A New

Benicia-Martinez Bridge

2005 Gold Award Winner – Magazine, State Information Officers Council
2006 Gold Award – Internal Magazine, National Transportation Public Affairs Workshop
2007 Awards of Distinction – Communicator Awards
2008 Silver Award Winner – Magazine, State Information Officers Council
Dear Stakeholder,

This publication details 14 projects that recently won the Department’s “Excellence in Transportation” Awards, the Department’s prestigious statewide program for recognizing outstanding work in the field of transportation.

Private contractors, consultants, Caltrans, and local and public agencies submitted nearly 90 entries describing their best work in 2007. A panel of judges, including professional engineers, transportation planners, historical preservation architects and members of the Seismic Advisory Board, reviewed the entries and chose a select few as the most deserving to exemplify excellence in transportation across the nation.

I congratulate everyone who worked to make these projects a reality and participated in the effort to provide quality and improved transportation for California’s citizens. We are proud to showcase this work in this magazine. We hope you enjoy reading about these successful projects. They reflect some of the very best practices in transportation.

Sincerely,

Will Kempton, Director
EXCELLENCE IN TRANSPORTATION AWARD WINNER

The Benicia-Martinez Bridge was designed to exceed lifeline seismic design standards and was built with high-performance lightweight concrete that has compressive strengths in excess of 10,000 pounds per square inch and also exceeds several other aggressive material properties for creep, shrinkage and elasticity.

Structure
As powerful machines built her “legs” into rock, a bubble curtain created a sound breaker around the aggressive construction method so the unnaturally strong sound waves didn’t kill the fish. The bridge’s pier foundations are composed of eight to nine piles. For the first time in the Department’s history, crews used a mini-drilled shaft inspection device and a land rock-cutting machine in the marine to ensure that the rock sockets were sound. Near mid-span, hinges with girders and four 1,000-ton spherical bearings would allow the span to slide six feet along the girder during a massive earthquake.

After a Major Shakin’
The Benicia-Martinez Bridge is an essential route for goods and services and is the longest concrete span in a seismically sensitive area that is not supported by cables or trusses. She’s a lifeline to Contra Costa and Solano counties and would be able to reopen to traffic shortly after a major shakin’ during an earthquake. The new and technically complex gal doubled her predecessor’s capacity with five lanes of northbound traffic on Interstate 680.

Design Standards
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Left photo: Overhead antennas, cameras and other high-tech devices on the FasTrak toll booth-free lanes read motorists’ FasTrak tags displayed on car dashboards and deduct fees from prepaid accounts to increase toll capacity by 50 percent.
**Benicia was designed to exceed lifeline seismic design standards...**

State of the Art

She’s also a state-of-the-art toll bridge, featuring the Bay Area’s first toll booth-free lanes for FasTrak customers. She can handle 50 percent more motorists with electronic collection system that relies on overhead antennas, cameras and other high-tech devices to read FasTrak toll tags and deduct tolls from prepaid accounts. FasTrak also curbs traffic congestion and carbon emissions at the toll plaza.

Her design has resulted in reduced incidents over the Carquinez Strait, and the bridge can accommodate cyclists and pedestrians. In the future she’ll also be able to accommodate light-rail.

That’s quite a bridge.

For more information, contact Mike Forner at mike_forner@dot.ca.gov.

By Erin Gallup
Public Information Officer

Sutter County, home to the Sutter Buttes, is a rural county spanning 609 square miles. As of the U.S. Census Bureau’s 2000 report, about 79,000 people reside in the county. In comparison, more than 100,000 people currently live in the county’s neighboring city of Roseville.

So when State Highway 99 was widened in October 2005, it changed the feel of the historical county. A traffic noise analysis determined that a sound wall was necessary to mitigate current and future noise levels for a portion of Highway 99.

