Importance of Industrial Land in the Central Bay Area

MTC GOODS MOVEMENT/LAND USE PROJECT

Presented By

Linda Hausrath
Hausrath Economics Group

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HAUSRATH ECONOMICS GROUP

Background: MTC Regional Goods Movement Study, 2004 - 2006

- Initial focus on freight transportation and infrastructure

- Found much broader **GM System**, that includes all locations and ways businesses function within transportation infrastructure to:
  - Supply
  - Produce
  - Warehouse/Store
  - Distribute
  - Transport/Deliver

  goods for Bay Area businesses and households

- Identified ***GM System* as providing "economic infrastructure"** that
  - Facilitates production and commerce
  - Supports consumption

  throughout Bay Area

- Found **land use trends in Central Bay Area are impacting** efficiency of the GM System

MTC Goods Movement/Land Use Project, 2007-2009

To further region's understanding of:

- Land supply along key GM Corridors
- GM businesses/industries with demand for central locations
- Future GM land use pattern resulting from trends
- Transportation, environmental, and economic implications of current trends
- Land use policy issues and challenges

Project Participants

Lead: MTC

Funding Partner: Caltrans grant

Steering Committee: Staff from

- MTC
- Caltrans
- ABAG
- Joint Policy Committee
- Bay Area Council
- East Bay EDA
- Alameda Co. CMA
- West CC Co. Transp. Advisory Comm.
- Santa Clara VTA

METROPOLITAN
TRANSPORTATION
COMMISSION

Focus on Industrial Land Use Along Key Goods Movement Corridors in Central Bay Area

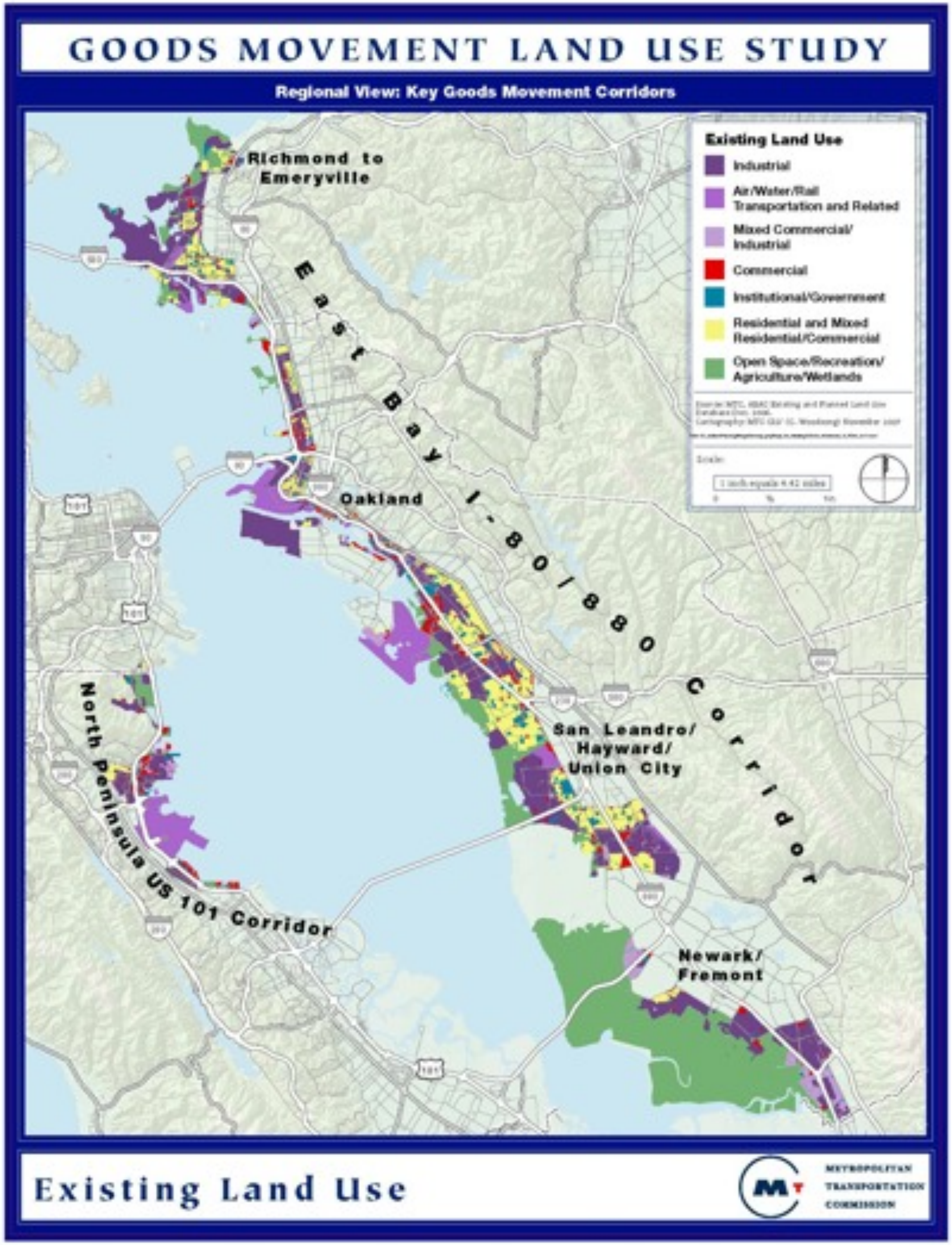
- East Bay I-80/880 Corridor
  - Richmond to Fremont
- North Peninsula US 101 Corridor
  - San Mateo Co. line to Millbrae/Burlingame

