

Multi-County Goods Movement Action Plan



Metro



Presentation for the
8th Stakeholder Advisory Group Meeting

March 6, 2008

Overview of the Action Plan

- > The master plan for goods movement in Southern California that is regional in scope.
- > This plan builds upon and complements other goods movement plans.
- > Intended to be used as a guide in preparation of state, regional, and local transportation plans.
- > Represents a partnership between county, regional, and state transportation agencies.
- > Presents regional modeling of freight facilities.
- > Presents a market segmented approach to addressing goods movement and associated issues.
- > Respects Agency Roles and authority.

What's New

- > The Action Plan represents a partnership between county, regional, and state transportation agencies, resulting in ongoing collaboration with State and Federal agencies.
- > The Action Plan included regional modeling of freight facilities.
- > The Action Plan presents a market segmented approach to addressing goods movement and associated issues.
- > The Action Plan is a new vision that encourages collaborative efforts and regional consensus.
- > First time development of an Action Plan accommodated continuous dialogue of all stakeholders through out the process

Agency Roles

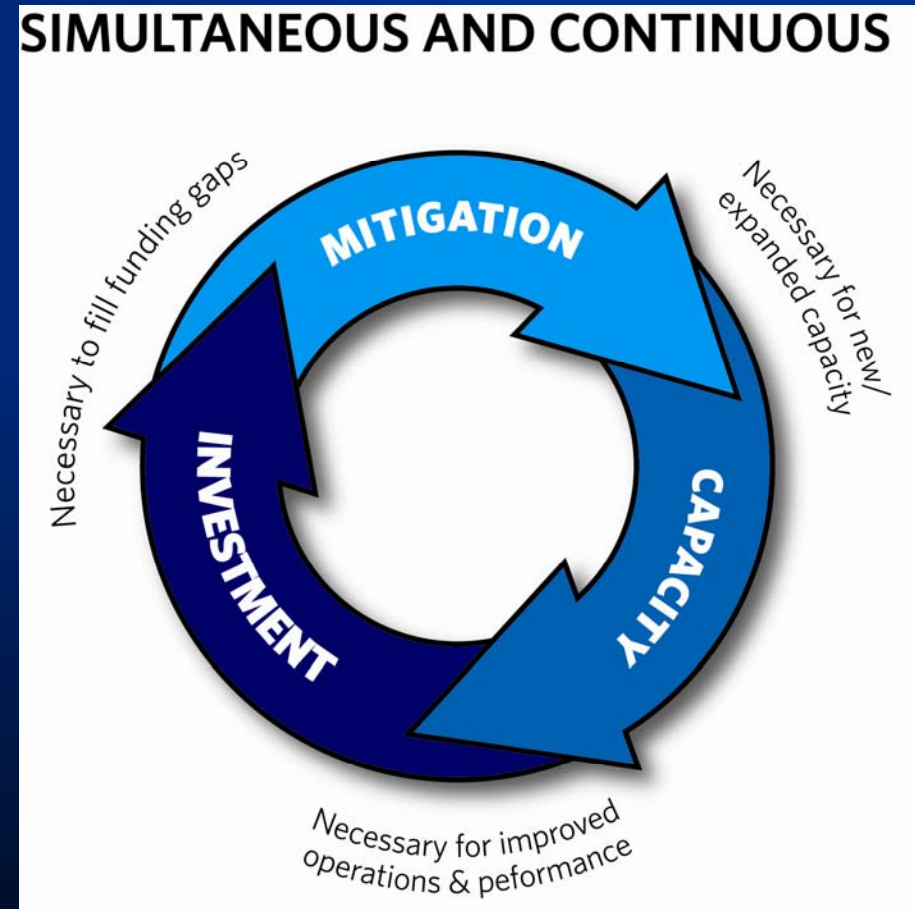
- > **The MCGMAP partners are the transportation and planning agencies that co-manage the development of the Action Plan.**
 - > The MCGMAP partners plan, fund, maintain, operate, construct and implement multi-modal transportation projects.
 - > The MCGMAP partners influence the goods movement system through the regional planning and programming of funds to transportation projects.

MCGMAP Study Area



Implementation Principles

1. **Guideline**
2. **Investment**
3. **Cost Distribution**
4. **Management**
5. **Public Benefit**
6. **Land Use Compatibility**



Challenges

Major Container Port Gateway (2005)

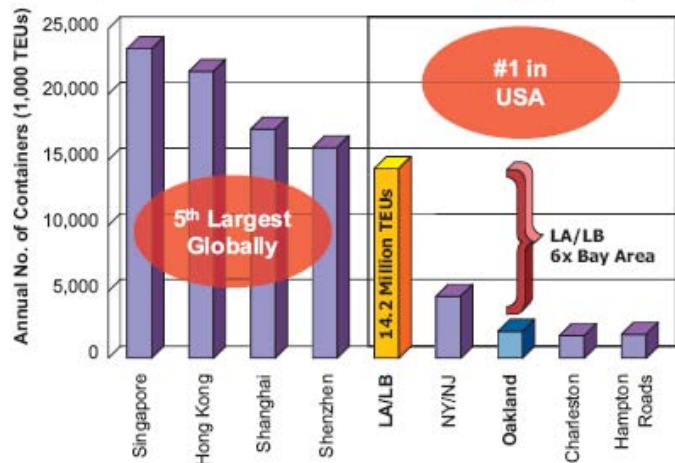


Figure 2 – Total Value of Containerized Trade Moving through the Ports of Los Angeles and Long Beach, 2005