Caltrans designed and developed a new sound wall to reflect the historical fruit production aspects of the orchard community. The 2,500 foot-long masonry block sound wall, varying in heights between nine to 14 feet, is located between residents and Highway 99, just approaching the city limits of Yuba City. Caltrans strategically placed various shaded masonry blocks to create an illusion of trees growing out of the wall.

Caltrans planted hundreds of oak trees and native grasses in front of the wall to blend with the existing landscaping and conserve the area’s natural resources.

The construction cost for the wall was $200,000 and landscaping was $125,000. Local residents and travelers have already given Caltrans positive feedback for the sensitive solution to the noise problem.

For more information on this project, contact Fernando Rivera at fernando_rivera@dot.ca.gov.

Crews poured concrete to form the seismically upgraded legs of the new Benicia-Martinez Bridge.
The total cost for the decals, including installation, was a quarter of the cost of standard signage. The delineators are lightweight, flexible, and ultraviolet and vehicle-impact resistant, ensuring long-term durability. Caltrans minimized environmental and aesthetic impacts associated with larger signs by reducing the informational decals so few motorists notice them at all.

Early feedback from cyclists has been positive. They appreciate the signs and have requested additional decals at different locations, including supplementary signs denoting terrain changes ahead, points of interest and route alternatives. This project has spurred additional efforts to improve the cycling experience in Northern California by identifying, prioritizing and implementing improvements in coordination with local stakeholders, both along the Pacific Coast Bike Route and all state highways in the district.

For more information, contact Lindsay Walker at lindsay_walker@dot.ca.gov or Rex Jackman at rex_jackman@dot.ca.gov.
In August 2005, the “Queen” was badly injured. A vehicle damaged more than 100 feet of railing on Fernbridge, the “Queen of Bridges,” which arches over the Eel River on State Highway 211 in Humboldt County. Caltrans staff determined that immediate replacement of all 446 posts and lateral rail elements was necessary given the extensive damage the vehicle caused and the deterioration of reinforcing steel within the railing posts.

The historic arch bridge was constructed in 1911. It was heralded as an outstanding engineering feat – the first of the great reinforced concrete spans in California. At nearly one-half mile long, it is still the longest closed spandrel, earth-filled arch bridge in California. The John B. Leonard design solved the problem of crossing the wide, flood-prone Eel River.

Fernbridge was dedicated as a California Historic Civil Engineering Landmark in 1976 and listed in the National Register of Historic Places in 1987. The “Queen of Bridges” is still the gateway to the historic town of Ferndale. The local community is interested and concerned about anything that affects the bridge.

Replacement of the railing, required Caltrans to manage following issues: coordinate with the State Historic Preservation Officer to ensure the new railing color and texture remained the same; construct the new railing from the narrow roadway, maintain throughput and limit delays.

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Listed in the National Register of Historic Places in 1987, the “Queen of Bridges” is still the gateway to the historic town of Ferndale.

on the high-volume route at all times; confer and communicate with the local community regarding aesthetics of the repair and community impacts; and coordinate with local resource agencies to minimize impacts to vital fishery resources of the Eel River.

Due to the emergency situation, the project’s multidisciplinary teams had to move fast to develop and implement unique and innovative repair and construction methods, and obtain proper clearances and approvals. Caltrans and its contractor, Mercer Fraser Construction Company, built and provided a publicly displayed sample section of the post and railing to keep the community involved. Caltrans staff asked local community members and government officials to comment on the sample.

Construction was accomplished with an innovative set of techniques. Caltrans’ contractor created pre-cast concrete post and rail components off site using specific texturing methods to give a weathered look by exposing the aggregate. Mercer Fraser Construction obtained aggregate from the same source as the original construction for the concrete to keep the original rail look. The post and railing elements were grouted in place, using acid-etched galvanized steel pipes for the bridge railing and weathered concrete for the approach railings. The acid etching provided a weathered look to the otherwise shiny galvanized pipe railing. Caltrans’ contractor did component construction and pre-weathering at a nearby concrete plant to avoid impacts to the Eel River salmon habitat.

