

## Agenda Item 5



METROPOLITAN  
TRANSPORTATION  
COMMISSION

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### *Memorandum*

TO: Policy Advisory Council

DATE: January 7, 2015

FR: Carolyn Clevenger, Principal Planner

W.I. 1124

RE: Regional Goods Movement Plan Update

### **Background**

Plan Bay Area identifies goods movement as a key work item to advance as part of Plan implementation and to develop further for the Plan update in 2017. In response, MTC staff has initiated an update to the Regional Goods Movement Plan, as discussed at your September meeting. This memo and attached presentation slides provide an update on that work.

### **Project Update**

The primary focus of work for the past few months has been to continue stakeholder outreach, complete an assessment of baseline conditions, and begin the needs assessment.

#### *Stakeholder Outreach*

Staff and/or the consultant team have conducted numerous meetings with stakeholder groups to discuss their issues and needs related to goods movement. The stakeholders have included industry groups and the business community, shippers and receivers, logistics service providers, trucking firms and organizations, labor, community and social justice groups, environmental and public health organizations, the county congestion management agencies, the Partnership Technical Advisory Committee (PTAC) and the Regional Advisory Working Group (RAWG). The project team will continue to engage these stakeholders, as well as additional stakeholders, on an ongoing basis over the course of the project.

MTC has created a technical advisory committee (TAC) composed of members of PTAC and RAWG to advise staff on the project. The TAC is providing technical input on all deliverables and will inform the Plan's recommendations and ongoing advocacy. The TAC is composed of staff from regional agencies, congestion management agencies, ports, the business community, and public health and environmental organizations. The TAC will meet approximately every other month over the course of 2015.

MTC and the Alameda County Transportation Commission (ACTC) have jointly hosted two roundtable events open to the public. The roundtables are meant to foster dialogue between stakeholders from all groups and help build a platform for advocacy for goods movement within the region. On July 23<sup>rd</sup>, MTC and ACTC hosted a kick off roundtable event to bring stakeholders from all groups together to discuss what goods movement is in the region, key trends, and what issues and opportunities are critical to the success of the planning efforts. A second roundtable was held on Saturday, November 15<sup>th</sup> in West Oakland to focus on

community issues related to the impacts of goods movement on those communities adjacent to goods movement activity. Additional roundtables will be held throughout 2015.

The baseline assessment of goods movement in the Bay Area is nearing completion. The analysis builds upon work recently completed for a Caltrans District 4 study to support the state freight plan. The baseline assessment provides an overview of goods movement in the Bay Area – the types and amounts of various goods transported, the key facilities, highways and rail corridors, and the role goods movement plays in the region’s economy. In addition, the analysis looks forward to identify growth projections that inform the needs assessment that will be conducted this summer. A draft task memo is posted on MTC’s website and available for public review ([http://files.mtc.ca.gov/pdf/rgm/Draft\\_Task2C\\_Infrastructure\\_Dec2014.pdf](http://files.mtc.ca.gov/pdf/rgm/Draft_Task2C_Infrastructure_Dec2014.pdf)).

### **Needs Assessment**

The needs assessment includes analysis of the needs, gaps, deficiencies and opportunities for the goods movement system in the Bay Area. The needs assessment evaluates how well the system meets the vision and goals established for the regional goods movement system. The needs assessment focuses on key goods movement corridors throughout the region, and also identifies cross cutting issues that are found throughout the region. The draft needs assessment technical memo will be ready for review by the TAC in late January and posted for public review in February or March. An overview of some of the common themes from the needs assessment will be presented at your meeting.

### **Next Steps**

The next steps for the plan are to finalize the needs assessment this winter. We will then begin developing draft strategies, related to goods movement projects, programs and policies, including infrastructure, operational and institutional strategies, for recommendation in late 2015. Staff will return to this Committee to report on the draft strategies this summer.