Source: BST Associates
 Note: Alaska and Hawaii not shown

Challenges (Continued)

> Mobility

- > More than doubling of regional VMT and freight rail traffic by 2030
- > 5.4 million hours of daily delay by 2030
- > Some freeways may carry more than 80,000 trucks per day

> Environment and Community

- > In 2005, almost \$19.5 billion is health costs due to freight transport in California
- > Premature deaths – 2,400 (CARB) statewide, 1,200 in South Coast Air Basin

Challenges (Continued)

- > **Environment and Community (continued)***
 - > California counties not meeting the basic public health standard for fine particles leading to health issues
 - > Major roadways are pollution “hot spots”
 - > Even full fleet turnover to 2010 truck standards and to the Tier 4 locomotive standards proposed by USEPA will not provide sufficient reductions
 - > Additional emission reductions — over and above the control measures the agencies have been able to identify for inclusion in plans to date — will have to be implemented
 - > Incompatible Land Uses

* Source: “Southern California’s Freight Movement Challenge” presentation to California Bar Association Environmental Law Conference, October 2007 (SANBAG)

Challenges (Continued)

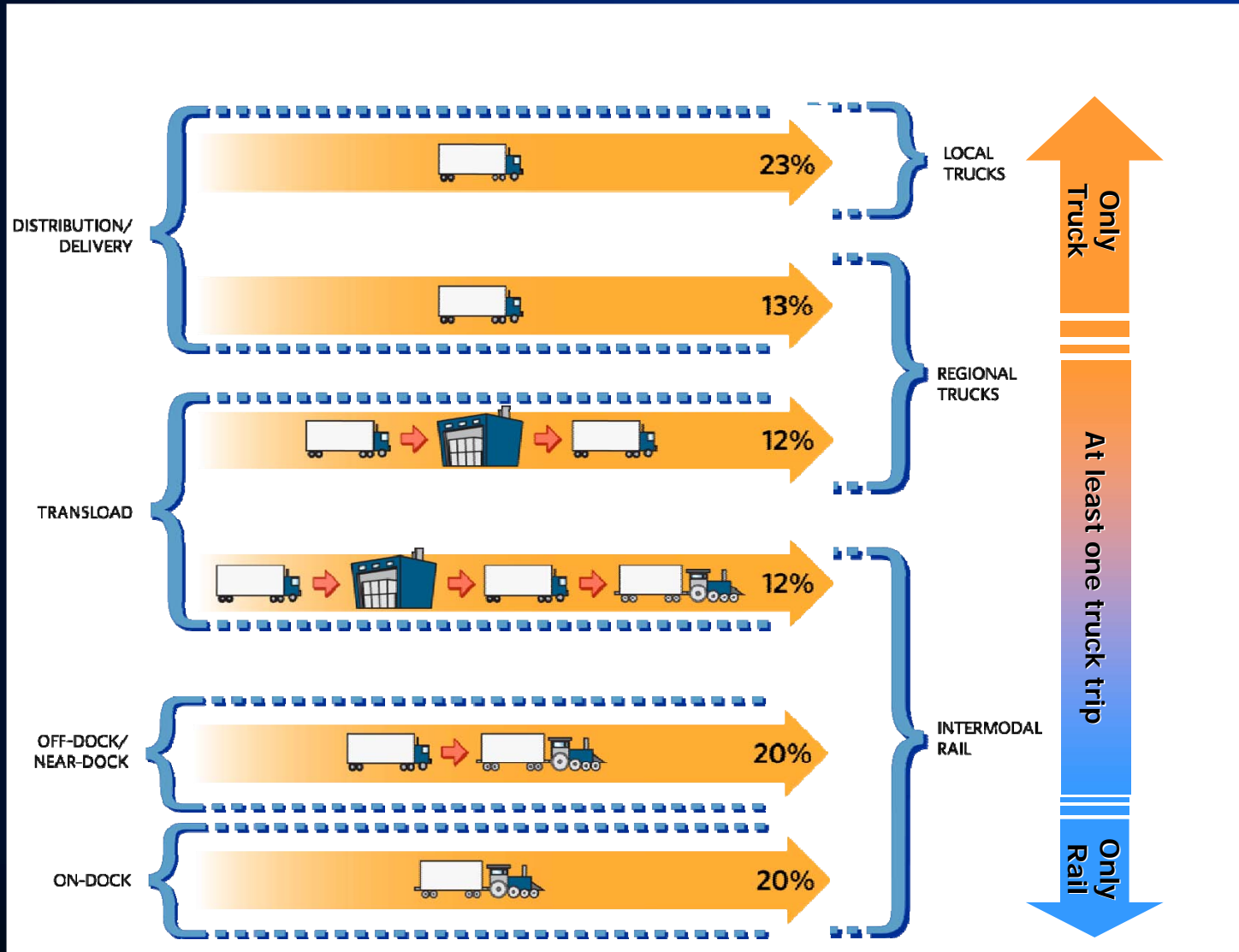
> Funding

- > More than \$50 billion required to fund Action Plan projects and programs in the next 30 years

