

Goods Movement Regional Technical Advisory Committee

December 15, 2014

12-1:30pm (lunch will be provided)

MTC, 101 8th Street, Oakland 94706

Fishbowl Conference Room

Call in: 1-877-273-3658; Passcode 9427202

Agenda

1. Introductions – 5 minutes
2. Background – 15 minutes
3. Needs Assessment – 60 minutes
4. Next Steps – 5 minutes

RTAC Members

Members	Organization
Joseph Aguilar	Caltrans District 4
Matt Davis	Port of Oakland
Matt Bomberg	ACTC
Ross Chittenden	CCTA
Bob Macauly	STA
Marcella Rensi	VTA
Joanne Parker	SMART
Michael Murphy	BAAQMD
Johnny Jaramillo	ABAG
Linda Scourtis	BCDC
Joel Ervice	RAMP/DDDC
Paul Campos	BIA
Michael Kent	CC Public Health Dept.
Jim Maloney	Port of San Francisco



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Memorandum

TO: Goods Movement Regional Technical Advisory Committee
(TAC)

DATE: December 12, 2014

FR: Carolyn Clevenger, Planning Section Principal

W. I. 1124

RE: December TAC meeting

Thank you for volunteering to serve on the Regional Technical Advisory Committee (TAC) for the Regional Goods Movement Plan. Attached please find the agenda and presentation for Monday's meeting (12-1:30pm, at MTC). A call in option is available; call in information is provided on the agenda.

Background

As a reminder, the update of the Regional Goods Movement Plan began in early 2014. At that point, we used the Partnership Technical Advisory Committee (PTAC) as the TAC for the project, and also briefed the Congestion Management Agency Planning and Project Delivery Directors and Executive Directors and other interested stakeholders as part of our overall engagement efforts. In the Fall, we briefed PTAC and the Regional Advisory Working Group and advised that we were seeking volunteers for a subcommittee TAC to really focus on the Goods Movement Plan. This TAC will therefore start in midstream, as the goals and baseline assessment have already been completed. A table detailing the major tasks and status of each deliverable is provided below. Task reports will be available online by the end of the day on Monday: <http://www.mtc.ca.gov/planning/rgm/>

Task	Task Name	Status
2a.1	Inventory of Existing Plans*	Complete
2a.2	Vision and Goals*	Complete and presented to Commission
2b	The Importance of Goods Movement*	Complete
2c	Infrastructure, Services and Demographics/Freight Flow Trends	Available by Dec 19 th for review
2d	The Importance of Goods Movement for the Northern CA Megaregion White Paper	January 2015
3a	Performance Measures for Goods Movement*	Complete
3b	Freight Demand Forecasts*	Late January 2015
3c	Needs Assessment	Draft for review January 2015
3d	Economic Effects of Goods Movement	Spring
4a	Strategies for the Goods Movement Plan	Early 2015
4b	Project Evaluation	Summer 2015
4c	Cost Estimates and Funding Plan	Summer 2015
5	Draft/Final Goods Movement Plan	Fall 2015

*These items are joint deliverables with the ACTC Countywide Goods Movement Plan.

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, and the Partnership Technical Advisory Committee. 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 and 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 23rd, 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 15th 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.

Baseline Conditions Assessment

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 will be posted for the TAC to review by December 19th. (An email will be sent out with the link when the document is available.)

Vision and Goals

A vision statement and goals have been developed to help guide the project. The vision and goals are meant to: provide focus to overall project approach and outreach; reflect issues and opportunities identified through early outreach; align common issues in regional, state and county plans; and organize strategy evaluation using performance measures. The vision statement is:

The Goods Movement system will be safe and efficient, provide seamless connections to international and domestic markets to enhance economic competitiveness, create jobs, and promote innovation while reducing environmental impacts and improving local communities’ quality of life.

The goals were developed to be consistent with the goals of the state freight plan, initial freight policy direction from the federal government, and to take into consideration the most recent goals from *Plan Bay Area*. The goals for the project are to:

- Reduce environmental and community impacts from goods movement operations to create healthy communities and a clean environment, and improve quality of life for those communities most affected by goods movement.
- Increase economic growth and prosperity that supports communities and businesses.
- Preserve and strengthen an integrated and connected, multimodal goods movement system that supports freight mobility and access, and is coordinated with passenger transportation systems and local land use decisions.
- Provide safe, reliable, efficient and well-maintained goods movement facilities.
- Promote innovative technology strategies to improve the efficiency of the goods movement system.

Needs Assessment

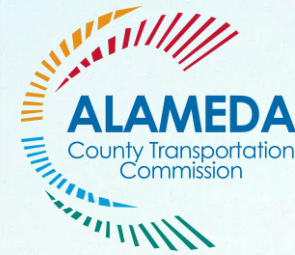
The needs assessment includes analysis of the needs, gaps, deficiencies and opportunities for the goods movement system in the Bay Area. The needs assessment evaluates how well the system meets the vision and goals established for the regional goods movement system. The draft needs assessment technical memo will be ready for review by the TAC in January. At the TAC meeting on Monday, the consultant will review some initial information from the needs assessment and we seek your feedback on the following questions:

- Does this present an accurate picture of goods movement needs in the region? What is missing?
- Are the opportunities that were identified interesting enough to be pursued in the regional plan? Are there other opportunities we should be looking into?
- What ideas do you have for strategies that should be evaluated to address these needs?
 - *Projects (or types of projects) – regionally significant*
 - *Programs (e.g., new funding categories)*
 - *Policies and partnerships – coordination with other agencies*

CC

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Regional Goods Movement Plan



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Regional Technical Advisory Committee

December 15, 2014

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 5th 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