# Regional Goods Movement Plan



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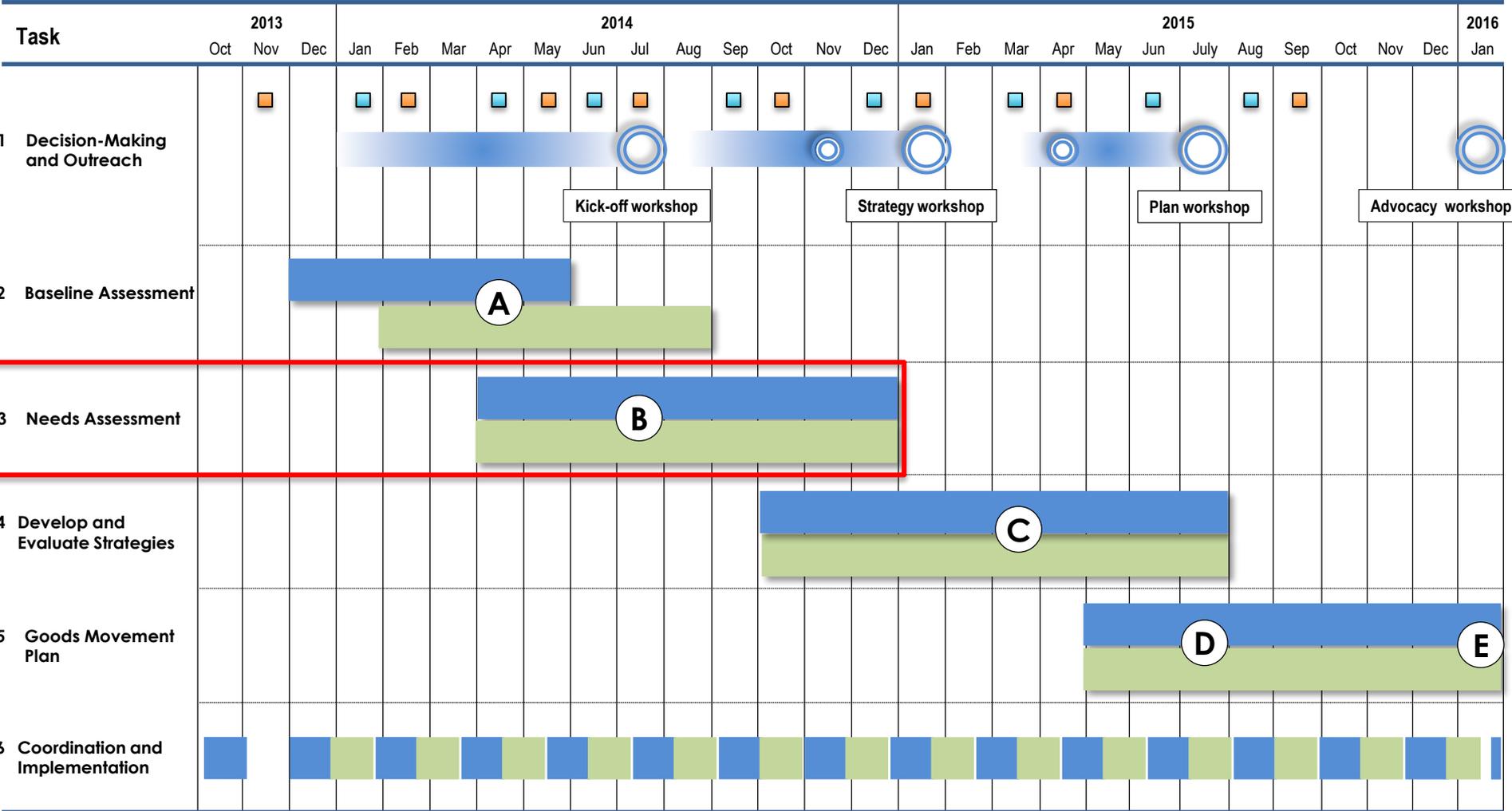
**Policy Advisory Council**

January 14, 2015

# Why Goods Movement?

- Integral part of the region's economy
  - *Over \$600 billion of goods flow within or through the region each year*
  - *32 percent of jobs in the region are in goods movement dependent industries; key source of job diversity in the region*
- Heavily reliant on transportation system
  - *Nation's 5<sup>th</sup> largest marine port and two major airports*
  - *Major highway and rail corridors*
  - *Local streets and roads*
- Significant public health and quality of life impacts on local communities