> Economic

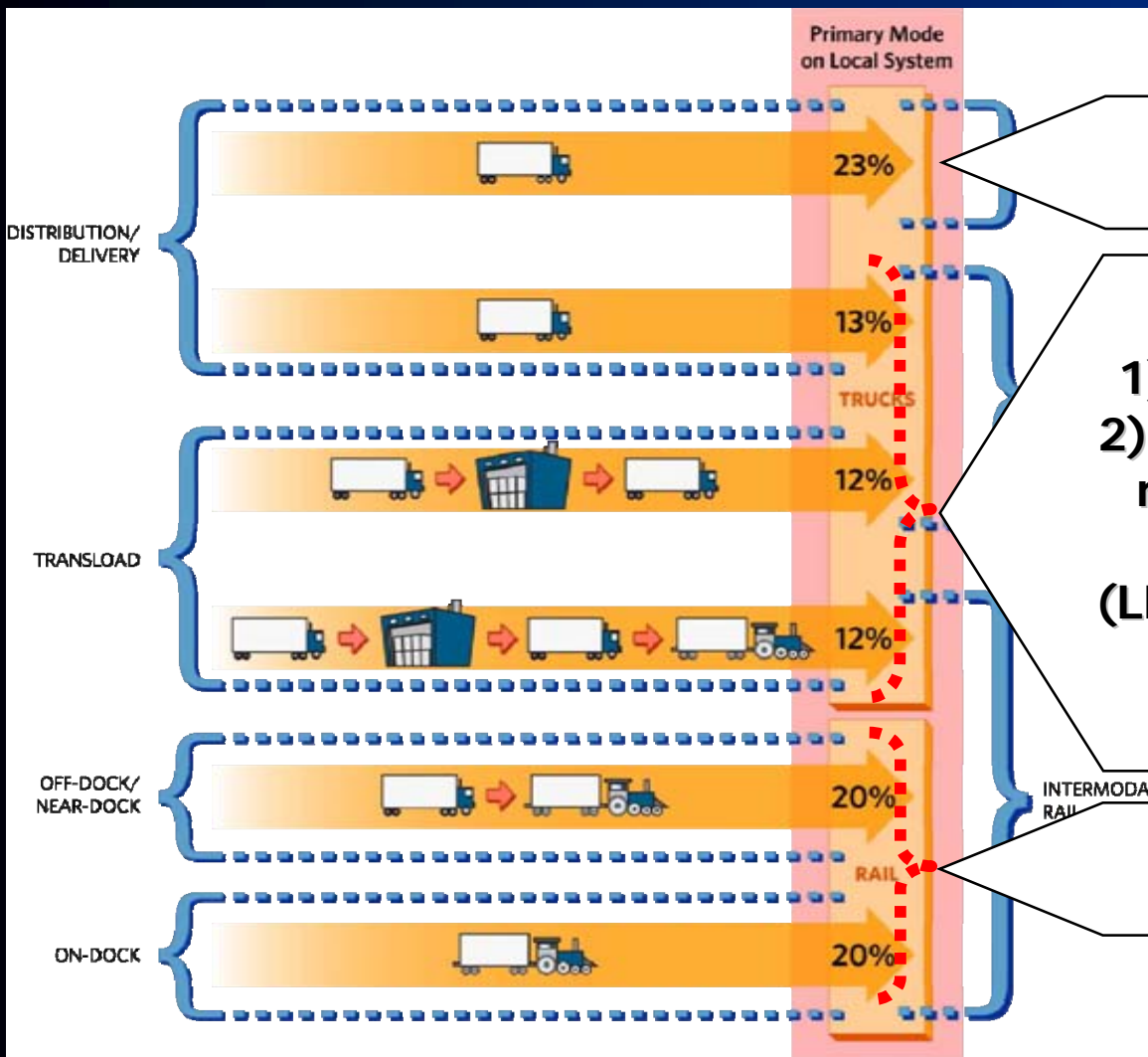
- > Logistics activity is directly responsible for 6.6% of the region's economy
- > One logistics job supports 2.2 new jobs
- > Border crossing delays resulted in the loss of \$3.9 billion from the binational economy

Modal Market Segments



* All percentages estimated based on 2005 data.

