



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 4a

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Memorandum

TO: Planning Committee

DATE: January 5, 2018

FR: Executive Director

RE: Goods Movement Investment Strategy

Background

The goods movement sector supports nearly one-third of related industries in the Bay Area and is a key component of the region's economic strategy for increasing access to living-wage jobs that have low educational barriers to entry. The industry is also growing – today's almost \$1 trillion in freight flows in Northern California are projected to double by 2040. The Bay Area is home to major goods movement infrastructure that has local, regional, statewide and national significance, including highways designated as part of the National Primary Freight Network, two Class 1 railroads, and the Port of Oakland.

MTC and the Alameda County Transportation Commission (ACTC) adopted goods movement plans in 2016. Subsequently, a regional goods movement executive team— including MTC, ACTC, Port of Oakland, the Bay Area Air Quality Management District, Santa Clara Valley Transportation Authority, Solano Transportation Authority, Contra Costa Transportation Authority, and the East Bay Economic Development Authority— worked to develop a near-term (10 year) investment strategy to implement these plans. An investment strategy will help the region in the following ways:

1. *Deliver projects that can improve mobility and economic vitality.* The strategy will help implement projects and programs crucial to achieving Plan Bay Area 2040's performance targets, including reducing delay on the regional freight network, increasing middle-wage jobs, and reducing per capita GHG emissions.
2. *Address community and environmental concerns of freight.* The strategy also sets forth a commitment to reduce impacts of pollution on communities, mitigate emissions from existing technologies, and adopt cleaner technologies. These efforts would be led by the Bay Area Air Quality Management District, in coordination with MTC, ACTC, Port of Oakland, and public health and environmental groups.

3. *Enable the region to coordinate and compete for state and federal fund sources.* Over the past couple years, three new major state and federal funding programs with a direct nexus to freight have been initiated. These include the National Highway Freight Program, the National Significant Freight and Highway Projects Discretionary Program (FASTLANE/INFRA), and the SB1 Trade Corridors Enhancement Program. Staff estimates that the region is positioned to receive over \$1 billion in funding over the next 10 years from these funding sources alone.

Draft Revenues and Project List

Attachment 1 includes a draft estimate for revenues likely to be available for regional goods movement projects over the next 10 years. The revenues — totaling \$3.8 billion — include federal, state, regional, and local sources. The basis for most of the revenue is the Plan Bay Area 2040 forecast and input from other regional and local funding partners.

Attachment 2 includes a fiscally constrained draft list of projects, programs and costs that could comprise the goods movement investment plan. These projects support recommended investments included in Plan Bay Area 2040, the Bay Area and Alameda County Goods Movement Plans, and were compiled in close coordination with regional partners via the Goods Movement Executive Team.

Next Steps

Staff will seek Commission approval of the strategy next month. Moving forward, MTC will use the strategy as a way to help guide regional decision-making around upcoming competitive funding sources.



Steve Heminger

Attachments:

- Attachment 1: Draft 10-Year Revenues for Bay Area Goods Movement
- Attachment 2: Draft Bay Area Goods Movement Investment Strategy
- Presentation

Fund Source	10-year estimate	Notes
National Highway Freight Program	\$260	Base year is FY 2015-16 and assumes a growth rate of 2% to 3%. Assumes the Bay Area receives 19% of the state program.
National Significant Freight and Highway Projects Discretionary Program (FASTLANE / INFRA)	\$260	Base year is FY 2015-16 and assumes a growth rate of 2% to 3%. Assumes the Bay Area receives 2.5% of the national program.
STP/CMAQ	\$50	Assumes funding for goods movement projects at 5% of PBA2040 forecast. Estimate begins after OBAG2 (e.g. starting with FY23)
RTIP/ITIP	\$140	Based on uprogrammed SB1 STIP revenues from FY 20 to FY 27; assumes 20% would be spent on freight corridors and on freight projects.
SB1 – Trade Corridors	\$540	Assumes Bay Area receives 20% of annual \$300 million earmark that would be begin in FY2019.
SB1 – Solutions for Congested Corridors	\$90	Assumes \$250M a year x 9 years. Assumes Bay Area receives 20% of the program and 20% would be spent on freight elements.
SHOPP	\$170	Assumes 6.5% of SHOPP will be spent on “mobility” enhancements, per the 2016 SHOPP distribution. Assumes 50% of the “mobility” funding would be spent on freight corridors.
Future Bridge Toll Increases (RM3)	\$990	Assuming the SB 595 expenditure plan, assumes \$160M from regional programs plus additional revenues for corridor-specific projects
TFCA - 40% counties	\$5	Assumes funding for goods movement projects at 5% of PBA2040 forecast.
TFCA - 60% regional	\$10	Assumes funding for goods movement projects at 7% of PBA2040 forecast.
Carl Moyer	\$10	Assumes 1% of funding for goods movement projects and assumes authorization continues after 2023.
Mobile Source Incentive Funds	\$8	Assumes authorization continues after 2023. Assumes funding for goods movement projects at 10% of forecast.
AB 617/134	\$20	Assumes one-time funding (40% of \$50M total to the region) for cleaning up trucks and other goods movement-eligible projects
Proposition 1B	\$20	Assumes funding to be awarded to a final tranche of goods movement emissions-reduction projects
Low Carbon Transportation Program	\$10	Assumes funding to the Bay Area from this Cap and Trade source for advanced freight demonstrations
Alameda County Measure BB	\$700	Assumes that 33% of BB would be spent on goods movement, congestion relief on freight corridors, and technology development.
Other sources: private sources, Local match for state and federal sources, other federal sources	\$500	Assumes roughly 30% match for certain competitive programs, and includes private sources of funding for trade projects. Includes \$9.6M in FHWA ATCMTD funds for GoPort ITS.
Total	\$3,783	

