

Seaports handled trade valued at \$336 billion in 2010, including over 14 million twenty-foot equivalent units (TEUs) of containerized cargo



Interstate, Highways, and Local Roads make up over 53,400 road miles, some averaging over 25,000 trucks per day, that carry a mix of local, domestic trade, and international cargoes and provide critical "last mile" connections to ports, airports, manufacturing facilities, intermodal terminals, warehouses, and distribution centers

# **GOODS MOVEMENT**

## in the Southern California Region

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 the quality of life for our communities.

In 2010, over 1.5 billion tons of cargo valued at almost \$2 trillion moved across the region's transportation system. Whether carrying imported goods from the San Pedro Bay Ports to regional distribution centers, supplying materials for local manufacturers, or delivering consumer goods to Southern California Association of Governments (SCAG)\* residents, the movement of freight provides the goods and services needed to sustain regional and national industries and consumers on a daily basis. As part of its 2012–2035 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), SCAG has identified nearly \$60 billion of needed investment in its regional goods movement system.

Read more inside about the challenges and proposed strategies identified by SCAG in the 2012–2035 RTP/SCS designed to ensure that international and domestic trade in Southern California and the nation continue to thrive.

\*SCAG is the nation's largest metropolitan planning organization, representing six counties, 191 cities and more than 18 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California now and in the future.



#### Warehousing and Distribution Centers

totaling an estimated 837 million square feet (and another 185 million square feet with the potential for development) are clustered along major goods movement routes and concentrated near the San Pedro Bay Ports and much farther east in the Inland Empire



Land Ports at international border crossings were responsible for over \$10.4 billion in trade in 2010 despite the recent economic downturn



**Railroads** serving the region include two Class I railroads (Burlington Northern Santa Fe Railway and Union Pacific), that carry international and domestic cargo to and from distant parts of the country, multiple major intermodal terminals and railyards, and Class III railroads (Pacific Harbor Line, Los Angeles Junction Railway, and the Ventura County Railway) serving local and regional origins and destinations



Air Cargo Facilities at regional airports handled over \$78 billion in air cargo in 2010, much of it moving through the regional intermodal system upon arrival

### **MAINLINE RAIL IMPROVEMENTS & EXPANSION**

By considering routing alternatives, the 2012–2035 RTP/SCS identified a number of potential regional rail improvements and capacity expansion strategies critical to accommodate projected levels of future train traffic on the BNSF and UP lines. These strategies are intended to reduce capital costs, increase safety, reduce train volumes through the worst bottlenecks, avoid the most costly line expansions, separate passenger rail from heavy UP traffic expansion, and route freight lines where they are the most environmentally friendly.



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## BOTTLENECK RELIEF STRATEGY

Heavy truck congestion, often stemming from highway bottlenecks, results in delays, wasted labor hours, and increased fuel usage costing the SCAG region approximately \$2.6 billion in 2010 alone. In the 2012–2035 RTP/ SCS, SCAG identified \$5 billion in total investments over the next 25 years to address the top 50 regional priority truck bottlenecks that would reduce delay and associated emissions.



## **RAIL SAFETY & GRADE SEPARATIONS**

Seventy-one grade separations throughout the SCAG region, estimated at \$5.6 billion, were included in the financially constrained 2012–2035 RTP/SCS to reduce traffic congestion and delays, reduce emissions from idling vehicles, and address other critical rail crossing related concerns such as noise and safety.

## **ENVIRONMENTAL STRATEGY**

For the near term, the regional strategy supports the deployment of commercially available lower-emission trucks and locomotives while centering on continued investments in improved system efficiencies.

**For the long term,** the 2012–2035 RTP/SCS strategy focuses on taking critical steps now toward phased implementation of a zero- and near-zero emission freight system. This includes planning for new infrastructure to incorporate evolving technologies—to fuel vehicles as well as to charge batteries and provide power.

**For 2013–2015,** the regional strategy includes demonstration and initial deployment of zero- and/or near-zero emission trucks receiving wayside power.