# Alameda County Transportation Commission and Metropolitan Transportation Commission Goods Movement Collaborative and Goods Movement Plans



ACTC Activity

Executive Team Meetings

Stakeholder Roundtables (Broad and topic-based)

A Vision and Goals

MTC Activity

Technical Teams Meetings

Interest Group Meetings and Outreach

B Performance Measures

C Strategy Development

D Strategy Evaluation Results

E Final Plans

# Goods Movement Opportunities for the Bay Area

# Opportunities Identified to Date

- **Goods Movement to Support Emerging Industries** (biotech, artisanal foods, clean energy & transportation, advanced manufacturing, recycled materials)
- **E-Commerce and Advanced Retail Distribution** – capture value-added economic activity; neighborhood & commercial center impacts
- **Goods Movement Workforce Development** – key source of job diversity; need to focus on access to jobs for impacted communities
- **Bulk Exports and Expanded Rail Services** – growth in bulk exports (including ag and food products via interregional connections) at seaports; increased demand on rail corridors
- **New technologies** – ITS, equipment technology
- **Integrated planning** – coordinated land use, transportation and economic development; integration of complete streets concepts

# Regional Needs Assessment Summary

# Goods Movement Corridors

Counties in Bay Area	Corridor Name	Other Corridor Elements	Major Functions/Industries Served
Alameda, Santa Clara	I-880	UP Rail Lines (Niles, Coast Subdivisions), Port of Oakland, UP Railport, BNSF OIG, OAK, SJV	Connects intermodal rail terminals. Major industrial corridor with much of the region's historic industrial core.
SF, Alameda, Contra Costa, Solano, Napa	I-80 (Central Corridor)	UP Martinez Subdivision, Port of Benicia, Travis AFB, Cordelia Truck Scales, I 80/I 680/SR 12	Primary corridor connecting Bay Area to Sacramento and northern tier states across the U.S. Connects North Bay oil refineries and Ports of Richmond and Benicia.
Contra Costa, Alameda	I-580/SR 238 (Altamont Corridor)	UP Oakland Subdivision, M580 Marine Highway, Port of Richmond	Primary truck corridor connecting the Bay Area to the rest of the U.S. Secondary freight rail line that is expected to grow increasingly important with expansion of rail terminal at the Oakland Army Base
Santa Clara, San Mateo, San Francisco, Marin, Sonoma	U.S. 101	SFO, Port of San Francisco, Port of Redwood City, SMART rail on NWP line	Major goods movement corridor serving the Peninsula. Connects agriculture shippers on North Bay (Sonoma), Central Coast, and North Coast with markets in Bay Area. Primary access to SFO.
Santa Clara, Alameda, Contra Costa	I-680	Port of Benicia	Serves trucks moving from South Bay and Fremont and connecting to and from the warehouses in the San Joaquin Valley via connections with I 580.
Sonoma, Napa, Solano, Marin	SR 12/SR 37	Northwestern Pacific rail line	Helps connect North bay to San Joaquin Valley.
Santa Clara	SR 152		Important link that connects the San Joaquin Valley to the Bay Area and coast. Recently selected as a Caltrans Focus Route.
Contra Costa	SR 4	BNSF Route to Stockton Subdivision (Transcon Line),UP line to Stockton	Serves refineries and diverse manufacturers in CCC, provides connections to Central Valley.