All values in millions of dollars

The 10-year estimate covers FY 17-18 through FY 26-27, unless noted.

Bay Area Goods Movement Investment Strategy - DRAFT

#	Focus Area	Project Name	Project Description	Project Cost (\$millions)
1	Community Protection	Equipment-Based Reduction Projects	<p>Categories for upgrade to zero or near-zero emission (focused on West Oakland, but could also include other communities) include:</p> <ul style="list-style-type: none"> -Yard trucks -Tug boats (incl shore power) -On-road Class 5/6 trucks -Truck retirement project -Locomotives (Class 1 &3) -Ocean-going vessels (bonnets and electrification) -Forklifts -Transport Refrigeration Units -Top/Side Pick Cranes 	\$200
2	Community Protection	Port of Oakland Non-Equipment-Based Reduction Projects	<p>Includes the following components:</p> <ul style="list-style-type: none"> -Port Electrical Grid Improvements -Facility upgrades and emission reductions -Supply Chain Efficiencies- extended Marine terminal hours, grey chassis pool, gate modifications, and technology solutions -Extended gate hours/days 	\$100
3	Community Protection	Freight Emission Reduction Action Plan: Recommended Regional Demonstrations	<p>Urban Delivery Demonstration Project: Range Extended Electric Vehicle (REEV) for Medium Heavy Duty (Class 5 - 6) Trucks.</p> <p>Rail Demonstration Project: Yard Switcher Using Dual Mode Battery-Assisted Locomotive in West Oakland and Richmond.</p> <p>Grow Bay Area Near-Zero and Zero Emission Vehicle R&D</p> <p>Public/Private Clean Truck Collaborative</p>	\$40
4	Community Protection	Community Impact reduction through "receptor-side" mitigations	Invest in "receptor side" mitigations to reduce impacts on "fence-line" communities, including, for example, planting trees or other pollution catchments between sources and communities, investing in improved air quality, air filtration, HVAC etc systems for sensitive facilities located near freight corridors.	\$10
Community Protection Subtotal				\$350

Bay Area Goods Movement Investment Strategy - DRAFT

#	Focus Area	Project Name	Project Description	Project Cost (\$millions)
5	Freight Roadway	Interstate 80 Corridor	Includes: I-80/I-680/SR12 Interchange - Packages 2-7 West Bound Truck Scales (Solano County) Ashby Interchange Improvements Gilman Street Interchange Improvements	\$640
6	Freight Roadway	Interstate 880 Corridor	Includes: Whipple Road and Industrial Blvd Interchange Improvements Winton Avenue Interchange Improvements A Street Interchange Improvements	\$200
7	Freight Roadway	Interstate 680 Corridor	Includes: SR-4 Interchange Improvements - Phase 3 SR-84 Interchange Improvements + SR-84 Widening South County Access (262/Mission Blvd Cross Connector)	\$440
8	Freight Roadway	Interstate 580 Corridor	Includes: Interchange improvements at Vasco Road Integrated Corridor Management between Foothill Road and Isabel Avenue I580/680 interchange improvements- Planning	\$310
9	Freight Roadway	US 101 Corridor	Includes: SR-25 Interchange and US-101 Widening to 6 lanes SR-92 Interchange Improvements	\$460
10	Freight Roadway	SR-37 Corridor	SR-37 Improvements	\$100
11	Freight Roadway	SR-152 Corridor	SR-152 Environmental and Planning Studies	\$30
12	Freight Roadway	Local road and county road access and safety program on truck routes	Includes: Kirker Pass Road - NB Truck Climbing Lane Vasco Road Safety Improvements - Phase 2 Byron Highway and Camino Diablo Road	\$40
Freight Roadway Subtotal				\$2,220

