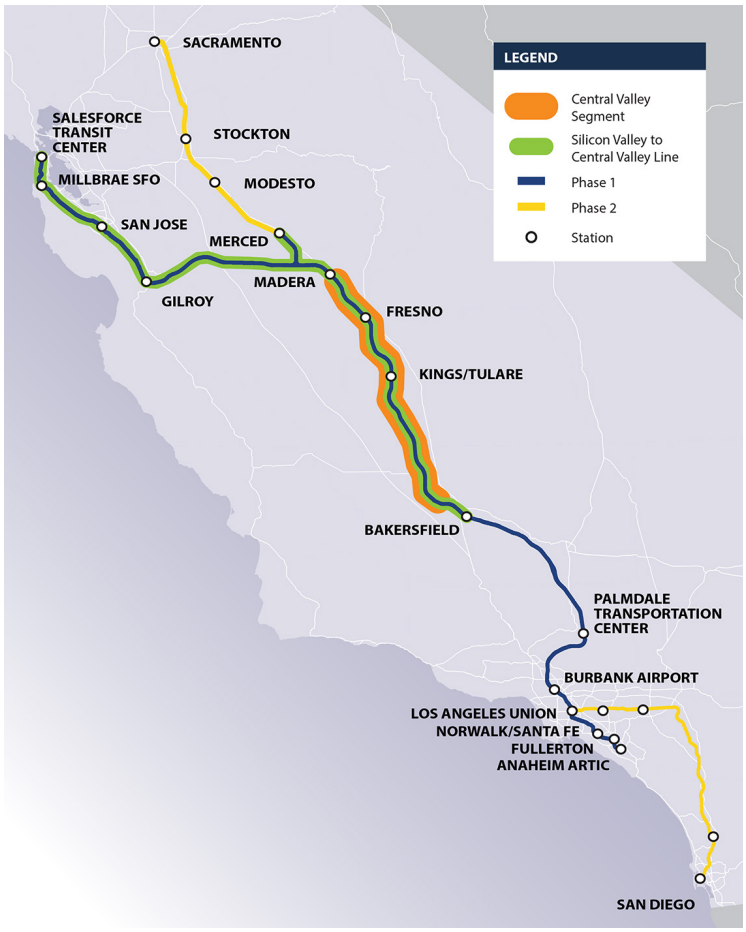
California High-Speed Rail

# 2021 Climate Adaptation Plan Highlights

The California High-Speed Rail Authority is committed to building a resilient, new transportation option for the State of California that is prepared for the uncertainties of the future.




The California High-Speed Rail Authority (the Authority) was formed to deliver the first high-speed rail system in the United States, connecting California from San Francisco in the north to Los Angeles in the south by 2033. California high-speed rail is an important investment for the State of California, not only for the improved mobility of its citizens, but for long-term reductions in greenhouse gas emissions. High-speed rail is a necessary part of the state's greenhouse gas mitigation efforts. It is also a critical element of the state's climate change adaptation strategy.

Given the importance of the high-speed rail system through the coming century, it is good policy and sound business practice for the Authority to consider the impacts of climate change and extreme weather. The Authority has a unique privilege to design, build, and operate the system with climate change in mind. And preparing for the foreseeable impacts of the climate crisis now will allow the Authority to avoid the future costs of these impacts. Not only does it make sense for the Authority to consider these challenges now, it is a requirement for all state agencies to do so. California policy requires that state agencies consider climate change in all major state investments and this is especially important for large infrastructure projects like high-speed rail.

Since the first major Executive Order (EO) on climate adaptation (EO B-30-15), the Authority increased its efforts to assess and respond to the threats posed by climate change. It assembled staff to assess and evaluate the risks posed by climate change. The Authority organized an internal committee dedicated

solely to climate change adaptation: The Climate Adaptation Implementation Committee (CAIC). This committee reviewed the Authority's existing risk assessment framework, the Safety and Security Management Plan (SSMP), and proposed revisions to the plan so that it includes and addresses climate change-related risks. The Authority assessed potential climate change impacts to high-speed rail through a systemwide exposure analysis of relevant climate stressors, including temperature rise, precipitation and riverine flooding, wildfire, sea-level rise and storm surge. And the Authority has tackled system resiliency by setting design, operations and maintenance, and programmatic requirements that address climate change.

The urgency to document the Authority's work to date inspired the development of the California High-Speed Rail Authority Climate Adaptation Plan (CAP). The CAP summarizes each of the efforts listed above in greater detail. In addition, in the CAP the Authority identifies the path forward for climate change adaptation efforts. These critical next steps will be led by Authority sustainability staff with a background in climate change adaptation planning and are to:

1. Re-evaluate climate change impacts to the system as new information becomes available.
2. Finalize an Authority climate change policy.
3. Update the next version of the SSMP to include climate change as another type of risk to the Authority.
4. Coordinate with the Authority asset management team to collect weather and climate-related impacts to the system and integrate climate data into asset maintenance, rehabilitation, and replacement schedules.
5. Continue to develop design, operations and maintenance, and programmatic responses to future climate conditions and extreme weather events.
6. Reconvene the CAIC following the completion of major climate change-related milestones and/or at regular intervals to continue to build a sophistication with climate data within the Authority.

These are not the only steps necessary to create a "climate-ready" high-speed rail and the Authority recognizes that new data, information, ideas, and strategies will continue to affect the direction of the Authority's climate adaptation planning. It is the intention that the CAP will be the first of its kind and will be updated periodically.

By creating the CAP, the Authority takes a critical step forward in preparing for the uncertainty of the coming century and beyond. The Authority understands the importance of identifying climate change risks and preparing for them, not only to ensure the longevity of its system, but also for the safety and convenience of its users. The Authority hopes that through the recommendations of the CAP and future efforts that stem from it, the Authority can create a resilient and reliable system for the State of California.