

on the move

SOUTHERN CALIFORNIA DELIVERS THE GOODS





gateway to the n

Southern California's freight infrastructure — from ships and ports to rails and roads — is integral to our nation's economic health. Covering an area larger than the state of Tennessee, the region handles tremendous freight volumes — including over 15 million twenty-foot equivalent units (TEUs) annually — or almost half of our nation's shipping containers. Most of these are destined for locations east of the Rocky Mountains. By 2035, this volume is expected to nearly triple.

Additionally, goods valued at \$50 billion moved through land Ports of Entry at the California and Mexico border, along with another \$92 billion in air cargo moving through regional airports.

The region's mobility challenges are daunting and require immediate investment to ensure our nation's global competitiveness.

ation

These regional trade activities are vital to national and regional economies, and commerce overall. Goods movement dependent industries sustain 2.9 million regional jobs (35 percent) in Southern California, with the San Pedro Bay Ports alone supporting over 3 million jobs nationwide.

Southern California is the unparalleled gateway to the nation because of the area's numerous advantages: deep-water marine ports, highly developed networks of highways and railways, an extensive concentration of warehousing and distribution facilities, and an enormous local consumer market. However, there are daunting challenges. Congested highways and rail corridors are a barrier to keeping goods moving and the economy growing. Public health is at risk, and regional freight activities are a major source of air pollution. Regional air pollution is recognized as being responsible for thousands of premature deaths per year. Also, failure to meet stringent federal and state mandates for air quality could jeopardize funding and public support for regional transportation projects.

While Southern California has made great strides in building infrastructure and planning for the future through self-help tax measures, numerous critical projects in the region are urgently needed. These projects will support the regional and national economies, reduce congestion and emissions on freight corridors, and enhance safety and quality of life for everyone. Yet current funding sources fall far short in supporting identified infrastructure expansion and improvements.

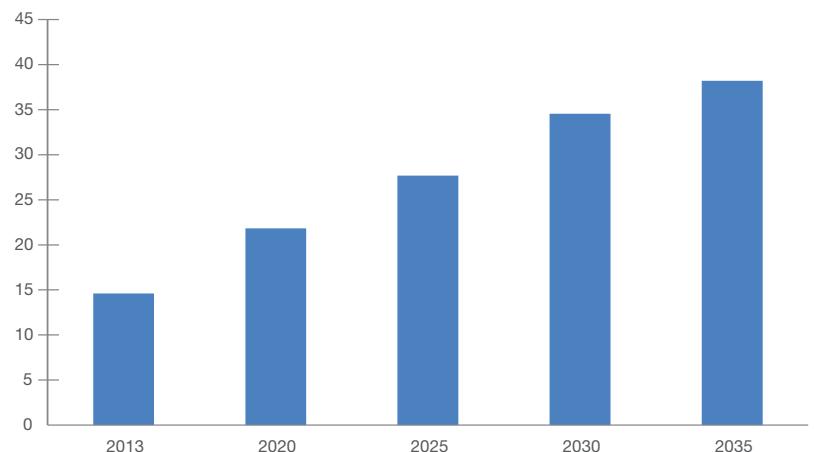
A growing number of communities, public agencies, and private freight industries in Southern California are calling for substantial investment in regional goods movement infrastructure and clean



Facts about the Southern California region

- The region's population of over 21 million residents is greater than every state except California and Texas.
- The region's economy is the 16th largest in the world
- The region's land area is larger than 17 states, or slightly bigger than Tennessee.

SAN PEDRO BAY PORTS CONTAINER FORECAST (millions of TEUs)



Note: Forecast for Year 2035 reflects estimated Port terminal capacity

delivering goods and jobs

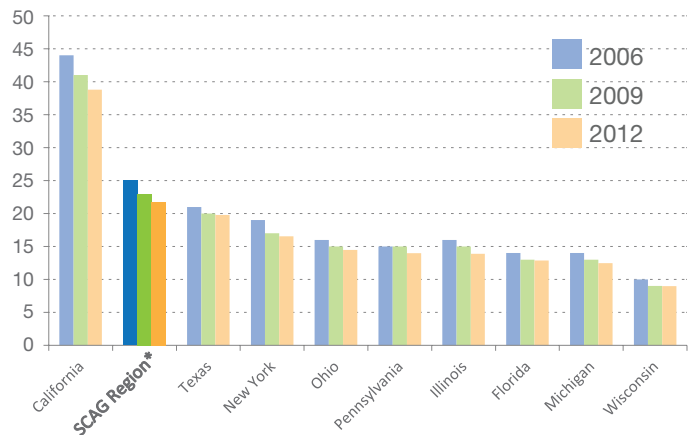
technologies. The economic and physical health of Southern California and the nation depend on it.

