
CHAPTER 1.3

CURRENT FUNDING PROGRAMS

Currently, there is no permanent, dedicated, multipurpose freight funding program for California or the nation. While California has several funding programs that focus on transitioning freight vehicles and equipment to technologies that pollute less, are more efficient, and utilize cleaner fuels, those programs do not address the broader needs of California's full, multimodal freight system. Funding from the State's 2006 voter-approved transportation bond program is winding down, highway trust funds from gas taxes are dwindling, and competition for other limited funding resources that are available for freight purposes is fierce. Insufficient funding for freight transportation projects leads to more traffic congestion, increased community and environmental impacts, elevated freight transportation costs, and steeper consumer prices, which results in a higher cost of living and a less productive and competitive economy.

This Plan is written with the intention that, should new freight funding sources be developed, the identified projects and priorities included in the Plan will be considered in the corresponding funding program's development process. This chapter discusses various federal, State, and local freight funding programs in addition to details regarding the most recent bond program, including sources for potential matching funds. As will become evident, project sponsors depend upon funds from multiple sources and programs, not single sources. Therefore, it is essential to retain broad funding program eligibility for freight projects.

FEDERAL FUNDING

TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY PROGRAM

Since 2009, the Federal Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program³ has been funding freight projects on a nationally competitive basis. Although not specifically for freight, this program has proven to be a vital funding component for many freight projects around the country, including projects in California; however, it also has several disadvantages:

- TIGER funds rarely provide more than 25 percent of project cost; thus, access to and coordination of multiple funding sources is necessary.
- Its national scope and relatively low funding amount mean only a small number of freight projects are funded in any one state during a funding cycle.

- Limited amount is sought by a large number of competing applicants.
- Specific project selection criteria vary from cycle to cycle and the application process is cumbersome, making it difficult for smaller entities to compete.
- Infrequent and irregular funding cycles do not provide a predictable or reliable funding source for long-term fiscal planning, project development, and project delivery through construction.
- While sponsors of freight projects in California have been very pleased to receive TIGER funding and recognize it as an essential component of project funding packages, project sponsors need a federal freight funding program that enables long term planning and a reasonable level of assurance of federal funding availability into the future.

HARBOR MAINTENANCE TRUST FUND

The Harbor Maintenance Trust Fund (HMTF), established in 1986 by United States Code (USC) §9505 to support the operation and maintenance of ports and harbors, is funded by the Harbor Maintenance Tax (HMT). The HMT is a federal tax imposed on shippers based on the value of goods shipped through ports. In 1998, the US Supreme Court declared tax collection on exports unconstitutional; since then, the tax has been collected only on imports. The tax revenue is placed in the HMTF to be used for maintenance dredging, dredged material disposal areas, jetties, and breakwaters on federal navigational channels. Appropriations from the HMTF have lagged behind revenues collected into the HMTF for many years. HMT revenues are approximately \$1.6 billion per year, with expenditures averaging \$850 to \$900 million per year. The resulting HMTF surplus was approximately \$7 billion at the end of fiscal year 2012 due to its growth by hundreds of millions of dollars each year.^{4,5} For years, California has been a donor state – some years generating over 30 percent of HMTF revenue and receiving just 4 percent in return.

The Water Resources Reform and Development Act of 2014 (House of Representatives 3080, Schuster), established minimum target levels of HMT distributions for allowable uses under HMTF. These targets call for 67 percent of the HMT collected in 2014 to be distributed in 2015, increasing by 2 to 4 percent per year through 2024, with 100 percent of the HMT being made available in 2025. However, there is no requirement for appropriators to meet these target levels. Nonetheless, this newly enacted legislation should help ensure that the HMT is being used in a timelier manner and that more funds will be returned to California.

OTHER FEDERAL FUNDING

Other existing federal funding sources include the Projects of National or Regional Significance (PNRS) and programs under the Transportation Infrastructure, Finance and Innovation Act

(TIFIA). Surface transportation projects that qualify for US Code – Title 23 funds and are of national or regional importance are eligible for funding under the PNRS Program.⁶ This program seeks to improve economic productivity, facilitate international trade, relieve congestion, and enhance movement of passengers and freight. Similar to the TIGER Program, PNRS Program funding levels, cycle frequency, and criteria are not reliable for long-term fiscal planning. The TIFIA Program provides credit assistance for nationally or regionally significant surface transportation projects. This assistance includes loans, loan guarantees, and lines of credit.⁷

On the operations side, Motor Carrier Safety Assistance Program (MCSAP) grants are directly available to states from the Federal Motor Carrier Safety Administration (FMCSA). MCSAP lead agencies can apply for Basic and Incentive grant funding by submitting a commercial vehicle safety plan. If funds are approved, the FMCSA will reimburse 80 percent of eligible costs incurred in a fiscal year. The California Highway Patrol (CHP) continues to pursue its goal of reducing commercial truck-at-fault fatal and injury collisions through aggressive enforcement and quality inspections through the use of MCSAP funds.

