REGIONAL TRANSPORTATION PLAN
2012RTP
SUSTAINABLE COMMUNITIES STRATEGY
Towards a Sustainable Future

2012 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

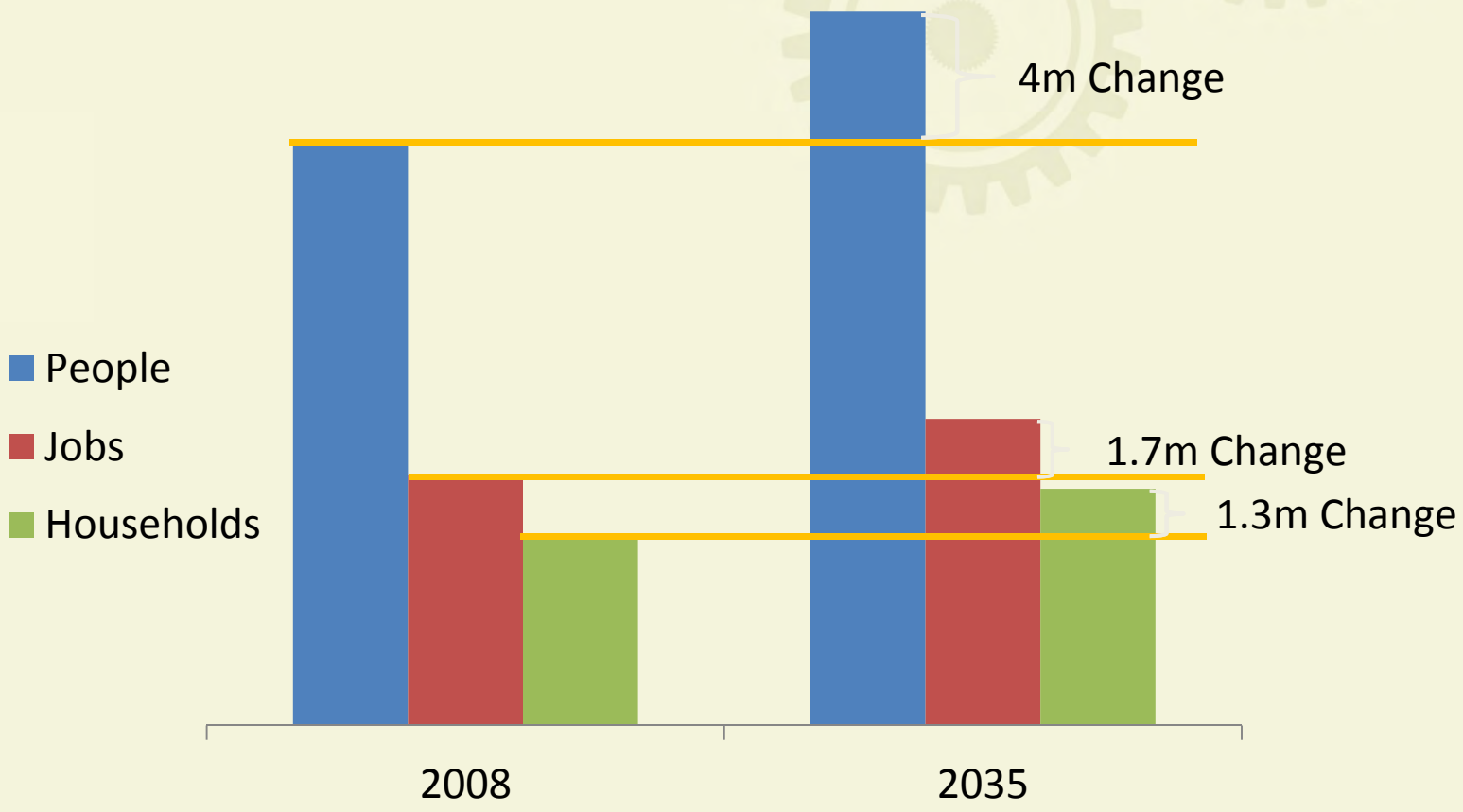
October 20, 2011

Purpose of today's meeting

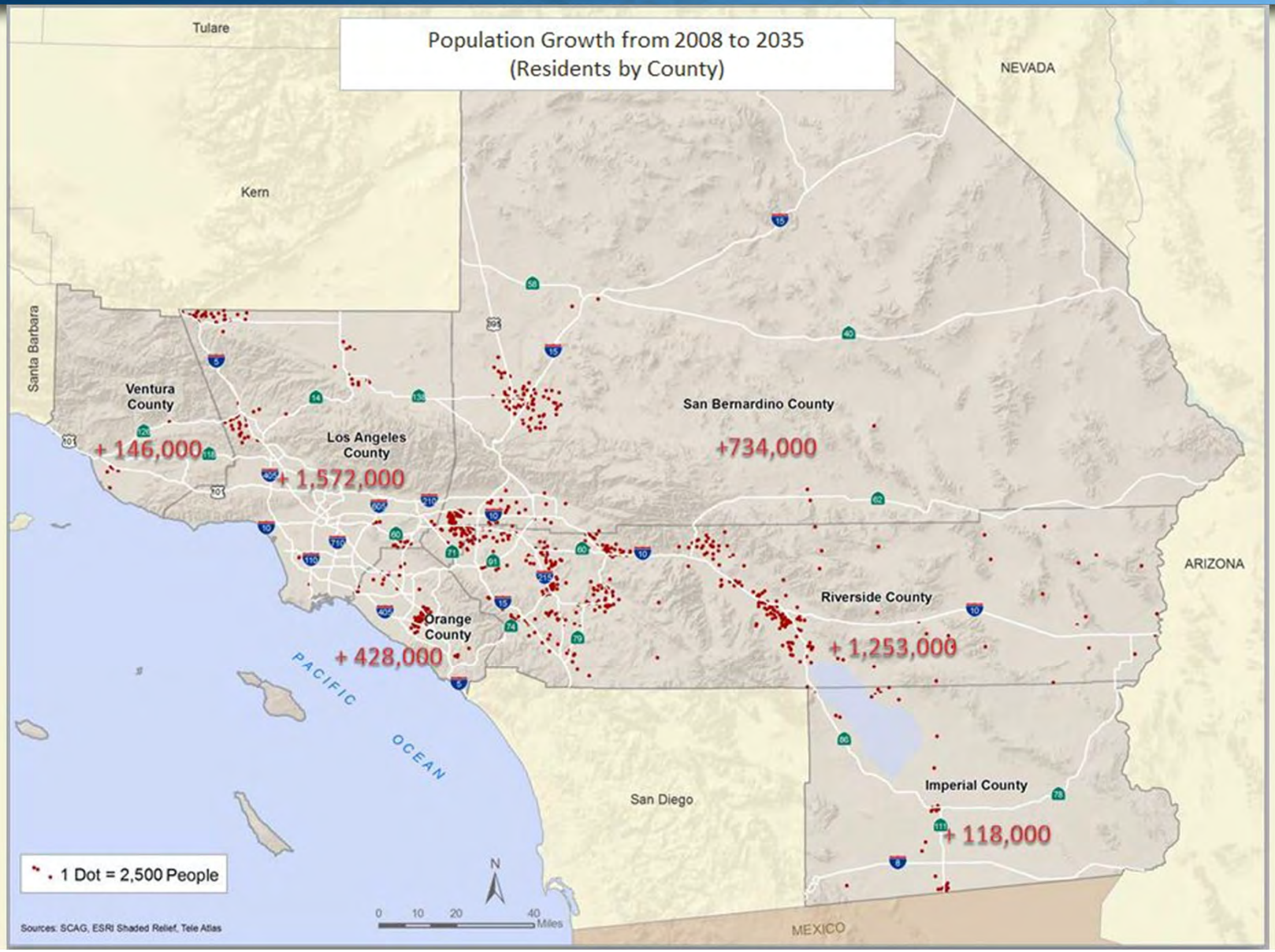
- Discuss our vision
- Discuss our proposed financial plan
- Discuss major programs, policies and projects

Our Vision for a Better Urban Future

Anticipated Future Growth



Population Growth by County



Policies for A Sustainable Urban Future

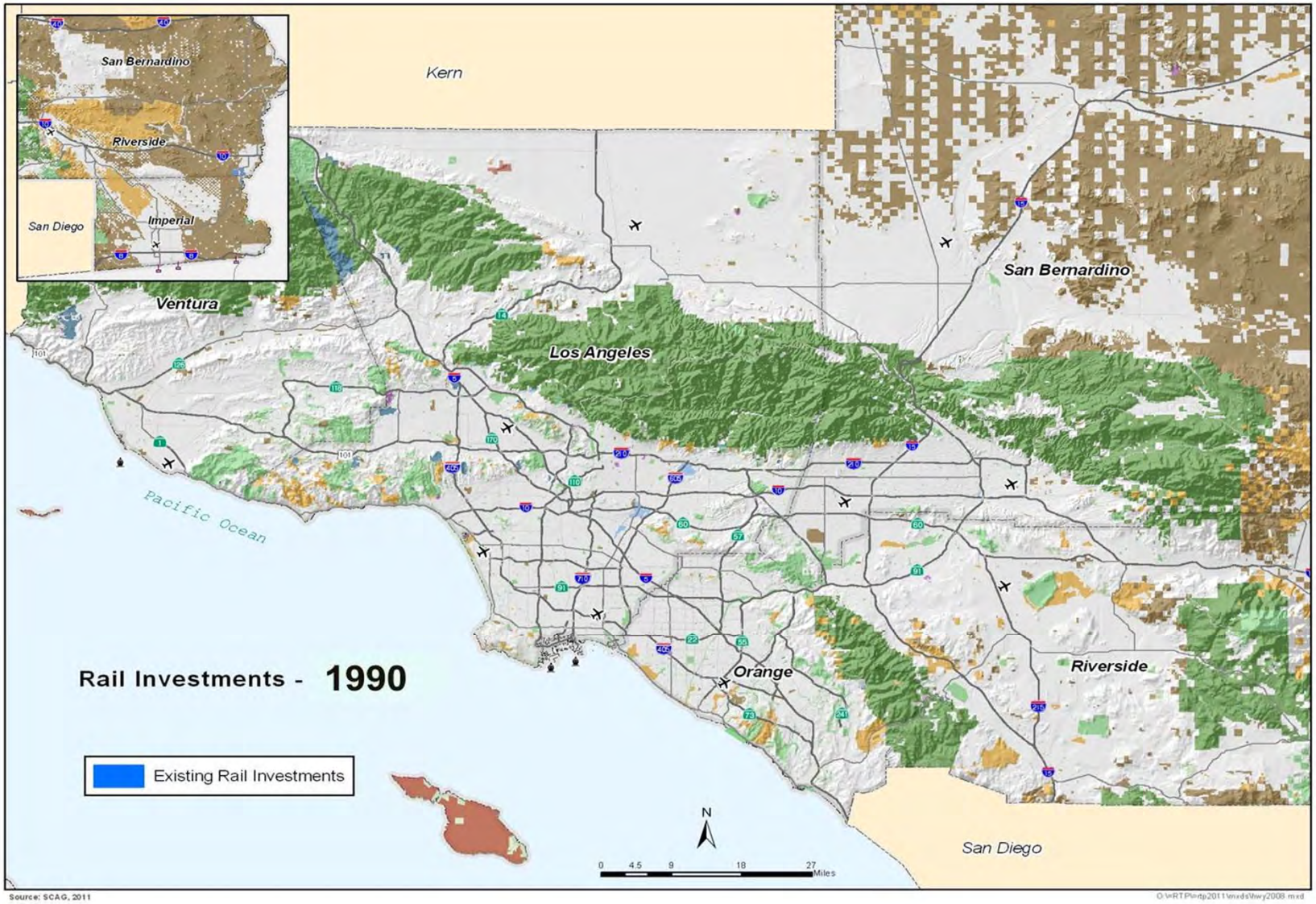
- Region-wide transit systems (enhanced capacity, service miles, and ridership)
- Regional centers (improved job-housing balance)
- Transit-oriented development
- Transit-ready development
- Neighborhood-oriented design
- Complete community design
- Complemented by active transportation facilities
- Compact new housing (2 out of 3 multifamily/townhouse)
- Zero-emission vehicle infrastructure (contribute to additional benefit beyond the state requirement)
- Open Space Conservation

Regional Strategies For A Sustainable Urban Future

- An Interconnected Regional Transit System
- Transit-Oriented Development
- Transit Ready Development Opportunities