The San Pedro Bay Ports Complex (Ports of Los Angeles and Long Beach) is the largest container port complex in the U.S. and the ninth largest in the world. The Ports serve as a key economic engine, facilitating trade for goods valued at over \$311 billion in 2011, up from \$226 billion in 2002 — a 45% increase in 10 years. In 2013, the value of maritime cargo moving through the two ports was valued at over \$403 billion.

Studies indicate between 65%-75% of containers that enter the San Pedro Bay Ports are delivered east of the Rocky Mountains, providing enormous benefit to the rest of the nation. Over the next 25 years, this volume of containers is expected to reach over 38 million TEUs.

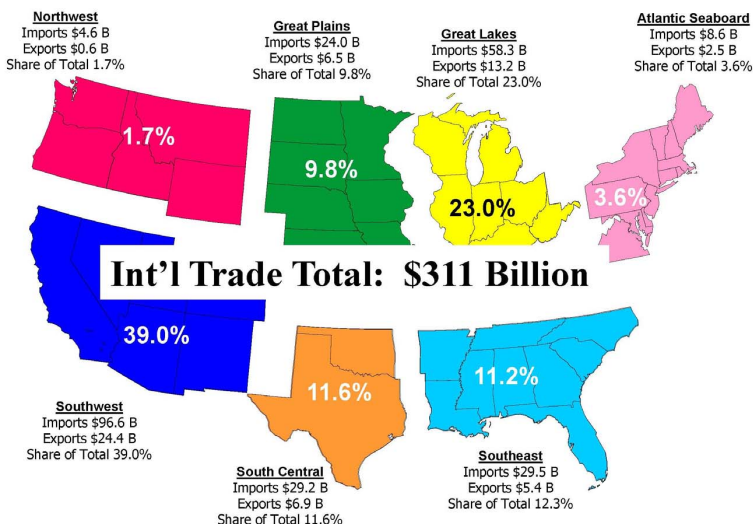
In addition, the Port of Hueneme, which specializes in the import and export of automobiles, fresh fruit, and produce, supported the movement of cargo valued at \$8 billion. The Port of San Diego, which specializes in the import and export of containerized fruit, automobiles, and building supplies, supported the movement of cargo valued at \$5.58 billion in 2013.

TOTAL NUMBER OF MANUFACTURING ESTABLISHMENTS (in thousands)



*Includes Counties of Imperial, Los Angeles, Orange, Riverside, and San Bernardino
Source: US Census, County Business Patterns

IMPACT OF INTERNATIONAL TRADE THROUGH THE SAN PEDRO BAY PORTS, 2011



Domestic manufacturing also plays a key role in Southern California as both imports and exports are expected to grow over the next 25 years. Regionally, manufacturing contributes approximately \$91 billion and 800,000 jobs to the Southern California economy. Manufactured products are especially dependent on freight with directly related transportation spending in the Southern California region totaling more than \$14 billion. In addition to the increasing number of port-related truck trips, non-port truck trips add significantly to regional traffic volumes and vehicle-miles-travelled. It is critical to ensure proper transportation and goods movement planning to meet the anticipated growth in international and domestic trade.

Southern California also has eleven commercial airports that serve as a world gateway for high-value, time-sensitive air cargo valued at over \$92 billion in 2012.