Bay Area Goods Movement Investment Strategy - DRAFT

#	Focus Area	Project Name	Project Description	Project Cost (\$millions)
13	Rail Strategy	Port of Oakland: Go Port	The GoPort project will reduce emissions from idling trucks, increase Port operational efficiency, and provide significantly improved truck and rail access. Project includes: 7th Street Grade Separation West 7th Street Grade Separation East Port of Oakland ITS improvements Industrial Parkway Connection	\$500
14	Rail Strategy	Rail Connectivity Improvements	Shinn Connection New wye connections at Lathrop and Stockton Junctions - not included in project cost since revenue assumptions are not inclusive of SJ County	\$240
15	Rail Strategy	Safety Improvements	Grade crossing improvements at Jack London Square and in Emeryville - City of Berkeley Railroad Crossing Improvements City of Berkeley Gilman Street Grade Separation City of Fremont Railroad Quiet Zones	\$130
16	Rail Strategy	Railroad Grade Crossing Improvements and Grade Separations	Additional Grade Crossing Improvements	\$150
17	Rail Strategy	Targeted Operational Improvements	City of Hercules Third Track Upgrade water side drill track to 3 mainline between Port and Bancroft Track improvements to Coast Subdivision	\$60
18	Rail Strategy	Port of Oakland	Includes: OAB Phase 2 improvements (logistics warehousing, transloading)	\$150
19	Rail Strategy	SMART	Freight rail improvements to the SMART corridor including double-tracking select segments.	\$10
Rail Strategy Subtotal				\$1,240
20	Other	Oakland Airport	Includes: Oakland International Airport Perimeter Dike	\$20
Other Subtotal				\$20
Draft Investment Plan Total: 10-Year				\$3,830

Bay Area Goods Movement Investment Strategy



Planning Committee
January 12, 2018

The Regional Goods Movement Plan, adopted in February 2016, evaluated needs and prioritized opportunities for the Bay Area freight system



The Goods Movement Plan committed MTC to develop an investment strategy

- Modeled off efforts like the Regional Transit Expansion Program (MTC Res. 3434)
- To set forth a commitment to addressing environmental and community impacts (MTC Res. 4225)
- Developed in partnership with county and regional agencies, including CMAs, BAAQMD, and public health advocates



Plan Bay Area 2040, released in July 2017, reflects the priorities of the Goods Movement Plan, including over \$5 billion in these investments



Increase Port of Oakland efficiency



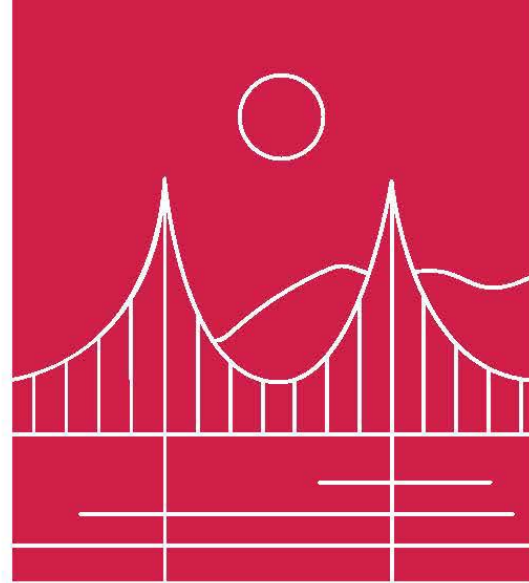
Reduce emissions



Reduce neighborhood impacts



Strategic highway investments



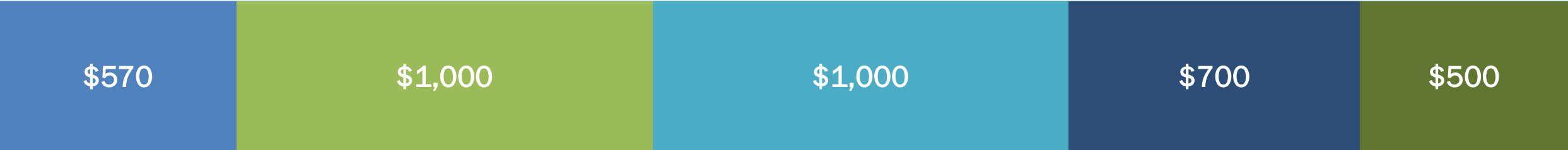
Why develop a near-term investment strategy for goods movement?