A Regional Transit System

Rail Transit Investments, 1990



A Regional Transit System

Rail Transit Investments, Today

A Regional Transit System

Rail Transit Investments, 2035

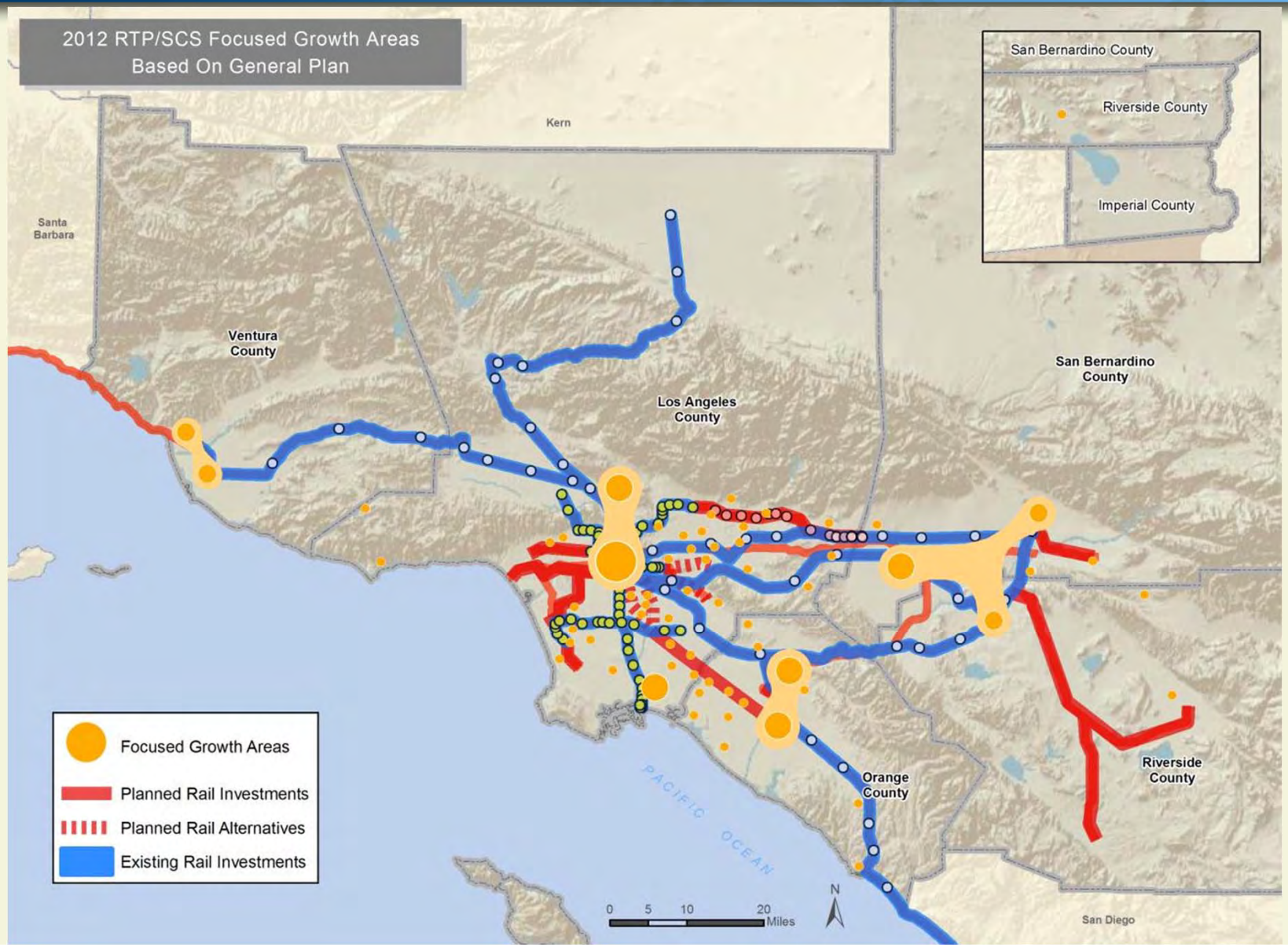
Transit-Oriented Development

- Suitable for urban core and areas near transit corridors
  - Compact community design around transit corridors
  - Enhanced Walkability to urban amenities by public transit
  - Mixed residential development

Transit-Ready Development Opportunities

- Suitable for suburban and outlying areas
  - Mixed-use development
  - Complete community design
  - Neighborhood-oriented design
  - One-stop development

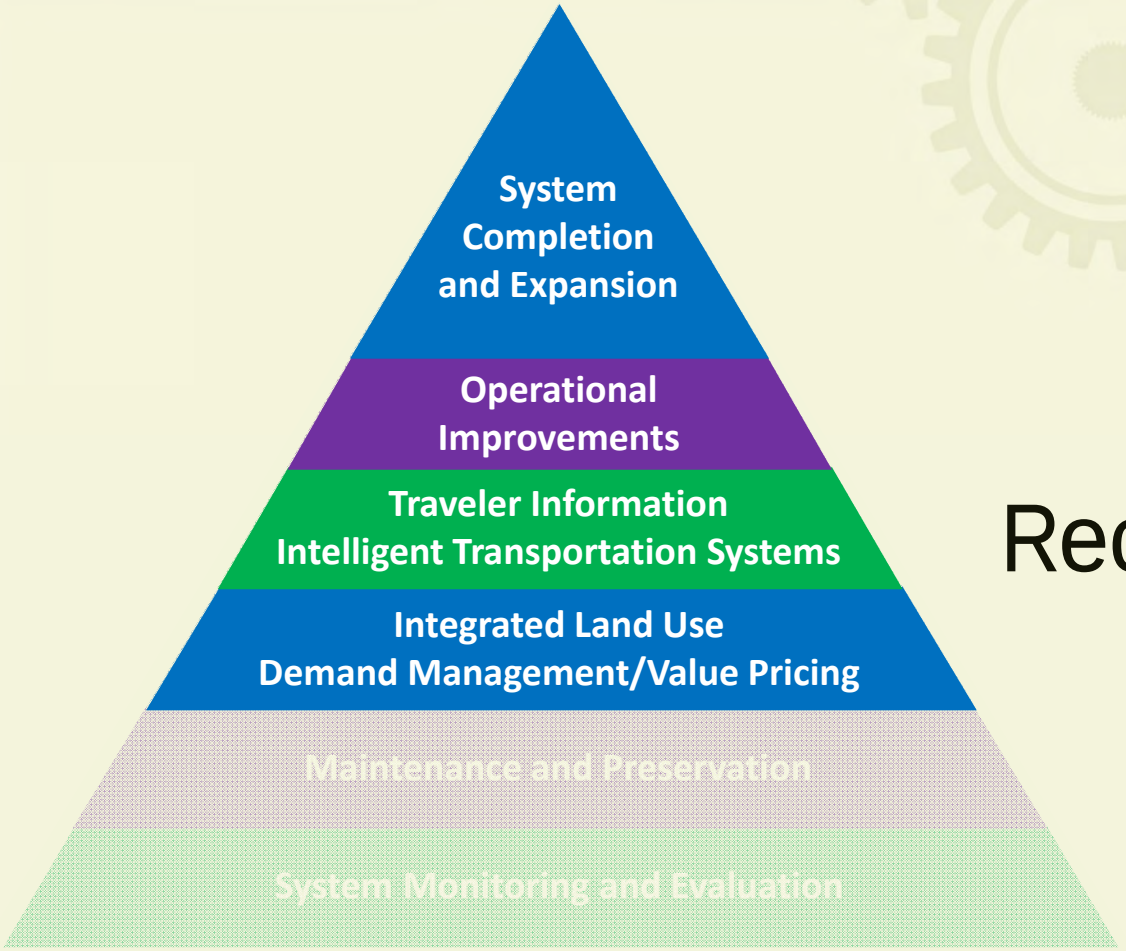
2012 RTP/SCS Focused Growth Areas



Land Use Recommendations

Land Use Strategy for preferred Alternative

- Utilize local growth input
- Compass Blueprint Demonstration Projects
- Emphasize growth in planned Transit Priority Project Areas
- Emphasize growth along main streets, downtowns and other appropriate locations



Transit Recommendations

Transit Recommendations Rationale

- Significant investments in transit already committed locally (CTCs)
- Changing demographics and urban forms call for more travel choices, particularly transit
- Transit can significantly relieve pressure on some of our most congested roadways
- Additional transit will be necessary to ensure our pricing strategies work efficiently and equitably

Transit Recommendations

- Includes current commitments such as:
  - Purple Line Extension to Westwood
  - Gold Line Extension to Glendora
  - Metrolink San Jacinto and Temecula Extensions
  - High frequency Metrolink service from Laguna Niguel to LA
  - Rail feeder service in Orange County
  - Anaheim Rapid Connector
  - New BRT services in Orange County
  - Redlands Rail
  - E Street Corridor

Transit Recommendations Beyond Current Commitments

- Increase service in productive corridors
  - Increase frequency and span-of-service on corridors starting in 2020
  - Apply to TOD/TPPs and corridors with current low frequencies (45- to 60-minute frequencies)
  - 68 new vehicles
  - Capital cost $35.7 million
  - Yearly service cost $61.7 million

Transit Recommendations
Beyond current commitments

- New Point-to-Point Express bus service in key corridors
  - New or expanded service on HOV and HOT lane networks starting in 2020
  - Frequent peak and also mid-day service
  - 135 new vehicles
  - Capital cost $70.4 million
  - Yearly service cost $37.1 million

Transit Recommendations Beyond Current Commitments

- New Bus Rapid Transit (BRT)/limited-stop service in key corridors
  - BRT with signal priority, limited stops, and bus lanes starting in 2020
  - Limited-stop where funding not available
  - 92 new vehicles
  - Capital cost $48.3 million
  - Yearly service cost $26.2 million

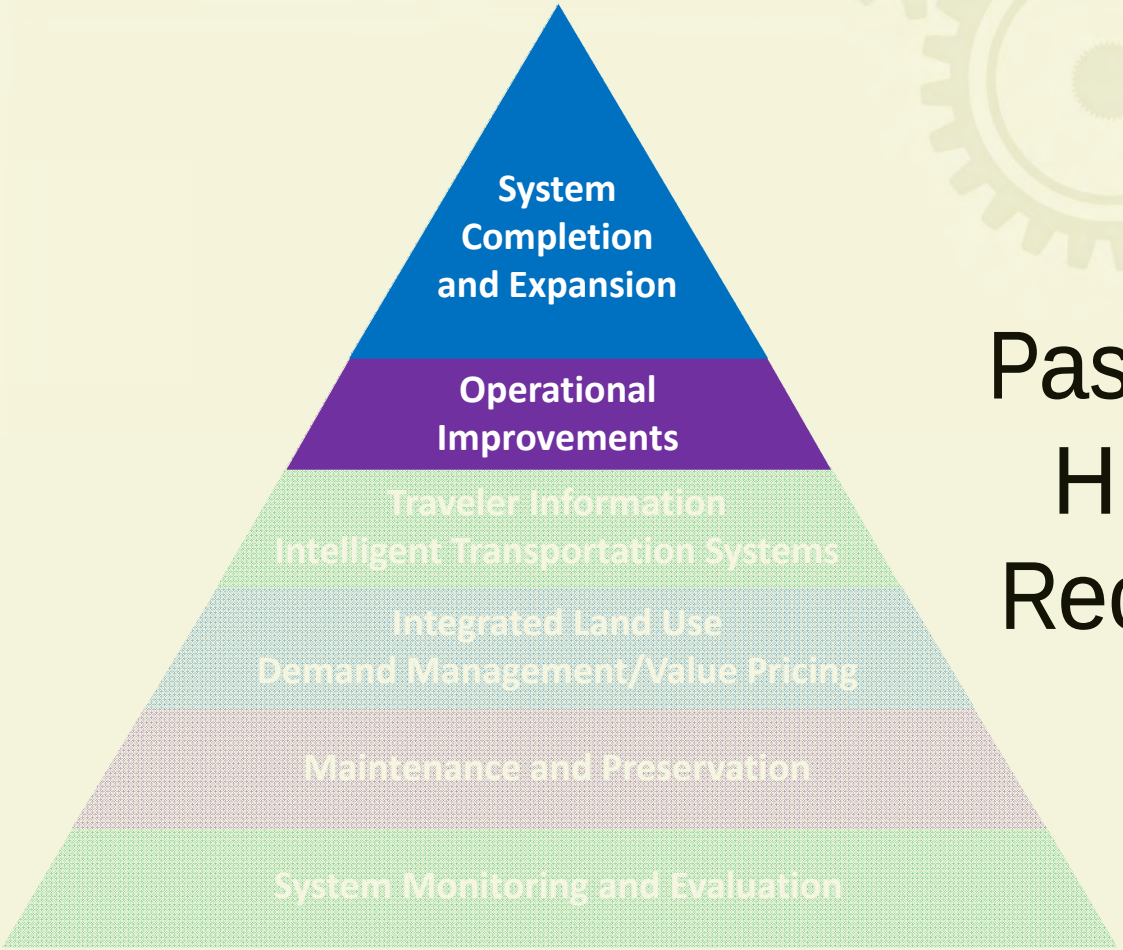
Committed Projects Example - Rail Investments

Build 2035 Fixed-Guideway Transit Network (2008 RTP)