Source: Port of Long Beach, Port of Los Angeles, and Alameda Corridor Transportation Authority



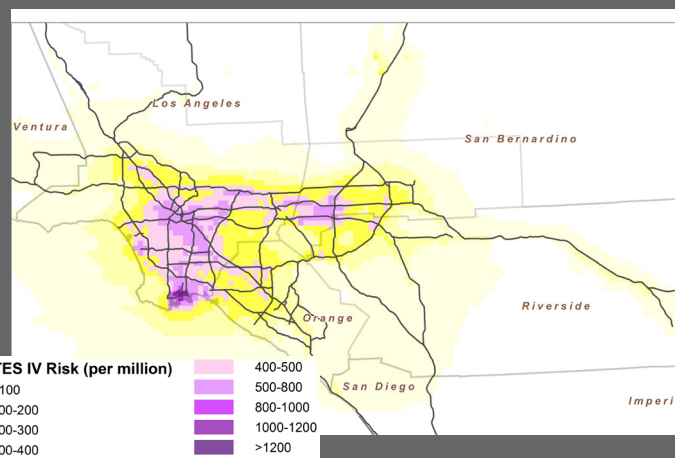
Healthy System, Healthy Communities

While the freight system is important to the health of Southern California's economy, it takes a significant toll on the health and quality of life of local communities. Increasing volumes of freight movement require simultaneous and continuous improvement in pollution control strategies to reduce health impacts.

- Millions of Southern California residents live near transportation corridors with high traffic volumes. They face elevated risks of asthma and other respiratory and cardiopulmonary health impacts. In addition, cancer risks from air pollutants are significantly elevated in communities near transportation and goods movement facilities (such as ports, highways, and intermodal warehouse centers) due to diesel exhaust from ships, locomotives and heavy-duty trucks.
- Diesel emissions from freight activities in the region are major contributors to regional air pollution. Analyses by the California Air Resources Board indicate that regional air pollution annually causes thousands of premature deaths, as well as hospitalizations, lost work days, and cases of asthma and lower respiratory symptoms.

Advanced zero and near-zero-emission technologies, along with efficiency measures, land use approaches, and policy and regulatory initiatives, are important tools for reducing these impacts and improving community health, and will be needed for the region to attain national air quality standards as required by federal law.

Cancer Risk from Air Pollution



Source: South Coast Air Quality Management District Draft Multiple Air Toxics Exposure Study IV (October 2014). Diesel exhaust is cause of majority of risk. Risk estimates are expected to rise with pending state assessment methodology revision.

A Vast and Complex Infrastructure

Southern California's vast goods movement system involves many critical components. Containers enter Southern California primarily by ship, and are transferred to trucks and rail cars to reach their final destinations across the country. Before leaving Southern California, many containers are unloaded and reconfigured at intermodal centers, warehouses, and distribution centers. It takes a complex system to move freight through the region along critical freight corridors to points throughout the nation.

Congestion is Growing

The growth in container volumes will increase traffic, further clogging already congested highways and railways.

- **Regional truck vehicle miles** traveled will increase by over 80% by 2035, growing from 6.8% of total VMT in 2008 to 10% by 2035.
- **Competition between truck and passenger traffic will grow**, dropping average speeds for all vehicles, resulting in an average of 5.4 million hours of daily traffic delay.
- **Rail volume** will increase from 93 trains per day in 2010 to nearly 147 trains per day in 2035, a 58 percent increase, along certain segments of the mainline rail network.
- **Grade crossing delays** are expected to increase by an average of 269 percent for all rail lines combined, with some lines experiencing increases of over 400 percent.

meeting system cha



Rail-Roadway Crossings

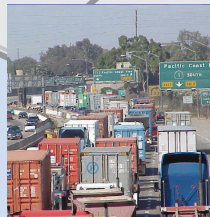
The Alameda Corridor-East grade separations will relieve traffic congestion, increase productivity, improve safety, and reduce harmful emissions (particularly in Los Angeles, Riverside, San Bernardino and Orange counties), and facilitate the efficient movement of rail cargo to the nation.

East-West Freight Corridor

The identified EWFC would accommodate expected dramatic growth on east-west corridors by 2035. The EWFC is projected to result in a 4.3% reduction in delay for all traffic in the influence area, and a 10% reduction in delay for heavy-duty trucks. It would benefit regional businesses by serving the 52% of regional warehousing and 27% of regional manufacturing that lies within a 5-mile radius of the proposed alignment. The EWFC is projected to reduce truck/automobile accidents (up to 20-30 annually on some segments) and utilize zero-emission technologies to reduce harmful pollutants.

Warehouses and Distribution Centers

The region currently provides well over 800 million sq. ft. of space for warehouse and distribution centers. An additional 400 million sq. ft. of space will be needed by 2035, but less than half is identified as suitable and available.