Strategic means to address ... Truck Issues



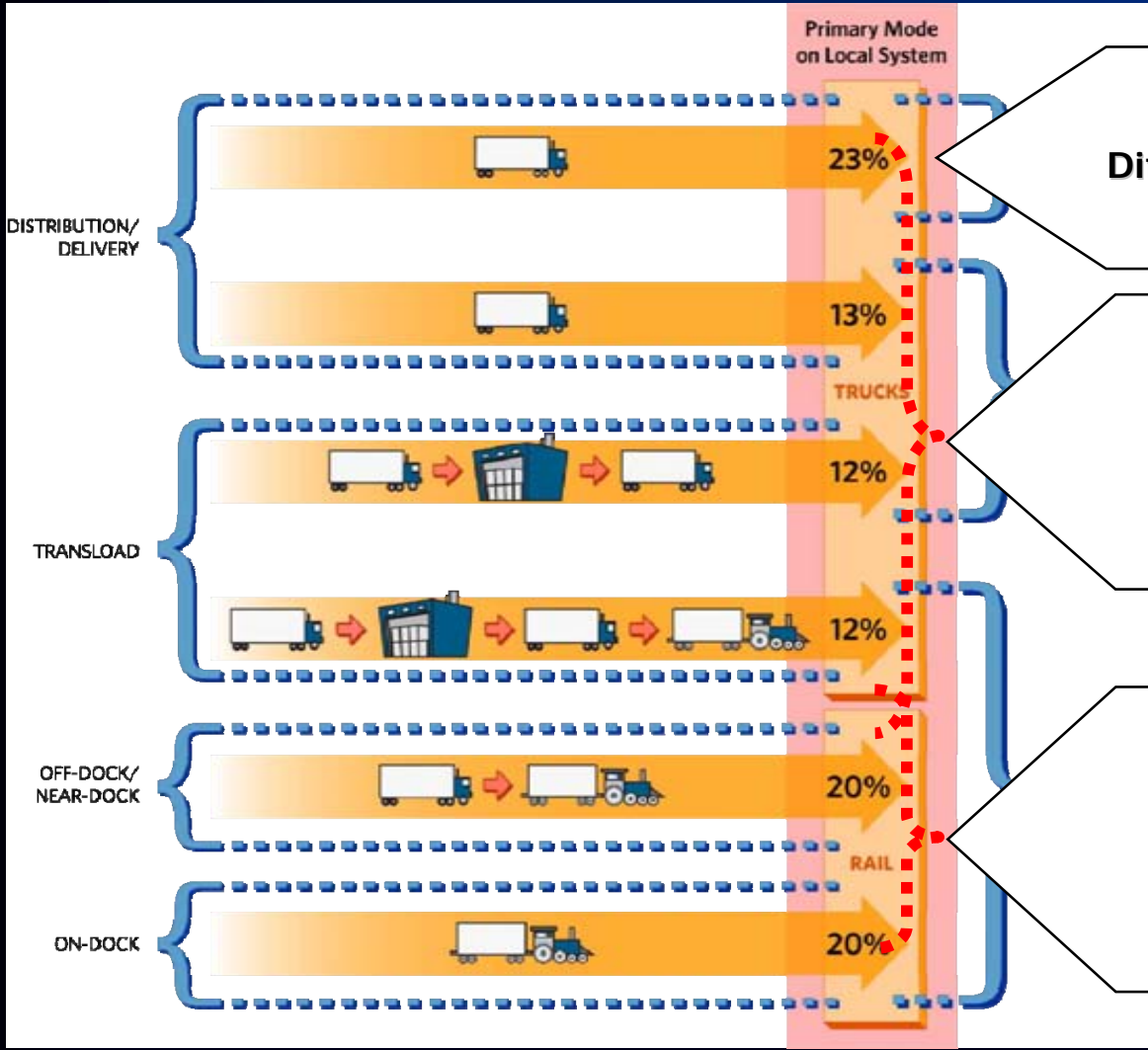
Hwy Operations & Capacity
General purp. hwy network

Innovative Strategies

- 1) Inland staging areas (inland port);
- 2) Separated corridor (truck lanes, rail, maglev, other shuttle technologies);
- 3) Clean fuels & efficient vehicles (LNG trucks, maglev, LNG locomotives);
- 4) Warehouse clustering around inland port.

Maximize On-Dock Rail
Minimize local truck drayage

Strategic means to address ... "Fair Share" Funding



Limited Opportunity
Difficult to target specific users/beneficiaries of the Gen. purp. hwy system in a fair manner.

Moderate Opportunity
Target specific users/beneficiaries

- Regional truck markets & destinations
- Combine with innovative strategies

Maximum Opportunity
Target ALL users/beneficiaries

- 1) State and Federal
- 2) User fees

Potential Future System



Four Sets of Actions



ACCELERATE Regional Environmental Mitigation

- 1) Region-wide approaches
- 2) Project specific mitigation measures



RELIEVE Congestion and Increase Mobility

- 1) Increase intermodal and mainline rail capacity
- 2) Improve highways/roadways



IMPROVE Operational Efficiencies

- 1) Improve marine terminal productivity, truck turn times, and intermodal operations
- 2) Improve highway operations



DEVELOP EQUITABLE Public/Private Funding Strategy

- 1) Maximize the region's fair share of Federal/state funds
- 2) Obtain private sector contribution

Freight Growth Scenarios

Scenario	Assumptions	2030 Employment impact (number of jobs)	Change relative to Scenario 1
1	San Pedro Bay port growth of 42.5 million TEUs by 2030; SCAG 2004 Regional Transportation Plan baseline implementation	1,601,476	-
2	San Pedro Bay port growth of 24 million TEUs by 2030; SCAG 2004 Regional Transportation Plan baseline implementation	1,013,101	-36.7%
3	San Pedro Bay port growth of 33 million TEUs by 2030; SCAG 2004 Regional Transportation Plan baseline implementation	1,303,490	-18.6%
4	San Pedro Bay port growth of 42.5 million TEUs by 2030; SCAG 2004 Regional Transportation Plan baseline implementation supplemented by additional projects and private investment sources and fees	1,601,476	0.0%

Source: IMPLAN Model

Notes:

1. 42.5 million TEUs is a capacity constrained forecast.
2. Employment impact shown in terms of logistics-related jobs.