STATE FUNDING

PROPOSITION 1B

Voter-approved Proposition 1B enacted the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, which provided nearly \$20 billion in bonds for specified purposes.⁸ The following subset of programs from the bond act is linked to goods movement:

- Trade Corridors Improvement Fund (TCIF) Program,
- Goods Movement Emission Reduction Program, and
- California Ports and Maritime Security Grant Program.

TRADE CORRIDOR IMPROVEMENT FUND

The Trade Corridor Improvement Fund (TCIF) Program, managed by the California Transportation Commission (CTC), provides \$2 billion in bond proceeds, along with an additional \$500 million from the State Highway Account (SHA), to cover State transportation priorities. The CTC works with Caltrans, regional agencies, corridor coalitions, and project sponsors to conduct TCIF Program oversight, including project management and technical assistance in the development and delivery of freight projects. The initial set of TCIF projects, many of which were identified in the State's 2007 Goods Movement Action Plan (GMAP), were concentrated along high-priority freight corridors. The GMAP was prepared by the Business, Transportation and Housing Agency (now the California State Transportation Agency, CalSTA) and the California Environmental Protection Agency. The TCIF Program includes the following elements:

- Project funding is restricted to the project construction phase with a 50 percent matching fund requirement.
- Prior to fund allocation, projects must have already cleared all project development phases, such as environmental, design, and right-of-way.
- Types of projects include mainline rail, grade separation, seaport, highway, and intermodal projects.

The TCIF Program's \$2.0 billion in funding, plus approximately \$4.7 billion in additional federal (including TIGER funds), state, regional, local, and private funds resulted in a combined total program value of over \$7.2 billion as of December, 2014. The program is approaching the end of funding availability, with almost all of the projects either completed or in the construction phase. Project cost savings have created additional limited capacity to fund new projects; however, there is no successor state freight funding program after the TCIF Program ends.

Per TCIF guidelines, all TCIF projects were required to be under construction by December 31, 2013; however, in August 2013, to utilize savings from existing projects, CTC approved an extension of the TCIF Program, allowing new projects to receive an allocation through June 2014 and to award construction contracts by December 2014. This savings policy was again extended by the CTC in March 2014, allowing projects funded by savings until June 2016 to allocate and December 2016 to award. For detailed project information, including the most current quarterly report, see <http://www.catc.ca.gov/programs/tcif.htm> and <http://www.catc.ca.gov/1baccount/prop1breport.htm>.

On September 29, 2014, Governor Jerry Brown approved Senate Bill (SB) 1228, which continued the existence of the TCIF for the purpose of receiving and expending revenues from sources other than the Proposition 1B Bond Act, but it does not provide any additional revenue for the TCIF Program. This potential new revenue would be appropriated by the CTC for similar TCIF program purposes, such as infrastructure improvements that benefit the state's land ports of entry, seaports, and airports. Funds transferred from the Greenhouse Gas (GHG) Reduction Fund into the TCIF would be subject to all requirements of existing law applicable to those funds, including furthering the regulatory purposes of the California Global Warming Solutions Act of 2006. The text of SB 1228 can be found in Appendix H-2-3.

TCIF PROJECTS

Table 2 contains a list all 81 projects included in the TCIF Program as of December, 2014. These projects are in various stages of development or have been completed. Without this dedicated freight funding source, it is unlikely that such an extensive set of projects would have been implemented over the past several years.

Table 3: TCIF Project Match Funding Sources presents a diverse sample of the various types of funds needed to meet the project funding requirements. Some projects are funded by a single source in addition to TCIF program funds. Other projects are funded by multiple sources in addition to TCIF funding. The same fund source can often be used for many project types. This table, though not an exhaustive list of freight project financial resources, clearly shows that it is necessary to develop a custom funding package for each freight project. Much of the investment in freight infrastructure has come from the private sector and public-private partnerships. Freight rail is almost exclusively owned and operated by private rail lines, many shipping operations rely on funds from private, non-governmental sources, and warehousing and distribution centers, as well as trucking fleets, are primarily privately funded.

Table 3 also indicates that a tremendous range of project types can be funded from non-freight-specific funding sources. As was mentioned previously, the TCIF program served as the catalyst, drawing all these funding sources together to deliver the impressive set of freight projects. It is the expectation of the CFMP that if another freight funding program is provided at the State or federal level, similar results will occur. Detailed project information can be found at the Bond Accountability website: <http://www.bondaccountability.dot.ca.gov/bondacc/>.

