



## California's North Coast Corridor Program Balances Infrastructure Demands and Environmental Stewardship

The North Coast Corridor (NCC) of California is a 27-mile stretch along Interstate 5 (I-5) that connects nine cities on California's Pacific Coast, including San Diego. Communities along this corridor have undergone significant changes in recent decades as population growth and urban development have brought a wealth of opportunity to the region.

The transportation system tying these networks together has gone nearly four decades without significant improvement. The result is infrastructure that fails to meet the demands of growing communities and threatens the area's unique coastal environments, which includes regionally significant drainage basins, coastal lagoons, and wildlife corridors. The congested roadway conditions in these communities are projected to worsen in the coming years, and solutions are limited by the existing circulation system, urban development, and environmental and geographical constraints.

To improve the quality of life for residents, promote regional economic growth, and protect and enhance the coastal environment, the California Department of Transportation (Caltrans), the San Diego Association of Governments (SANDAG), and other regional stakeholders developed the NCC Program. This issue of *Successes in Stewardship* will introduce this 40-year, \$6 billion program by highlighting the multimodal transportation improvements and environmental enhancements that address the needs of the NCC.



The Batiquitos Lagoon in Carlsbad, California, one of six lagoons in San Diego County. Efforts to improve the health of these lagoons include preserving existing ecosystems, restoring disturbed uplands, and mitigating the effects of stormwater runoff from nearby roads (Image courtesy of Caltrans).

### California Puts Policy into Practice

Caltrans, SANDAG, local cities, resource agencies, and community members worked for more than a decade to identify highway improvements, coastal rail and transit enhancements, and augmentations to environmental protection and coastal access that would further benefit the residents and habitants of the corridor. The goal for all parties was to enhance the transportation and environmental ecosystems within the NCC by respecting all communities equally.

In 2011, the California Senate further underscored this ideal by signing [California Senate Bill 468 \(CA SB 468\), Streets and Highways Code 103 and 149.10](#) into law. The collaborative effort among State and local stakeholders ensures a balanced, multimodal approach, such that existing natural resources are not unduly burdened by future transportation improvements. CA SB 468 requires the development of a Public Works Plan (PWP) published jointly with the Transportation Resource and Enhancement Program (TREP). The joint PWP/TREP lays out a blueprint for implementing the entire NCC Program and

provides the California Conservation Corps an integrated regulatory review rather than a project-by-project approval approach, saving time, money, and valuable resources. The legislation contained several key provisions, including concurrent construction of rail and highway bridge crossings over lagoons, adopting regional bike plans with transit services, and the opportunity for public involvement in shaping the direction and impact of PWP/TREP.

The NCC PWP/TREP focuses on all transportation needs of the corridor, not just the demands of I-5. Though this may add to the initial cost and scope of the project, the costs may be at least partially offset by delivering projects in a more efficient manner, and with approval from stakeholders with varied interests. The additional enhancements are considered mitigation within the context of the PWP/TREP, and will offer each community the flexibility to express their unique character through project design. Many of these projects will improve and facilitate connectivity across the freeway and to the coast with little-to-no impact on the core I-5 updates.

### Combatting Congestion by Expanding Multimodal Options

Among the provisions listed under CA SB 468 is the establishment of a value pricing high-occupancy toll (HOT) lane along I-5 from La Jolla to Oceanside, ensuring a reliable, congestion-free travel option for carpools, vanpools, and buses. The HOT lane would be available to single-occupancy vehicles for a fee. Revenue generated from these express lanes will be invested into future NCC transit projects.

Additional projects within the NCC Program include several initiatives for non-motorized commuters to enhance their access to the community. Nearly 30 miles of bicycle and pedestrian paths will be developed along the coast, and will link to the east-west trails that already exist in the region. Four rail under-crossings will be built to provide pedestrians and bicyclists safe passage to and from the coast, while more than 30 overpasses will add or improve existing bike and pedestrian paths. Efforts such as these not only add to the aesthetic of a community, but provide citizens with healthy alternatives to driving.

In addition, the coastal rail corridor will receive an upgrade. Nearly 99 percent of the 60-mile San Diego segment of the Los Angeles – San Diego – San Luis Obispo Rail Corridor coastal rail line will receive a second track, allowing the agency to conduct two-way traffic through the county. Rail stations and platforms will also be modernized.

### Putting Tax Dollars Back into Communities

Although relatively small, San Diego County is the most biologically rich county in the continental United States, and California is one of the top 10 most biodiverse areas on Earth. As such, local, State, and Federal agencies are working in concert to preserve half of the region—about 1.4 million acres—as permanent open space by 2050. The region has proven to be a worldwide leader in environmental conservation, which will continue through the NCC Program.

The NCC Program will rely on \$250 million in funding from *TransNet* (see side box for more information) to preserve, enhance, and protect coastal habitats within the corridor. The *TransNet* Environmental Mitigation Program provides funds for habitat-related environmental mitigation activities, including habitat acquisition, land management, scientific research, and environmental restoration.