I. Central Area Industrial Land Supply

- High concentration of warehouse and manufacturing space along central, Bayside corridors

  – Proximity to business and population centers
  – Access to major airports and seaports
  – Access across the Bay

- Bay Area freight flows concentrated along central corridors



Monday, October 4, 2010

High Concentrations of Industrial Land Remaining Along Key Corridors

Industrial Land, 2006	
Industrial	
Mfg/Whse/Stor	**15,800 ac.**
Refineries/Pipelines	1,900 ac.
Closed Military	1,500 ac.
Air/Water/Rail	7,000 ac.
Mixed Com'l/Ind'l	2,200 ac.
Total Land	**28,400 ac.**

Industrial Bldg. Space, 2007	
Warehouse	100 mil. sf
Manufacturing	88 mil. sf
Total space	**188 mil. sf**

Air/Seaport/RR facilities


Warehouse and Manufacturing Space in
Goods Movement Corridors, 2007
Jurisdiction
Richmond
Berkeley
Emeryville
Oakland
San Leandro
Hayward
Union City
Newark
Fremont
Brisbane
South San Francisco/San Bruno
Burlingame/Millbrae
0
5
10
15
20
25
30
35
40
Millions of Square Feet

II. Broad Range of Industrial Businesses/Industries Along Central Corridors

	2006 Estabs.	2006 Employment	
Tier 1: Goods Movement Dependent Industries			
Manufacturing (excl. high-tech mfg.)	1,430	54,000	31%
Wholesale Trade	1,760	32,720	18%
Transportation, Warehouse, Courier/Postal, and Related	630	31,770	18%
Refineries, Other Resource/Energy, Waste Mgmt./Recycling	80	5,750	3%
Tier 1 Subtotal	***3,900***	***124,240***	***70%***
Tier 2: Other Goods Movement Industries			
Construction	1,150	25,570	14%
High Technology Manufacturing	260	24,920	14%
Transport/Vehicle Support, Equipment Rental, Utilities and Telecom	110	2,420	2%
Tier 2 Subtotal	***1,520***	***52,910***	***30%***
TOTAL	**5,420**	**177,150**	**100%**

Goods Movement Industries Are Important to Bay Area Region

- Support business activity and household consumption throughout the region
  - Majority **serve regional demand**
  - Also serve national and international markets and facilitate trade

- Serve and support central business/population centers

- Efficient goods movement along major corridors enhances regional competitiveness

Suppliers:

- Oakland
- Union City
- Brisbane
- San Francisco

Industrial Land Uses Are Important To Central Bay Area Corridors

- They represent:
  - Nearly 50%of all employment in corridors
  - 23% of total employment for 22 corridor jurisdictions

- Provide good-paying, blue/green collar jobs near urban centers
- Contribute to economic diversity of local economies

III. Industrial Business Activity Is Growing As Is Demand for Central Corridor Locations

- Demand-driven forecasts for study corridors

  2006: 177,200 jobs *2035:* 282,100 jobs

  +104,900 jobs
  +59% growth
  +1.6% per year

  - Growing concentration of businesses and population in central areas
  - Growth of major airports and seaports
  - Good access to rest of region from central corridors