- Enable the region to coordinate and compete for state and federal fund sources
- Deliver projects that can improve mobility and economic vitality
- Address community and environmental concerns of freight



\$3.8 billion is estimated to be available over the next 10 years for Bay Area goods movement projects

■ Federal ■ State ■ Regional ■ Local ■ Other

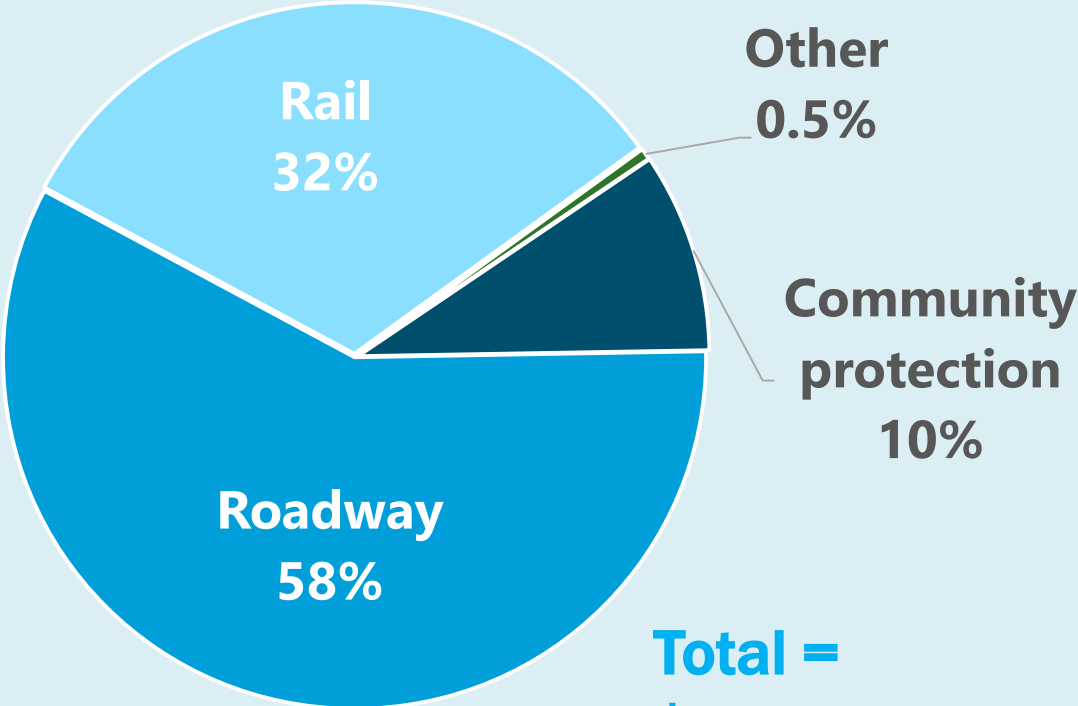


\$3.8 billion over 10 years



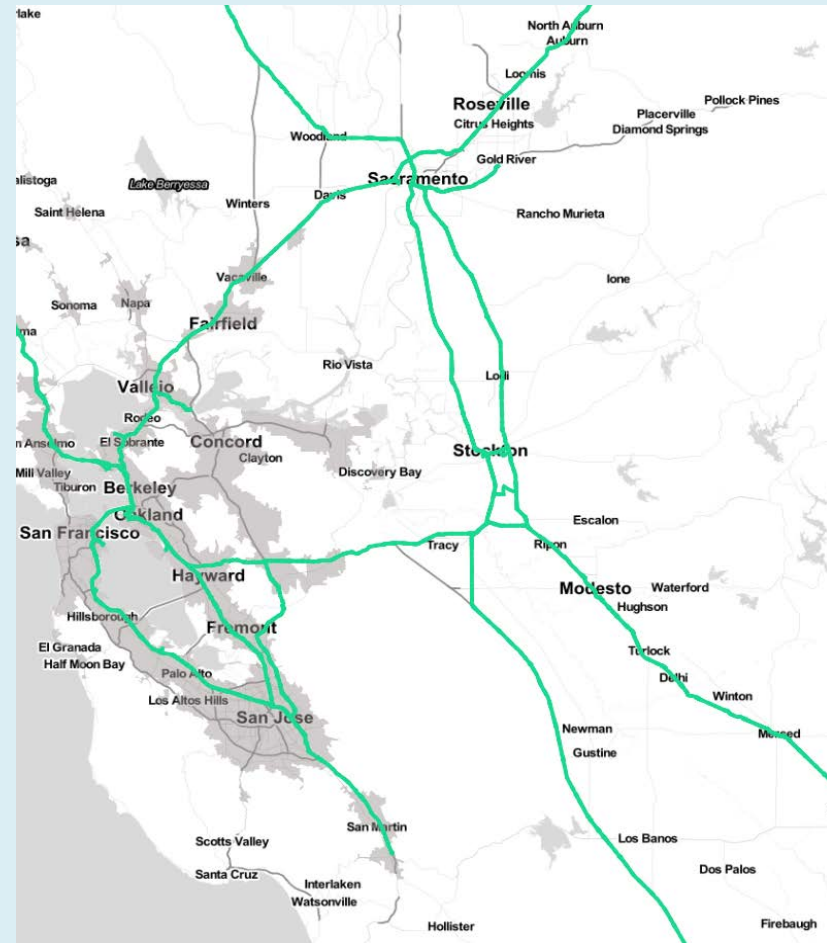
The region has developed a corresponding set of investments crucial to achieving Plan Bay Area 2040's performance targets