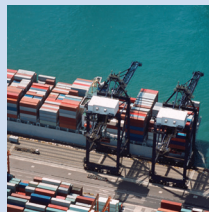


Interstate 710

Interstate 710 links trucks directly to and from the region's freeway network and distribution centers and carries up to 40,000 trucks on an average weekday. A recent study projected that by 2025, heavy-duty truck traffic may reach up to 35% of total traffic volumes along high volume segments, compared to current shares of between 14% and 19%.

LEGEND

- Roadway Improvement Projects (major cluster)
- Grade Separation Projects (major cluster)
- Airport
- Sea Port
- Land Port of Entry
- Intermodal Facility
- Major Warehouse/Distribution Center Cluster
- Alameda Corridor
- ALAMEDA CORRIDOR EAST**
- Union Pacific Alhambra Line
- Burlington Northern Santa Fe Transcon line
- UP LA Sub
- UP El Paso Line



Ship and Marine Terminals

Southern California hosts four regional seaports (Port of Hueneme, Port of Long Beach, Port of Los Angeles, and Port of San Diego). The Ports of Los Angeles and Long Beach, also known as the San Pedro Bay Ports, constitute the nation's busiest seaport and the ninth largest container port complex in the world. In their current state, the San Pedro Bay Ports can accommodate about 28.5 million TEUs. Fully-funding the Ports' planned system improvements and environmental projects will enable them to accommodate the 38 million TEUs expected by 2035.

Land Ports of Entry

The San Diego-Imperial Valley region hosts four major commercial land ports of entry (POE) which handled almost 97% of the volume of goods passing through this part of the region. The Otay Mesa POE, located 15 miles south of Downtown, San Diego, handles the second highest volume of trucks and third dollar value of trade among all U.S./Mexico land border crossings. In 2013, the Ports-of-Entry in San Diego (nearly \$37 billion) and Imperial County (over \$13 billion) were responsible for over \$50 billion in trade despite the recession.