Pre-cast fabrication provided additional benefits during installation, including rapid construction and reduced construction dust and debris. Mercer Fraser Construction Company contained the remaining dust with a steel gutter and vacuum recovery system. Traffic delays were less than five minutes, minimizing impacts to the local community. The contractor developed a unique temporary cable railing system that minimized visual impacts during nonwork hours. This allowed for full bridge use and maintained the historic driving experience for tourists.

Due to substantial local interest in the bridge repairs, Caltrans offered the original railing to the community, who recycled most of the railing to create landscape fencing, driveway entrances, gazebo footings and garden ornaments. This significantly reduced the waste disposal from the project.

Mercer Fraser Construction Company produced extra post and rail components so future repairs could be done quickly. The pre-cast techniques are now a model for construction on other narrow historic bridges throughout the state.

This collaborative project satisfied travelers’ and the environment’s needs, while preserving the historic characteristics of Fernbridge. As a result, the “Queen of Bridges” remains a functioning element of the state highway system, preserved and showcased as part of California’s rich past.

For more information contact Tom Fitzgerald at tom_fitzgerald@dot.ca.gov.
Oftentimes, the public isn’t aware of where their tax dollars are going...

But Governor Arnold Schwarzenegger, Caltrans and local transportation partners were motivated to showcase their record year for state highway improvements slated for 2007 with the addition of a recent $20 billion transportation investment by California taxpayers.

Instead of a routine media advisory, District 3’s Office of Public Information and Graphic Services decided to think outside the “advisory” and spotlight the Department’s biggest construction season ever.

From thoughts of spotlights came glimpses of stage and screen, and a movie premiere theme took shape. First, staff created movie posters of the district’s main geographical (Sacramento, Valley and Sierra) areas, showcasing more than 100 new and ongoing projects as “now playing” and “coming soon” and featuring the Department’s Slow for the Cone Zone logo. Caltrans created area maps with plotted projects and brief descriptions.

The Secretary of State building in downtown Sacramento served as the movie venue, with curtains, a stage and theatre seating. Caltrans’ video photography unit supplied movie props such as director’s chairs, vintage cameras and movie lights. Caltrans created and cleverly packaged tickets and backstage passes in a bucket of popcorn and shipped them to nearly 50 of the district’s television, radio and print media outlets.

As the curtain for the 2007 construction rollout rose May 25, 2007 to the blare of 20th Century Fox’s legendary theme song, District Director Jody Jones and resident engineers of all the area’s major construction projects were revealed. They treated the media to a PowerPoint presentation and exclusive interviews with construction staff. Reporters and editors who couldn’t make the trip used their back stage passes to visit construction sites and write stories on local projects. The Department’s safety message reminded motorists to Slow for the Cone Zone.

The event generated nearly a dozen positive television, radio and newspaper stories featuring major projects like the U.S. 50 Placerville Improvement Project, the Highway 149 Widening Project between Chico and Oroville, the Pet Hill Project on State Highway 20 in Nevada County and four “GoCalifornia” projects in the Sacramento area designed to reduce traffic congestion.

The district’s graphic artists and public information office staff worked overtime to produce the event materials, spending less than $500 on supplies, shipping packages and renting the auditorium. This effort reached more than a million viewers, listeners and readers in Northern California with the new Caltrans motto — “We’re here to get you there.”

For more information on this project, contact Mark Dinger, at mark_dinger@dot.ca.gov.
The Department routinely partners with other state agencies, nonprofits and organizations to build trails, endangered species habitats and community connectors. The “Holes in the Hammond” project is a prime example.

The Redwood Community Action Agency led the amazing collaborative work with Caltrans, Humboldt County, the California River Parkways Grant Program and California Conservation Corps to complete two “holes” in a 5.5 mile long recreation pathway called the Hammond Coastal Trail. The State Coastal Conservancy and California River Parkways Grant Program utilized Proposition 50 funds to get the job done.