	Goal	Draft Plan Performance		
Goods Movement/Congestion Reduction	-20%	-29%		
Middle-Wage Job Creation	+38%	+43%		
Climate Protection	-15%	-16%		
Open Space and Agricultural Preservation	100%	100%		
Adequate Housing	100%	100%		
Transit Maintenance	-100%	-75%		
Non-Auto Mode Shift	+10%	+3%		
Affordable Housing	+15%	+3%		
Healthy and Safe Communities	-10%	-1%		
Access to Jobs	+20%	-0%		
Road Maintenance	-100%	+6%		
Displacement Risk	+0%	+5%		
Housing + Transportation Affordability	-10%	+13%		WORST



Total = \$3.8 Billion over 10 years

Improve truck mobility through roadway bottlenecks, primarily at interchanges along the Primary Highway Freight System



Focus Area 1:

Roadway

\$2.2 billion (58%)

**Includes
improvements to:**

- I-80 corridor (\$640 million)
- I-880 corridor (\$200 million)
- I-580 corridor (\$310 million)
- SR-37 and SR-152 Planning & Improvements (\$130 million)

Increase economic competitiveness of the Port of Oakland while addressing increasingly pressing tradeoffs between freight and commuter rail



Focus Area 2:

Rail

\$1.2 billion (32%)

Includes:

- Port of Oakland Go Port (\$500 million)
- Rail Connectivity Improvements (\$230 million)
- Safety Improvements (\$130 million)

Address community and environmental impacts of freight and fund regional demonstration pilots



Focus Area 3:

Community protection
\$350 million (10%)

Includes:

- Equipment-based Reductions
- Regional Demonstrations (Truck and Rail)
- Community impact reduction receptor-side mitigations

The projects in the investment strategy span the Bay Area, with a significant portion of investment in Alameda county

Projects Not Mapped

- West Oakland Equipment-Based Reduction Projects
- Port of Oakland Emission Reduction Projects
- Freight Emission Reduction Action Plan: Recommended Regional Demonstrations
- Community Impact reduction through "receptor-side" mitigations
- Additional Grade Crossing Improvements
- Track Improvements to Coast Subdivision



While the investment strategy is fiscally constrained, breaking down the eligibility of forecasted revenue sources shows surpluses and deficits across the project categories

Strategy	Revenues	Projects	Difference
Emissions Reduction	\$250	\$350	\$(100)
Freight Roadway	\$2,400	\$2,200	\$200
Rail Strategy	\$500	\$1,250	\$(750)
Flexible	\$650		\$650
Total	\$3,800	\$3,800	\$ -

Regional Measure 3 presents a big opportunity for freight

- Regional Measure 3 (RM 3), authorized by SB 595 (Beall) would allow for a toll increase of up to \$3 to be placed on the ballot in all nine Bay Area counties.
- SB 595 includes a \$4.5 billion expenditure plan, including 35 capital projects (**nearly \$1 billion for goods movement projects**)
- The toll increase may be phased in over a number of years, or a lesser amount could be placed on the ballot; however, the full \$4.5 billion requires a \$3 toll increase to ultimately be approved.
- RM 3 could appear on the ballot as early as June 2018.



Next Steps

- Strategy will be presented for action to the MTC Commission in February
- Partners must work now to coordinate on pursuing funding opportunities to deliver the strategy (e.g. SB1 Trade Corridors)
- Community protection projects will be an area of specific focus for BAAQMD, the Port, MTC, and ACTC