Forecasts Dispel Perception of Goods Movement Industries in Decline

Demand-driven Forecasts For Corridors	Employment 2006	2035	Growth	% Growth	Avg. Ann. Rate
Tier 1: Goods Movement Dependent Ind.					
Manufacturing (excl. high-tech mfg.)	54,000	64,360	10,360	19%	0.6%
Wholesale Trade	32,720	48,830	16,110	49%	1.4%
Transportation and Related	31,770	61,710	29,940	94%	2.3%
Refineries, Other Resources/Energy, Waste Mgmt./Recycling	5,750	9,630	3,880	75%	1.8%
Tier 2: Other Goods Movement Ind.					
Construction	25,570	41,420	15,850	62%	1.7%
High-Tech Manufacturing	24,920	52,830	27,910	112%	2.6%
Transport/Vehicle Support, Equip. Rental, Utilities, & Telecom	2,420	3,270	850	35%	1.0%
TOTAL	**177,150**	**282,050**	**104,900**	**59%**	**1.6%**

Forecasts Identify Growth of Demand For Central Area Industrial Land Uses

Land Use	Employment 2006	Employment 2035	Growth 2006-2035	Percent Change
Industrial	**138,870**	**203,530**	**64,660**	**47%**
Airports/Seaports/Rail	11,250	23,540	12,290	109%
Refineries/Pipelines	2,110	2,150	40	2%
R&D/Lt. Industrial	24,920	52,830	27,910	112%
TOTAL	177,150	282,050	104,900	59%

IV. Strong Competition for Industrial land in Central Areas

- Market pressures for higher-value uses

- Local land use policies allow/encourage new uses in industrial areas

- Increasing land use conflicts as development intensifies around industrial uses

Result: - **Declining industrial land supply**
- **Increasing costs of industrial land/space**

Significant Loss of Industrial Space Along Central Corridors

(Q1 2003 – Q1 2007)

East Bay		-11.8 mil. sq. ft.
I-80/880 Corridor		**-6.7%**
North Peninsula		-2.9 mil. sq. ft.
U.S. 101 Corridor		**-10.9%**
Total Space	*2003:*	202.6 mil. sq. ft.
	2007:	187.9 mil. sq. ft.
	Change	**-14.7 mil. sq. ft.**
		-7.3%

- Industrial space declined
- Industrial vacancies declined
- Industrial rents/prices increased