TABLE 2. TRANSPORTATION CORRIDOR INVESTMENT FUND (TCIF) PROJECTS

Project Status as of December, 2014				
				
TCIF Project Number	Project Type	Nominated By	Project Description	Total Project Cost (x1,000)
2	Rail	Caltrans / BNSF	Richmond Rail Connector	\$22,650
3	Port	Port of Oakland	Outer Harbor Intermodal Terminals (OHIT)	\$499,241
4	Highway	Metropolitan Transportation Commission	I-880 Reconstruction, 29th & 23rd Avenues, Oakland	\$97,912
5	Highway	Metropolitan Transportation Commission	I-580 Eastbound Truck Climbing Lane	\$49,485
6	Rail	Caltrans/BNSF	Tehachapi Trade Corridor Rail Improvement	\$26,040
9	Rail	City of Sacramento	Sacramento Intermodal Track Relocation	\$81,292
10	Highway	San Joaquin Council of Governments	State Route 4 West Crosstown Freeway Extension Stage 1	\$165,678
11	Port	Port of Stockton / Contra Costa County	San Francisco Bay To Stockton Ship Channel Deepening Project	\$15,000
12	Highway	Metropolitan Transportation Commission	I-80 Eastbound Cordelia Truck Scales Relocation	\$88,392
15	Grade Separation	Alameda Corridor East Construction Authority	San Gabriel Valley Grade Separation Program	\$732,190
17	Grade Separation	City of Santa Fe Springs	Alameda Corridor East (ACE): Gateway-Valley View Grade Separation Project	\$65,077
18	Rail	Southern California Regional Rail Authority	New Siding On The Antelope Valley Line For Freight Trains	\$14,700
19	Highway	Port of Los Angeles	I-110 Freeway Access Ramp Improvement State Route 47/I-110 NB Connector Widening	\$42,268
20	Highway	Port of Los Angeles	I-110 Freeway & C Street Interchange Improvements	\$39,385
21	Highway	City of Commerce	Washington Boulevard Widening & Reconstruction	\$32,000
22	Grade Separation	Port of Los Angeles	South Wilmington Grade Separation	\$76,823
23	Port	Port of Long Beach	Gerald Desmond Bridge Replacement	\$ 1,288,101
24	Port	Port of Long Beach	Ports Rail System - Tier 1 (Pier F Support Yard)	\$30,176
25	Port	Port of Long Beach	Ports Rail System - Tier 1 (Track Realignment At Ocean Boulevard)	\$44,756
32	Port	Port of Los Angeles	Ports Rail System - Tier 1 (West Basin Road Rail Access Improvements)	\$137,656
34	Highway	Orange County Transportation Authority	State Route 91 Connect Aux. Lanes Through Interchange On Westbound State Route 91 Between State Routes 57 And I-5	\$62,977
35	Grade Separation	Orange County Transportation Authority	State College Boulevard Grade Separation	\$74,644
36	Grade Separation	Orange County Transportation Authority	Placentia Avenue Undercrossing	\$72,843
37	Grade Separation	Orange County Transportation Authority	Orangethorpe Avenue Grade Separation	\$108,595

TCIF Project Number	Project Type	Nominated By	Project Description	Total Project Cost (x1,000)
38	Grade Separation	Orange County Transportation Authority	Kraemer Boulevard Undercrossing	\$68,799
40	Grade Separation	Orange County Transportation Authority	Lakeview Avenue Overcrossing	\$87,873
41	Grade Separation	Orange County Transportation Authority	Tustin Avenue / Rose Drive Overcrossing	\$88,175
42	Grade Separation	City of Riverside	Columbia Avenue Grade Separation	\$33,003
43	Grade Separation	City of Corona	Auto Center Drive Grade Separation	\$32,675
44	Grade Separation	City of Riverside	Magnolia Avenue Grade Separation - UPRR	\$50,248
45	Grade Separation	City of Riverside	Iowa Avenue Grade Separation	\$32,000
46	Grade Separation	City of Banning	Sunset Avenue Grade Separation	\$33,042
47	Grade Separation	City of Riverside	Streeter Avenue Grade Separation	\$36,000
48	Grade Separation	Riverside County	Avenue 56 Grade Separation	\$29,394
50	Grade Separation	Riverside County	Grade Separation At Clay Street Railroad Grade Crossing	\$30,806
51	Grade Separation	City of Riverside	Riverside Avenue Grade Separation	\$32,154
53	Grade Separation	Riverside County	Grade Separation At Magnolia Avenue Railroad Grade Crossing - BNSF	\$51,609
54	Highway	City of Riverside	March Inland Cargo Port Airport - I-215 Van Buren Boulevard - Ground Access Improvements	\$66,776
56	Highway	San Bernardino Associated Governments	I-10 Cherry Avenue Interchange Reconstruction	\$77,806
58	Highway	San Bernardino Associated Governments	I-10 Riverside Ave Interchange Reconstruction	\$29,741
59	Grade Separation	San Bernardino Associated Governments	Ace Glen Helen Parkway Grade Separation	\$25,885
61	Grade Separation	San Bernardino Associated Governments	Ace South Milliken Avenue Grade Separation	\$75,649
63	Grade Separation	San Bernardino Associated Governments	Palm Avenue Grade Separation	\$25,123
64	Grade Separation	San Bernardino Associated Governments	Lenwood Road Grade Separation	\$31,154
66	Highway	City of Oxnard	US 101 Rice Avenue Interchange Reconstruction	\$73,597
67	Highway	San Diego Association of Governments	State Route 905	\$82,953
68	Highway	San Diego Association of Governments	State Route 11/Otay Mesa East Port of Entry	\$606,954
69	Highway	Port of San Diego	Bay Marina Drive At I-5 At-Grade Improvements	\$3,172
70	Port	Port of San Diego	10th Avenue/Harbor Drive At-Grade Improvements	\$4,551
72	Highway	Port of San Diego	Civic Center Drive At Harbor Drive And I-5 At-Grade Improvements	\$2,193
74	Rail	San Diego Association of Governments	Southline Rail Improvements - Yard Expansion	\$40,460