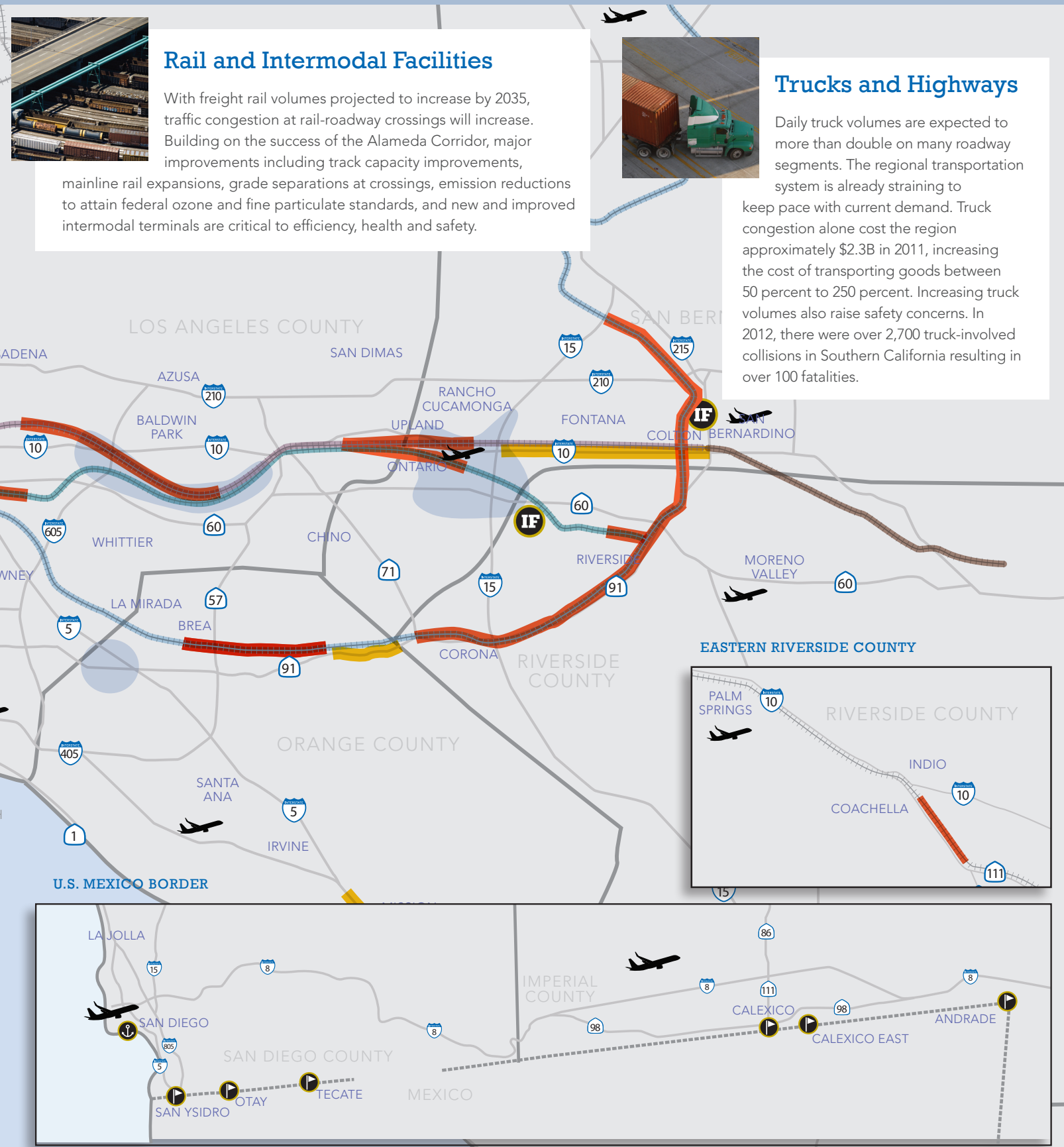
Challenges

Rail and Intermodal Facilities

With freight rail volumes projected to increase by 2035, traffic congestion at rail-roadway crossings will increase. Building on the success of the Alameda Corridor, major improvements including track capacity improvements, mainline rail expansions, grade separations at crossings, emission reductions to attain federal ozone and fine particulate standards, and new and improved intermodal terminals are critical to efficiency, health and safety.

Trucks and Highways

Daily truck volumes are expected to more than double on many roadway segments. The regional transportation system is already straining to keep pace with current demand. Truck congestion alone cost the region approximately \$2.3B in 2011, increasing the cost of transporting goods between 50 percent to 250 percent. Increasing truck volumes also raise safety concerns. In 2012, there were over 2,700 truck-involved collisions in Southern California resulting in over 100 fatalities.



southern california: we have a plan

The Southern California National Freight Gateway Collaboration includes regional, state and federal transportation and resource agencies working together to explore ways to support the movement of goods, the economic health of the region and nation, and the quality of life of Southern California communities. The Collaboration represents an unprecedented level of coordination and collaboration in the nation's leading trade gateway.



Our vision: A world-class, coordinated Southern California goods movement system that accommodates growth in the throughput of freight to the region and nation in ways that support the region's economic vitality, attainment of clean air standards, and quality of life for our communities

Goods moving through Southern California to the rest of the nation rely heavily upon our regional transportation network. However, existing infrastructure needs, coupled with significant growth in freight moving through ports, and on rail lines and roadways, demand that meaningful steps be taken to ensure continued economic growth. Failure to implement identified improvements will have considerable repercussions for businesses and residents alike.

Priority Projects

In response, regional transportation and planning agencies have planned for improvements critical to support the efficiency and capacity of the nation's largest and most complex freight system. The essential package of multimodal transportation projects based on the Regional Transportation Plan and estimated at over \$77 billion (\$3 billion specified in the California Freight Mobility Plan to initiate deployment of zero and near zero emission