Potential Benefits

- New and enhanced transit services that provide new choices for commuters and residents
- Cleaner air, reduced congestion, VMTs and GHGs
- Facilitation of current and future smart growth and sustainable communities
- The ability for our residents to choose a healthier, more active lifestyle
- The ability for our residents who do not own a vehicle to remain mobile and active

Discussion on Transit Recommendations



Passenger Rail and High-Speed Rail Recommendations

High-Speed Rail Rationale

- Voters of California passed Proposition 1A in 2008
- Most of currently secured funding ($6.3 B) has been dedicated to initial construction segment in Central Valley
- Making improvements to our existing assets (LOSSAN and Metrolink) to bring faster service (110 mph and above) sooner will put us in a good position to benefit from the State HSR

High-Speed Rail Recommendations

- Amtrak LOSSAN speed and service improvements
  - Capital projects to increase speeds to 110 mph in some segments – current average speed 46 mph
  - Double tracking, new sidings, station improvements, grade separations, grade crossings
  - New locally-controlled JPA moving forward
  - Strategic Implementation Plan in progress
  - Estimated costs $6 to $7 billion (corridor-wide)

High-Speed Rail Recommendations

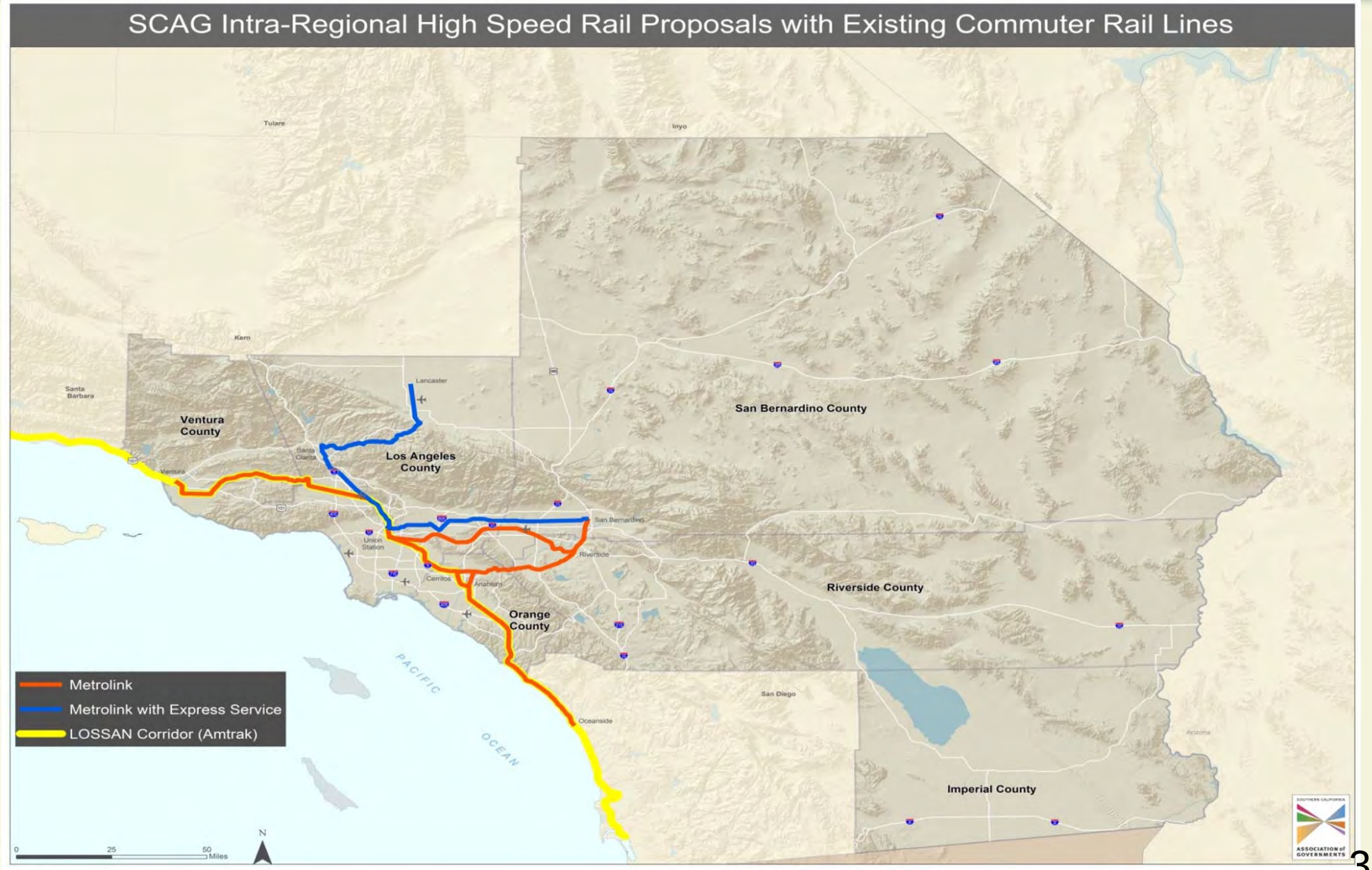
- Metrolink speed and service improvements
  - Capital projects to allow speeds of 110 mph in some segments – current average speed 40 mph
  - Double tracking, new sidings, station improvements, grade separations, grade crossings
  - Support Antelope Valley Line study in progress and consider implementing study recommendations
  - Support extending Metrolink service to major trip attracters such as regional airports where feasibile
  - Support Strategic Assessment
  - Additional Express Services
  - Estimated costs $3 to $7 billion

High-Speed Rail Recommendations

- California High-Speed Rail Phase One (contingent upon additional commitments by CHSRA for LOSSAN and Metrolink improvements)
  - San Francisco to Anaheim via L.A. Union Station
  - Connects Palmdale to Union Station and further south to Anaheim in our region
  - HSR, Amtrak and Metrolink services compliment each other along with other public transit services
  - Estimated cost $43 billion+?
  - Only partially funded

- Southern California-Las Vegas HSRT
  - Study of Anaheim-Ontario segment, estimated cost $45 million

Proposed HSR Improvements in SCAG Region

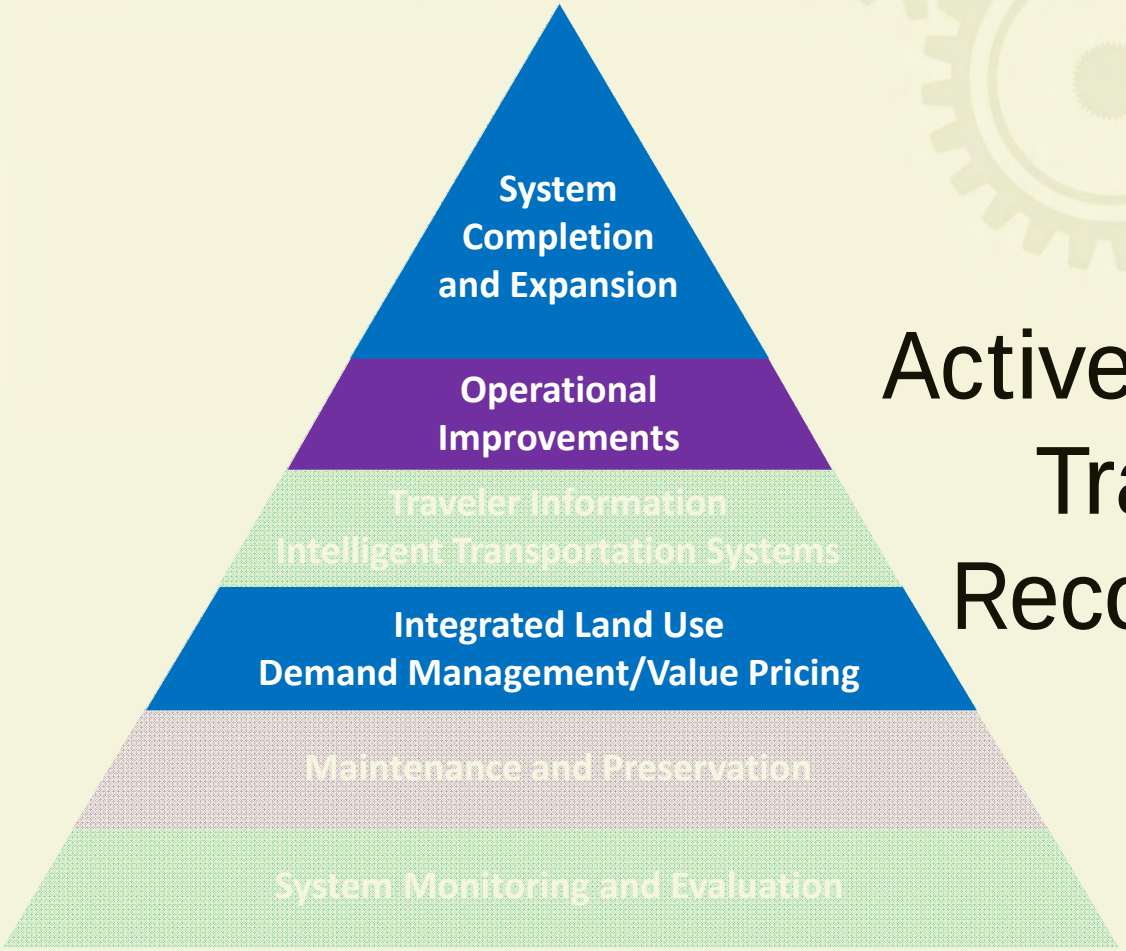


Proposed HSR Improvements in SCAG Region

Potential Benefits

- New and enhanced sustainable transportation options for travel between regions
- Reduced congestion and GHG from travel market shift from air and car travel
- A system that complements and feeds current inter-city (Amtrak) and commuter rail (Metrolink) and the region's public transit network, and vice-versa
- Economic benefits and new jobs from constructing the project
- Reduced demand for short-haul flights in our most congested airports, particularly LAX

Discussion on High-Speed Rail Recommendations



Active/Non-motorized Transportation Recommendations

Active / Non-motorized Transportation

- Increase funding level to $6 billion (from current $1.8 billion in the 2008 RTP)
- Increase existing network of about 4,300 miles of bikeways to about 10,200 miles (more than double)
- Invest in making biking and walking safer
- Invest in making transit more bike friendly
- Expand and integrate bike racks strategically with existing and future transit system
- Invest in bringing sidewalks to ADA standards
- Encourage implementation of 'Complete Streets' policy across the region

Active/Non-motorized Transportation

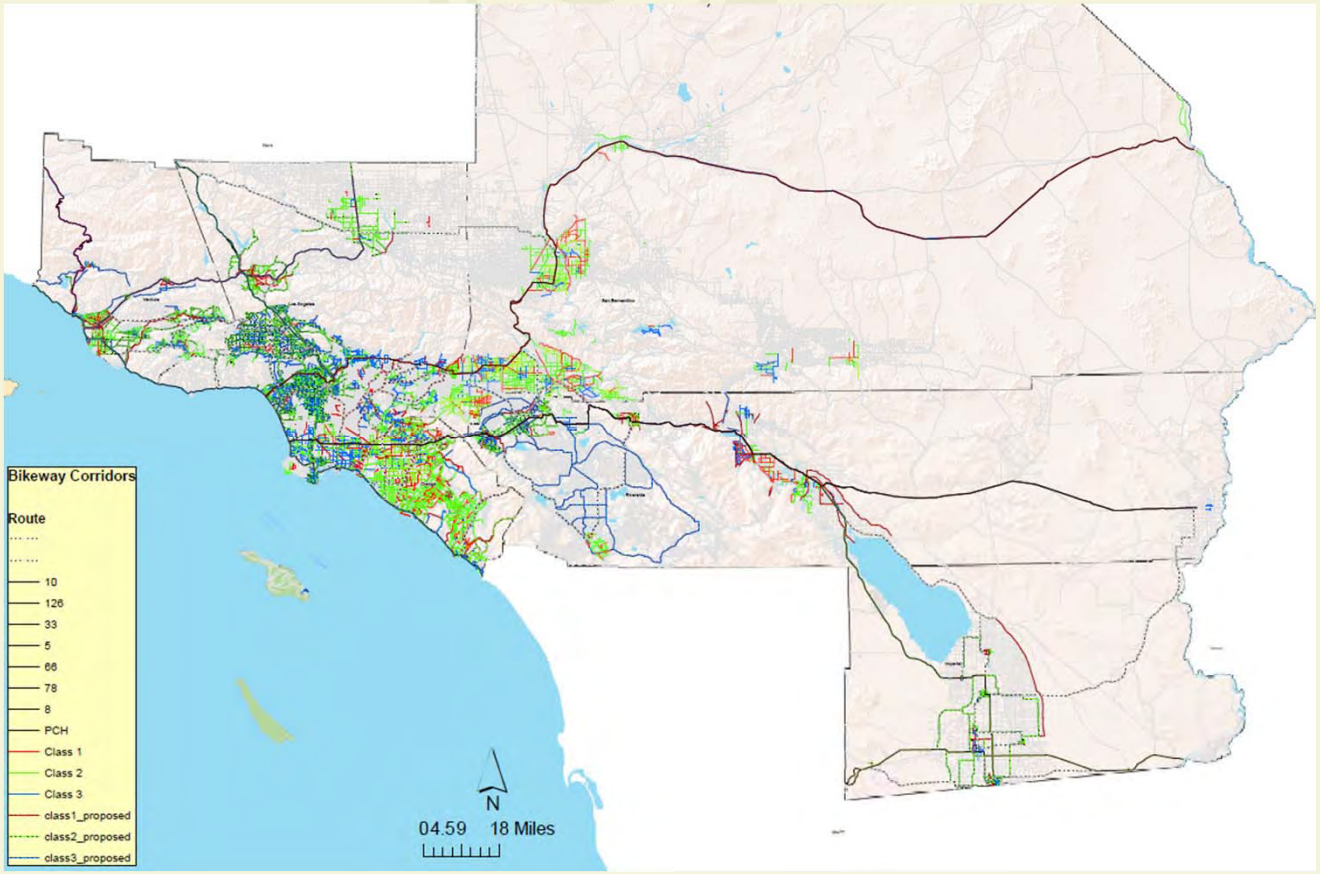
Percent of our population that lives within ¼ mile from a bikeway