TCIF Project Number	Project Type	Nominated By	Project Description	Total Project Cost (x1,000)
75	Rail	San Diego Association of Governments	Southline Rail Improvements -Mainline Improvements	\$48,925
76	Rail	San Diego Association of Governments	Los Angeles-San Diego Rail Corridor Agency (Lossan) North Rail Corridor At Sorrento	\$ 44,000
77	Highway	Imperial Valley Association of Governments	Brawley Bypass State Route 78/111	\$70,305
81	Highway	Northern California Trade Corridors Coalition	Sperry Road Extension	\$56,582
82	Grade Separation	Northern California Trade Corridors Coalition	Marina Bay Parkway Grade Separation	\$42,180
83	Rail	Caltrans / BNSF / UP	Colton Crossing Project	\$ 138,536
84	Grade Separation	San Bernardino Associated Governments	Laurel Street/BNSF Railway Grade Separation	\$58,725
85	Grade Separation	Riverside County	Avenue 52 Grade Separation	\$29,866
86	Port	Port of Los Angeles	Alameda Corridor West Terminus Intermodal Railyard -West Basin Railyard Extension	\$72,987
87	Port	Port of Los Angeles	Cargo Transportation Improvement Emission Reduction Program	\$169,695
88	Grade Separation	Alameda Corridor East Construction Authority	Baldwin Avenue Grade Separation	\$77,391
89	Highway	Northern California Trade Corridors Coalition	Solano I-80/I-680/State Route 12 Connector	\$99,247
90	Port	Ventura County Transportation Commission / Alameda Corridor Transportation Authority	Hueneme Road Widening	\$2,924
91	Highway	Ventura County Transportation Commission	US 101 Improvements	\$46,525
92	Port	Port of West Sacramento	West Sacramento Rail Plan-Pioneer Bluff Bridge	\$22,525
93	Rail	San Diego Association of Governments	Sorrento Valley Double Track	\$36,381
94	Highway	Metropolitan Transportation Commission	US 101 Freeway Performance Initiative	\$ 24,764
95	Grade Separation	Alameda Corridor East Construction Authority	Ace Puente Avenue Grade Separation	\$99,019
96	Grade Separation	Alameda Corridor East Construction Authority	Ace Fairway Drive Grade Separation	\$142,213
97	Highway	County of Yuba	State Route 70 / Feather River Boulevard Interchange	\$19,350
98	Highway	Northern California Trade Corridors Coalition / Caltrans	US 50 Natoma Overhead Widening And Onramp Improvements	\$8,459
99	Grade Separation	Orange County Transportation Authority	Raymond Avenue Grade Separation	\$112,190
100	Highway	San Bernardino Associated Governments	Phase 2 Tippecanoe Interchange Improvements	\$59,789
101	Highway	San Joaquin Council of Governments / Caltrans	State Route 99 Ramp Improvements	\$3,040
102	Port	Port of Los Angeles	TraPac Terminal Automation-Automated Shuttle Carrier Maintenance & Repair	\$ 5,681
103	Rail	City of Fairfield	Fairfield/Vacaville Intermodal Station – New Track And Grade Separation	\$22,600

TCIF Project Number	Project Type	Nominated By	Project Description	Total Project Cost (x1,000)
104	Highway	San Diego Association of Governments	State Route 905/State Route 125 Northbound Connectors	\$ 26,157
105	Highway	City of Salinas	Sanborn Rd/US 101 Interchange Improvements and Elvee Drive Extension	4,100
106	Rail	Southern California Regional Rail Authority	Vincent Siding Extension at CP Quartz and Second Platform at Vincent/Acton Grade Station	17,400
107	Highway	San Joaquin Council of Governments/Caltrans	Southbound State Route 99 Ramp Improvements	8,410
			Grand Total	\$ 7,189,639

