

Caltrans U.S. 101 Project Completes Envision® Post-Construction Review Envision Silver Award-winning project is a model of innovation, collaboration, and sustainability



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May 18, 2023 — Caltrans' U.S. 101 Managed Lanes Project retained its Envision Silver Award for sustainable infrastructure after successfully completing the post-construction review stage of verification. This multi-year, multi-agency project created 22 miles of express lanes from the San Mateo County/Santa Clara County line to I-380 in South San Francisco. Improving traffic conditions and travel times for motorists along the major commute route between San Francisco and Silicon Valley, the project advances air quality and quality of life goals and delivers a sustainable and efficient transportation network.

Early into the planning and design, Caltrans evaluated the sustainability performance of this project and used Envision to identify additional opportunities to improve. The project's performance was assessed across 64 Envision sustainability criteria addressing a wide range of indicators, including community, quality of life, management, planning, materials, energy, water, environmental impacts, emissions, and resilience. The Caltrans U.S. 101 Project earned an Envision Silver award from ISI in May 2021.

The project team submitted its post-construction review in January 2023. The post-construction review is the final Envision verification stage to confirm that commitments (i.e., pending credits) submitted during design were carried out successfully through construction to maintain the Envision Award. Examples of credits submitted for post-construction review include reducing construction waste, energy and water, demonstrating byproduct synergies, and providing a plan for long-term monitoring and maintenance.

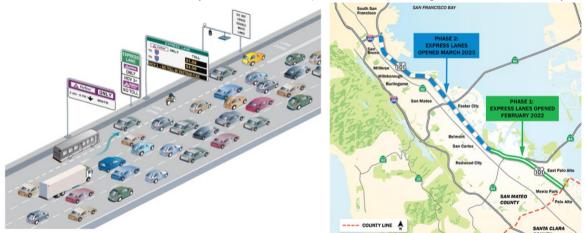
SOUND BITES

"Caltrans is committed to the four P's – People, Programs & Projects, Partnerships, and Planet. We are proud to promote a sustainable method to construct 22 miles of express lanes in each direction on Highway 101 to reduce traffic congestion and encourage carpooling. We have also implemented a firstof-its-kind equity program which will serve historically underserved communities in San Mateo County," said **Mohammad Suleiman, Caltrans Project Manager**.

"Retaining Envision Silver through this last stage of the third-party Envision verification process is truly an achievement that the project owner and project team should be proud of, as it affirms that commitments made during the initial design review were carried forward during the construction phase," said **Melissa Peneycad, Managing Director of ISI**. "With this milestone, it is worth celebrating the many sustainability achievements that have been demonstrated on this project."

THE PROJECT IN BRIEF

Caltrans' U.S. 101 Managed Lanes Project was undertaken to reduce traffic congestion and encourage carpooling and transit use on U.S. 101 in San Mateo County. Following extensive data collection and analysis, an express lanes option was shown to offer the most significant travel time savings of any alternatives considered. With the express lane system, buses, 3+ carpools, and motorcycles drive for free; other drivers opt to pay by using the system's electronic toll collection. Dynamic tolls (i.e., congestion pricing) help keep the lanes free flowing and reduce congestion in the corridor. In addition, unlike some other express lanes, drivers can get on and off the San Mateo 101 Express Lanes at any point. The new express lanes were built to seamlessly connect to the express lanes operating in Santa Clara County.



While introducing modern technology to manage traffic, the express lanes include new features, such as updated freeway signs, special striping, and pavement markings. In addition, several sections of the freeway were repaved, then restriped.

ENVISION-VERIFIED ACHIEVEMENTS: HIGHLIGHTS

Effective leadership and commitment to sustainability. The project was supported by a sustainable management policy, processes, and technical analyses commensurate with the complexity of the project. As an example, early on the project conducted a life-cycle cost analysis focused on the roadway pavement design and an overall cost-benefit analysis to understand the expected value of its future social, environmental, and economic benefits.

Energy Conservation. This project eliminated existing light fixtures and replaced fixtures with highly efficient LED lighting. In addition, the new safety lighting reduces risks associated with the existing driving conditions.

Plan for sustainable communities. Caltrans U.S. 101 is delivering on the goals of Plan Bay Area 2040 in relation to climate protection, health and safe communities, and transportation system effectiveness. The improved travel times will result in more jobs becoming accessible within thirty minutes by auto or within 45 minutes by transit in congested conditions.

Management of construction waste. The project demonstrated a high level of achievement in this area, with a 95 percent or more waste diversion. As one example, the project verified contractors' adherence to a rigorous reporting system where the type and quantities of waste generated had to be identified, along with their subsequent end use (on-site reuse, off-site recycling, or landfill disposal) and the specific recycling or disposal location.



Graphic combining the lead agencies, from the project web site. ©California Department of Transportation. Used with permission.

Sustainable construction management requirements. Caltrans' standards include requirements and policies to minimize construction impacts and to take a comprehensive view of those aspects, including mitigating noise and vibrations resulting from project construction, thereby ensuring continued safety and wayfinding for pedestrians and vehicles during construction, and minimizing distracting and intrusive lighting.

Assessing climate change vulnerability. An assessment of highway climate vulnerabilities within District 4 was conducted by Caltrans, and the project's Environmental Impact Report addressed how the design needed to address vulnerability to climate change impacts. The project emphasized sharing of climate threat findings in order to support and facilitate community awareness and their inclusion in future projects.



PROJECT DETAILS AT A GLANCE

Name of project at time of award:	US 101 Managed Lanes Project
Location:	San Mateo County, California
Lead Envision Firm:	AECOM
Envision Rating:	Silver
Publicized Award Date:	July 20, 2021
Project Owner:	<u>California Department of Transportation</u> (Caltrans) – District 4 (Bay Area), in partnership with the San Mateo County Transportation Authority (SMCTA) and the City/County Association of Governments of San Mateo County (C/CAG).
Cost:	\$581 million
Project Completed In:	All construction completed in 2022; lanes fully opened in March 2023
For more information:	Visit these Caltrans pages: <u>SM 101 Express Lanes</u> ; <u>FAQ</u> .