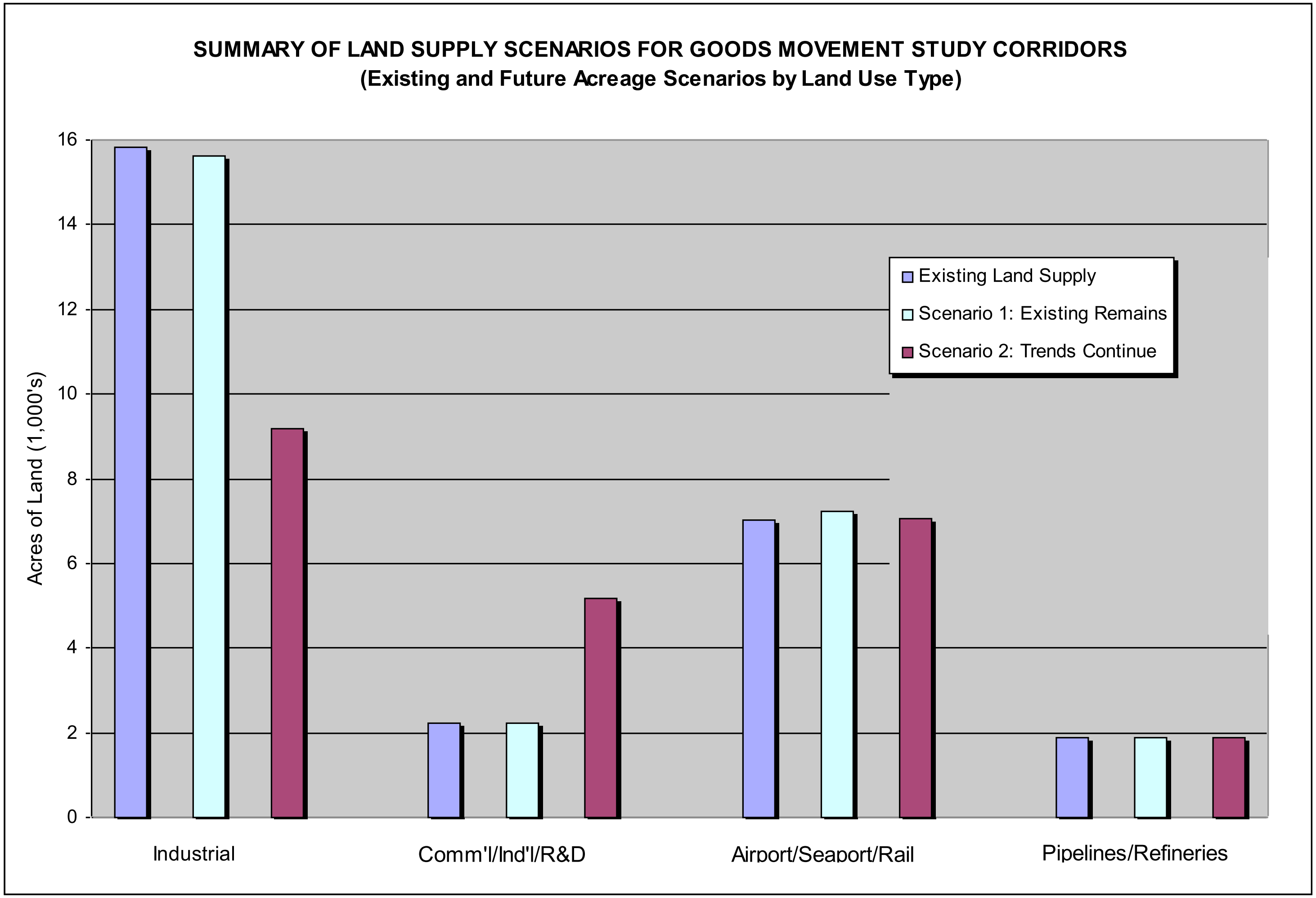
Land Use Policies Are Very Important

Local General Plan Land Uses for Existing Industrial Land, 2006/07

(% of Existing Industrial Acres)

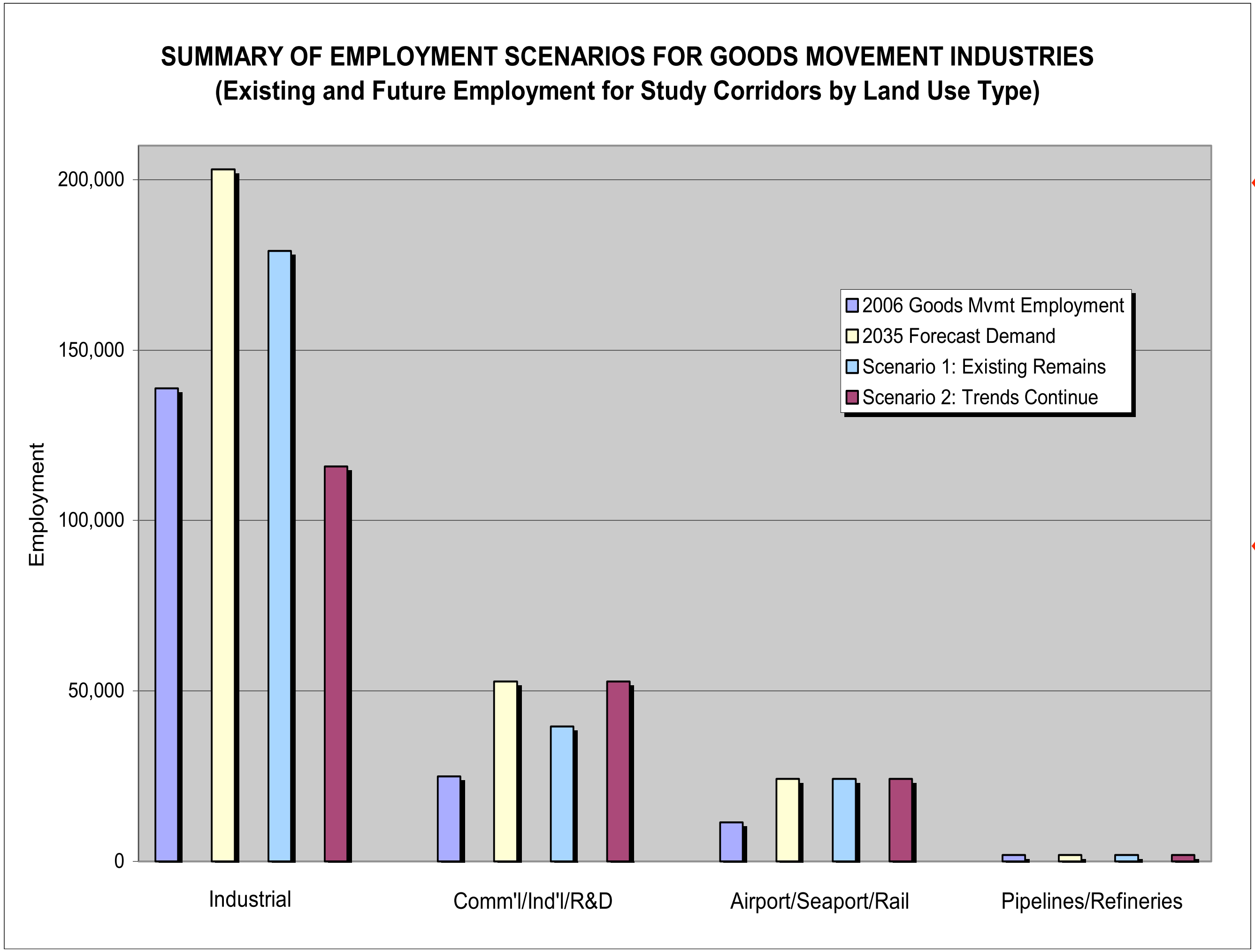
	Industrial	Industrial At Risk:			
	Not Changed	**Total**	Business Mix	Com'l, Resid'l, OS	Air/Sea & Inst.
East Bay I-80/880 Corridor	**62%**	**38%**	12%	23%	3%
North Peninsula U.S. 101 Corridor	**30%**	**70%**	53%	16%	1%
TOTAL	**59%**	**41%**	16%	22%	3%