Evaluations

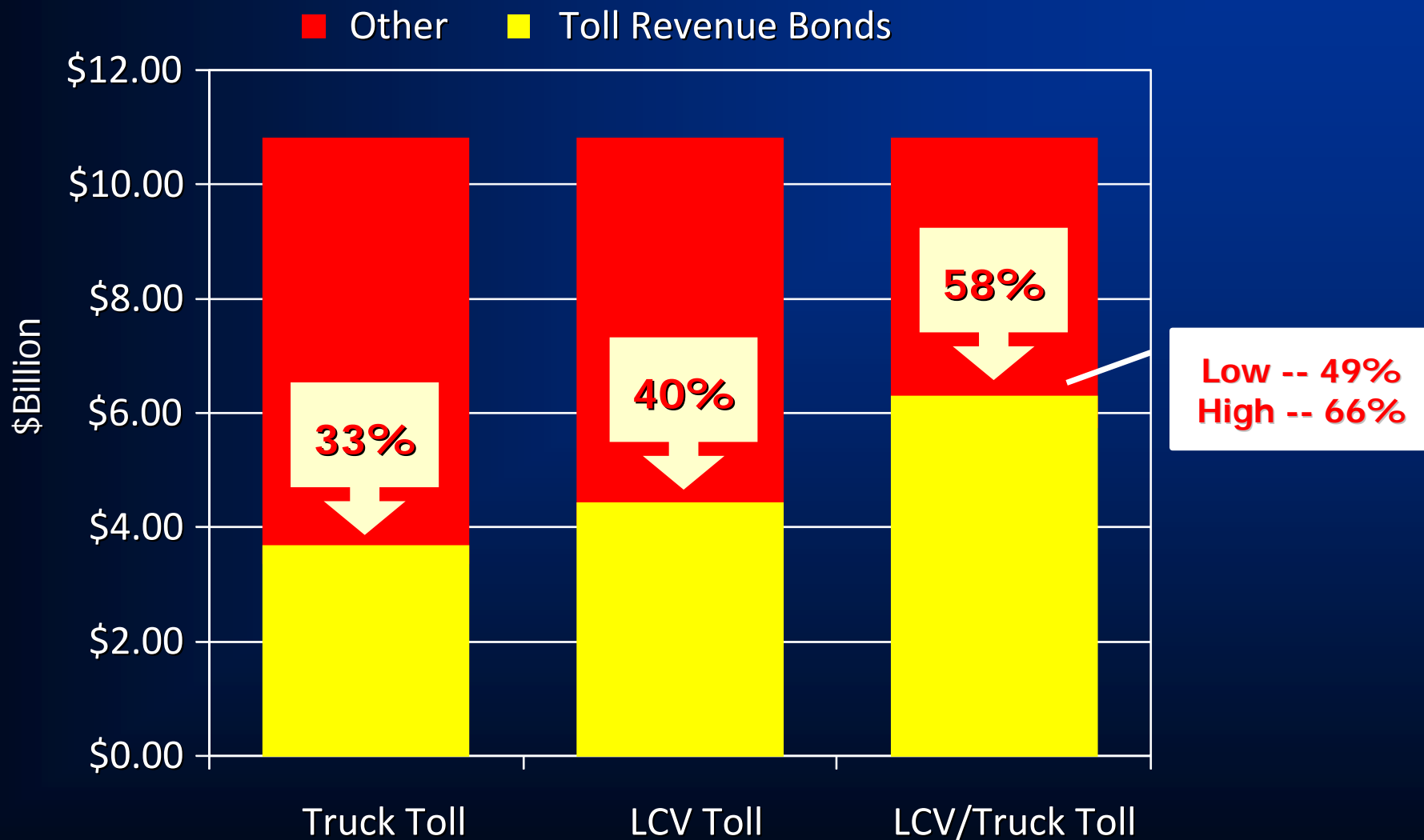
SPB Ports to High Desert

Bundle	Description	Distance (mi)	Reduction of Hours of Delay (vs. 2030 Baseline)		Schools*	Residential* (Acres)	Warehouse* (Acres)
			Autos	Trucks			
1	Operational and safety improvements	N/A	-42,000	-1,000	N/A	N/A	N/A
2	I-710 to SR-60 to I-15	101.5	203,000	78,000	35	9,933	6,290
3	I-710 to I-10 to I-15	98.7	289,000	83,000	60	11,329	3,135
4	I-710 to SR-91 to I-15	87.5	192,000	87,000	48	8,684	4,716
5	I-710 to I-10 (WB) / SR-60 (EB) to I-15	100.1	252,000	81,000	77	16,702	6,767
6	I-710 to SR-91 to SR-57 to SR-60 to I-15	110	207,000	76,000	41	10,533	5,057
7	I-710 to SR-91 to I-605 to I-10 to I-15	96.1	273,000	83,000	57	11,177	2,691
8	I-5 (I-710 to Kern County)	74.6	347,000	89,000	31	4,979	579
9	I-5 (U.S./Mexico Border to Kern County)	204.6	112,000	122,000	78	12,806	3,054
10	Mixed-flow toll expressways: I-710 > SR-60 > I-15	101.5	225,000	32,000	35	9,933	6,290
11	Alternative technologies (e.g. Shuttle Trains, Maglev) between POLA/POLB and inland destinations	N/A	98,000	23,000	N/A	N/A	N/A
12	I-15 (U.S./Mexico Border to Victorville)	161.7	185,000	76,000	23	5,500	3,151

Note: *Data does not include San Diego County information.