With these funds, NCC has already bought several hundred acres of habitat for preservation or restoration. The health of the six lagoons across the county will also be made a priority, as conservationists work to preserve existing ecosystems, restore disturbed uplands, and mitigate the effects of stormwater runoff from nearby roads.

Caltrans and SANDAG have developed the Resource Enhancement Mitigation Program to cultivate opportunities for restoration and enhancement of the lagoons. The two agencies will continue to work with community and environmental stakeholders to prioritize environmental improvements.

### NCC Program Compliments Character with Sustainability

The NCC coastline provides some of the most unique scenic views in California. This has prompted the NCC Program to focus on protecting coastal character.

#### What Is *TransNet*?

*TransNet* is a half-cent sales tax for local transportation projects. The tax applies to purchases in San Diego County, and has been instrumental in expanding the transportation system, reducing traffic congestion, and bringing critical transit projects to life.

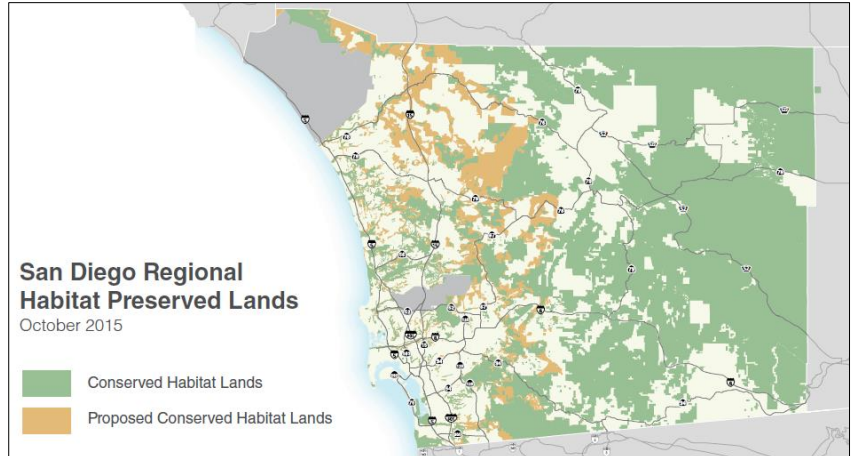
*TransNet* was first approved by voters in 1998. In 2004, 67 percent of voters in San Diego County approved a ballot measure that extended *TransNet* for another 40 years.

For more information, visit the [TransNet website](#).

As rail and highway bridges within the corridor reach the end of their useful lives, new bridges will feature longer spans with fewer piers in the water. The smaller footprint of these bridges will help to improve tidal flow in the county's six lagoons, promoting healthier coastal environments by limiting the impact of the infrastructure.

As freight and personal vehicle traffic grow in the region, community organizers have identified ways to reduce freeway noise for residents by installing sound walls. Transparent sound walls have been installed near residents with existing views to better blend into their environment. Infrastructure design has seen an evolution as well, as various bridges and retaining walls alongside highways have been designed to complement existing community character.

Caltrans used the ENVISION tool, an online rating system for infrastructure projects that provides guidance on sustainability best practices, to minimize each project's impact on the surrounding community and environment. For example, construction trailers will be solar powered and Caltrans is also evaluating the use of freeway excavation material as beach sand replenishment.



Preserved land in San Diego County, shown here in green, as of October 2015 (Image courtesy of Caltrans).

## Caltrans and SANDAG Partnership Sets Example for Future Projects

The innovative planning, collaboration, and financing of the NCC Program serve as an example for future projects with similar goals and constraints.

Program partners established relationships and goals at the project's onset to identify and pursue the best options available. The partnership of State and Federal agencies allowed SANDAG to advance funds for updates that may not regularly be eligible for State or Federal highway funding, while regular meetings kept all resource and permitting agencies well-informed of goals, schedules, and expectations.

By offering reimbursed staffing positions at the resource agencies, the NCC Program benefited from subject matter experts who may have otherwise been unavailable to lend their expertise. Transportation liaisons at the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California Coastal Commission offered first-hand knowledge and perspectives that expanded the potential of what the NCC Program could accomplish over the next four decades.

The goal of the NCC Program is greater than improving where people can go and how quickly they can get there. By incorporating environmental considerations into infrastructure investments, Federal, State, and local agencies can meet the demands of burgeoning communities and the unique natural environment that surrounds them.

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### Look What's New!

- Two proposed rulemakings to implement the Fixing America's Surface Transportation Act (FAST Act) were published recently in the Federal Register:
  - [Program for Eliminating Duplication of Environmental Reviews Notice of Proposed Rulemaking \(NPRM\)](#) – Comments are due on or before November 27, 2017.
  - [Environmental Impacts and Related Procedures Supplemental NPRM](#) – Comments are due on or before November 28, 2017.

For additional information on other FAST Act guidance related to the environmental review process, please visit the [Environmental Review Toolkit](#).

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