BEFORE

42 %

AFTER

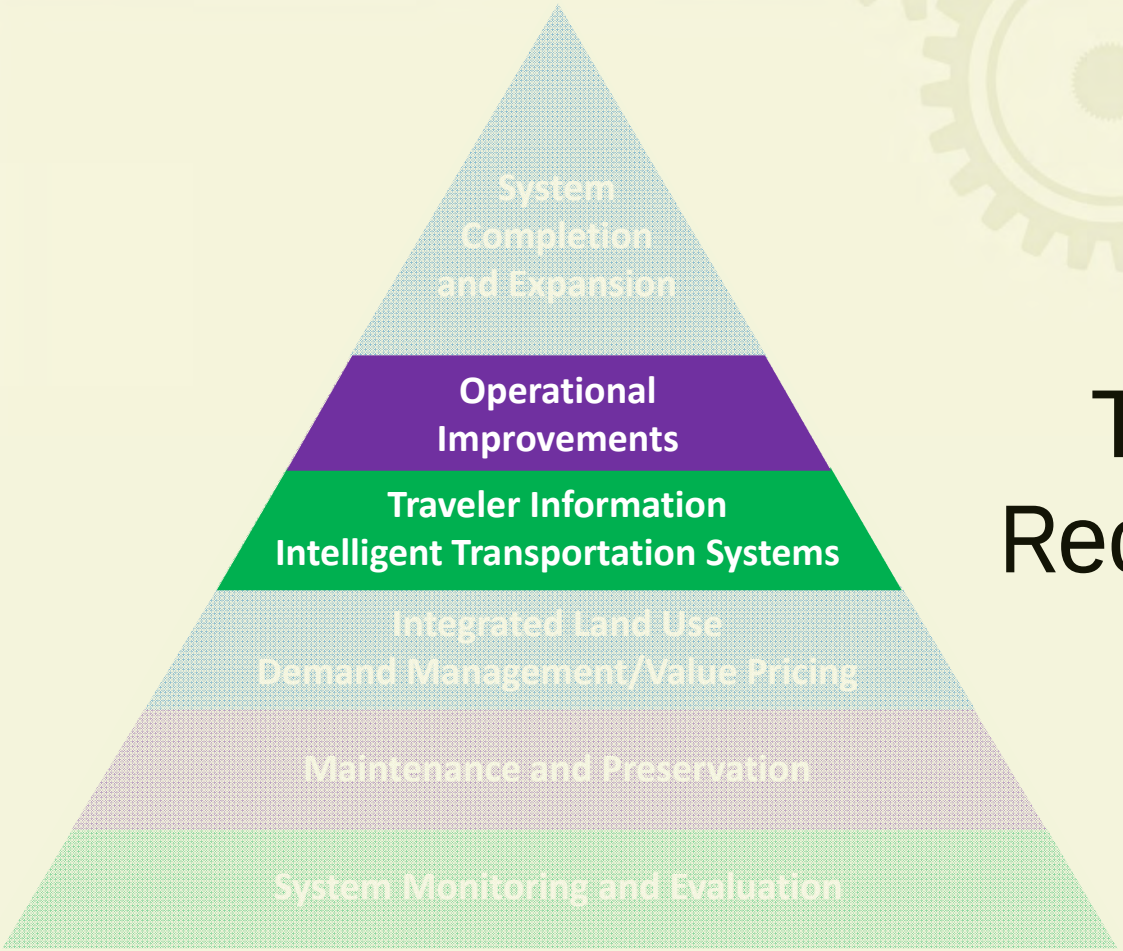
62 %



Potential Benefits

- A safer, more well-connected bikeway and pedestrian network that will serve as:
  - A viable transportation option in itself
  - A means by which to easily access bus and rail service
- The ability for our residents to choose a healthier, more active lifestyle
- The ability for our residents who do not own a vehicle to remain mobile and active
- Reduced VMT, cleaner air and lower GHG emission

Discussion on Active/Non-motorized Transportation Recommendations



TDM and TSM Recommendations

Why focus on TDM?

- Managing our demand wisely before considering capital intensive options to meet our future demands
- Ensuring an efficiently operating system must be a prerequisite for capital improvements

Transportation Demand Management

- 2008 RTP proposed investing $1.3 billion for TDM
- Draft 2012 RTP/SCS recommends increasing funding for TDM programs to $4.0 billion:
  - Rideshare incentives/matching
  - Telecommuting incentives
  - Integrated mobility hubs
  - Parking cash-out policy
  - Preferential parking or parking subsidies for carpoolers
  - Flexible work schedules
  - Other First Mile/Last Mile Strategies

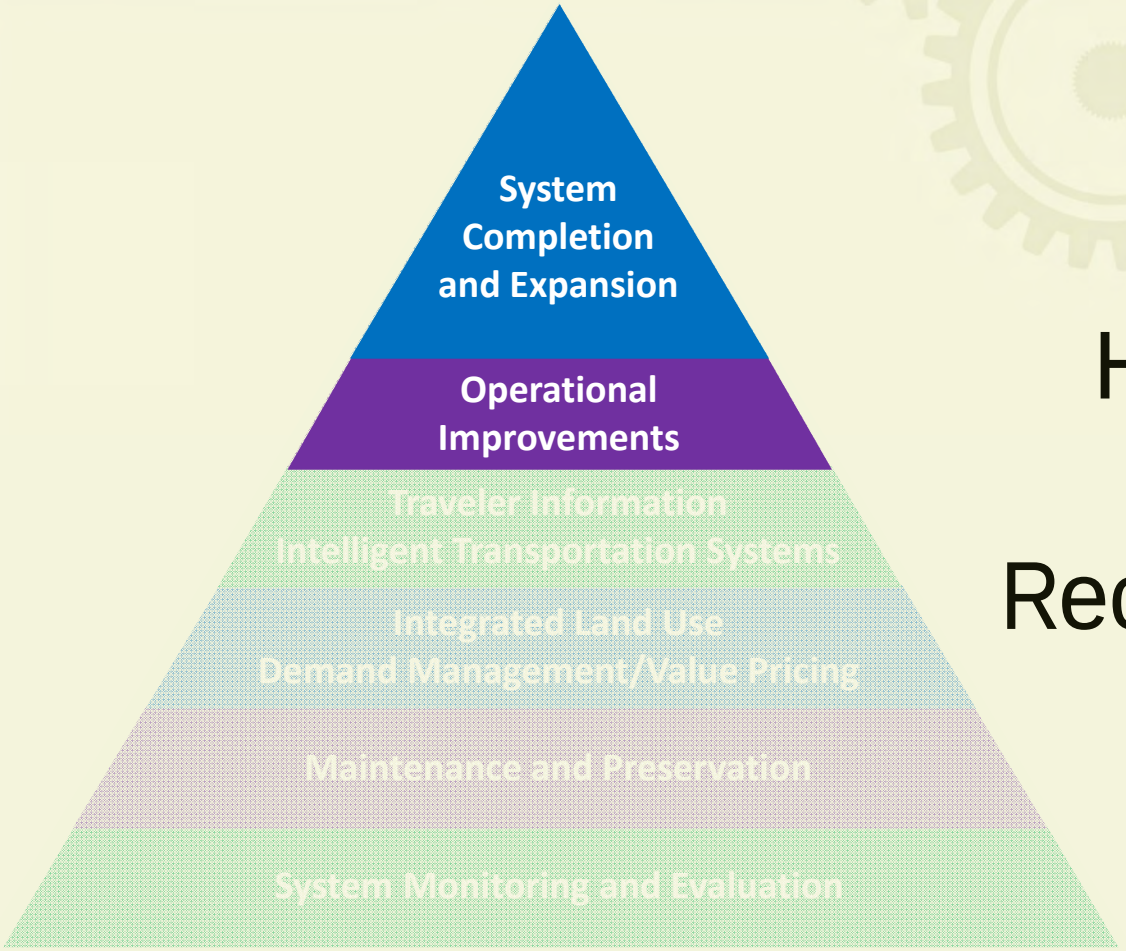
Transportation System Management

- 2008 RTP includes $3.6 billion for TSM Strategies
- Draft 2012 RTP/SCS recommends funding $5 billion to implement TSM Strategies such as:
  - Extensive advanced ramp metering, enhanced incident management, and spot improvements to improve flow (e.g. auxiliary lanes)
    - Includes $840 million worth of improvements from recent Corridor System Management Plans (CSMPs)
  - Expand integration of the traffic signal synchronization network
  - Data collection to monitor system performance
  - SBCOG/WRCOG NEV Pilot Programs

Potential Benefits

- Increased use of carpooling, transit, and telecommuting, resulting in better performing system overall
- A more efficient and fully functioning transportation system
- Enhanced real-time traveler information resulting in improved user experience and efficient system use
- Reduced congestion on our roadways
- Reduced VMT, GHG and cleaner air
- Reduced need for investing in extensive capital improvement projects

Discussion on TDM and TSM Recommendations



Highways and Arterials Recommendations

Highways and Arterials Rationale

- Significant investments in highways and arterials already committed locally (CTCs)
- There are critical gaps in the network that hinder access to certain parts of the region
- Closing these gaps to complete our system will allow our residents to be able to enjoy improved access to opportunities
- Closing gaps will allow for more efficient use of the system in the long run

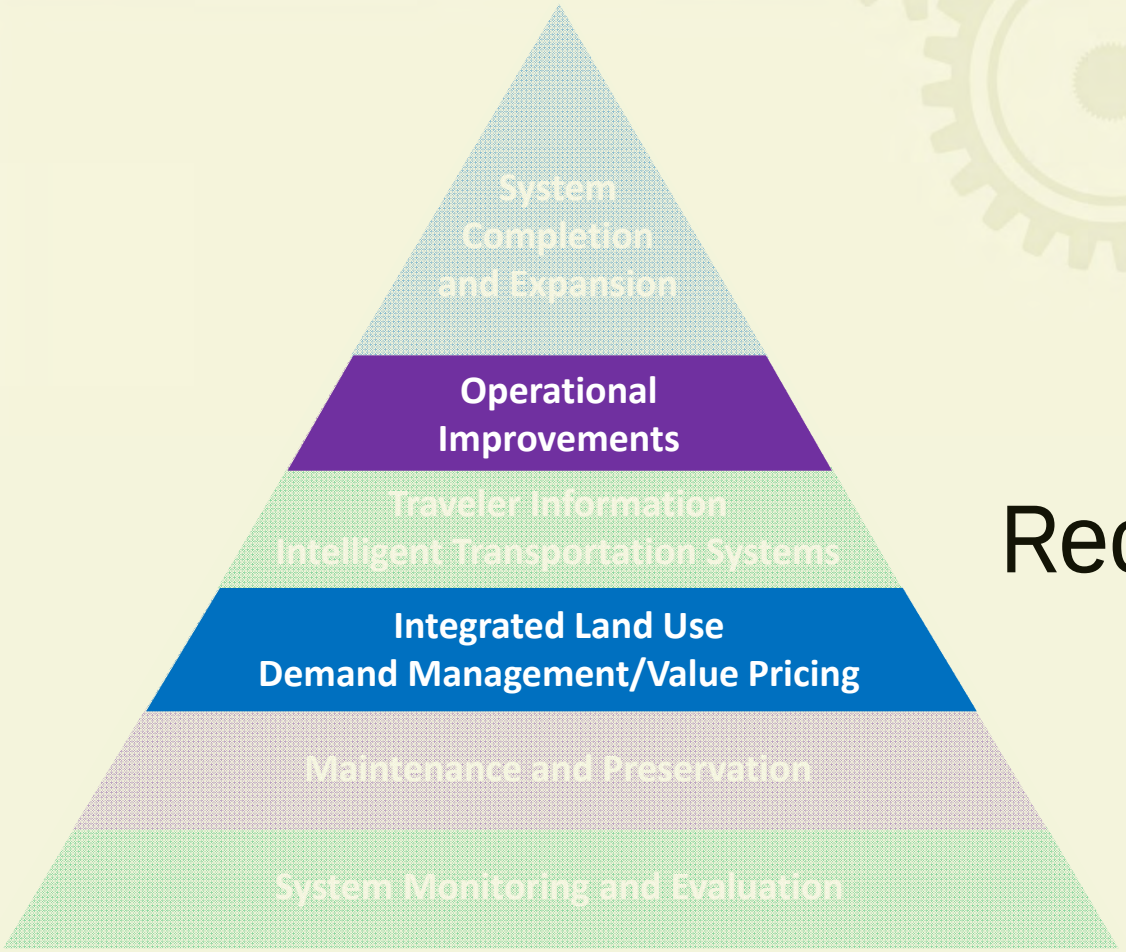
Highways and Arterials Recommendations

- Includes current commitments such as:
  - SR-710 Gap Closure
  - High Desert Corridor
  - SR-241 Improvements
  - CETAP Intercounty Corridor A
  - HOV Gap Closures and direct connectors on:
    - I-10 in LA & SB Counties
    - I-5 in LA & Orange Counties
    - I-215 and I-15 in Riv & SB Counties
    - Several additional corridors