TABLE 3. TRANSPORTATION CORRIDOR INVESTMENT FUND (TCIF) PROJECT MATCH FUNDING SOURCES

Fund Source	Fund Type	Project Type	TCIF Project Number
Local	AMTRAK	Rail	9
Federal	ARRA - American Recovery and Reinvestment Act	Rail, Highway	9, 91
Private	BNSF Railway (formerly Burlington Northern Santa Fe Railroad)	Rail, Grade Sep	2, 6, 42, 45, 53, 59, 63, 64, 83, 84
Local	Bridge Tolls	Highway	12, 89
State	PTA - Public Transportation Account	Rail	6, 83
Local	Capital Corridor Funds	Rail	9
Federal	CMAQ - Congestion Management Air Quality	Rail, Grade Sep, Highway	9, 17, 35, 37, 40, 45, 46, 50, 53, 63, 85, 92, 94
Federal	Intermodal Surface Transportation Efficiency Act (ISTEA) Demonstration Funds	Highway	66
Federal	Pre-ISTEA Demonstration Funds	Highway	58
Federal	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETELU) Demonstration Funds	Grade Sep, Highway, Port	15, 51, 63, 66, 68, 69, 77, 85, 88, 90
Federal	Transportation Equity Act for the 21st Century (TEA21) Demonstration Funds	Grade Sep, Highway	4, 17, 35, 38, 40, 46, 51, 66, 67, 74, 88
Private	Developer	Port, Rail	3, 9
Federal	Federal Bridge Discretionary Program	Highway	23
Federal	Federal Railroad Administration (FRA) Section 9002	Rail	9
Federal	Federal Transit Administration (FTA) Section 5307	Grade Sep, Rail	21, 93
Federal	HBRR - Highway Bridge Replacement and Rehabilitation	Highway	23
Federal	High Speed Intercity Passenger Rail Program - FRA	Rail	9
Federal	HPP - Federal High Priority Project funds	Rail, Grade Sep, Highway	9, 17, 21, 23, 64, 70
Local	Local - Development Funds	Rail, Grade Sep, Highway	9, 42, 43, 44, 53, 54, 58, 59, 61, 63, 82
Local	Local - Community Reinvestment Bonds - City of Sac	Rail	9
Local	Local - Other	Grade Sep, Port, Highway, Rail	32, 35, 36, 42, 43, 44, 45, 46, 51, 54, 58, 66, 67, 68, 81, 85, 88, 90, 91, 92, 99, 100, 101, 103, 104, 106
Local	Local - Regional Transportation Impact Fees	Highway	10, 105
Local	Local – Transportation Development Act (TDA) Grant Riverside County Transportation Commission (RCTC)	Grade Sep	47, 53

Fund Source	Fund Type	Project Type	TCIF Project Number
Local	Local - Water Funds - City of Sacramento	Rail	9
Local	LTF - Local Transportation Funds	Port, Grade Sep, Highway, Rail	24, 25, 43, 45, 46, 48, 50, 53, 56, 58, 64, 70, 74, 75, 76, 82, 84, 97
Local	Measure 2 – Metropolitan Transportation Commission (MTC)	Highway	4, 12
Local	Measure 2 – Orange County Transportation Authority (OCTA)	Highway, Grade Sep	34, 35, 38, 41
Local	Measure A - RCTC	Highway	54
Local	Measure A - Sacramento County	Rail	9
Local	Measure I – San Bernardino Associated Governments (SANBAG)	Highway, Grade Sep	56, 58, 59, 61, 63
Local	Measure K – San Joaquin Council of Governments (SJCOG)	Highway, Grade Sep	10, 81
Local	Measure M - OCTA	Grade Sep	36, 37, 40, 99
Local	Measure R – Los Angeles (LA) Metro	Grade Sep	15
Local	Measure J – Contra Costa Transportation Authority (CCTA)	Grade Sep	82
Federal	NCPD - National Corridor Planning and Development Program	Grade Sep	15, 81
State	Other Proposition 1B	Rail, Highway, Grade Sep	9, 23, 53, 61, 64, 99
Federal	PNRS - Projects of National and Regional Significance (Section 1301)	Rail, Highway, Grade Sep	9, 23, 43, 45, 50, 63
Local	Port - General Revenue Funds	Port, Grade Sep, Rail	19, 20, 22, 32, 86, 102
Local	Port - Other	Port, Highway	3, 11, 23, 72
Local	Proposition C Sales Tax – Los Angeles County Metropolitan Transportation Authority (LACMTA)	Rail, Port, Grade Sep, Highway	18, 19, 20, 21, 22, 23
State	PUC - Public Utilities Commission Section 190 Grade Separation Program	Grade Sep	15, 17, 42, 43, 44, 45, 47, 51, 53
Federal	RSTP - Regional Surface Transportation Program	Highway, Grade Sep	23, 40, 41, 45, 46, 47, 51, 64, 90, 91, 97, 105
Local	SCRRRA - Southern California Regional Rail Authority	Rail	18
State	SHOPP - State Highway Operations and Protection Program	Highway	4, 12, 23, 94, 100, 101, 107
State	STIP - State Transportation Improvement Program	Highway	4, 56, 58, 66, 76, 77, 89, 91
State	TCRP - Traffic Congestion Relief Program	Highway, Grade Sep	12, 17, 36, 84
Federal	TIGER - Transportation Investment Generating Economic Recovery	Port, Rail	3, 24, 25, 83
Private	UP - Union Pacific Railroad	Grade Sep, Rail, Port	44, 47, 61, 83, 84, 92
Federal	US Army Corps of Engineers	Port	11
Federal	CBIP - Coordinated Border Infrastructure Program	Highway, Rail	68, 74, 104
Federal	FTA 5309	Rail	74

Fund Source	Fund Type	Project Type	TCIF Project Number
Federal	Federal Transportation & Community System Preservation Pilot Program	Highway	91