The quarter mile-long footpath provides nonmotorized access from the Hammond Mad River Bridge to Clam Beach County Park through McKinleyville in Humboldt County. A paved Americans with Disabilities Act (ADA)-compliant trail provides access along Route 101 right of way for all nonmotorized users, while a separate pedestrian-only interpretive footpath runs along and over salmon-bearing Widow White Creek.

The Hammond is now the longest segment of the California Coastal Trail on the north coast. It’s scenic footpath provides views of beaches, riparian and upland forests, and the outlet of the Mad River into the Pacific Ocean. The trail widens under spruce and alder canopies and follows streamside ferns and sedges. Now McKinleyville residents can walk or ride to county beaches in a unique riparian corridor, Airport Business Park visitors can access the rest of McKinleyville via a nonmotorized route and Pacific Coast Bike Route users have a dedicated non-motorized facility for five and a half miles.

The footpath is in an easement designed to conserve a unique coastal riparian corridor beyond the trail, so several things were taken into special consideration during this project. The interpretive footpath was constructed mostly by hand due to the environmental sensitivity of the site. Extensive restoration efforts included culvert repair and biotechnical stream bank stabilization. Upstream development eroded the banks of Widow White Creek and degraded salmon spawning gravels. Biotechnical methods armored stream banks and enhanced the fish habitat. Project partners also modified drainage systems to improve nonmotorized access.
stormwater management. High-pressure laminate interpretive signs were installed to emphasize the value of riparian and aquatic habitats and educate users about human impacts on coastal riparian and stream resources. The sign system is the only one of its kind on the north coast and will be expanded to the entire trail system. The new Widow White Creek bridge was made of weather-resistant composite materials and crane-lowered into place to reduce stream disturbance. Plants, rocks and logs reinforce creek banks and are low-maintenance solutions to erosion. Stairs to the south and a northern trail maze discourage cyclists and equestrians from using the footpath intended for pedestrians.

Many people used the trail for recreation and non-motorized commute trips before the project was completed. Now more residents and visitors are able to enjoy the beautiful pathway since the connection of the existing northern and southern segments of the Hammond Coastal Trail, that were previously separated by the “Hole in the Hammond” and a freeway. One week after the $1 million “Hole in the Hammond” links were joined, regular trail users reported a significant increase in people using the pathway.

For more information, contact Rex Jackman at rex_jackman@dot.ca.gov.
Highway 149 Environment al Impact Mitigation Project

Rochelle Jenkins, Assistant Public Information Officer

When people think about Caltrans, they often imagine orange cones or a highway worker fixing a road.

That stereotype belies innovations employed in the creation of self-sustaining eco-systems for an Excellence in Transportation Environment Award-winning project on Highway 149 in Butte County.

In 2006, Caltrans created a vernal pool, freshwater marsh and riparian habitat to mitigate work on a four-lane expressway with interchanges at state routes 99 and 70 between Chico and Oroville. Caltrans contracted with Restoration Resources to complete a 38-acre freshwater marsh on a parcel adjacent to the highway rights of way and a 400-acre vernal pool complex north of the marsh.

These ecosystems exhibit innovative advances in environmental technology. The freshwater marsh was an olive orchard with a natural drainage running through it. The challenge was to contour the site to allow the water to flow through a series of wetlands and swales at different elevations to feed into the main marsh. Also, the water previously sheeted across the highway and created flooding. Caltrans used a clay liner to ensure that the marsh would hold water. Now the water is channeled off the road into the marsh and adjacent beaver ponds.

Vernal pools are unique ecosystems comprised of soil, plants and animals. Plant seeds and spores remain dormant in the dirt until winter rains trigger their growth. To create a new vernal pool, seeds and spores from an existing vernal pool must be transplanted to the new site. The crew from Restoration Resources worked with the Caltrans resident engineer and highway construction contractor to harvest soil from pools affected by construction that started in 2006. The crew used smaller equipment to “tiptoe” around the existing pools. Rainwater triggered the growth cycle in the newly created pools.