Source: SCAG Draft 2030 AQMP Travel Demand Model

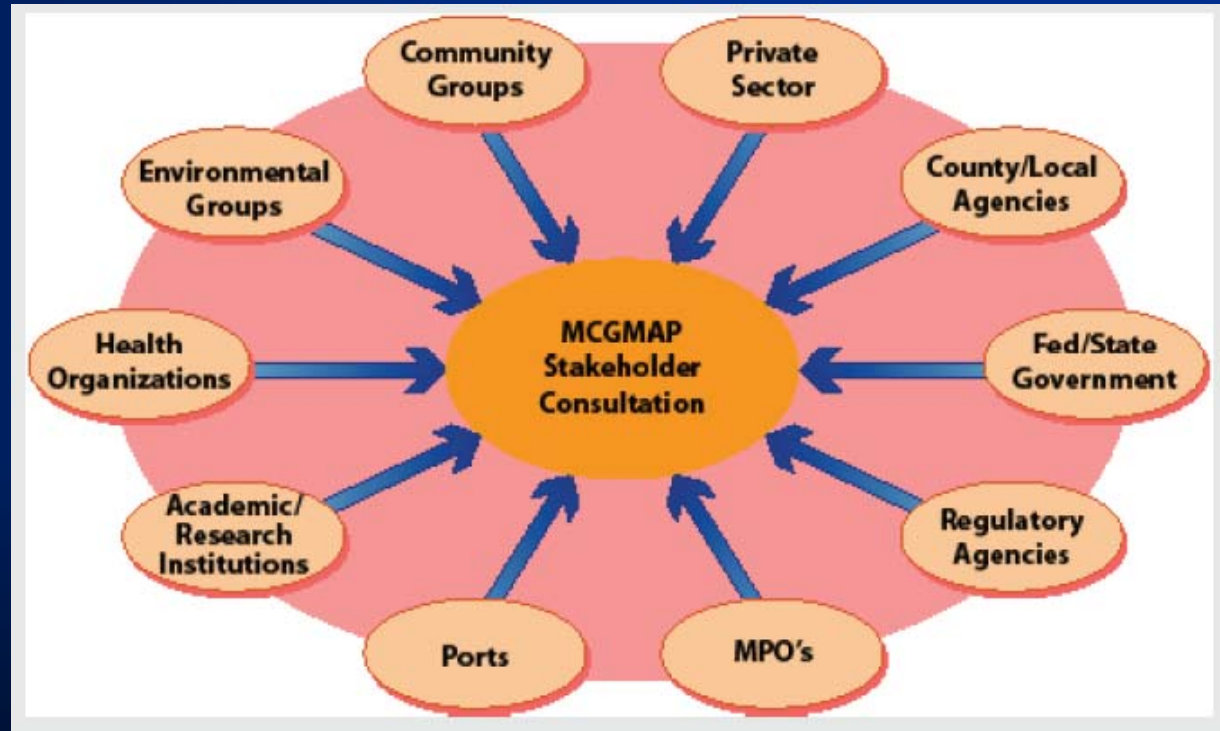
Preliminary Tolling Analysis



* 40 Year amortization increases coverage by 13%.

Outreach Efforts

- > Occurred throughout plan development
- > **Stakeholder Advisory Group Meetings**
 - > Began in 2005
 - > Various locations
 - > Diverse attendance
- > **One-on-one meetings**



Key Stakeholder Concerns

1. More aggressive environmental mitigation strategies to reduce current impacts.
2. Dedicate new private/public funding sources to reduce health and environmental impacts.
3. More aggressive use of alternative fuels and/or new technologies.
4. Study all costs and benefits of meeting a seemingly unlimited goods movement demand.
5. Consider limiting trade growth to invest in clean industries.

Core Mandates

Environment

- Avoid, reduce and mitigate environmental, community, and health impacts.

Mobility

- Promote the safe and efficient movement of all transportation modes and reduce congestion.

Economy

- Ensure the economic well-being of the region and the state.

Funding

- Secure the region's fair share of public and private funds for investment in the freight transportation system.