Potential Benefits

- Improved mobility and accessibility to opportunities for majority of our commuters and residents
- Will provide additional roadway capacity needed to run additional transit services, including express bus services and BRTs
- More efficient system due to gap closures, eliminating the need to make detours onto local streets
- A complete regional HOV network
- More travel choices

Discussion on Highway and Arterials Recommendations

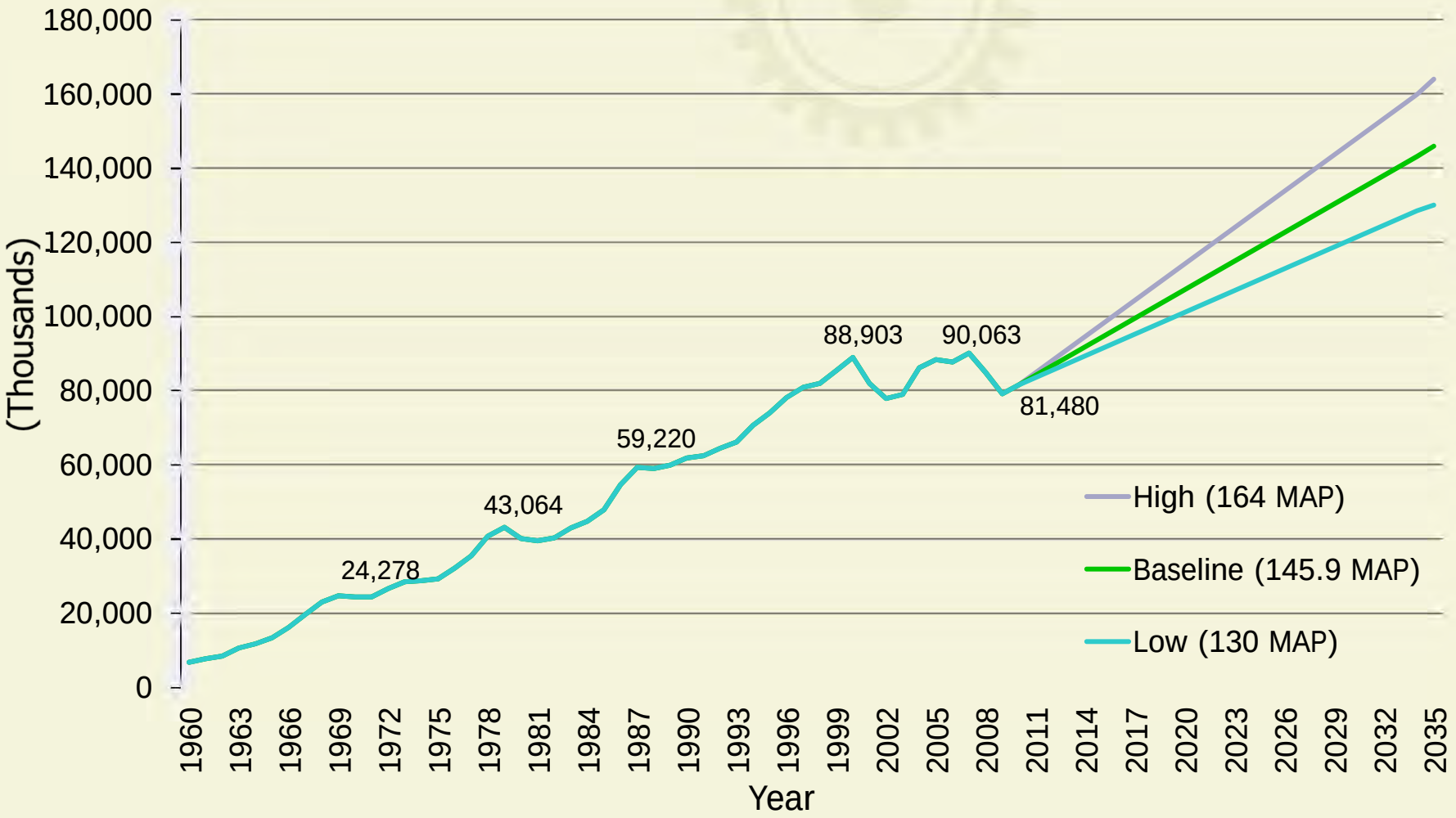


Aviation Recommendations

Aviation Recommendations Rationale

- Recommended Aviation demand forecast scenario is a medium or baseline scenario (146 MAP)
- It is the same as the No-project scenario modeled and evaluated for the 2008 RTP
- It represents a conservative vision for the regional airport system, consistent with more recent trends
- It represents the most logical and reasonable scenario for the Draft 2012 RTP/SCS based on current physical and legally enforceable constraints on some of our airports

Historical Trend and Forecasts of Air Passenger Activity (1960-2035)



Aviation Recommendations

Table1

Airport Forecasts (2035)
(million annual air passengers)

	Low	Baseline	High
Bob Hope	9.4	9.4	9.4
John Wayne	10.8	10.8	10.8
LAX	78.9	78.9	78.9
Long Beach	4.2	4.2	4.2
March Inland Port	0.4	0.6	2.5
Ontario	19.2	30.7	31.6
Palmdale	1.6	2.6	6.1
Palm Springs	2.6	4.1	9.6
San Bernardino	1.8	2.8	6.7
SoCal Logistics	0.4	0.7	1.6
Imperial	0.6	0.9	2.1
Oxnard	0.1	0.2	0.5
TOTAL	**130**	**145.9**	**164**

Aviation Recommendations
Air Cargo (In tons)

	Scenario		
	Low Growth	Baseline	High Growth
Bob Hope	80	108	130
John Wayne	34	46	55
Los Angeles International	2,685	3,647	4,358
Long Beach	69	94	112
March Inland Port	108	147	176
Ontario International	968	1,314	1,570
Palmdale Regional	25	34	40
Palm Springs International	(<100 tons)	(<100 tons)	(<100 tons)
San Bernardino Int'l	108	146	175
So. California Logistics	50	68	81
	4,127	5,605	6,697

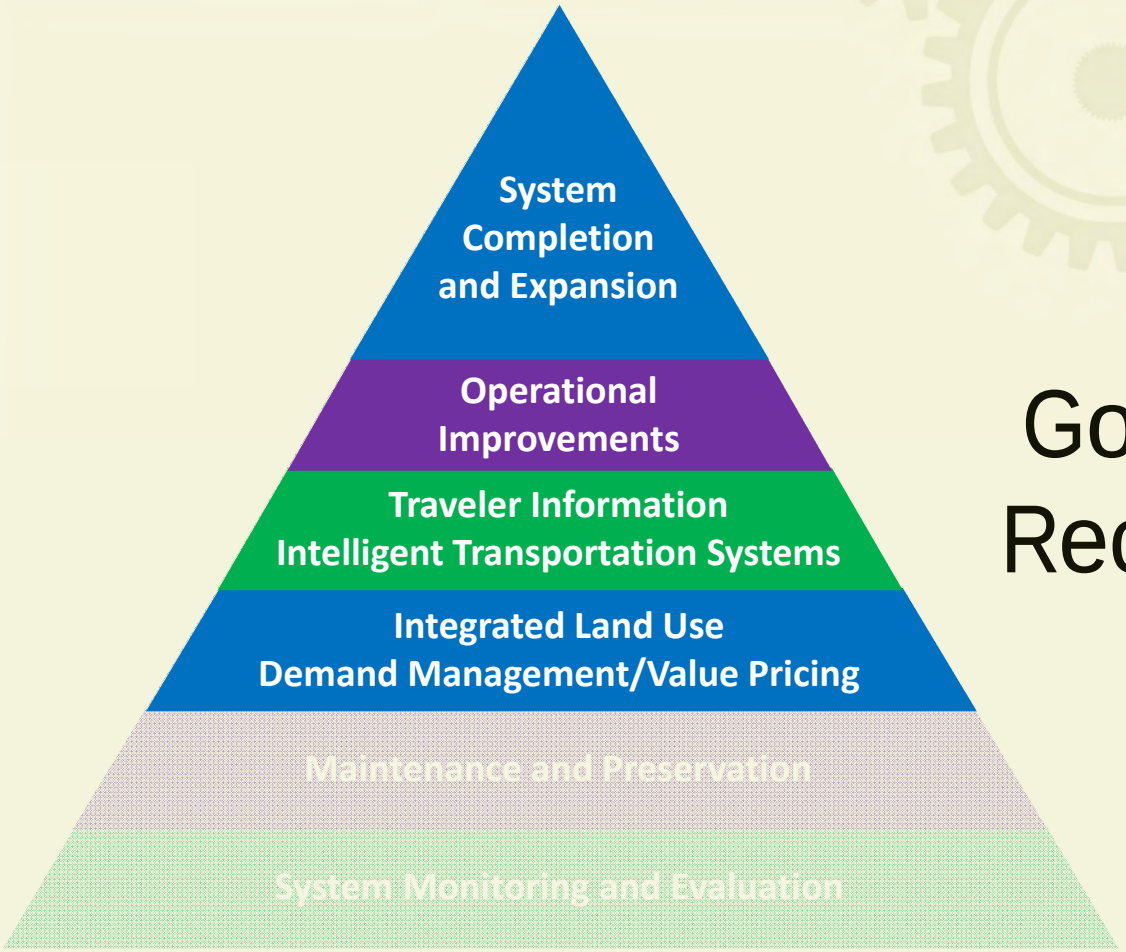
Aviation Recommendations
Airport Ground Access

- Airport Ground Access Improvements proposed in the 2008 RTP updated with latest information will adequately serve the proposed aviation demands
- Staff also recommends seeking flexible use of airport revenues for off-airport ground access improvements where appropriate
- Improving access to secondary airports by transit and high-occupancy public transportation should also be encouraged where appropriate

Potential Benefits

- Accommodate future aviation demand in the region in an efficient and equitable manner
- Allows decentralization of aviation demand and the economic opportunities associated with it
- Minimizes additional ground access improvement needs beyond those that are already committed