Collaborative Outreach

Executive Team – Guidance and advocacy

- *Executive level from key partner agencies*

Technical Teams – technical review and input

Regional TAC

- *PTAC/RAWG Subcommittee*
- *Policy Advisory Council advises staff and the Commission*

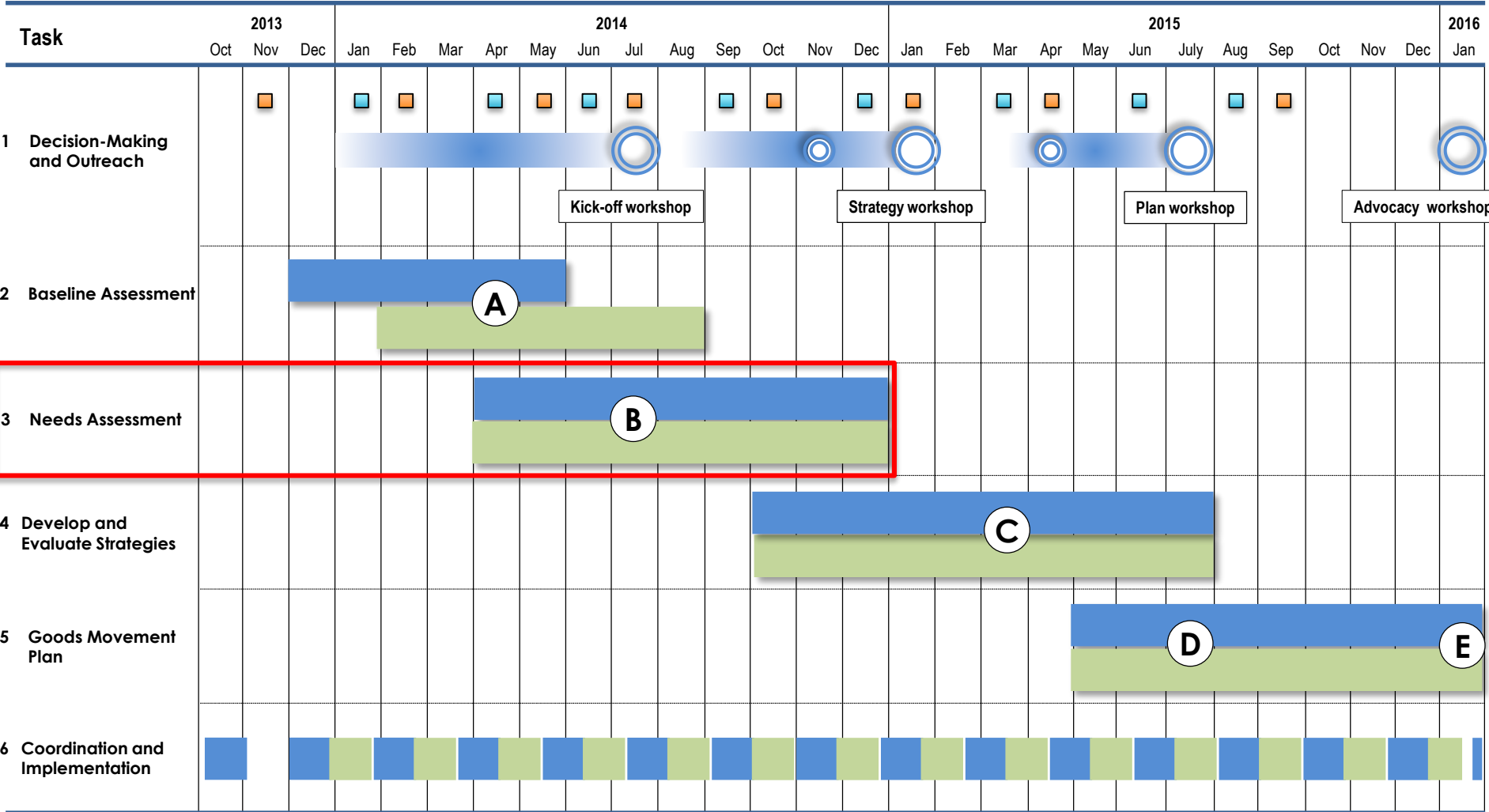
Interest Groups – meaningful, frequent input

- Private sector, economic development and business groups, environmental groups, public health groups, community groups

Roundtables – building stakeholder collaboration

- *Representatives from interest groups*

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



ACTC Activity
MTC Activity

Executive Team Meetings
Technical Teams Meetings

Stakeholder Roundtables (Broad and topic-based)
Interest Group Meetings and Outreach