Action Plan Projects/Strategies

> Included in Draft Executive Summary

- > Two lists – Regional and County level
- > Over \$50 billion in total cost, of which approximately \$2.4 billion is currently committed

> Project/Strategy Categories

- > Project-specific environmental mitigation emissions reductions
- > Rail
- > Intermodal ground access
- > Alternative technology
- > Freeway/highway

Regional Goods Movement Projects/Strategies

Environmental mitigation or Mode/System	Description	2007 Cost ¹	Committed Funds	Time-frame ²
		(in millions)		
Project specific mitigation emissions reduction	• Implementation of Goods Movement Infrastructure Projects Could Require Mitigation of Project Specific Impacts	TBD	TBD	S,M,L
	• San Pedro Bay Ports Clean Air Action Plan	\$2,067	\$464	S,M,L
	• Other Goods Movement Emission Reduction Plans and Identified Needs	TBD	TBD	S,M
RAIL				
Grade Separations	• Alameda Corridor East (ACE) Grade Separations and Grade Crossings Improvements	\$4,410	\$706	S,M,L
	<i>Ace County subtotals</i>			
	• Los Angeles County – San Gabriel Valley	\$1,891	\$343	S,M,L
	• Orange County	\$631	\$115	S,M,L
	• Riverside County	\$1,048	\$80	S,M,L
	• San Bernardino County	\$840	\$168	S,M,L
Mainline Capacity Enhancement	• Rail Capacity Improvements (e.g., double and triple tracking; Colton Crossing) ³	\$2,200	\$0	S,M,L
Regional Freight Links	• Reconnect Santa Paula Branch Rail Line	\$450	\$0	M
INTERMODAL GROUND ACCESS				
On Dock Rail	• San Pedro Bay Ports Rail Systems	\$631	TBD	S,M,L
Intermodal Yards/Facilities	• Ports of Los Angeles/Long Beach Union Pacific Intermodal Container Transfer Facility Modernization ⁴	\$300	\$0	S
	• BNSF Port of Los Angeles/Long Beach Near Dock Facility (Southern International Gateway - SCIG) ⁴	\$200	\$0	S
Inland port	• Further investigation of Inland Port Strategy	TBD	\$0	M
ALTERNATIVE TECHNOLOGY				
Truck Lanes/Dedicated Freight Guideway System	• Dedicated Freight Guideway System/Regional Truck lanes (I-710 From Port of Long Beach to SR-60; East-West Corridor between the I-170 and to I-15 to Victorville) inclusive of non-freeway corridors	\$18,268	\$35	M,L
FREEWAY/HIGHWAY				
Freight Corridor Capacity Enhancement and Operational Improvements	• High Desert Corridor ⁵ (SR-14 to I-15)	\$5,600	\$0	M,L
	• Alameda Corridor SR-47 Expressway	\$662	\$265	S
	• Replace/Reconstruct Gerald Desmond Bridge	\$800	\$337	S
	• I-710 Early Action Projects ³ - City of Long Beach	\$500	\$12	S
	• I-5 Truck Lanes Project ² - North Los Angeles County	\$392	\$12	S,M
	• SR-86 NAFTA Corridor Interchange Construction	\$150	\$0	M
	• SR-58 Corridor Widening Projects ³	\$301	\$0	M,M
Border Crossing Improvements	• Access Improvements to the California/Mexico Ports of Entry at Otay mesa, Otay Mesa East, and Calexico East Projects ³	\$1,699	\$524	S
	Total	\$38,826 B	\$2,433 B	

Notes: 1. All figures include environmental mitigation costs.

3. Projects must demonstrate regional public benefit to qualify for public funds.

2. S=Short-term (2007-2015); M=Mid-term (2015-2025); L=Long-term (post 2025)

4. Private sector primary fund source.

5. Require further analysis west of US-395, private sector primary fund source, with possible exception of short-term project to construct section between Phantom East and I-15 (\$490 million)

County Goods Movement System Improvements

Mode/System	County	Description	2007 Cost ¹ (in millions)	Time-frame ²
RAIL				
Grade Separations	VEN	• Construct Rice Avenue/UP Grade Separation	\$45	TBD
	VEN	• Construct Rose Avenue/UP Grade Separation	\$45	TBD
	VEN	• SR-118/Coast Line - Construct Grade Separation	TBD	TBD
	LA	• Nogales Street (LA Subdivision) grade separation project	\$29	S
Mainline Capacity Enhancement	LA	• Relief siding (2 projects) and upgrade sidings (1 project) on the Antelope Valley Line	\$15	S
	LA	• Construct Coastal Rail Corridor	\$1,350	S, M
	SD	• Construct South Line Rail/Trolley	\$328	S, M
INTERMODAL GROUND ACCESS				
Intermodal Yards/Facilities	SBD	• Build New BNSF Intermodal Yard in Victorville	TBD	TBD
Maritime	LA	• Shuttle Train Intermodal Service to Inland Empire; Inland Terminal	\$60	TBD
	SD	• San Diego Port District Marine Terminal Ground Access	\$822	S, M
ALTERNATIVE TECHNOLOGY				
ITS Applications	LA	• San Pedro ATSAC System in City of Los Angeles	\$6	TBD
	LA	• Wilmington ATSAC System in City of Los Angeles	\$7	TBD
	LA	• Transportation Management, Information and Security System	\$10	TBD

Notes: 1. All figures include environmental mitigation costs.