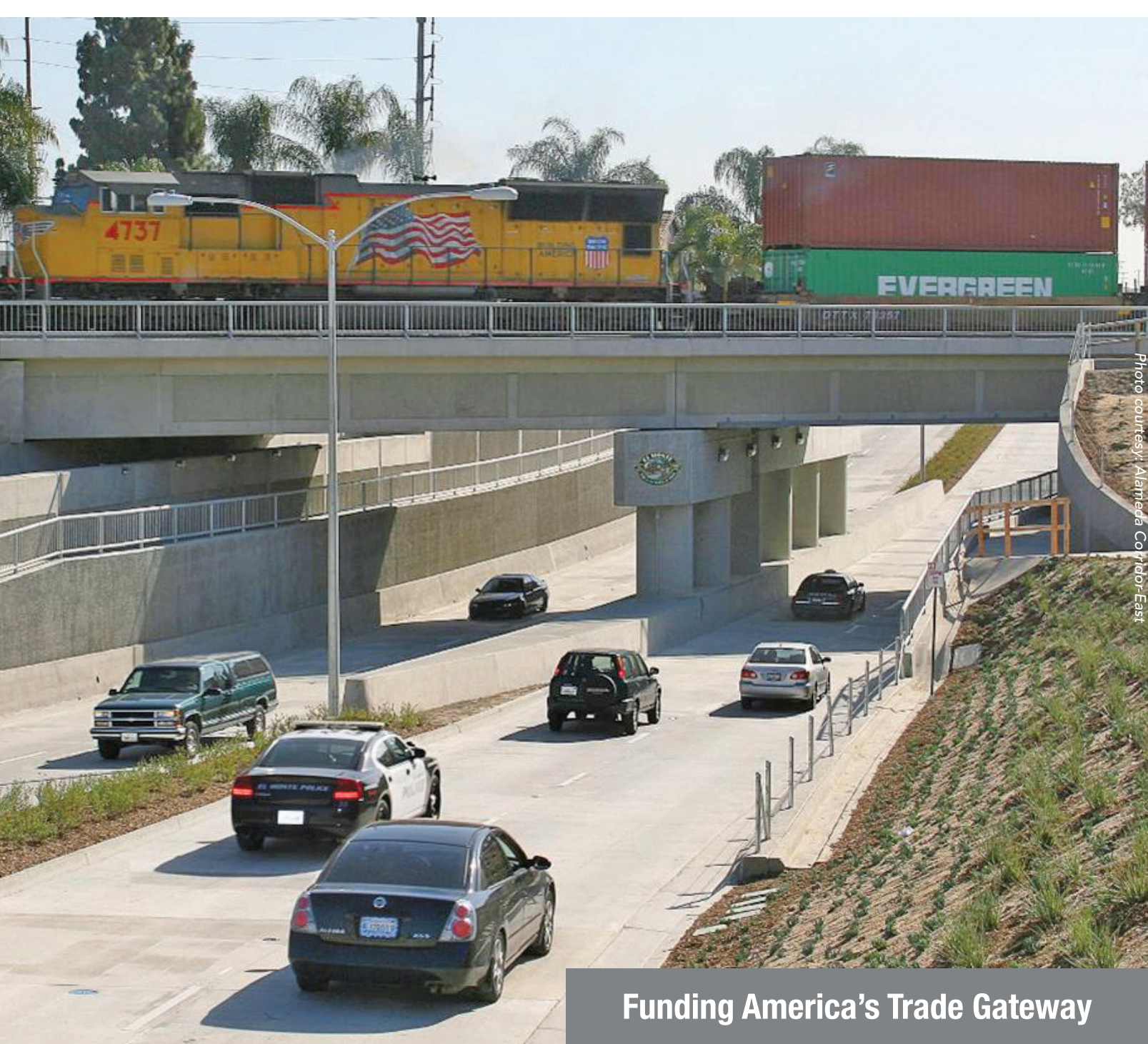
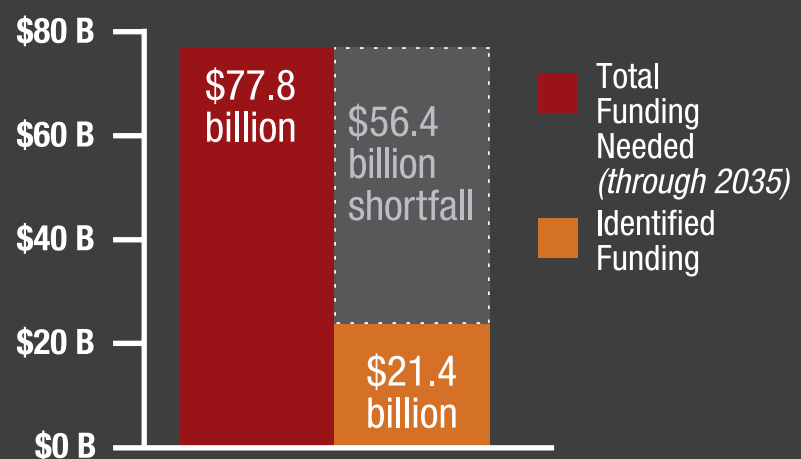