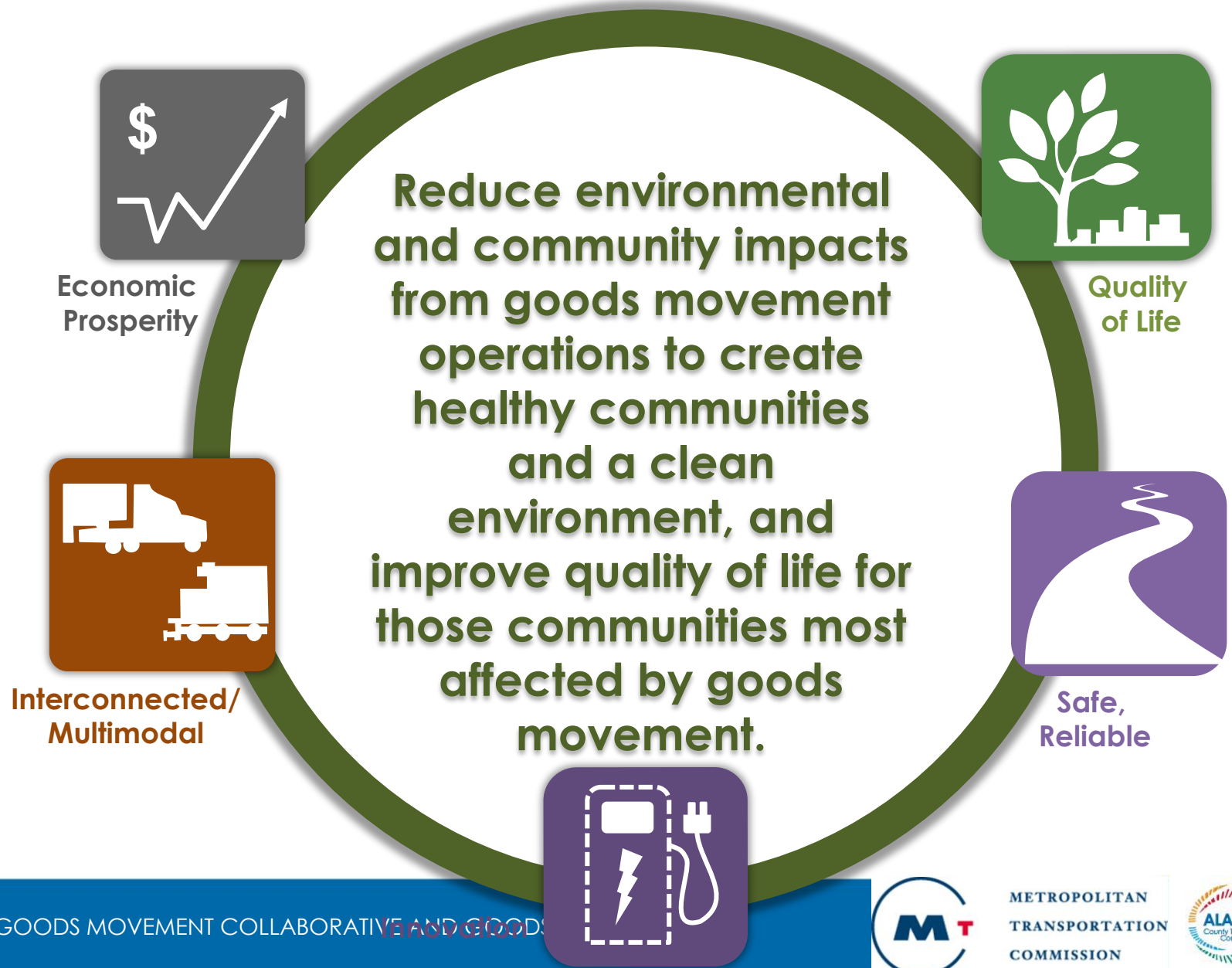
A Vision and Goals
B Performance Measures
C Strategy Development
D Strategy Evaluation Results
E Final Plans