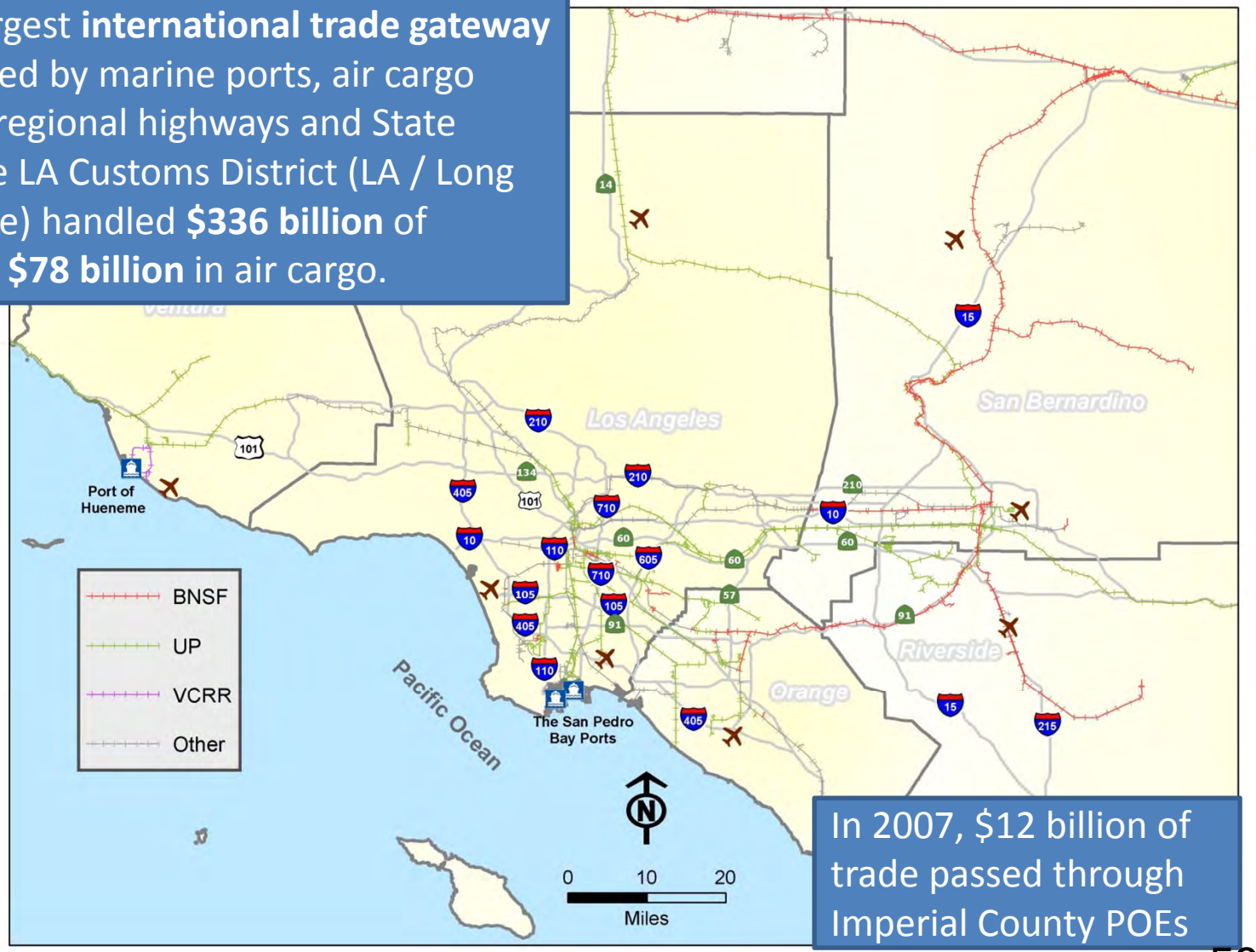
Discussion on Aviation Recommendations



Goods Movement Recommendations

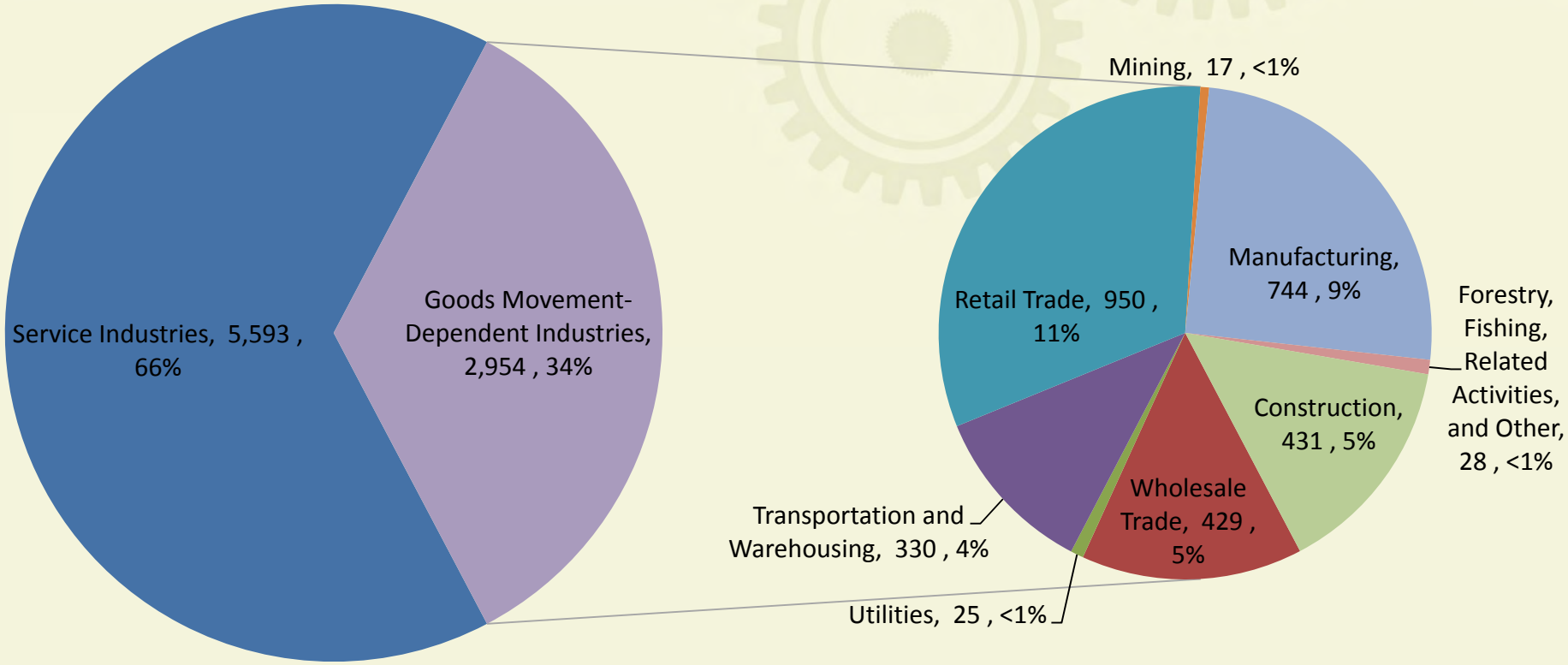
Key Functions and Markets

The region is the largest **international trade gateway in the U.S.,** supported by marine ports, air cargo facilities, railroads, regional highways and State routes. In 2010, the LA Customs District (LA / Long Beach and Hueneme) handled **$336 billion** of maritime cargo and **$78 billion** in air cargo.



In 2007, $12 billion of trade passed through Imperial County POEs

Key Functions and Markets



Goods movement-dependent industries contribute 34% of the SCAG regional employment – almost 3 million jobs

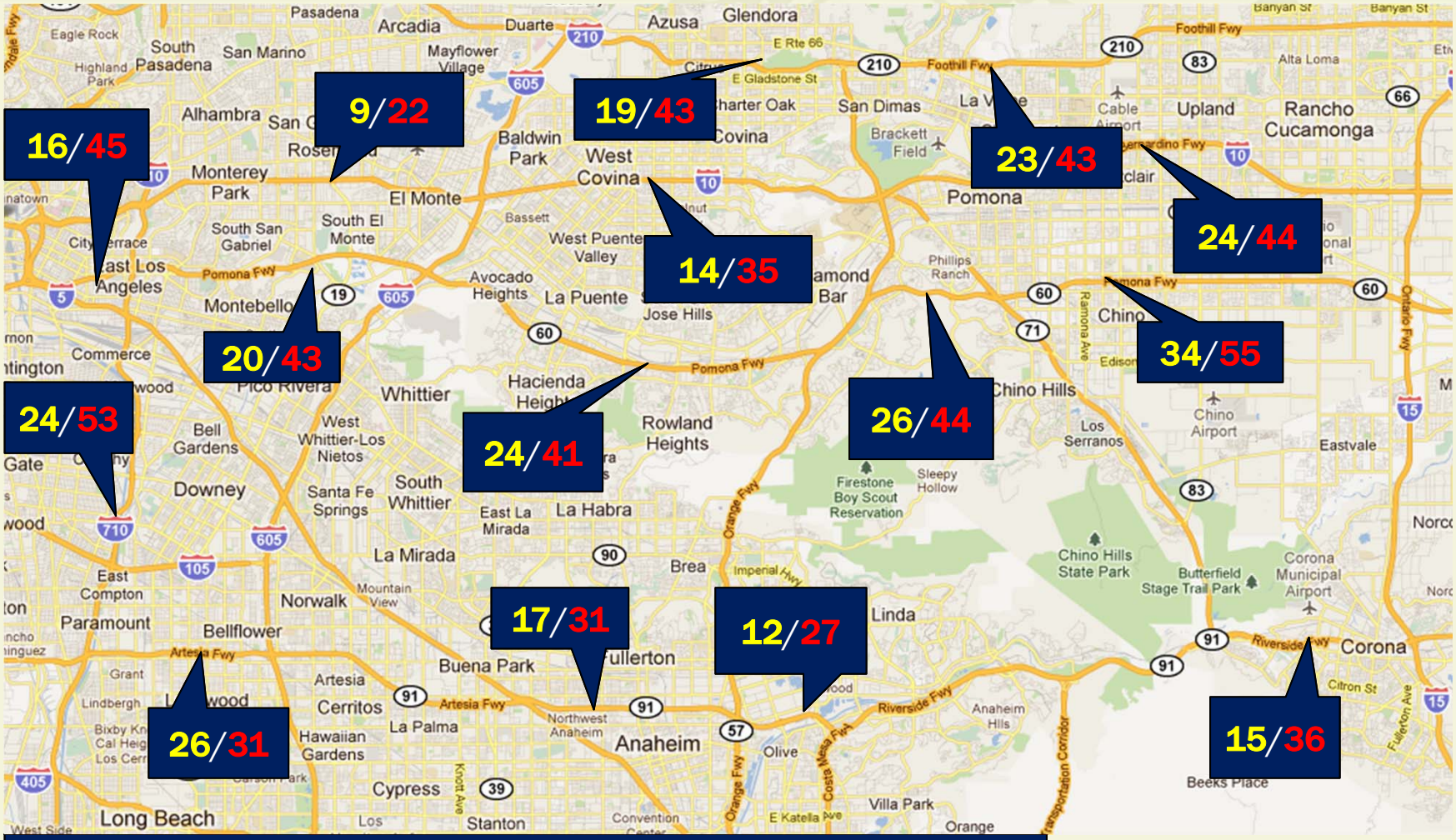
Key Functions and Markets

Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. The region has about 837 million square feet of warehousing space.

Our Goods Movement System Vision

- A world-class coordinated Southern California goods movement system that accommodates growth in the throughput of freight to the region and nation in ways that support the region's economic vitality, attainment of clean air standards, and the quality of life for our communities
  - Support regional economic growth by removing impediments to the expansion of international, regional and local markets that is sensitive to regional and neighborhood needs

Rising Truck Volumes in the Region



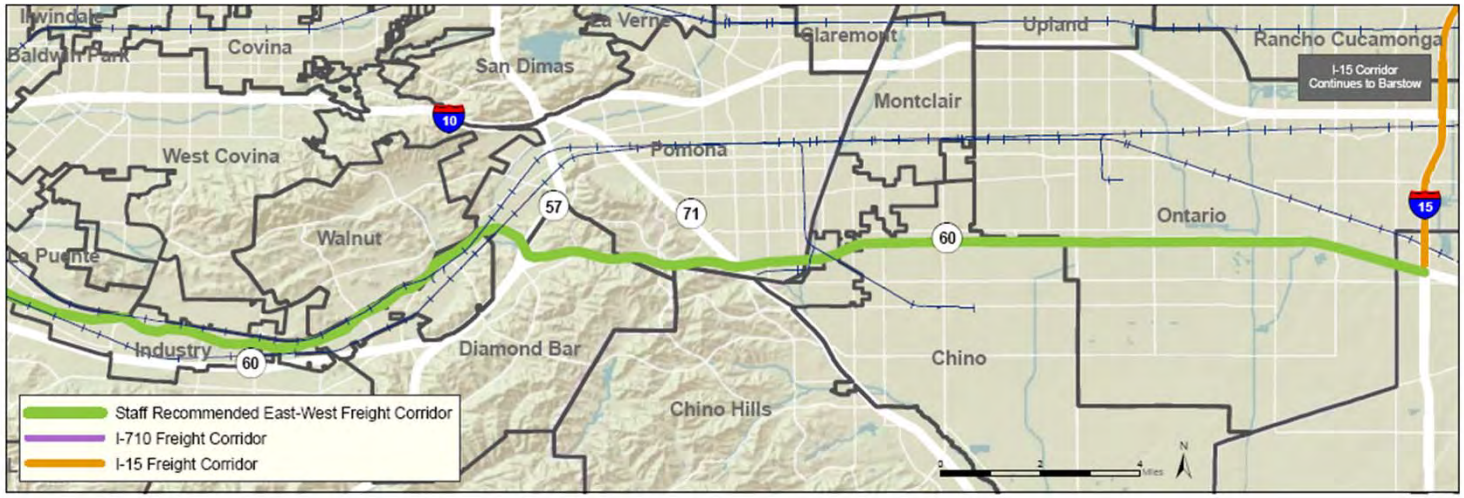
2008 Daily Trucks (bi-directional)/2035 Daily Trucks (bi-directional)

* numbers in thousands (rounded)

East-West Freight Corridor
Strategy Description

- The East-West Freight Corridor would allow for efficient connection between the truck lanes on I-710 and I-15. Known as the “East-West Freight Corridor”, this facility would:
  - Support mobility for key industries
  - Serve goods movement markets in an efficient manner
  - Bring benefits to neighboring communities
  - Meet the region’s environmental goals
  - Help to alleviate the region’s congestion
  - Not conflict with other major regional projects under consideration
  - Be fundable using known and reasonably available funding sources