# Congestion and Capacity Needs – Ports & Airports

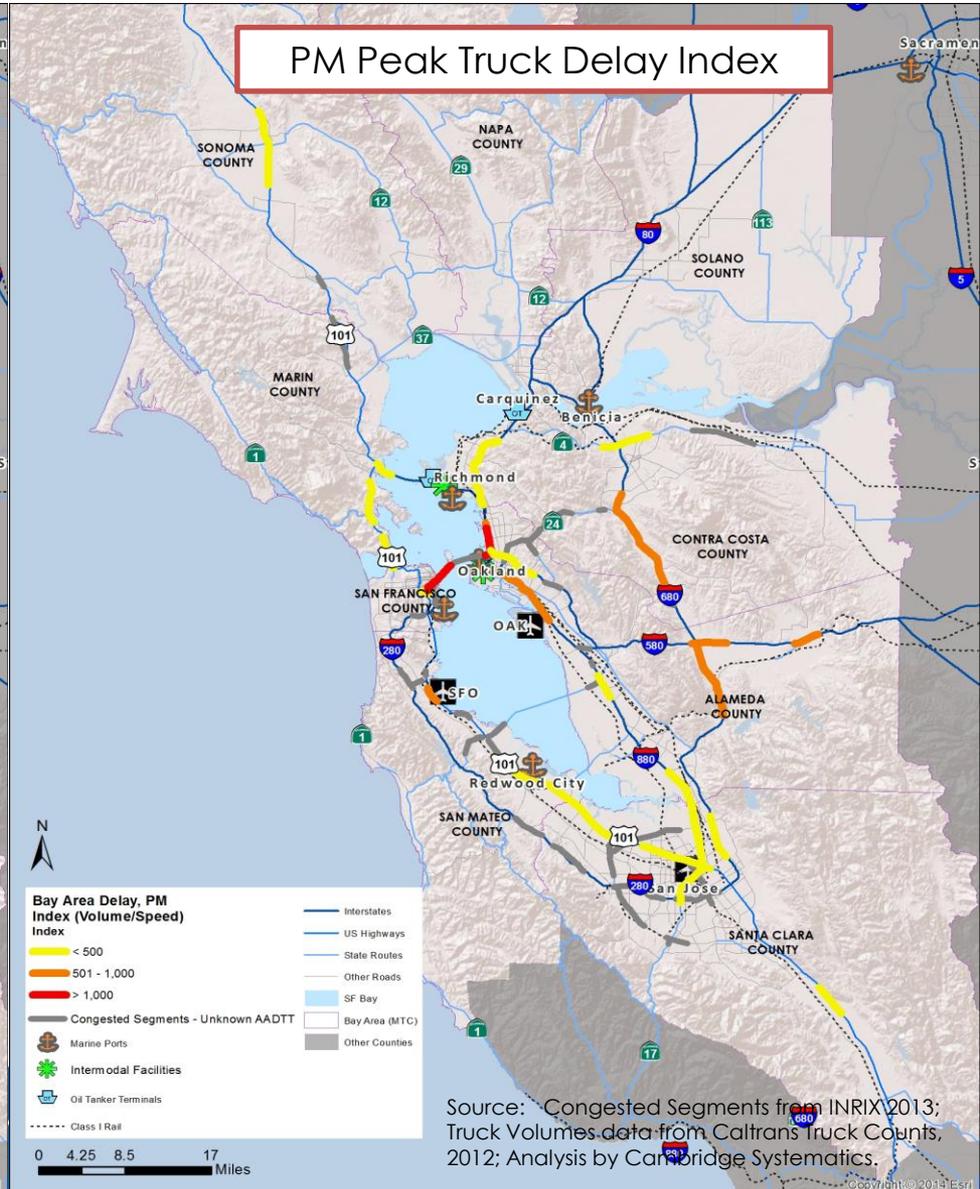
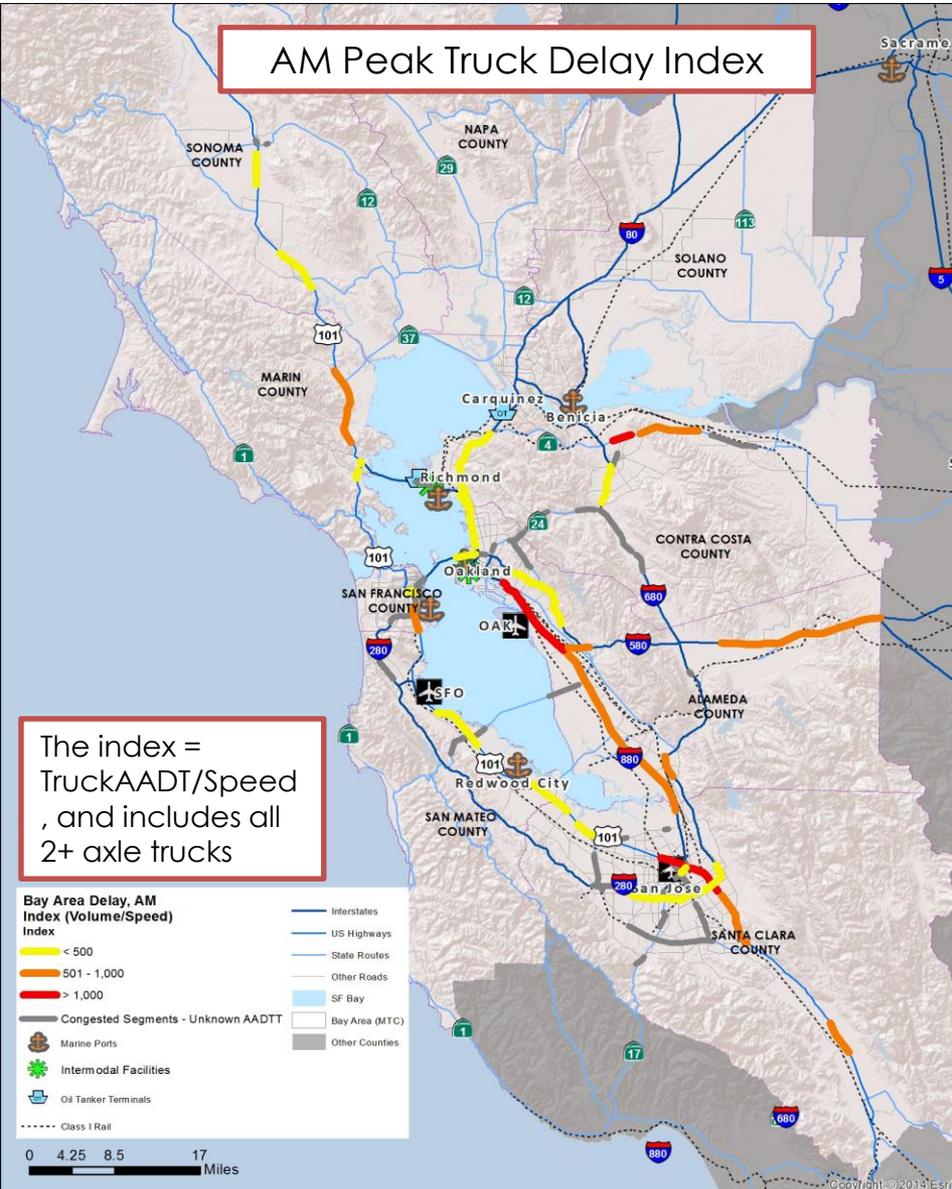
- Port of Oakland
  - *Needs expansion of rail terminal capacity and access; bulk terminal/cold storage facility opportunities*
  - *Needs to strategically plan for reduction of impacts on neighboring communities*
- Ports of Richmond, San Francisco and Redwood City could capitalize on forecast growth in bulk and auto freight if expand bulk facilities; land use and access constraints
- Airports have sufficient capacity for growth; SFO may experience capacity challenges if international cargo grows more quickly than forecast
- Highway congestion is key constraint for air cargo growth and reliability