The careful planning and “tread lightly” philosophy of the contractor created an environmental preserve that appears to have been there for years. Caltrans and its partners created a natural gem for future generations by taking advantage of land they already had and carefully choosing more than 2,500 native plants and trees. The timely completion of these two mitigation sites allowed Caltrans to meet regulatory permit requirements and keep the highway construction project on schedule. The construction costs were $6.6 million, but the benefit to the environment is priceless.

For more information, contact Martin Villanueva at martin_villanueva@dot.ca.gov.
Olive Hill Road

By Mark Phelan, Project Manager

Intersection Improvements on Highway 76 at Olive Hill Road

It's not often that the public takes the time to make a phone call to pass on positive feedback, but Caltrans San Diego district offices received a large volume of “thank yous” after the completion of the State Highway 76 and Olive Hill Road improvements in August 2005.

In the past, a two-lane highway with limited shoulders was sufficient for the rural community of Bonsall in San Diego County. But now more than 40,000 daily drivers pass Olive Hill Road, through the area that houses several businesses and two strip malls. Olive Hill Road is the primary crossing of the San Luis Rey River, and the bridge serves two local schools.

Although the intersection of Highway 76 and Olive Hill Road is in a rural area, the traffic signal cycle was the longest in San Diego County. During the morning commute, waits at the signals frequently exceeded 15 minutes due to the signal cycle timing and the number of cars that accumulated in a line in the general travel lanes. It also took more than 25 minutes to travel one mile from South Mission Road, one and a half miles east of the project, to the local schools.

Caltrans and the San Diego Association of Governments partnered on a $2.1 million congestion-relief project that used existing Department rights of way to add highway lanes 1,000 feet on either side of the Olive Hill intersection, extend the Olive Hill Road left turn pocket, add a dedicated right turn pocket to north Olive Hill Road, construct a raised median island to channel traffic, and reduce the cycle time of the traffic signal controlling the intersection.

There were several other problems with motorists turning left in front of opposing traffic at a strip mall. Vehicles would idle in two-way left turn lanes, waiting for breaks in the traffic to make their turns. Vehicles exiting the strip mall encountered the same challenges attempting to make left turns onto the highway. The new raised concrete median on Highway 76 prohibits left turns out of one driveway and reduces the number of vehicles crossing the highway. The project also enhanced safety by creating a rural bus pullout with sidewalks and Americans with Disabilities Act (ADA) ramps.

Caltrans biologists worked with the project team to clean trash out of the concrete storm channel that carries Bonsall Creek under Highway 76. The endangered Arroyo Toad lives in the creek adjacent to the San Luis Rey River, so Caltrans took steps to protect the animal. The project design avoided impacts to a Native American cultural site, wetland habitat and breeding grounds of an endangered bird called the Least Bell’s Vireo on the western end of the site.

A temporary sound wall made from rice hay bales, as well as many other measures, preserved the valuable natural resources along the corridor during construction.

The $2.1 million project recovered its cost in the public’s time savings after the first six months. And though difficult to quantify, this was also reflected in the public’s show of appreciation as residents called to thank Caltrans for cutting their travel times.

For more information, contact Ed Hajj at ed_hajj@dot.ca.gov.

Caltrans and the San Diego Association of Governments partnered on a $2.1 million congestion-relief project...
Who says a landmark cannot be replaced?

Not Caltrans north region District 1 crews.

Although the Fort Bragg community loved the old 1949 Noyo River Bridge, Caltrans Seismic Retrofit Program staff discovered that it was susceptible to failure during a moderate earthquake. In fact, the landmark was functionally obsolete. It had lost 10 to 15 percent of some of its main structural steel members and upgrading it would reduce its weight load for loggers, so it needed to be completely replaced.