East-West Freight Corridor

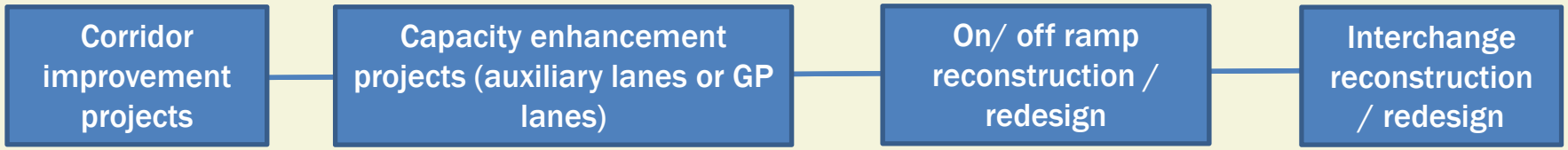


East-West Freight Corridor
Regional Benefits

Mobility	• Truck delay reduction of ~11% • All traffic delay reduction of ~4.3% • Reduces truck volumes on general purpose lanes – **up 82% reduction on SR-60**
Safety	• Reduced truck / automobile accidents (up to 20-30 per year on some east-west segments)
Environment	• 50% clean truck utilization removes: 2.4 tons NOx, 0.08 tons PM2.5, and 2,001 tons CO2 daily (2.7% – 6% of region's total)
Community	• Preferred alignment has least impact on communities • Removes traffic from other freeways • Zero-Emission Trucks - reduces localized health impacts
Economic	• Supports mobility for goods movement industries – comprise 34% of SCAG regional economy & jobs

Bottleneck Relief Strategy

- A substantial amount of truck delay is associated with bottlenecks. A coordinated bottleneck strategy focuses on mitigation of truck delay at bottlenecks/congestion hot spots.
- This is a cost-effective way to improve the efficiency of goods movement in the SCAG region. In addition, bottleneck projects tend to be less intrusive than other types of projects, and yield substantial benefits to trucks and passenger vehicles alike.



Rail Strategy

- The railroad system is vital to the region's long-term economic competitiveness.
- The goals of the Rail Strategy are to:
  - Increase freight and passenger rail mobility
  - Promote job creation and retention
  - Improve safety of rail operations and at grade crossings
  - Mitigate environmental impacts of rail operations
  - Promote collaboration and consensus/coalition building
  - Support "branding" of package

Component 1: Increase mainline capacity

Component 2: Increase intermodal facility capacity/efficiency and implement port area improvements

Component 3: Improve railroad grade crossing safety and reduce vehicular delay with grade separation strategy

Component 4: Reduce rail emissions –RD&D

Rail Strategy Benefits

Mobility	• Reduces train delay to 2005 levels • Provides mainline capacity to handle projected demand in 2035 (includes 43.2 million TEU port throughput) • Eliminates 5,782 vehicle hours of delay per day at grade crossings in 2035
Safety	• Eliminates 79 at-grade railroad crossings
Environment	• Reduces 22,789 lbs of emissions per day (CO_2, NOx and $PM_{2.5}$ combined) from idling vehicles at grade crossings • Facilitates on-dock rail • Reduces truck trips to downtown rail yards and associated emissions

Goods Movement Environmental Strategy

- Continue investments in system efficiency to reduce environmental impacts. Support proven low-emission technologies in near-term. Ensure that new infrastructure maximizes benefits of zero emission technologies in the long-term.

Component 1: Support deployment of existing low-emission technologies:
- Trucks – natural gas, hybrids
- Rail – low emission switchers

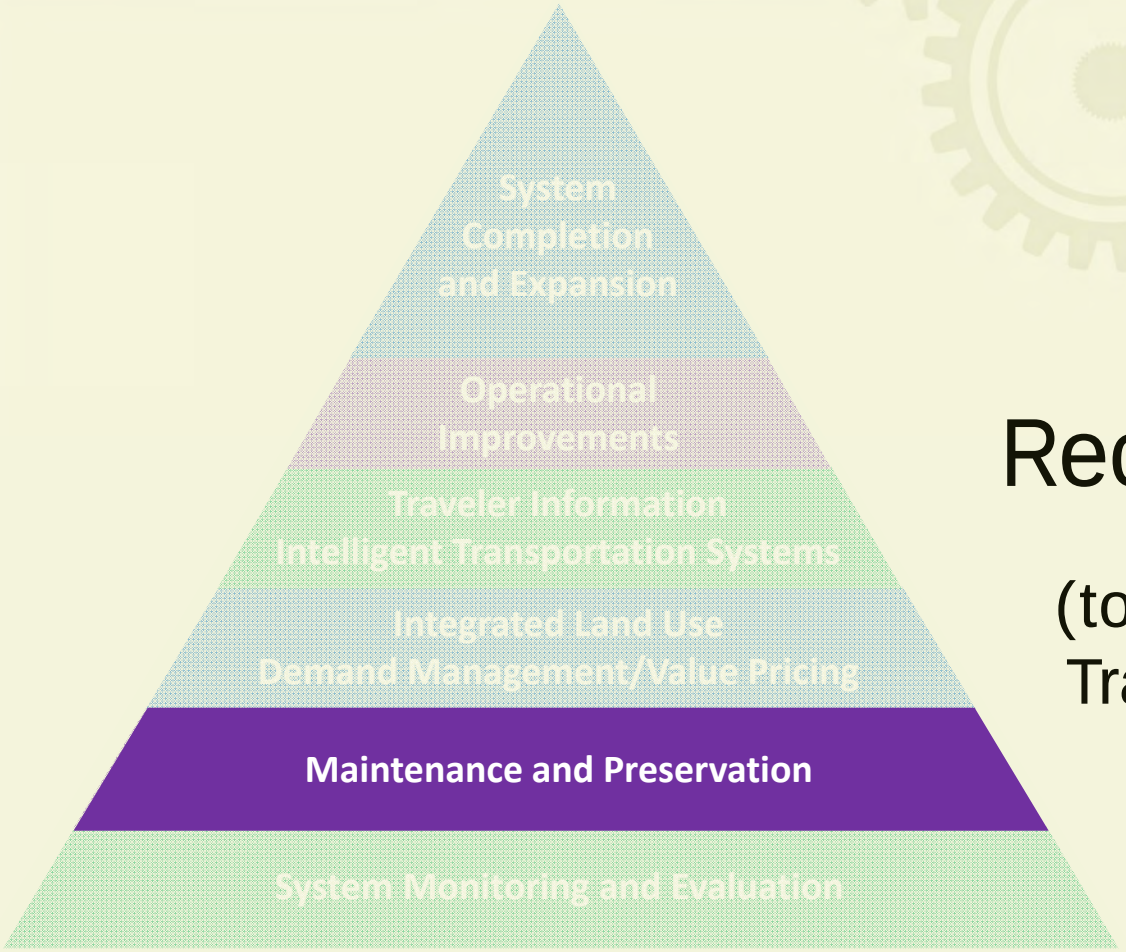
Component 2: Accelerate commercialization of zero emission trucks using infrastructure

Component 3: Support cooperative RD&D to realize long-term vision of zero emission rail system

Emissions benefits (tons per day)	NOx	PM2.5	CO2
E-W Freight Corridor with 100% ZEVs	4.7	0.16	4,000
Full Railroad Main Line Electrification*	10.4	0.19	2,400
20% Penetration of Low-Emission Trucks	8.3	0.16	3,200

*For illustrative purposes only. Further RD& D required. Staff recommends technology neutral position with further research, development & demonstration roadmap.

Discussion on Goods Movement Recommendations



System Preservation Recommendations

(to Maintain or Improve Transportation State of Good Repair)

State Highway System Preservation
Staff Recommendations

Main Priority
Eliminate Structural Distress (now and in the future)
Saves Significant Costs Long Term

Minor Structural Distress

Major Structural Distress

State Highway System Preservation
What is the issue?

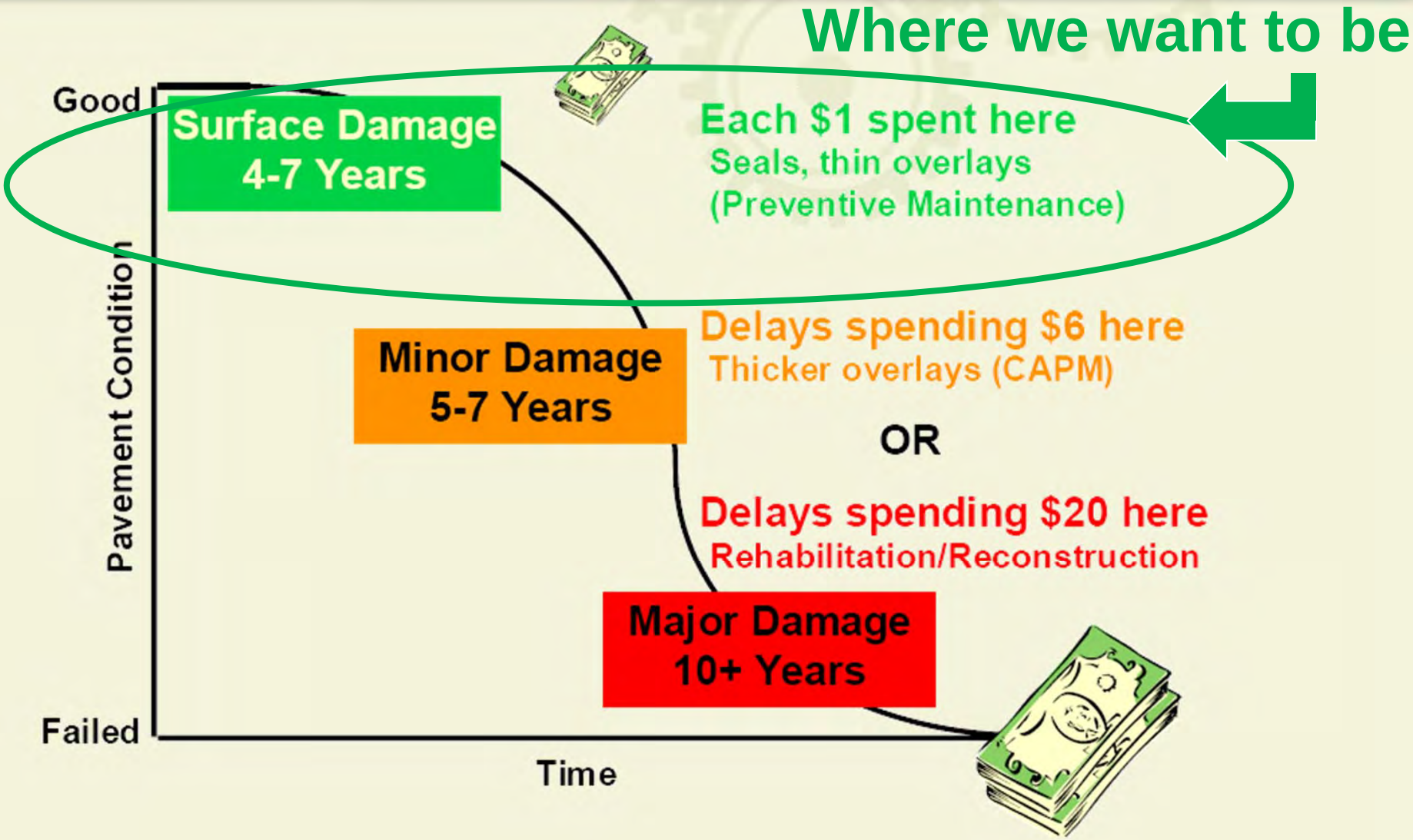
Perfect World
100% State of Good Repair
May be Too Expensive at $50 billion

No Distress

Possible Alternative
90+% State of Good Repair
Estimated at $40 billion

Minor Surface Distress

Success Should Lead to Further Efficiencies



Source: Caltrans 2007 State of the Pavement Report

State Highway Bridge Conditions in the SCAG Region

County	Number of Bridges	Deficient Bridges	% Deficient
Imperial	421	49	12%
Los Angeles	3,510	1,238	35%
Orange	1,117	286	26%
Riverside	1,061	215	20%
San Bernardino	1,370	282	21%
Ventura	486	125	26%
Totals	**7,965**	**2,195**	**28%**

Source: FHWA National Bridge Inventory (NIB), update 4/06/2011

Transit and Local Streets

- 10-Year Transit unfunded preservation needs estimated by California Transit Association is $15 billion.
  - These $15 billion should be the priority for the RTP. Longer term needs should be evaluated in the future.
- The RTP only includes Arterials of Regional Significance
  - Estimated preservation needs to bring these arterials to within 90+ percent state of good repair is $15 billion

Staff Recommendations

- Provide Preservation Funding as follows:
  - $15 billion for Transit
  - $15 billion for Local Roads (which would include bringing them up to ADA standards)
  - $40 billion for State Highway System
  - **Total Incremental Funding = $70 billion**