#### EXISTING GOODS MOVEMENT SYSTEM

- Warehouses
- Intermodal Facilities
- Main Line Rail Network
- Alameda Corridor
- Major Goods Movement Highway Corridors
   ✗ Major Airports
- Ports
- Ports of Entry

**BENEFITS OF AN EAST-WEST FREIGHT CORRIDOR STRATEGY** 

<ul> <li>Truck delay reduction of approximately 11 percent</li> <li>All traffic delay reduction of approximately 4.3 percent</li> <li>Reduces truck volumes on general purpose lanes – 42 percent to 82 percent reduction on SR-60</li> </ul>
<ul> <li>Reduced truck / automobile accidents (up to 20-30 per year on some segments)</li> </ul>
<ul> <li>100 percent clean truck utilization removes:</li> <li>4.7 tons NO<sub>X</sub>, 0.16 tons PM<sub>2.5</sub>, and 2,401 tons CO<sub>2</sub> daily.</li> <li>(2.7 percent to 6 percent of region's total)</li> </ul>
<ul> <li>Preferred alignment has least impact on communities</li> <li>Reduces traffic on other freeways</li> <li>Zero- and/or near-zero emission technology reduces localized health impacts</li> </ul>

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# **STRATEGY (RTP/SCS) FOR GOODS MOVEMENT**



## **ON-, NEAR-, AND OFF DOCK RAIL IMPROVEMENTS**

Additional capacity is needed at regional on-, near-, and off dock railyards to accommodate anticipated growth in regional cargo. The 2012–2035 RTP/SCS includes almost \$2.7 billion in rail improvements within the harbor area. It also supports projects such as modernization of the Intermodal Container Transfer Facility (ICTF) and the Southern California International Gateway (SCIG) to add intermodal capacity, reduce vehicle-miles-traveled, and reduce emissions.

## **REGIONAL CLEAN FREIGHT CORRIDOR SYSTEM**

A system of zero- and/or near-zero emission truck-only lanes, extending from the San Pedro Bay Ports to downtown Los Angeles and then eastward to the Inland Empire, is expected to address growing truck traffic on core regional highways mitigating impacts on communities and the environment. Physically separated from mixed-flow traffic, these truck-only



## **DS MOVEMENT DEPENDENT INDUSTRIES**





## **BENEFITS OF THE RAIL STRATEGY**

Mobility	<ul> <li>Reduces train delay to 2000 levels</li> <li>Provides main line capacity to handle projected demand in 2035 (includes 39.4 million twenty-foot equivalent units, or TEUs)</li> <li>Eliminates 5,782 vehicle hours of delay per day at grade crossings in 2035</li> </ul>
Safety	Eliminates 71 at-grade railroad crossings
Environment	<ul> <li>Reduces 22,789 lb of emissions per day (CO<sub>2</sub>, NO<sub>X</sub>, and PM<sub>2.5</sub> combined) from idling vehicles at grade crossings</li> <li>Facilitates on-dock rail</li> <li>Reduces truck trips to downtown railyards and associated emissions</li> </ul>



Goods movement and freight transportation are essential to supporting the Southern California regional economy and quality of life. As the regional Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties, SCAG is responsible for providing a blueprint for long-term transportation investments in Southern California through its Regional Transportation Plan (RTP), including those designed to increase mobility for goods moving through Southern California. Through its 2012–2035 RTP/SCS, SCAG identifies nearly \$60 billion in needed investments for goods movement, including over \$8 billion in near-term initiatives.



To address the continuing challenges associated with growth in international cargo and domestic freight in the region over the next 25 years, SCAG has partnered closely with local, state, and federal stakeholders from the public and private sectors to pursue and implement strategies that would facilitate goods movement activities through partnerships such as FreightWorks. To learn more about some of these efforts, please visit **www.scag.ca.gov/goodsmove/video.htm** or visit the homepage of the Southern California National Freight Gateway Collaboration at **www.freightcollaboration.org**.

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