# Congestion Needs - Highway

AM Peak Truck Delay Index

PM Peak Truck Delay Index

The index =  $\frac{\text{Truck AADT}}{\text{Speed}}$ , and includes all 2+ axle trucks



Source: Congested Segments from INRIX 2013; Truck Volumes data from Caltrans Truck Counts, 2012; Analysis by Cambridge Systematics.

# Reliability & Safety Issues - Highway

Shared passenger/freight corridors experience heaviest congestion and poorest reliability

## Key Corridors

### **Reliability – amount of extra time needed to ensure on-time arrival**

I-880: between San Mateo and Dumbarton bridges in AM and San Mateo and Bay Bridges in PM

I-80 between the Maze and I-580

I-580 between I-205 and I-680 in the AM

US101 in Santa Clara

### **Safety – truck involved crashes**

I-880 has highest truck crash rates in the region

I-580 has second highest truck crash rates, particularly near 680 interchange

I-80 has third highest truck crash rates, worst around Bay Bridge and Oakland to Richmond

# Operational Connectivity Issues - Highway

- Lack of East-West connectivity
  - *SR12/SR37 could provide greater connectivity between North Bay ag shippers and San Joaquin Valley but would need upgrading and improvements to bridges (e.g., Rio Vista) and major sea level rise issues*
  - *SR4 lacks connectivity to the San Joaquin Valley in east, inhibiting industrial growth options*
  - *SR152 carries 25% of East-West traffic today – potential to be a significant trade corridor*
- I-80/I-680/SR12 interchange and truck scales
  - *Significant truck bottleneck with diversion on local roads*

# Operations and Access Issues - Rail

- Passenger and freight conflicts a critical issue – along the Martinez Subdivision, through Niles Canyon, Caltrain and SMART
- Funding needed to create new industrial spurs to increase rail mode split and support economic development in Contra Costa Northern Waterfront, North Bay (NWP)
- Need for grade separations, signal improvements, street closures and/or quiet zones to reduce impacts on communities along heavily-used rail corridors