Goods Movement Vision and Goals

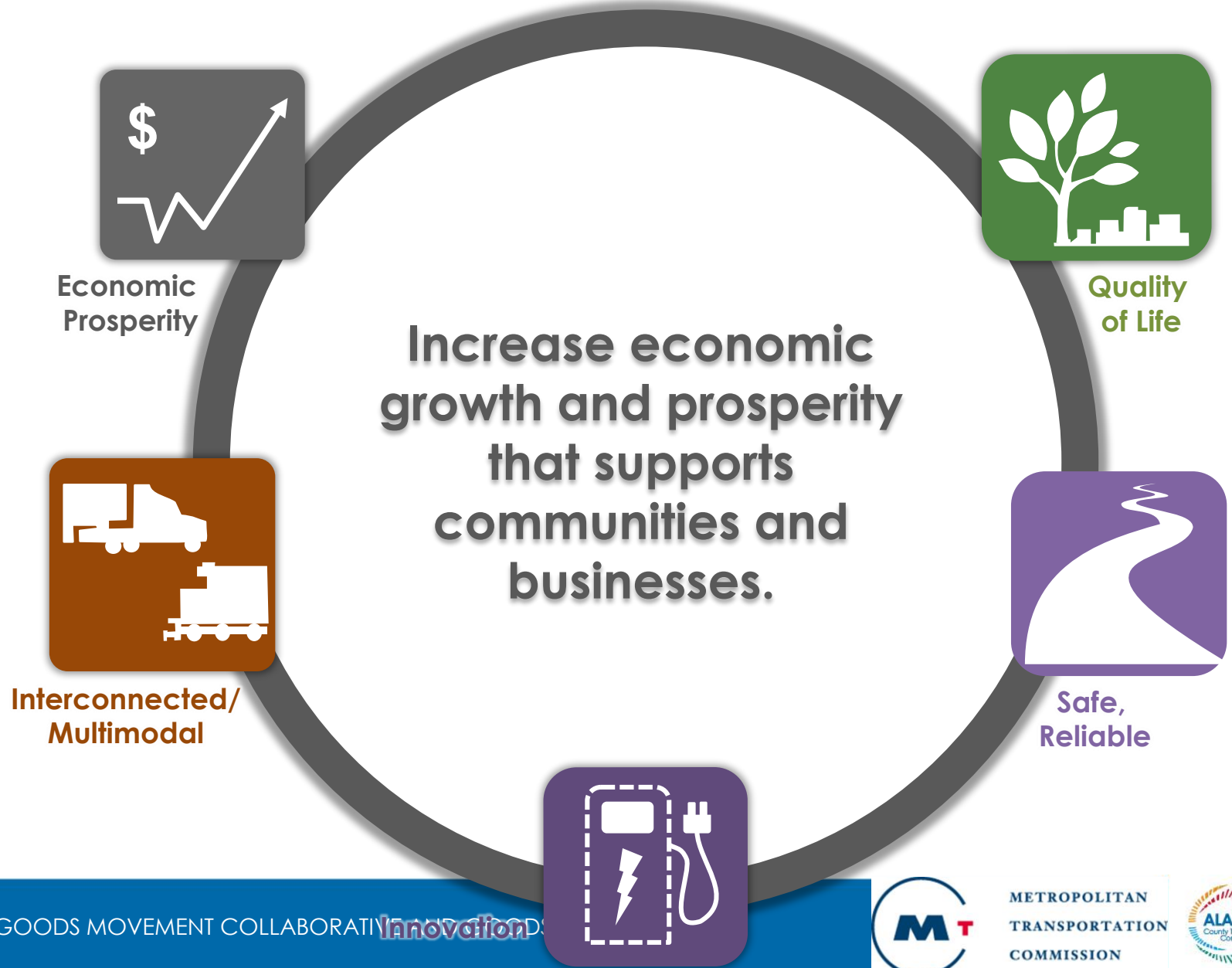
Vision

The Goods Movement system will be safe and efficient, provide seamless connections to international and domestic markets to enhance economic competitiveness, create jobs, and promote innovation while reducing environmental impacts and improving local communities' quality of life.

