### Goods Movement Collaborative and Goods Movement Plans

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**ACTC Activity**
- Executive Team Meetings
- Technical Team Meetings
- Stakeholder Roundtables (Broad and topic-based)
- Intered Group Meetings and Outreach

**MTC Activity**
- Vision and Goals
- Performance Measures
- Strategy Development
- Strategy Evaluation/Results
- 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.

Purpose of Needs Assessment

- **Evaluate** the existing and future conditions of freight assets in Alameda County against goals and performance measures (established in prior tasks)
- **Identify** gaps, issues and opportunities for each functional element based on performance measure ratings
- **Assess** crossing cutting issues such as land use, community, and health impacts based on performance measure ratings
- **Set** the stage for defining projects, programs and policies
How Needs Assessment Will Be Used

• Develop strategies to meet goals for any functional elements that need improvement based on performance measure evaluation in needs assessment
• Develop combinations of strategies to pursue opportunities
• Strategies will be evaluated against **ALL** performance measures
  • If a strategy makes performance better in one area but worse in another, additional strategies will be incorporated in plan to “balance portfolio”

Today’s Meeting and Next Steps

• Needs Assessment - Performance Measure Results
  • Cross-Cutting Issues
  • Local Streets and Roadway Issues (Local Truck Routes)
  • Interregional and Intra-regional Corridor Issues (Highway and Rail)
  • Global Gateway Issues (Seaport and Airport)
  • Opportunities
• Interactive Discussion
• Next Meetings
  • February Meeting - Finish review of Needs Assessment and initiate strategy discussion
  • March Meeting – Recommend strategies for evaluation
Feedback Desired

- Are the opportunities presented well-characterized? Are there additional opportunities we should capture?
- Are the needs and issues presented well-characterized? Is there anything else we should look at?
- What ideas do you have for strategies that should be evaluated to address these needs?
  - Projects (or types of projects)
  - Programs (e.g., new funding categories)
  - Policies and partnerships

Needs Assessment Summary

Cross-Cutting Issues
Context for Cross-Cutting Issues

- Crossing-cutting issues apply to multiple modes and functional elements. These include:
  - Environmental, public health issues
  - Issues related to external/non-transportation policy decisions (Hours of Service, Labor, Land-Use)

- Issues that are discussed under cross-cutting issues are often related to other performance issues that are discussed in the functional element sections but are covered with more focus in the cross-cutting issues section.

Air Quality and Environmental Impacts - Emissions from Freight

Significant reductions but still major public health issue

![Graph showing reductions in cancer risk from emissions](chart.png)

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.

Sea Level Rise Vulnerability

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Source: Adapting to Rising Tides.
Industrial Land Supply

• Continuing loss of industrial land to commercial and residential development
  ▪ Due to market pressures, and land use 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
Truck Routes and Restrictions

Tier 1 truck routes refer to freeways type roads that are intended to handle a majority of the through truck traffic.

Tier 2 truck routes refer to other state highways and designated arteries that provide access to various destinations and local routes.

Tier 3 truck routes refer to designated arterials and collectors that are used in a majority of local pickup and delivery.

Source: Cambridge Systematics Analysis; Truck Routes and restriction information collected from cities.

Truck Route Connectivity and Land Use Conflicts – East County

Source: Cambridge Systematics Analysis; Truck Routes and restriction information collected from cities; Land use information from MTC.
Truck Route Connectivity and Land Use Conflicts – South County

Source: Cambridge Systematics Analysis; Truck Routes and restriction information collected from cities; Land use information from MTC.

Truck Route Connectivity and Land Use Conflicts – Central County

Source: Cambridge Systematics Analysis; Truck Routes and restriction information collected from cities; Land use information from MTC.
Truck Route Connectivity and Land Use Conflicts – North County

Truck Routes and Modal Conflicts – High Frequency Bus Routes

- Overlap of major bus routes with truck routes on:
  - International Blvd
  - Hegenberger Rd
  - University Avenue
  - San Pablo Avenue
- Planned BRT on International Blvd

Source: Bus routes and frequency information from Parsons Brinkerhoff; Cambridge Systematics Analysis.