“Innovative” is the best word to describe the construction of the new bridge – or should we say, “new bridges.” Since there were no alternative routes around the construction site, the old steel bridge had to remain in service while the new structure was built. This is not unusual. However, the new bridge was built in segments next to the old one while the old bridge continued to carry unimpeded traffic – which is very unusual.

MCM Construction, Inc. started the $34 million project in March 2002. Crews had to confine two new spans to the narrow rights of ways between existing buildings at each end of the bridge. When the two new bridges were complete, traffic was diverted to those structures, allowing the demolition of the original steel bridge in the center. After the demolition, a third bridge was constructed between the two outside bridges. Then, in the fall of 2004, the three bridges were connected using a “post tensioning” method in which steel reinforcing cables embedded within the structure were pulled tight, stressing the bridge from end to end and side to side.

The new bridge design met all seismic and safety standards and was built within time, budget and lateral constraints. During the two-year construction period, Caltrans also had to ensure that boat access to the harbor remained open.

The new structure is 875 feet long and 86.5 feet wide. The surface area of the bridge, held aloft on four columns approximately 123 feet high, is 1.74 acres of cast-in-place concrete. In all, 19,305 cubic yards of concrete were required to construct the 39,093-ton structure. The result was four lanes, an 11-foot center median, 8-foot shoulders, and two 5.5-foot sidewalks. Innovative railings preserve the views of the ocean and the harbor.

The new bridge solved the historical traffic bottleneck, moving more vehicles and foot traffic over the harbor at a time. By working very closely with the community, Caltrans was able to construct a new bridge that has already captured the hearts of the residents of the coast town. It complements rather than competes with the environment. Numerous architectural features such as the slender parabolic superstructure, columns reminiscent of the existing piers and pedestrian lighting, made this a cost-effective, yet graceful crossing of the Noyo River.

A new landmark has been born.

For more information on this project, contact Phil Frisbie at phil_frisbie@dot.ca.gov.
International Friendship Plaza

By Tom Ham, District 11 Landscape Architect

Before completion of the Caltrans International Friendship Plaza, the area by Interstate 5 was unsafe, unattractive and uninformative. Each year more than 48 million people passed through or near a dirt path with tripping hazards and narrow walkways with potholes at the world’s busiest border at the San Ysidro U.S./Mexico crossing. Traffic was routinely blocked anytime someone unloaded a passenger at the busy international border between Alta and Baja California.

So Caltrans worked with the city of San Diego, the Mexico Consulate Office, San Ysidro Business and Transportation Association and the San Diego Police Department to create a bicultural plaza with colorful walkways, flowering trees, planter beds, ornamental fencing, tree grates, benches and handicapped access. The Transportation Enhancement Act funded this project.

Project partners held numerous meetings to gather community, agency and Mexican authority input on the venture. Since it was completed in September 2005, visitors have been astonished with the changes. Now the Interstate 5 Friendship Plaza celebrates the history of both nations, depicting the establishment of Spanish missions from Alta to Baja California. A broad and colorful walkway lined with flowering trees and shrubs includes a historical representation of Alta and Baja California, showing when each mission was named and dedicated. Pedestrians walking north to south to the international border gates can “retrace” the path taken by the Spanish explorers along a model of the Camino Real Spanish-founded highway. The walkway mimics the first interstate highway, connecting the Spanish missions that adorn California’s coastline like pearls all the way through Baja California. The project improved and enlarged a transit stop, passenger loading and unloading areas, provided safer crosswalks, lighted and landscaped walkways, and added Americans with Disabilities Act (ADA)-compliant features. Cyclists are now shielded from vehicular traffic in well-delineated areas that do not conflict with pedestrians.

A temporary fence protected an environmentally sensitive drainage channel as workers completed the project that added drought-resistant landscaping, automatic irrigation, improved drainage, and erosion prevention and control. New trees now shade pedestrians and an upgraded security fence blends into the setting.