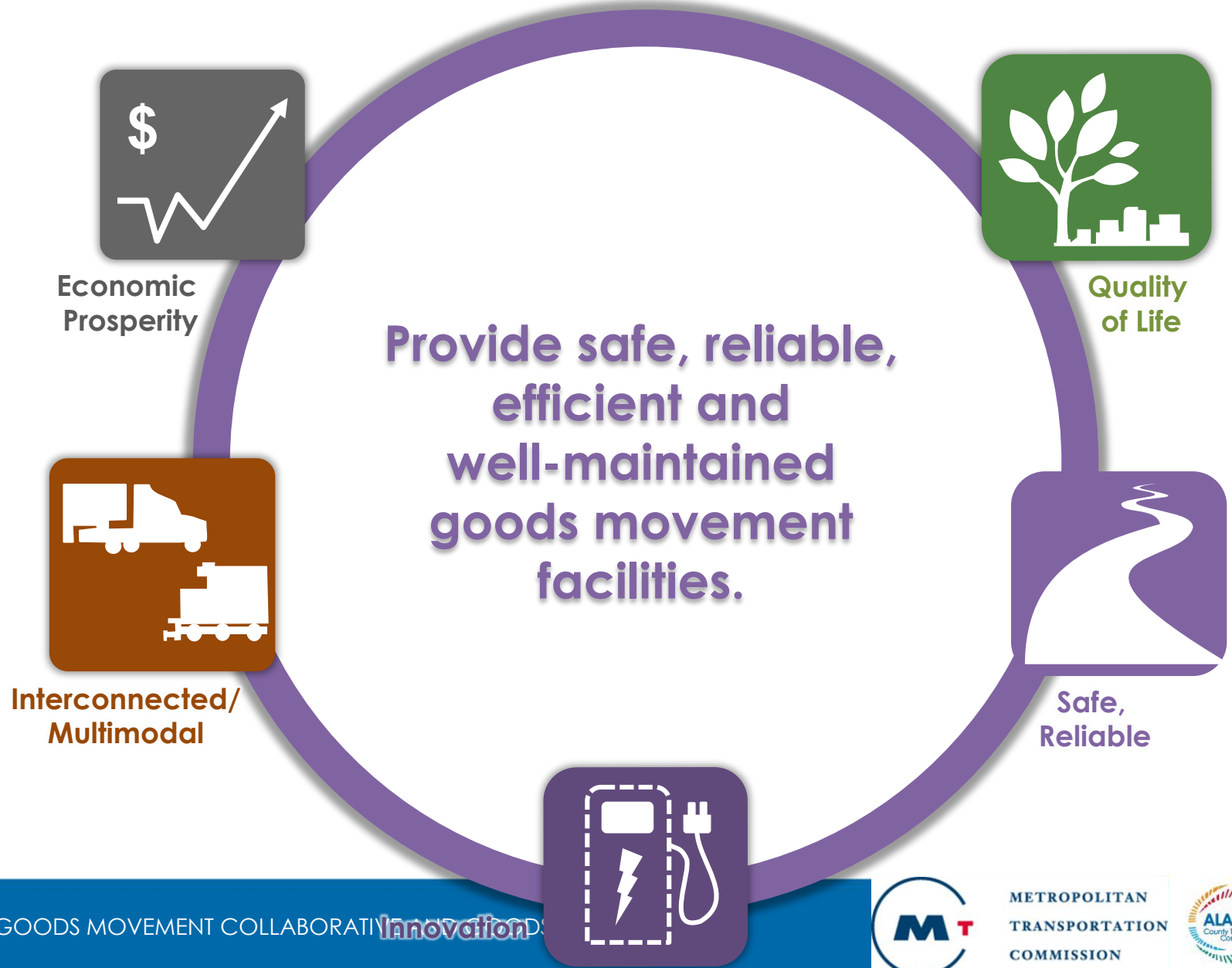
Goods Movement Vision and Goals



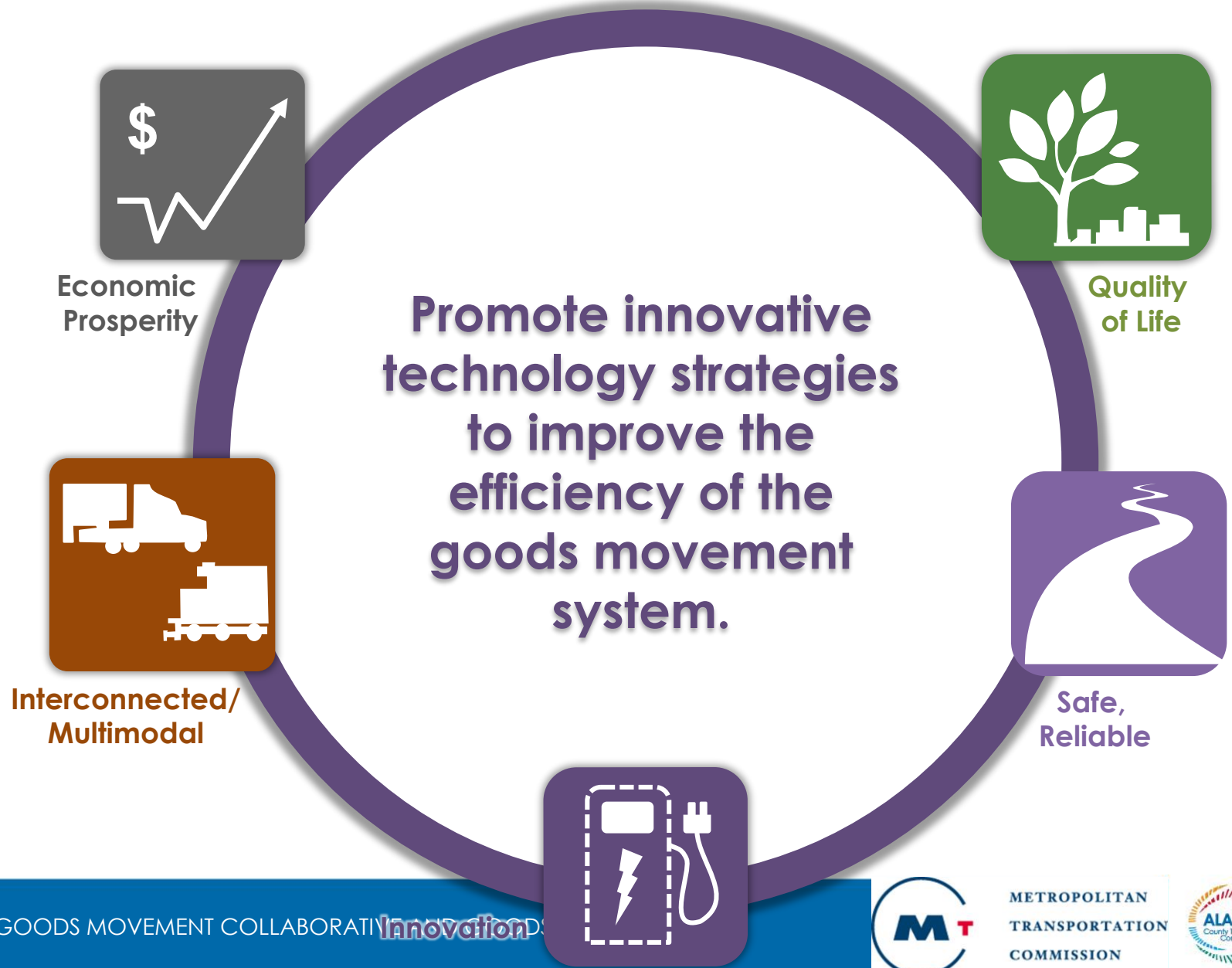
Goods Movement Vision and Goals



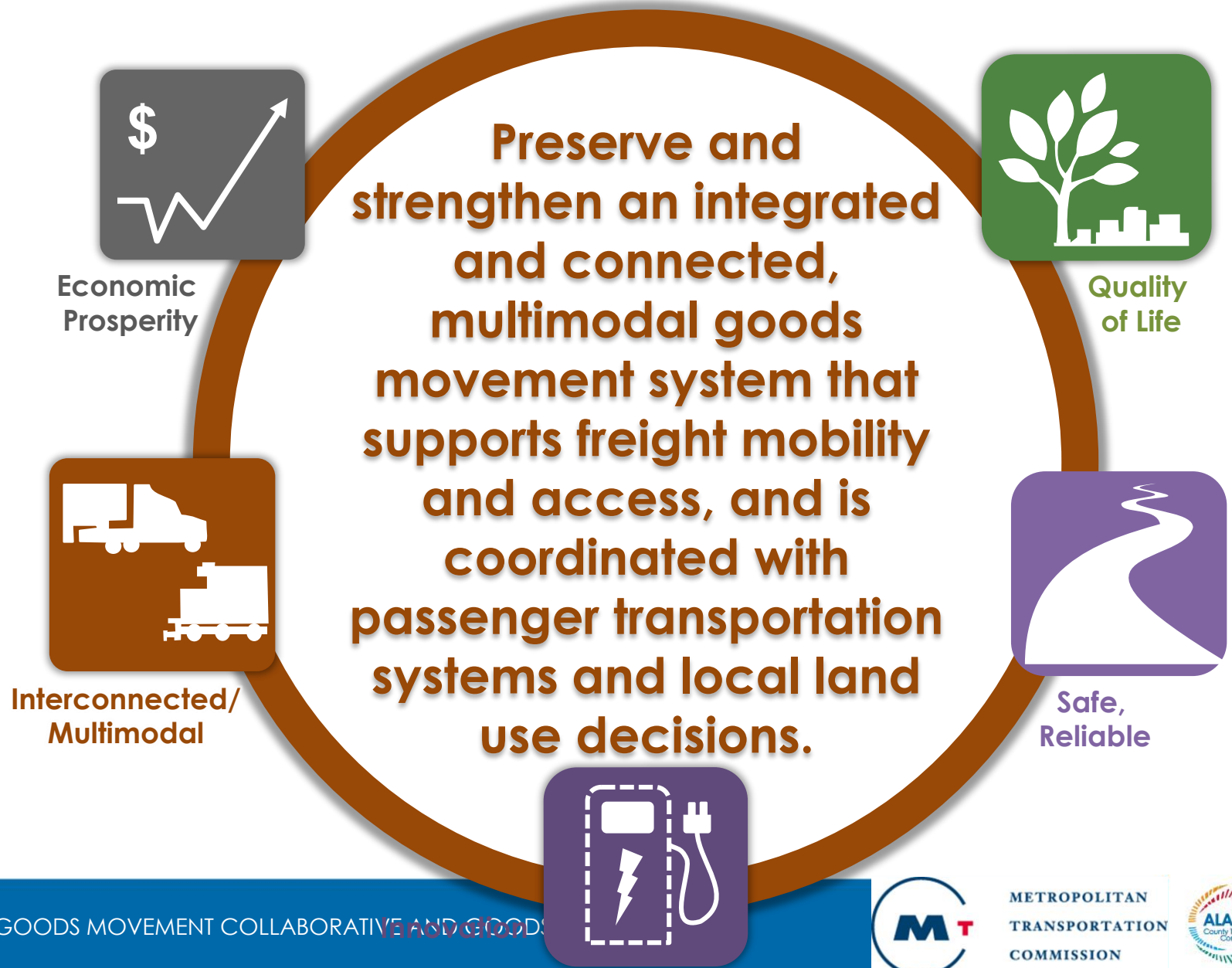
Goods Movement Vision and Goals



Goods Movement Vision and Goals



Goods Movement Vision and Goals



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

- Port of Oakland has sufficient intermodal terminal capacity but needs expansion of bulk terminal/cold storage facilities
 - *Need to lengthen berths for large ships*
 - *Need to expand rail terminal capacity and access as markets develop*
 - *Need 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 terminal facilities; adjacent land use and access constraints