2. S=Short-term (2007-2015); M=Mid-term (2015-2025); L=Long-term (post 2025)

County Goods Movement System Improvements (Continued)

Mode/System	County	Description	2007 Cost ¹ (in millions)	Time-frame ²
FREEWAY/HIGHWAY				
Freight Corridor Capacity Enhancement and Operational Improvements	VEN	• Reconstruct US 101/Rice Avenue IC	\$75	M
	LA	• Key Goods Movement Arterial Improvements	TBD	TBD
	LA	• Reconstruct SR-91/I605 interchange	\$240	S
	LA	• Reconstruct I-605/SR-60 interchange	\$1,000	S
	LA	• Reconstruct I-605/I-10 interchange	\$1,000	S
	LA	• Reconstruct SR-60/SR-57 interchange	\$550	S
	LA	• I-1110 8th/9th Street Interchange - Add Auxiliary Lanes and Modify/Reconstruct Ramps (Two Projects)	\$39	TBD
	LA	• Washington Blvd. Widening and Reconstruction project	\$14	S
	LA	• Alameda Street Widening and Reconstruction in Los Angeles (101 Freeway to 7th Street; I-10 to 7th Street)	\$29	TBD
	LA	• Seaside Avenue/Ocean Blvd (SR-47) and Navy Way Interchange	\$43	TBD
	LA	• I-110 Connector Improvement Program (4 Projects)	\$134	TBD
	OR	• I-5 From the I-5/SR-22/SR-57 Interchange to SR-91 add a general purpose lane in each direction	\$430	M
	OR	• I-5 Reconstruct El Toro Road Interchange	\$120	S
	OR	• I-5 between SR-55 and the SR-133 (near El Toro "Y") add one general purpose lane in each direction and improve interchanges in the vicinity	\$319.20	M
OR	• I-5 between the vicinity of El Toro "Y" to near SR-73 add new lanes in each direction	\$315	M	

Notes: 1. All figures include environmental mitigation costs.

2. S=Short-term (2007-2015); M=Mid-term (2015-2025); L=Long-term (post 2025)

County Goods Movement System Improvements (Continued)

Mode/System	County	Description	2007 Cost ¹ (in millions)	Time-frame ²
FREEWAY/HIGHWAY (Continued)				
Freight Corridor Capacity Enhancement and Operational Improvements (cont.)	OR	• I-5 Northbound Extend Existing Truck Bypass Lane From Crown Valley to El Toro Road. Add Auxiliary lane where needed.	\$240	L
	OR	• I-5 Southbound From Alicia Parkway to the Crown Valley Interchange add a Lane	\$411	M
	OR	• I-5 Construct new interchange at Crown Valley (Saddleback) and reconstruct interchange at Avery Parkway with collector distributor road between Crown Valley and Avery	\$260	L
	OR	• SR-57 Northbound From Lambert Road to the SR-60 interchange add truck climbing lane	\$157	M
	OR	• SR-57 Northbound From Orangethorpe to Lambert Road, Add Auxiliary Lane & 5th through lane	\$140	S
	OR	• SR-57 in the Northbound Direction Extend General Purpose Lane #5 Between Orangewood and SR-91 and Add Auxiliary Lane	\$190.8	S
	OR	• SR-91 Westbound From SR-57 to I-5 - Add General Purpose Lane & Auxiliary Lane	\$152	S
	OR	• SR-91 Westbound - Provide a General Purpose Lane from SR-55 to SR-57 and add auxiliary lane	\$120	M
	OR	• SR-91 Eastbound Add a Lane Between SR-55 (Lakeview and SR-241 and Westbound From SR-241 to Imperial Highway).	\$96	S
	OR	• I-405 from the I-5 to SR-55 add 1 general purpose lane in each direction	\$328.9	L
	RIV	• SR-60/10 Truck Climbing Lane	\$50	S
	RIV	• March ARB/Global Cargo Port Van Buren Interchange Project	\$75	S
	RIV	• I-10/SR60 New Interchange Construction	\$100	L
	SBD	• I-15 Widening and Devore Interchange (at I-215) Reconstruction	\$200	S
	SBD	• Interstate 10 Widening and Interchange Improvements (From SR-163 to SR-78)	\$700	S
	SD	• I-5 Widen/Managed Lanes (From La Jolla Village Dr. to Vandergrift)	\$962	S
	SD	• I-5 Widen/Managed Lanes & Operational Improvements (From SR-163 to SR-78)	\$608	S
	SD	• I-805 Widen/Managed Lanes (From SR-905 to I-5)	\$1,801	S
SD	• San Diego International Airport Truck Access to I-5 (Truck route/Interchange improvements)	\$32	M	
SD	• Pipeline Truck Access (Petroleum Terminal) to I-15 (Truck route/Interchange improvements)	\$32	M	

Notes: 1. All figures include environmental mitigation costs.

2. S=Short-term (2007-2015); M=Mid-term (2015-2025); L=Long-term (post 2025)

Next Steps

- > **Environmental and Community Impacts**
- > **Partnership and Advocacy**
- > **Mobility**
- > **Funding**
- > **Additional Plans/Studies**
 - > Environmental Justice Grant for MCGMAP (Underway)
 - > Los Angeles County Strategic Plan (Late Summer 2008)
 - > SCAG Goods Movement Implementation Plan (Late Spring 2008)

Completion Schedule

- > **Receive stakeholder comments on the Draft Action Plan and Executive Summary** – through March 17, 2008 (close of business)
- > **County workshops** – 13 total through February 2008
- > **Board presentations and approval** – December 2007 through April 2008
- > **Release of Final Action Plan and Executive Summary** – April, 2008

Questions & Answers

More Information:
www.metro.net/mcgmap