Photo courtesy: Alameda Corridor-East

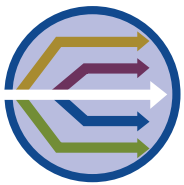
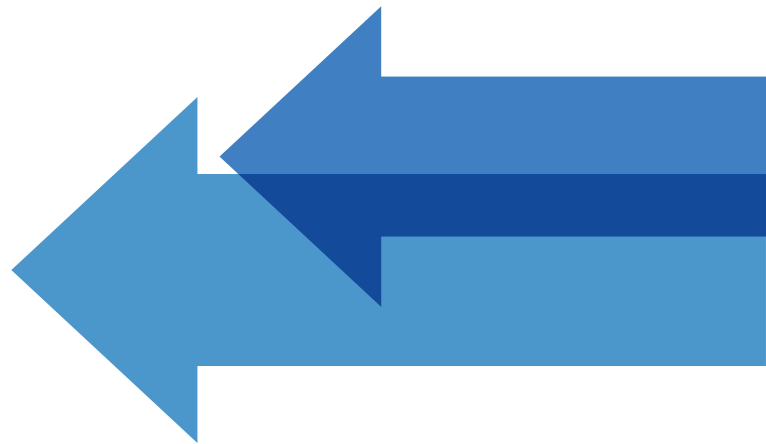
technologies), will provide capacity to move goods long term and will improve mobility, safety and environmental and quality of life issues related to goods movement. However, with only \$21.4 billion identified in anticipated funding, a shortfall of over \$56 billion remains.

While there is still significant work to be done, the region has laid out clear principles for designing financing strategies for the identified projects, and will continue to work with stakeholders at all levels of government.

Funding America's Trade Gateway



a collaboration focused on achieving the following objectives:



Mobility and Efficiency:

Handle demand and maintain acceptable levels of service among all system components, and support cost-competitiveness on an

international scale by providing sufficient capacity and implementing efficiency measures (such as intelligent transportation systems).



Safety: Improve traffic safety by separating on-road freight and passenger transport on major corridors, and at local road-railway crossings to the maximum feasible extent, and adopting advanced safety and incident response technologies.



Regional Air Quality: Build on the success of regional efforts, including the Ports of Los Angeles/ Long Beach Clean Air Action Plan, to reduce emissions from freight movement as needed to attain

ambient air quality standards and avoid jeopardizing federal transportation funding. Needed elements include transportation infrastructure that enables, incentivizes or incorporates use of efficiency measures and advanced clean technologies. These include zero and near zero emission technologies

such as hybrid-electric, electric, and hydrogen fuel-cell trucks and cargo handling equipment, vehicles using other fuels (e.g. natural gas) with advanced emission controls now under development, and the lowest emission locomotives and marine vessels.



Community Impacts: Address local health impacts from diesel exhaust, as well as traffic, noise and safety impacts, through smart growth principles that encourage clustering of