Changes in Corridor Land Supply



- Under trends, industrial declines: 15,800 ac. → 9,200 ac.

V. Demand for Industrial Land in Central Areas Will Greatly Exceed Supply Under Trends



- Trends Scenario for GM Industrial Land Use

  Demand 2035 203,000 jobs

  Accommodated in Corridors 116,000 jobs 57%

  Incorporates more intensive use of industrial land

- Airport/Seaport/Rail activities accommodated
  - Industrial land shortages nearby could impact operations

Result: Outward Dispersion of Industrial Goods Movement Businesses, Most Serving Bay Area Markets

- Industrial businesses with 87,000 jobs must locate outside central corridors

- Geography limits alternative locations nearby

- Demand shifting outward focused on locations with access back to central Bay Area markets

  - 64% to inland San Joaquin Valley, I-580/I-5
  - 30% to outlying parts of Bay Area
    - Tri-Valley, I-580
    - Solano County, I-80/780/680
    - Contra Costa Co., I-680 North
    - Other San Mateo Co./Santa Clara Co., US 101
  - 6% out of area entirely

- **More dispersed industrial land use pattern results**

VI. Implications of Industrial Dispersion, While Demand Grows in Center

- More truck miles on regional routes

- Greater congestion
- More truck emissions
- Less efficient GM system with higher costs for Bay Area businesses and household consumers
- Fewer industrial jobs in proximity to urban workforce