Congestion and Capacity Needs - Airports

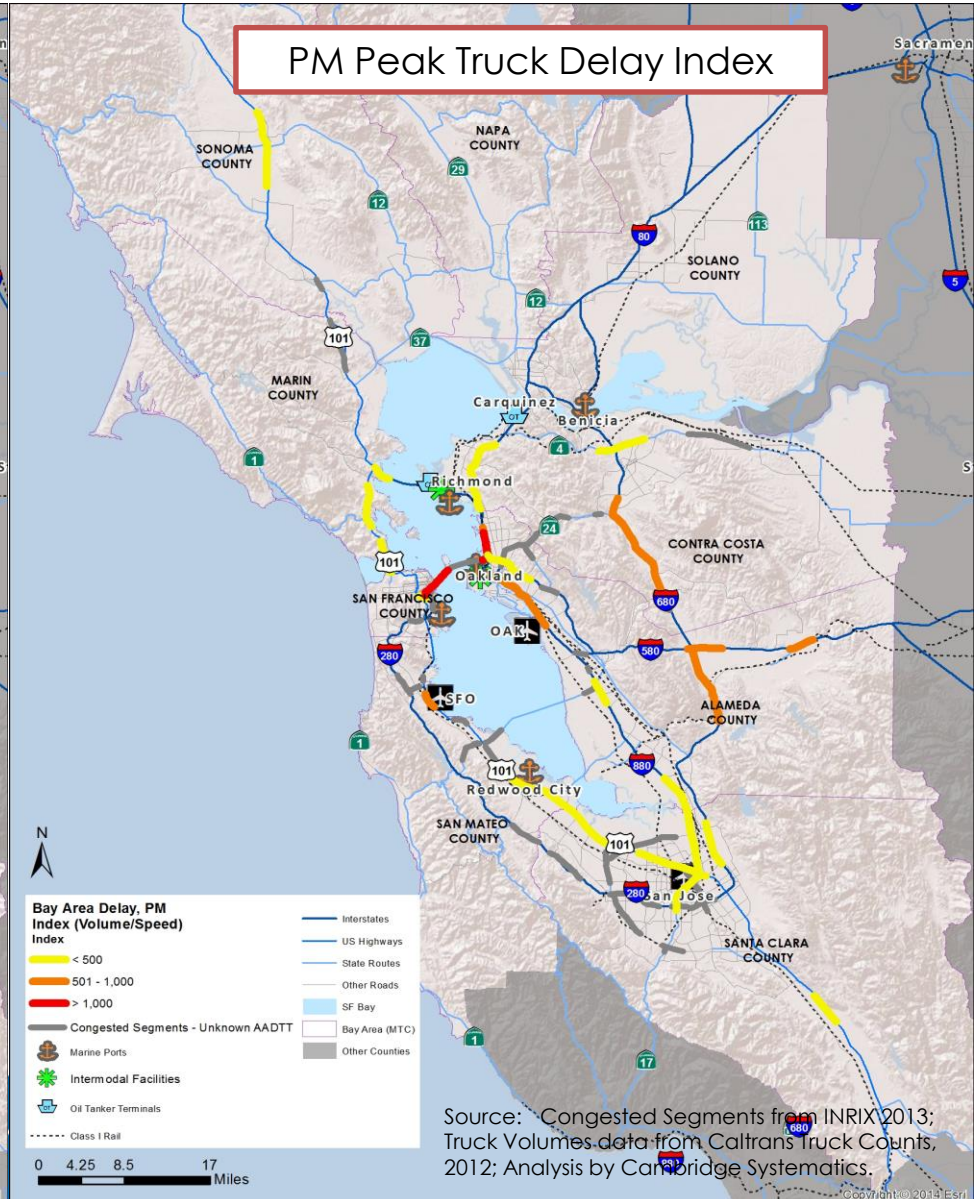
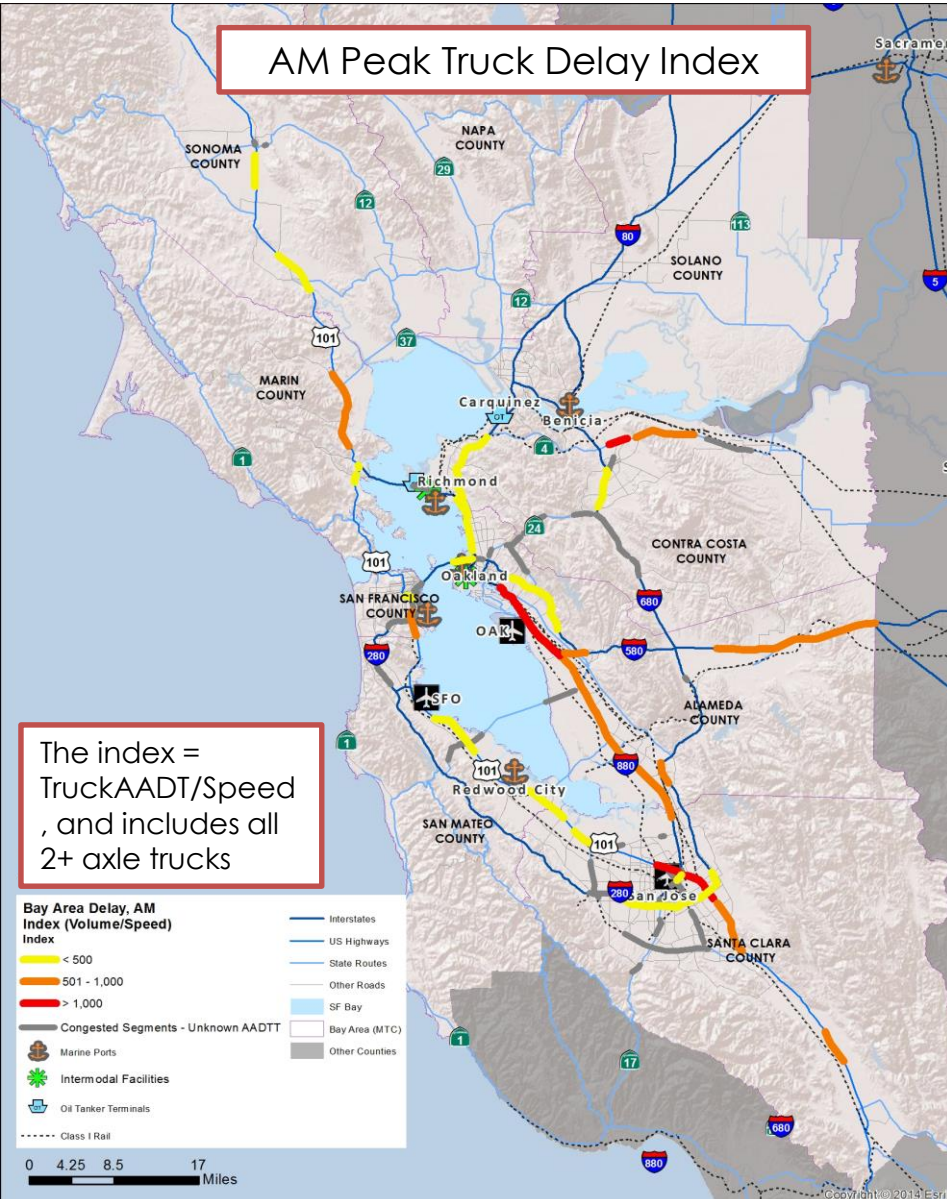
- Bay Area airports have sufficient capacity for growth; SFO may experience constraints if international markets come back stronger in the future
- Highway congestion is key constraint for air cargo growth and reliability

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

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

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

Congestion/Capacity Needs - Rail

Corridor	Subdivision	From:	To:	Existing			2020		
				Freight Daily Trains	Total Daily Trains	LOS	Freight Daily Trains	Total Daily Trains	LOS
I-880	UP Coast	San Jose	Newark	8	30	F	10	42	F
	UP Niles	Niles	Oakland	8	24	C	10	34	F
	UP Oakland	Niles	Melrose	1	1	A	N/A	N/A	N/A
I-80	UP Martinez	Sacramento	Martinez	18	52	B	22	56	C
		Martinez	Richmond	18	53	C	22	66	D
		Richmond	Emeryville	17	59	C	30	74	E
		Emeryville	Oakland	17	57	C	30	72	E
I-580	UP Oakland	Niles	Stockton	4	12	A	11	19	B
US 101	UP Coast	Gilroy	San Jose	2	10	A	4	12	C
	Caltrain Peninsula	San Jose	San Francisco	6	93	E	6	120	F
SR 4	BNSF Stockton	Richmond	Stockton	8	18	A	12	22	C
	UP Tracy	Martinez	Port Chicago	4	4	A	N/A	N/A	N/A
	UP Tracy	Port Chicago	Lathrop	0	0	A	N/A	N/A	N/A

Operations and Access Issues - Rail

- Passenger and freight conflicts a critical issue
 - *Need to look for ways to separate and/or build in sidings and operational flexibility*
 - *Connections between UP Oakland subdivision and UP Niles subdivision through Niles Canyon*
 - *Switching on Martinez subdivision mainline between Benicia and Sacramento*
 - *Conflicts between commuter service on SMART between Windsor and San Rafael and NWP*
 - *Caltrain limiting window for freight movement – impacts Port of San Francisco*