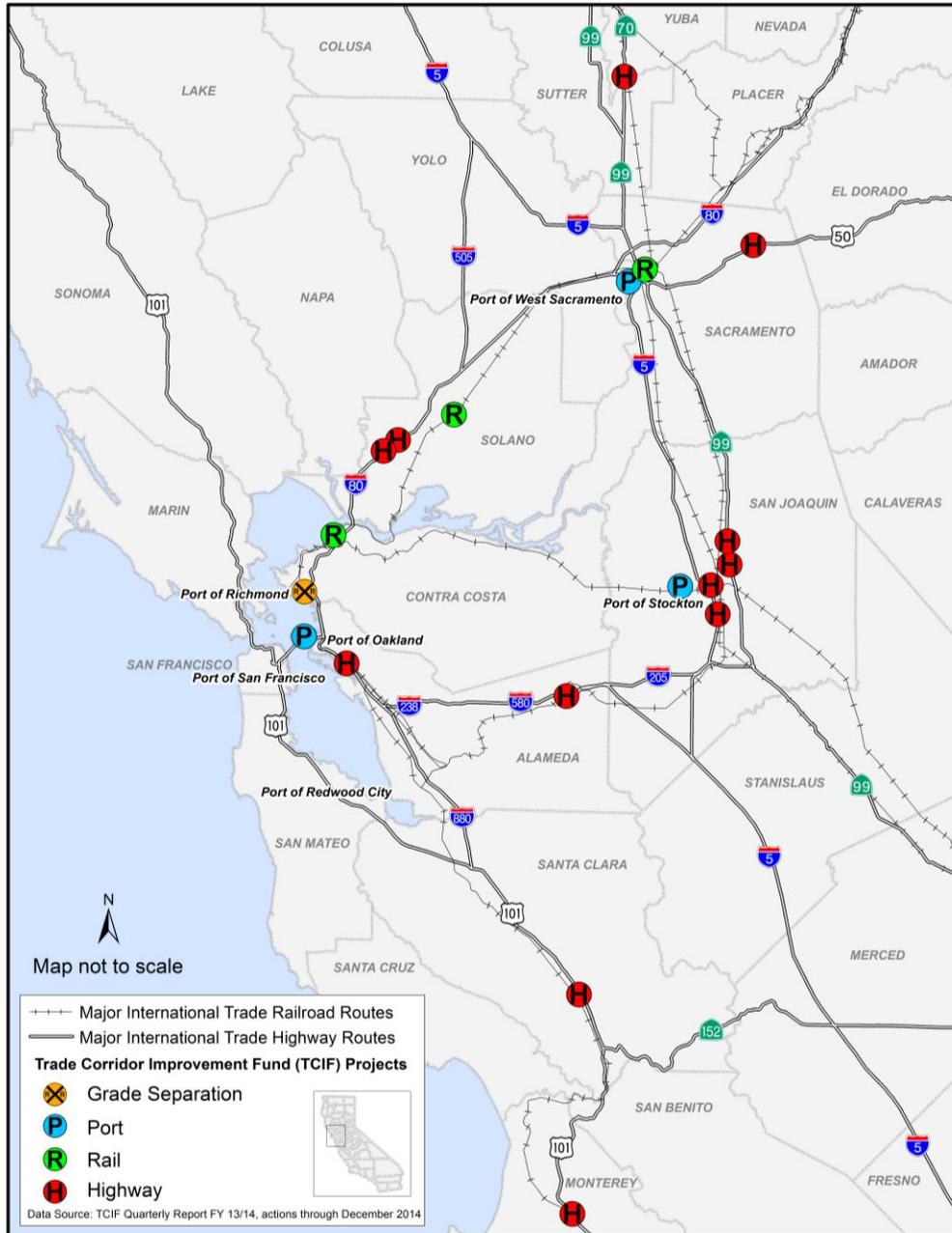
As shown on the following two maps, TCIF projects are concentrated in Northern and Southern California. Rather than distributing limited TCIF funding evenly across the state, the CTC used a corridor-based approach that emphasized corridors with higher volumes of freight movement and complemented the goods-movement planning work already completed. Regional agencies within each corridor created coalitions to select individual projects and to administer TCIF funds for their respective corridors. This successful concept ensures that the regional agencies within the corridor have a platform to discuss their needs and to prioritize projects. It has been well received by both the regional agencies and the TCIF Program, and it serves as a good model for any future freight funding program.

