grid stability and resilience, especially for critical facilities like hospitals.

**Adopt smart-growth strategies:** Smart-growth development such as infill can help communities save money in building new infrastructure, allowing limited resources to be allocated wisely.



Join us to learn more! www.climatereadiness.info