Operations and Access Issues - Rail

- BNSF access to OIG intermodal terminal at Port of Oakland crosses UP yard – OAB north lead project planned to address this
- 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 quiet zones to reduce impacts on communities along heavily-used rail corridors

Operations and Access Issues - Ports

- Port of Oakland
 - *Improve ability to process large ships and control gate access (gate queues sometimes backing up to freeway ramps)*
 - *Eliminate access bottleneck caused by 7th Street grade crossing*
- Port of San Francisco
 - *Tunnel height limitations on Caltrain impacts access*
 - *Quint St. rail lead*
 - *Potential conflicts with auto traffic on Caesar Chavez*

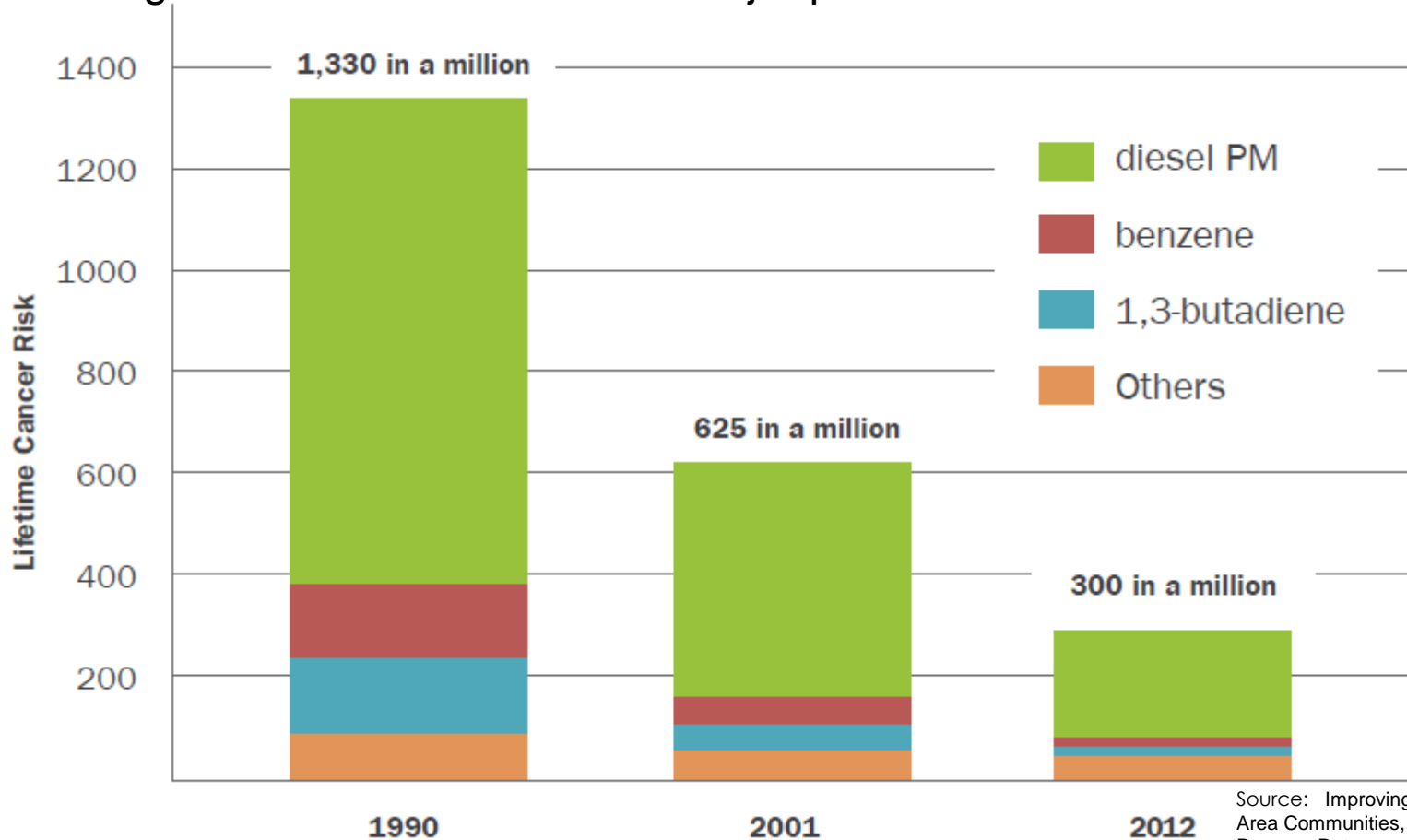
Cross-Cutting Issues

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
 - *What is an appropriate regional role given lack of jurisdiction?*

Sea Level Rise Vulnerability

Goods Movement Infrastructure	Current and Expected Challenges	Projected Climate Change Impacts	Vulnerability Assessment		
			Degree of Sensitivity	Adaptive Capacity	Vulnerability
Airports	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
Ports	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
Major Roads and Highways	Congested and in need of repairs.	Widespread flooding (99-186 miles), including key highways and interchanges.	High	Medium	High
Rail	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 - due to market pressures, fiscalization of land use, regional growth policies
- 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

Discussion

- Does this present an accurate picture of goods movement needs in the region? What is missing?
- Are the opportunities that were identified interesting enough to be pursued in the regional plan? Are there other opportunities we should be looking into?
- What ideas do you have for strategies that should be evaluated to address these needs?
 - *Projects (or types of projects) – regionally significant*
 - *Programs (e.g., new funding categories)*
 - *Policies and partnerships – coordination with other agencies*