FIGURE 9. STATE ROUTE 70, SUTTER COUNTY – A PROPOSITION 1B PROJECT



Source: Caltrans

FIGURE10. NORTHERN CALIFORNIA TRANSPORTATION CORRIDOR INVESTMENT FUND (TCIF) PROJECTS



Source: Caltrans

TCIF Project Breakdown:

- **Seaports:** 3 Projects - \$537 Million
- **Railroads:** 3 Projects - \$127 Million
- **Grade Separations:** 1 Project - \$42 Million
- **Highways:** 12 Projects - \$625 Million

FIGURE 11. SOUTHERN CALIFORNIA TRANSPORTATION CORRIDOR INVESTMENT FUND (TCIF) PROJECTS



Source: Caltrans

Project Breakdown

- **Seaports:** 9 Projects - \$1.756 Billion
- **Railroads:** 8 Projects - \$366 Million
- **Grade Separations:** 29 Projects - \$2.413 Billion
- **Highways:** 16 Projects - \$917 million

GOODS MOVEMENT EMISSION REDUCTION PROGRAM

This \$1 billion program is a partnership between California Air Resources Board (ARB) and local agencies to reduce air pollution emissions and health risks from freight movement along California's major trade corridors. The program offers financial incentives to owners of equipment used in freight movement to upgrade to cleaner technologies. Funded projects must achieve early or extra emission reductions not otherwise required by law or regulation. A majority of funding has been spent to upgrade trucks, but locomotive, harbor craft, electrical infrastructure for ships at berth and truck stop/distribution centers projects have also received funding. Additional information on the Goods Movement Emission Reduction Program is located at: <http://www.arb.ca.gov/bonds/gmbond/gmbond.htm>.

CALIFORNIA PORT AND MARITIME SECURITY GRANT PROGRAM

The California Port and Maritime Security Grant Program (CPMSGP) directs \$100 million for projects that maximize the maritime community's ability to prevent and/or recover from natural and unnatural disasters and also boost the economy by creating jobs. Ports and maritime organizations using this business model will be better positioned to save lives, protect the environment, and sustain continuity of operations. Funds in this account were allocated by the California Emergency Management Agency. Additional information on the CPMSGP can be found at: <http://www.bondaccountability.dot.ca.gov/bondacc/MainMenuAction.do?%3E&page=1000062>.

STATE OF CALIFORNIA INCENTIVE PROGRAMS

The State of California runs a number of additional programs that provide funding for research, development, commercialization, and deployment of cleaner vehicles, fuels, and fueling infrastructure. Each of these programs has different statutory mandates and goals, but collectively they help modernize the freight system and reduce the air quality and climate change impacts from the freight system in California. In addition to these State programs, local air districts in California provide complementary funding to reduce emissions from transportation sources, including freight.

In addition to Goods Movement Emission Reduction Program funds, ARB oversees freight-related programs, such as the Carl Moyer Memorial Air Quality Standards Attainment Program and the Air Quality Improvement Program (AQIP), which are implemented in partnership with local air districts. Over the next several years, these programs will distribute hundreds of millions of dollars via grants to reduce emissions from vehicles and equipment including on-road trucks, locomotives, harbor craft, and cargo handling equipment. Funds from the proceeds

of ARB's Cap-and-Trade program will be used to reduce GHG emissions. These and other State programs are discussed next.

THE CARL MOYER MEMORIAL AIR QUALITY STANDARDS ATTAINMENT PROGRAM

The Carl Moyer Program is a grant program run by ARB and local air districts that funds the incremental cost of cleaner-than-required engines, equipment, and other sources of air pollution. This program provides incentives to obtain early or extra emission reductions – especially targeting emission sources in environmental justice communities and areas disproportionately impacted by air pollution. Its primary objective is to obtain cost-effective and surplus emission reductions to be credited toward California's legally enforceable obligations in the State Implementation Plan (SIP) – California's road map for attaining the health-based national ambient air quality standards. Many of the funded engine retrofits and replacements are used in freight transport. In the first 14 years following its inception in 1998, the Carl Moyer Program provided over \$980 million in State and local matching funds. Additional information on the Carl Moyer Program can be found at: <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

AIR QUALITY IMPROVEMENT PROGRAM

The ARB's Air Quality Improvement Program (AQIP), created by Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), is an incentive program with an annual budget of about \$25 million to fund clean vehicle and equipment projects that reduce criteria pollutants and air toxic emissions, often with concurrent climate change benefits. ARB has focused AQIP investments in technology-advancing projects that also provide immediate emission reductions, including initial deployment of hybrid and zero-emissions trucks, zero-emissions and plug-in hybrid passenger cars, and other advanced technology demonstrations critical to meeting California's long-term air quality and climate change goals. AQIP investments are an important component in the transformation of the California vehicle fleet to near-zero- and zero-emissions vehicles. Additional information on AQIP is found at: <http://www.arb.ca.gov/msprog/aqip/aqip.htm>.

CAP-AND-TRADE PROGRAM

The ARB has developed a market-based Cap-and-Trade Program as a key part of its greenhouse gas reduction strategy to meet the requirements of the Global Warming Solutions Act of 2006 [Chapter 488, Statutes of 2006 (AB 32, Núñez/Pavley)]. A portion of the allowances required for compliance with the Cap-and-Trade Program are sold at auction, and the proceeds from sale of the State-owned allowances at these auctions will be used to fund projects that support efforts to reduce GHG emissions and have the potential to leverage national funding. Some of these investments will be aimed at reducing freight-related emissions. For example, the FY 2014-15 State Budget appropriated \$200 million to ARB for low-carbon transportation projects that

reduce greenhouse gas emissions and accelerate the commercialization of advanced emission reduction technologies for freight and passenger transportation, with a priority given to disadvantaged communities. Additional information on the investment of auction proceeds is located at: <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm>.