Now travelers crossing the busy international border can experience a bit of history in the safe, pleasing environment of Friendship Plaza. For more information, contact Emilio Viramontes at: emilio_viramontes@dot.ca.gov.
It may seem odd to the common layperson to pick up a highway and move it somewhere more environmentally friendly, but that’s what Caltrans does over and over again.

The Laguna Canyon Road, or State Highway 133, project was noted by the Excellence in Transportation Award judges for the collaborative work of Caltrans, Orange County, LSA Associates, Inc., and RBF Consulting. The project moved the open two-lane highway that bisected a lake in Laguna Canyon, up out of the 100-year-old flood plain. The new road includes two separate travel ways with different horizontal and vertical alignments that cup the side of the ravine and provide scenic views of the canyon lakes.

The alignment and design of Laguna Canyon Road addressed traffic, safety and flooding problems and operational deficiencies, while preserving numerous environmental resources. The road was widened and realigned with a consistent design for 60 mph speeds. The new median varies from 30 to 270 feet in width, providing additional protection against head-on accidents.

The project team worked closely with the Citizens’ Oversight Committee, mostly through interactive workshops, to understand and protect the environment. The new roadways include four animal wildlife under crossings, Laguna Coast Wilderness Park trail linkages, and stormwater basins and bio-swales to treat roadway runoff. The roadway drainage system was also designed to ensure that there is no increase of downstream runoff.

For more information, contact Nooshin Yoosefi at nooshin_yoosefi@dot.ca.gov.

Almost anything can be recycled, including pavement. And the bonus is that it’s cheaper, more environmentally friendly, quicker, safer, and lasts longer.

Caltrans has been recycling asphalt concrete since 1988, but only recently started using the “Cold in Place” recycle process as a maintenance treatment. Historically, two to three inches of roadway was removed and disposed of during a repair. New asphalt concrete filled the void and the whole roadway was covered with an additional 1.25 inch of new asphalt concrete.

The recycle process reuses 100 percent of the existing road material. There is no roadway disposal. The top two to three inches of existing roadway is ground up and mixed with about half the asphalt normally needed for road repair. This mixture is then placed back on the roadway. This is done to the whole roadway – not just the really worn spots. Trucks don’t have to haul out old or new materials, so recycling reduces the need for aggregate mining and emissions. The process also reduces travel delays, saving the public time and the fuel costs associated with idling.

Recycling not only repairs more pavement, but it lasts longer, is smoother and looks better. Repairing the entire surface prevents recurrences of localized failures. This also reduces the Caltrans maintenance crews’ exposure to traffic.

For more information, contact Joe Peterson at joe_peterson@dot.ca.gov.
Caltrans thoroughly considered the lasting impacts of this project, including how to hide the highway from sensitive locations and build it with anti-graffiti material. It also included access roads and maintenance vehicle pullouts to allow workers access and safer parking, as well as video cameras to monitor traffic speed and volume data.

Caltrans also established new and enhanced existing recreational trails along the entire length of the project. The Department expanded the Summit Meadows Regional Park to include a water play facility, recreation centers, added rest rooms and camping spots. And Little Leaguers are especially excited about the new baseball complex. It includes six fields, parking, artificial turf, electronic scoreboards, restrooms, meeting rooms and a snack bar.

In addition to all that, more than $20 million went to restore or preserve 1,770 open-space acres for the Quino Checkerspot Butterfly, coastal cactus wren, vernal pools, wetlands and other endangered species. The project includes a captive breeding and genetic study of the Quino butterfly.

Now travelers see a variety of scenic panoramas such as the spacious Otay River Valley, newly developed shopping centers, colorful residential communities that border the highway, and views of Sweetwater Reservoir.

For more information, contact Laurie Berman at laurie_berman@dot.ca.gov.
This publication is dedicated to all highway workers, including those who have lost their lives while improving California's highway system.