Note: Major bus lines include bus lines with daily weekday frequencies of more than 50 trips.
GOODS MOVEMENT COLLABORATIVE AND GOODS MOVEMENT PLAN

LOS Conditions on Truck Routes - AM Peak


GOODS MOVEMENT COLLABORATIVE AND GOODS MOVEMENT PLAN

LOS Conditions on Truck Routes - PM Peak

## Pavement Conditions on Truck Routes

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Note: PCI Rating: Green – Good or very good condition; Yellow – Fair condition; Red – At risk, poor, or failed condition.

Source: MTC.

### Local Roads Safety – Top Truck Crash Locations

Truck Parking Issues

• Port-related parking issues in West Oakland
  ▪ Location of truck services and truck-oriented businesses – Oakland Army Base plans and West Oakland Specific Plan
  ▪ New parking sites and requirements – Oakland Army Base EIR
  ▪ Parking and truck route enforcement issues

• Corridor parking needs- I-880
  ▪ Overnight parking – HOS rules

• Urban delivery issues
  ▪ Curbside management - Complete Streets
  ▪ Time-day-use

Needs Assessment Summary
Interregional and Intraregional Corridor Issues
Top 10 Truck Delay Locations in 2010 - AM

Legend
- Top Delay Points

Peak AM Delay (Trucks/Hour / Mile)

- Truck Restricted
- < 10
- 10 - 25
- 25 - 50
- 50 - 100
- > 100

Source: INRIX 2014; Alameda County Truck Travel Demand Model; PeMS time of day distribution, Cambridge Systematics analysis.

Top 10 Truck Delay Locations in 2010 - PM

Legend
- Top Delay Points

PM Peak Delay (Trucks/Hour / Mile)

- Truck Restricted
- < 10
- 10 - 25
- 25 - 50
- 50 - 100
- > 100

Source: INRIX 2014; Alameda County Truck Travel Demand Model; PeMS time of day distribution, Cambridge Systematics analysis.
### Corridor Level Reliability, 2014

#### AM Peak

<table>
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<tr>
<th>Corridor</th>
<th>Length</th>
<th>AM Peak Truck VMT</th>
<th>Average BTI</th>
<th>AM Peak Excess Truck Travel Time Budgeted (VMT/BTI)</th>
<th>Reliability Index (Excess Time/Mile)</th>
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#### PM Peak

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### Truck Involved Crashes - Inter/Intra-Regional Corridors

Source: SWITRS, Cambridge Systematics Analysis.
### Congestion/Capacity Needs - Rail

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Source: AECOM calculations.

### Operations and Access Issues - Rail

- **Changing nature and use of Northern California rail system**
  - Bulk unit trains and manifest traffic on Oakland/Niles to new terminals at Port of Oakland
  - Increasing domestic and international intermodal traffic on Martinez subdivision
- **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 – use of old Niles Railway
  - Capitol Corridor looking for separation through Emeryville, move from Niles to Coast Subdivision
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
- Need for grade separations/signal improvements/street closures and quiet zones to reduce impacts on communities along heavily-used rail corridors

Needs Assessment Summary
Global Gateway Issues
Congestion and Capacity Needs - Seaports and Airports

- 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
- Bay Area airports have sufficient capacity for growth -- Highway congestion is key constraint for air cargo growth and reliability

Operations and Access Issues - Global Gateways

- 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
  - Address bike and pedestrian access issues
- OAK
  - Address congestion issues on Hegenberger, 98th, and Doolittle
Opportunities

Context-Setting Opportunities

- **Goods Movement to Support Emerging Industries**
  - These includes biotech, artisanal foods, clean energy & transportation, advanced manufacturing, recycled materials
  - Coordinate industrial land use plans and goods movement infrastructure investment in I-880/I-80 corridor
  - Guidance for truck route and rail corridor planning and buffering

- **E-Commerce and Advanced Retail Distribution**
  - Capture value-added economic activity; neighborhood & commercial center impacts
  - Connections between Third-Party Logistics (3PL) warehouses, seaport, and airport
  - Off-peak deliveries, Complete Streets guidance in downtowns

- **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
  - Coordinated development of Martinez, Niles, and Oakland Subdivisions
  - At-grade crossing improvements, quiet zones
Wrap-Up

Discussion

• Are the opportunities presented well-characterized? Are there additional opportunities we should capture?
• Are the needs and issues presented well-characterized? Is there anything else we should look at?
• What ideas do you have for strategies that should be evaluated to address these needs?
  ▪ Projects (or types of projects)
  ▪ Programs (e.g., new funding categories)
  ▪ Policies and partnerships
Thank You!
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