ALTERNATIVE AND RENEWABLE FUEL AND VEHICLE TECHNOLOGY PROGRAM

The California Energy Commission's (CEC) Alternative and Renewable Fuel and Vehicle Technology Program, also created by AB 118, provides nearly \$100 million annually through 2024 to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the State's climate change goals. Over \$400 million has been invested to date in more than 250 projects, with approximately 30 percent of the funding going to advanced-technology truck projects. Funding over the life of the program will be about \$1.5 billion for advanced technologies, low-carbon fuels, fueling infrastructure, and vehicle projects. More information on the Alternative and Renewable Fuel and Vehicle Technology Program is located at: <http://www.energy.ca.gov/altfuels/index.html>.

ELECTRIC PROGRAM INVESTMENT CHARGE PROGRAM

Programs such as the CEC's Electric Program Investment Charge (EPIC) Program, its predecessor – the Public Interest Energy Research (PIER) Program – and others, provide investments in applied research and development, technology demonstration and deployment, and market facilitation for clean energy technologies. Some of these investments are aimed at advancing technology in the freight sector. For example, the CEC has funded the California Hybrid, Efficient and Advanced Truck (CalHEAT) Research Center, a California-based resource center for research, development, demonstration, and commercialization of advanced, efficient truck technologies and systems. This research center works in partnership with diverse stakeholders to develop and implement an overall research and market transformation plan to inform manufacturers and suppliers on the status of clean-truck technology, gaps, and needs for commercialization, as well as to guide State investment and funding for hybrid, efficient, and advanced truck technologies. More information on CEC research is located at: <http://www.energy.ca.gov/research/>. For more information about CalHEAT, see <http://www.calstart.org/Projects/CalHEAT.aspx>.

The ARB, the CEC, regional air districts, and other public agencies provide competitively based funding for freight projects that achieve specific goals associated with the funding source program, as the previous examples attest. These funds are largely focused on projects that address air quality, GHG emissions, alternative energy, new engine technologies, and more efficient freight operations. These have been essential resources for projects that have achieved dramatic emissions reductions in drayage trucking fleets and at seaports and rail yards. Since 2006, diesel particulate matter emissions have been reduced by over 70 percent; with

levels still decreasing in the areas surrounding California’s largest seaports – largely due to regulations imposed by ARB and voluntary measures by the ports of Los Angeles, Long Beach, and Oakland.

FIGURE 12. PORT OF LOS ANGELES – ELECTRIC TRUCK PROTOTYPE, A ZERO-EMISSIONS VEHICLE



Source: Port of Los Angeles

REGIONAL FUNDING

Voter-approved transportation sales tax measures at the county level sometimes include freight projects or projects that benefit freight as well as passenger movement. Some of these tax revenues have been and are being used to supplement and leverage additional State and federal funds. Seaports, airports, and railroads provide their own project funding through fees charged to customers. Many of these sources provide funds only for maintenance, operation, or expansion of sponsor facilities, or for off-site mitigation to address impacts from the sponsor facilities.

The State's four largest metropolitan planning organizations – Southern California Association of Governments (SCAG), Metropolitan Transportation Commission (MTC), San Diego Association of Governments (SANDAG), and Sacramento Area Council of Governments (SACOG) – along with a coalition of all eight San Joaquin Valley MPOs and smaller regional planning agencies and localities have prepared or are preparing regional freight plans that include freight project lists articulating freight goals and objectives for their respective regions. As new regional freight planning efforts move forward, it is expected that the resulting plans will be consistent with the CFMP vision and goals while also addressing other regional and local needs. Having a broadly defined State freight plan and numerous detailed regional and local freight plans with consistent goals will strengthen the importance of freight issues within the transportation planning arena to support the need for, and help justify the development of, dedicated freight funding programs at the national, State, and regional levels. As efforts move forward to create permanent, dedicated freight funding sources, there is a clear need for project sponsors to remain eligible to apply to multiple funding sources currently available, as listed on the following pages.

CONCLUSION

While several freight project funding sources have accomplished impressive results, freight projects, in general, are not well funded in California. The projects discussed in this chapter received limited, one-time, or short-term funding. The TIGER and PNRS funds, while they can be critical components of a complete funding package, are not predictable, reliable, and continuing resources. The TCIF Program is winding down, and no long-term, comprehensive freight funding program has been established to replace it. ARB, CEC, and regional air district funds are focused more narrowly to achieve important, specific objectives respective to each of the agencies' programs.

California's freight industry is a vital component of the state's economic health. Creation of an ongoing program to provide reliable, substantial public funding for freight projects is critical if the industry is to remain competitive, continue its mitigation of community and environmental impacts, and retain its extensive employment base. The program cannot redirect existing transportation funding; those resources are already insufficient to meet current needs. New funds must be found and specifically dedicated to freight transportation projects to augment existing funding sources, not to replace that funding. The total amount of freight funding needs to increase substantially.