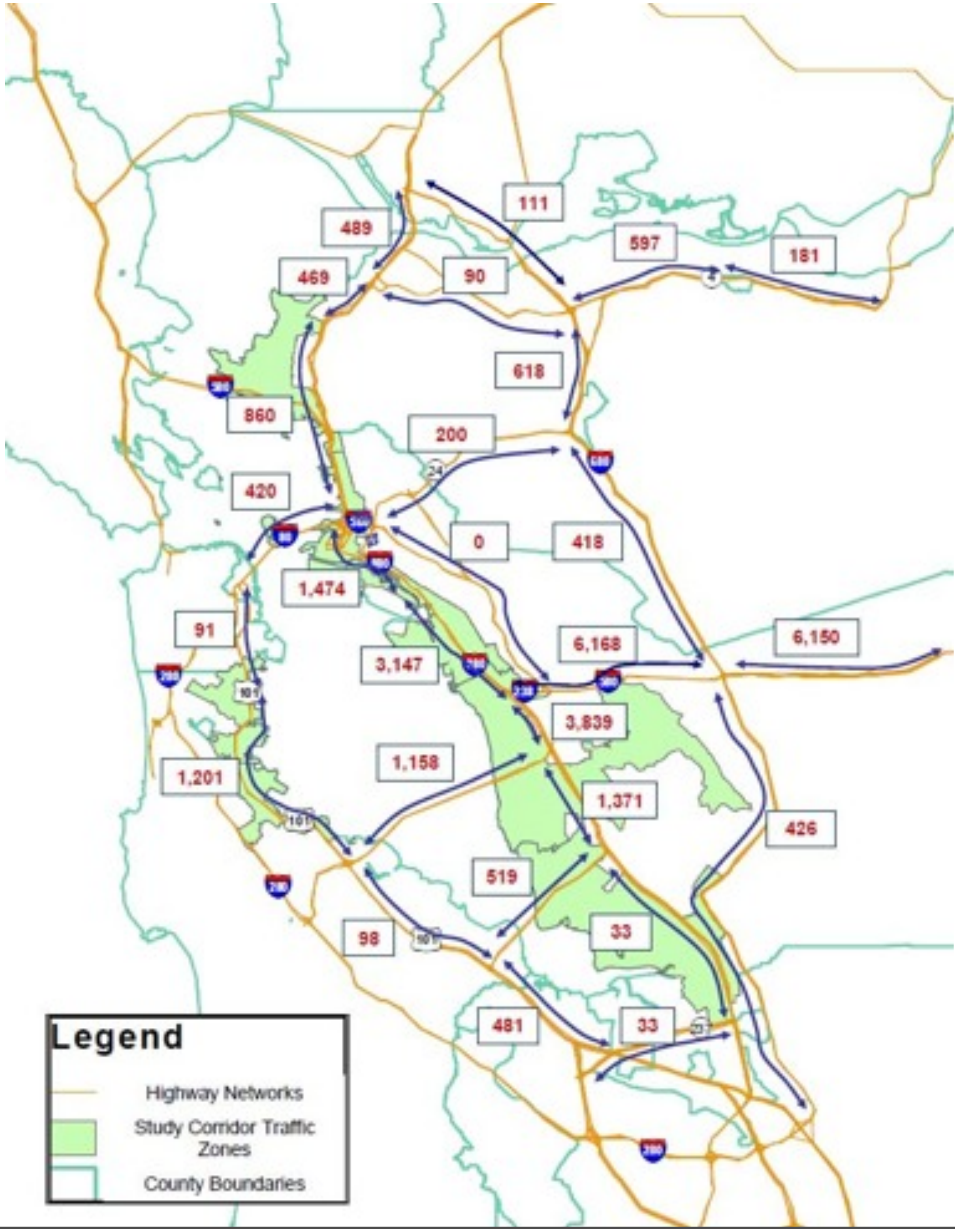
Transportation Impacts
More Trucks and Greater Congestion on Key Corridors

CORRIDOR TRANSPORTATION IMPACTS: ADDITIONAL DAILY TRUCK COUNTS

Corridor / Facility	Additional Daily Trucks* 2035	Impacts: Additional Trucks As % Of: Daily Trucks 2006	Truck Volumes Otherwise Projected 2035	Total Vehicle Volumes Otherwise Projected 2035
SR-4	**597**	26%	17%	0.2%
I-80	**860**	10%	7%	0.3%
I-680	**618**	7%	5%	0.3%
I-580 (West of I-680)	**6,168**	66%	46%	2.9%
I-580 (East of I-680)	**6,150**	39%	24%	2.6%
I-580 Average	**6,159**	49%	35%	2.8%
I-880	**3,839**	23%	19%	1.6%
US-101	**1,201**	12%	8%	0.4%
Bay Bridge	**420**	7%	5%	0.1%
San Mateo Bridge	**1,158**	19%	12%	0.9%
Dumbarton Bridge	**519**	25%	16%	0.5%

Impacts concentrated on I-580 and I-880 which are already highly congested.

Additional Daily Truck Trips on the Regional Goods Movement System



Air Quality Impacts From Greater Truck Emissions

- More trucks and higher truck VMT and VHT
- Greater truck emissions of criteria pollutants
- Greater emissions could affect Bay Area attainment status for several key pollutants
- Corridor impacts to pose increased health risks in I-580 Corridor
  - Over 50% of additional truck emissions here

Broad Regional Economic Implications

- Additional transportation costs to businesses shifted outward

  Particularly significant to businesses more dependent on transportation

  ↓

- Higher costs passed on to other businesses

  ↓

- Higher costs of doing business in Bay Area

  ↓

- Higher cost of living overall

  ↓

- Adverse implications for regional competitiveness

Effects on Jobs and Business Activity in Central Bay Area

- Fewer good-paying jobs in proximity to urban workforce
  - 87,000 fewer GM industry jobs
- Additional outward shifts of related businesses and jobs
  - Suppliers
  - Supporting businesses
- Less economic diversity
- Less jobs-housing balance

VII. Trends Raise Land Use Policy Issues and Challenges

- Cumulative effects of **local land use decisions are having regional consequences** – no oversight

- **Industrial land supply is a valuable regional resource**, supporting:
  - Efficient goods movement
  - Regional economic growth
  - Economic diversity

- Some urgency, as trends resulting in ***permanent loss*** of industrial land supply

From the Regional Perspective:

- **Industrial/Goods Movement Component of Regional Smart Growth/Focus and SB 375 Planning Makes Sense**
  - Need to broaden focus of Vision
  - Cities need regional support

- **Intent: Promote Balance of Industrial/Goods Movement Uses in Proximity to Business and Population Centers Served**

- **Can Be Done Without Sacrificing Objectives for Other Land Uses**

  – Industrial land uses occupy small share of land in Bay Area

  Industrial Land Use as % of Urbanized Land, 2005

Bay Area	6%	San Mateo Co.	3%
Alameda Co.	8%	San Francisco	3%
Contra Costa Co.	7%	Santa Clara Co.	6%

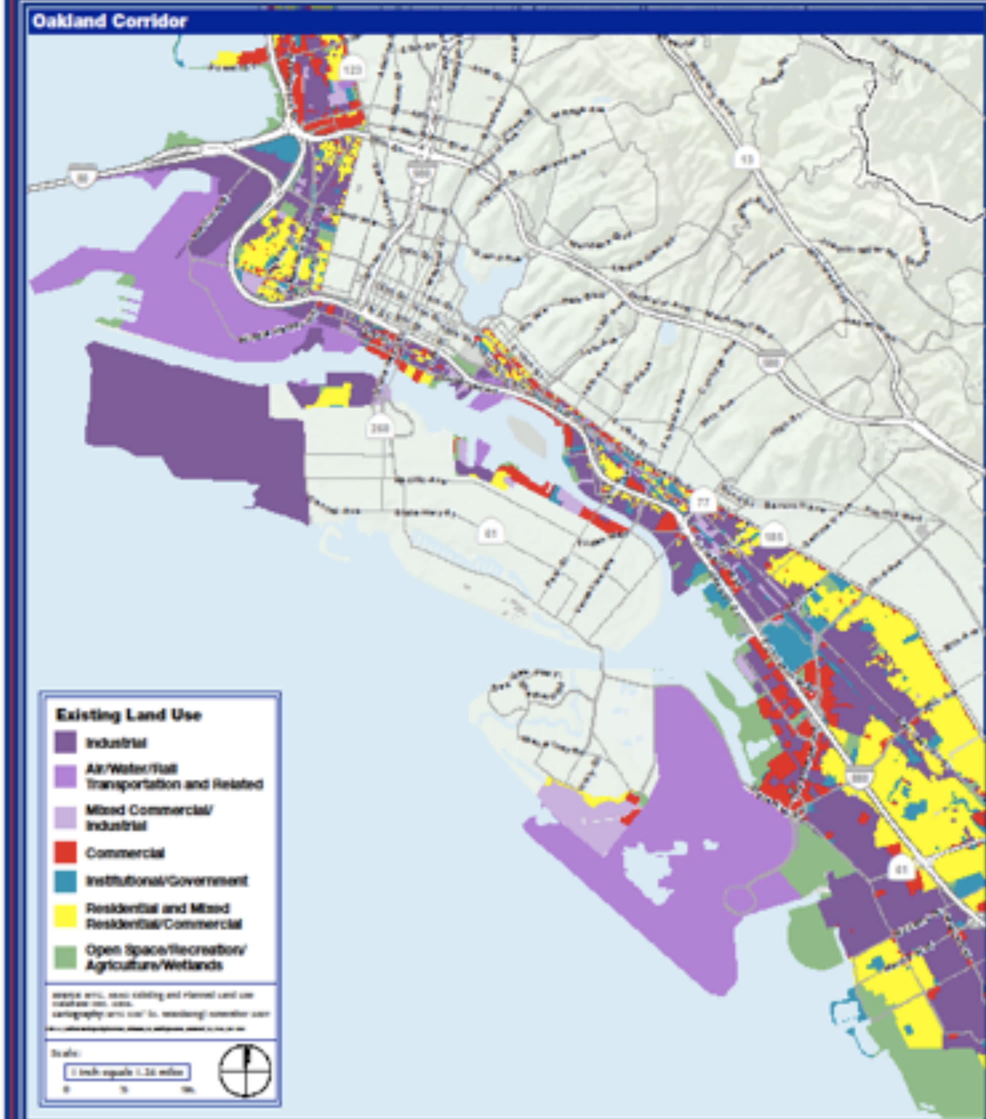
  – Many more locations for infill housing and commercial development outside functional industrial areas