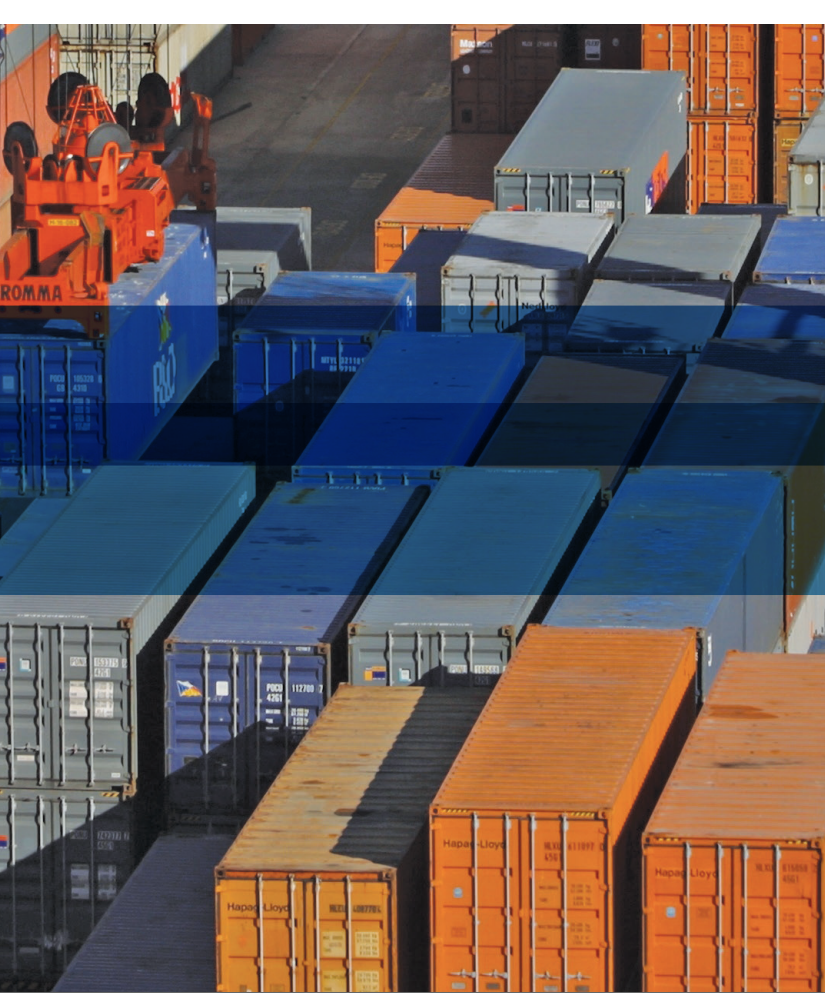
transloading facilities and warehouses away from residential areas, and close to zero and near zero emission truck and rail corridors. Also, apply new technologies and operations on major corridors, and reduce delays at railroad grade crossings.

Energy Efficiency and Security, Greenhouse Gas (GHG) Reductions:

Improve energy efficiency and cost certainty, and reduce GHG emissions, by utilizing electric, hybrid, or renewable fuel technologies in many modes of transport, or applying other cost-effective, low-carbon



technologies to the extent feasible.



Partner Agencies

Southern California National Freight Gateway Collaborative Working Group

Alameda Corridor East Construction Authority

Imperial County Transportation Commission

Los Angeles County Metropolitan Transportation Authority

Orange County Transportation Authority

Port of Hueneme

Port of Long Beach

Port of Los Angeles

Riverside County Transportation Commission

San Bernardino Associated Governments

San Diego Association of Governments

South Coast Air Quality Management District

Southern California Association of Governments

Ventura County Transportation Commission

A Call to Action

Southern California has identified over \$77 billion in critical investments to keep America's economy moving. Actions needed to realize our investments include:

- Redefine the National Freight Network to comprise a multimodal transportation system and further expand the Primary Freight Network beyond 27,000 centerline miles
- Structurally repair the Highway Trust Fund (HTF) funding imbalance through a combination of reasonable and fiscally prudent revenue enhancement options
- Support the recommendations of the House Transportation and Infrastructure Special Panel on 21st Century Freight Transportation
 - Support a fully funded national freight program with dedicated revenues from a range of sources that do not divert resources from existing programs and authorize a minimum of \$2 billion funding per year for freight investments
- Freight program funding should be multimodal and ensure that the most critical projects for the nation, the states, and the regions are appropriately considered including projects that mitigate the adverse impact of freight movements on communities
- Support sustainable funding for multimodal freight Projects of National and Regional Significance (PNRS)
- Further expand innovative financing provisions, including the expansion of RRIF (much like the TIFIA program) and Private Activity Bonds (PABs) while also authorizing America Fast Forward bonds (tax credit bonds)
- Continue to build upon MAP-21 reforms to accelerate project delivery



www.freightworks.org

The Southern California National Freight Gateway Collaboration is intended to foster cooperation, coordination, and collaboration to facilitate the movement of goods through Southern California while addressing the myriad infrastructure, environmental, and quality of life challenges presented by freight movement. Formalized by a historic agreement, the Collaboration aims to establish increased recognition and dialogue among the large and diverse group of stakeholders to address the broad array of critical regional goods movement challenges.