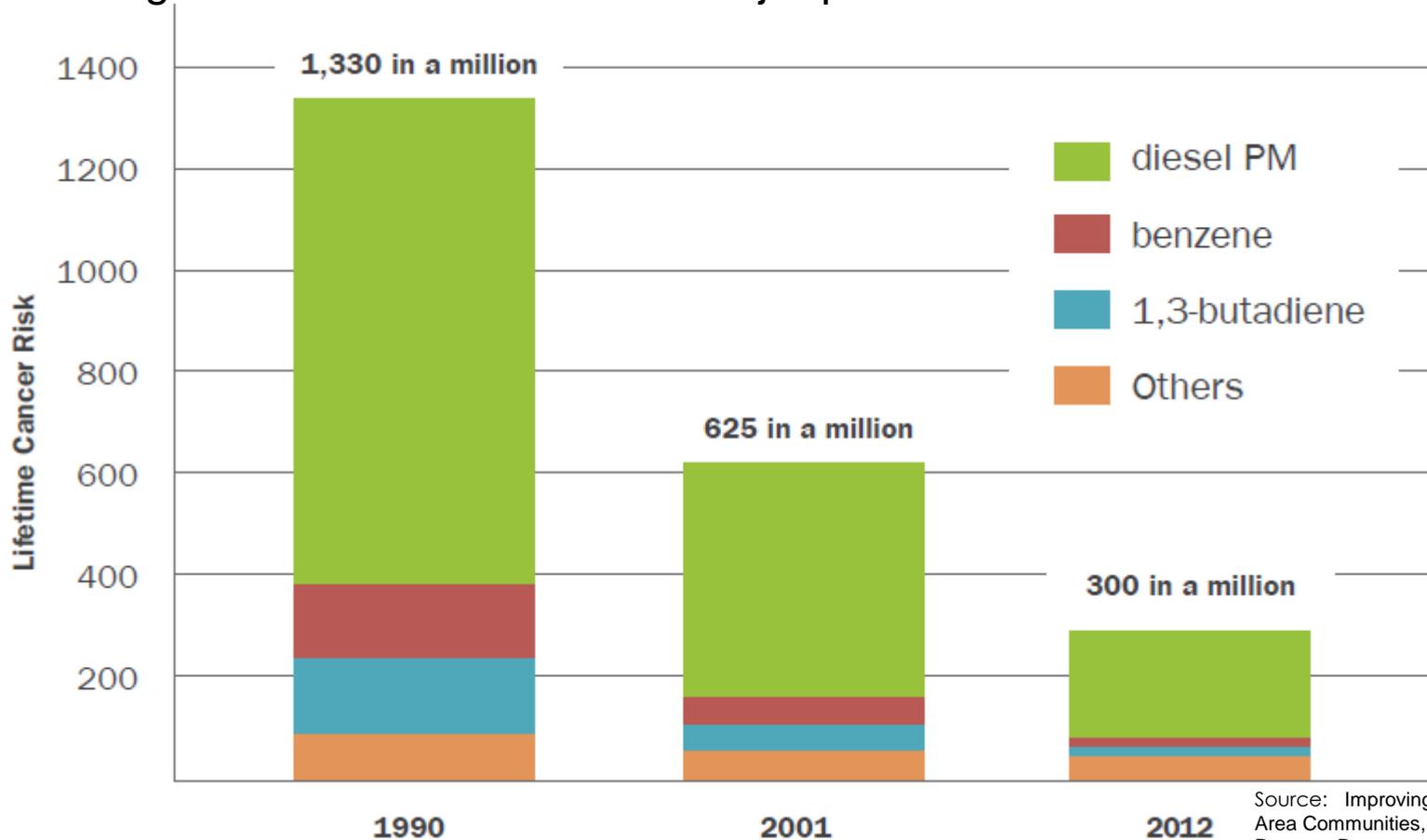
# Cross-Cutting Issues

# Arterial Operations/ITS/Urban Goods Delivery

- Arterial truck corridors – congestion and operations
  - *Urban intercity alternatives to freeways – coordination of operations*
  - *High speed rural truck routes – improve access controls*
  - *Increased small delivery truck activity due to e-commerce*
  - *Smart corridor options*
- Modal conflicts and Complete Streets
- Land use conflicts
  - *Truck routes bordering residential neighborhoods*
  - *Truck parking and truck services*
  - *Enforcement of truck controls and management*

# Air Quality and Environmental Impacts - Emissions from Freight

Significant reductions but still major public health issue



Source: Improving Air Quality and Health in Bay Area Communities, Community Air Risk Evaluation Program Retrospective and Path Forward (2004 – 2013), BAAQMD, April 2014.

# Air Quality and Environmental Impacts – Localized Health Effects



Source: Bay Area Air Quality Management District.

# Crude Oil By Rail

- Very dynamic issue throughout the nation
- Changing geography of crude supply to California refineries
  - *More oil coming primarily from Canada and some from North Dakota without access to pipelines and marine options*
- While growth has been large in percentage terms, crude by rail accounted for only 1% of crude imports to CA in 2013 – could grow to 25% by 2016
- State and federal regulators are working on safety strategies and improved emergency response

# Sea Level Rise Vulnerability

Goods Movement Infrastructure	Current and Expected Challenges	Projected Climate Change Impacts	Vulnerability Assessment		
			Degree of Sensitivity	Adaptive Capacity	Vulnerability
<b>Airports</b>	Difficulty moving goods on land from SFO & OAK.	<p>Flooding of 72- 93% of acreage for airport operations.</p> <p>Secondary impacts to ground movement of cargo and passengers from flooding of transportation network.</p>	High	High	Medium-High
<b>Ports</b>	Difficulty moving goods via highways and rail.	Moderate flooding of ports (4-20% of total acreage). Most flooding impacts regional goods movement.	Medium-High	Medium	Medium-High
<b>Major Roads and Highways</b>	Congested and in need of repairs.	Widespread flooding (99-186 miles), including key highways and interchanges.	High	Medium	High
<b>Rail</b>	Congested with multiple users sharing single tracks.	Widespread flooding (70-105 miles of track), including key segments.	High	Low	High

Source: Adapting to Rising Tides (ART), as compiled by AECOM.

# Industrial Land Supply

- Continuing loss of industrial land to commercial and residential development
- Increases conflicts around borders between industrial and residential developments threatens viability of goods movement corridors
- Past studies have demonstrated potential impacts - job displacement, increased truck-related emissions, and goods movement costs
- ABAG beginning work on industrial land supply and policies in 2015

# Next Steps

- Complete Needs Assessment
- Begin developing strategies – project, programs and policies
- January Roundtable – January 21<sup>st</sup>
- Review strategies – Summer 2015
- Draft Plan – Fall 2015