Challenges Involved and Barriers to Overcome

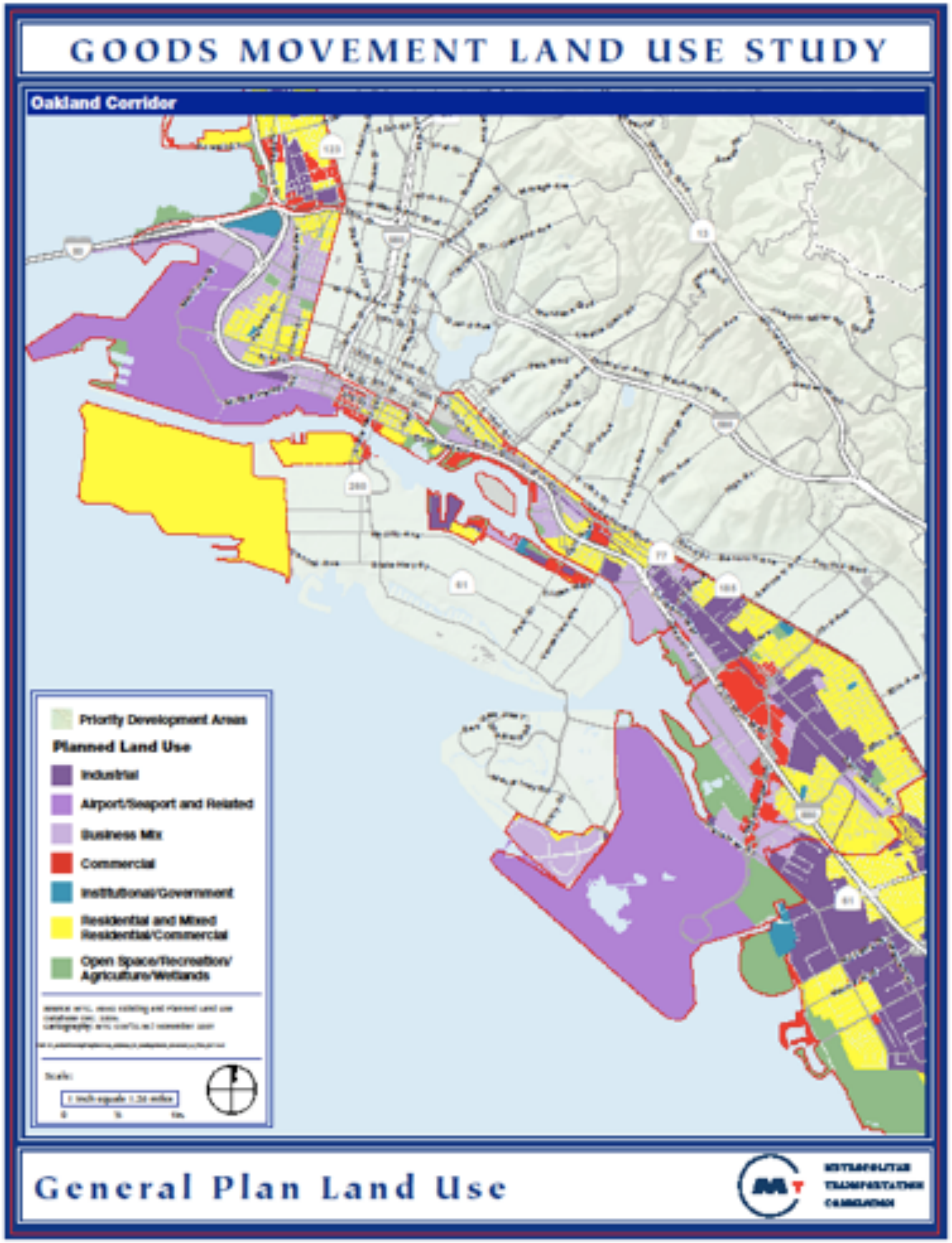
Will Require:

- Balancing local concerns/incentives with regional benefits
  - Strong local concerns and incentives in favor of higher-value land uses over industrial/goods movement uses
  - Benefits accrue more broadly throughout the region and are "behind the scenes" and not well understood
- Devising multi-jurisdictional approach for large metropolitan region
  - Efficiency of goods movement system is regional
  - Umbrella of Smart Growth/FOCUS makes sense

GOODS MOVEMENT LAND USE STUDY



Existing Land Use


GOODS MOVEMENT LAND USE STUDY
Oakland Corridor
Priority Development Areas
Planned Land Use
Industrial
Airport/Seaport and Related
Business Mix
Commercial
Institutional/Government
Residential and Mixed Residential/Commercial
Open Space/Recreation/Agriculture/Wetlands
Scale:
General Plan Land Use