Potential Benefits

- Improved driving experience for all users of the system
- Lower cost to the tax payers in the long run
- Lower cost to the users in the form of reduced auto repair bills and reduced fuel costs
- Cleaner air and reduced GHG from more efficiently operating transportation system

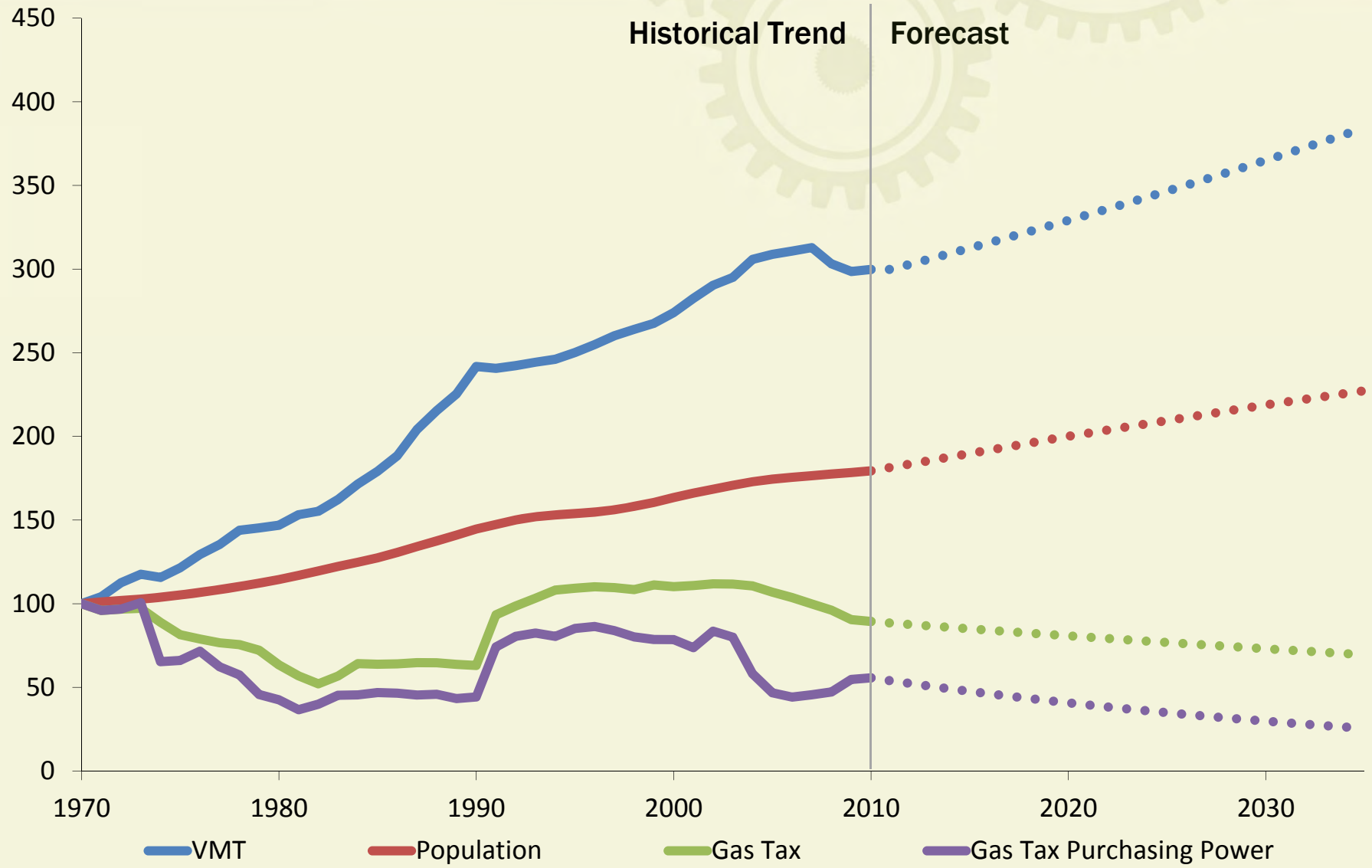
Discussion on System Preservation Recommendations

Financial Plan/Recommendations

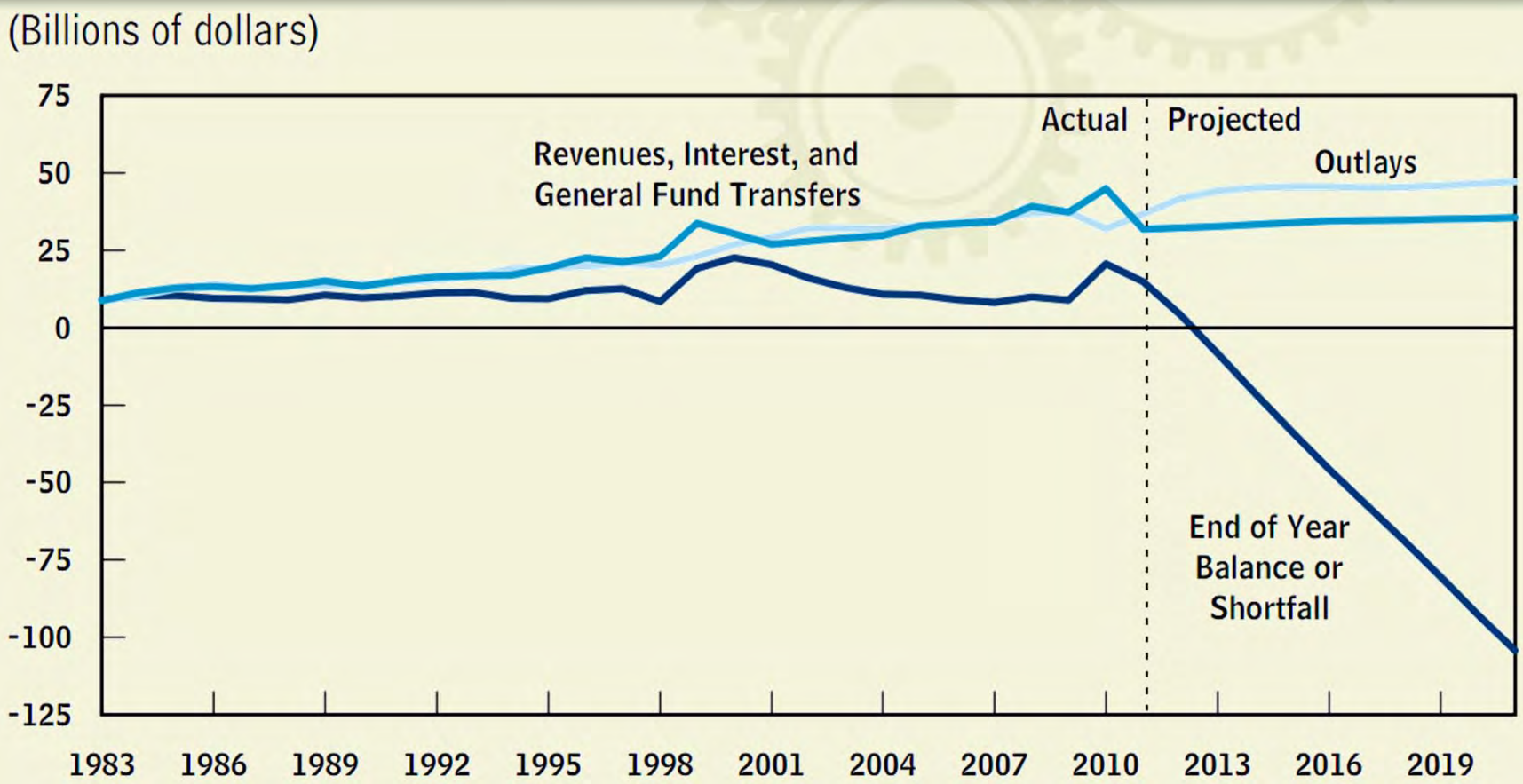
2012 RTP Financial Plan Context

- We have a widening gap between our investment needs and existing resources
  - We have underinvested in system preservation and deferred critical maintenance—compounding our investment gap as costs grow exponentially to achieve a state of good repair
  - Environmental constraints and lengthy project development processes also contribute to cost escalation and impede our ability to deliver projects efficiently
  - We have underpriced our transportation system with existing funding mechanisms, resulting in increasing gridlock
  - Gas taxes, the traditional means of funding transportation infrastructure, have not been adjusted for almost a generation while technology advances with more fuel efficient vehicles

Gas Tax Revenue Has Not Kept Pace with VMT and Population



Federal Highway Trust Fund
Status of the Highway Account



Source: Congressional Budget Office (May 2011)

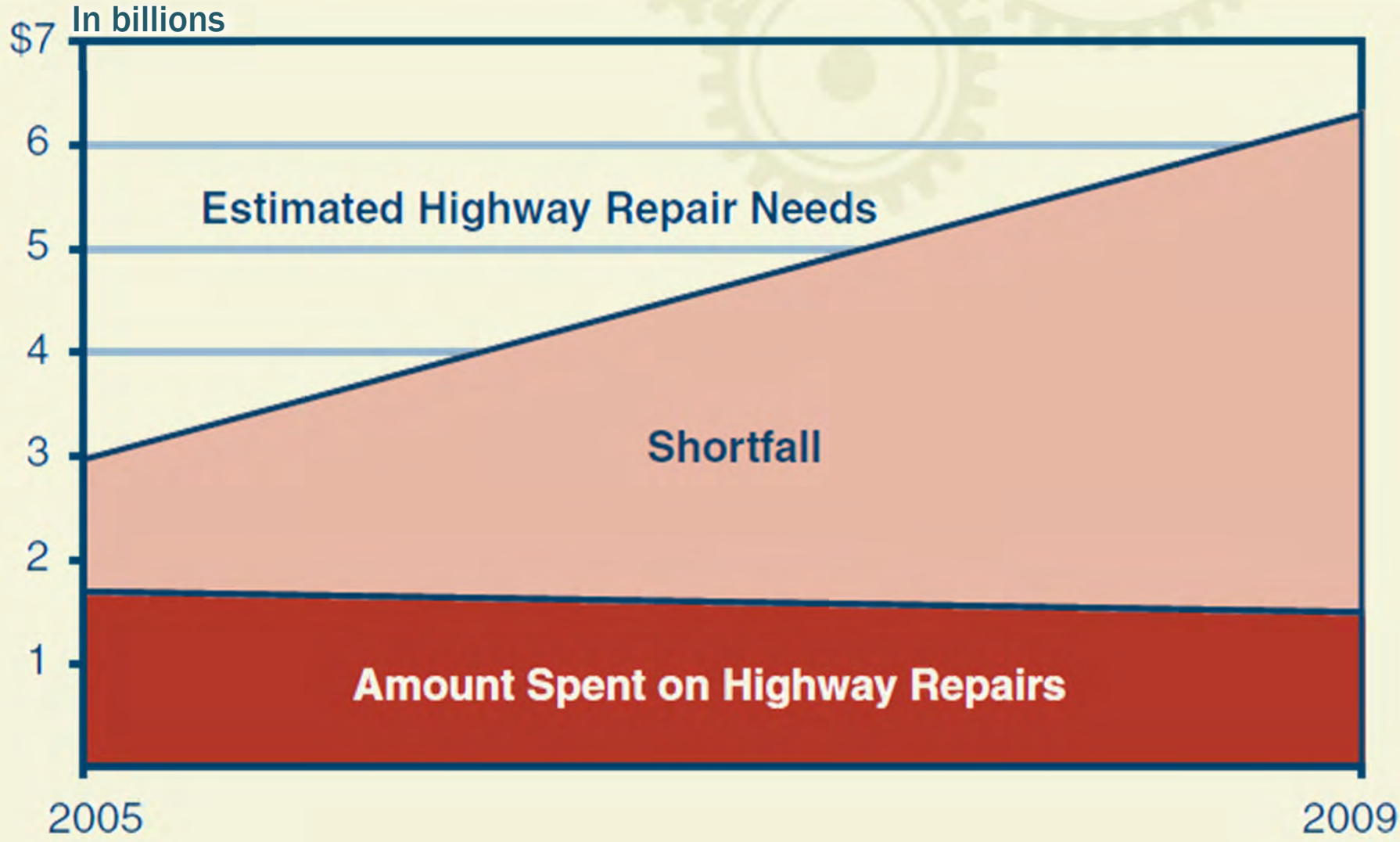
Note: Under current law, the Highway Trust Fund cannot incur negative balances. The negative balances shown above illustrate the projected inability of the funds to pay obligations as they are incurred by the states. If the Highway Trust Fund was unable to meet its obligations in a timely manner, spending on programs financed by the fund could continue more slowly, to keep pace with tax collections. The Department of Transportation has stated that if the fund faced a shortfall, it would ration the amounts it reimburses to state in order to maintain a positive balance in the fund.

Continued Uncertainty at the Federal Level

- On multiple occasions since 2008, the Highway Trust Fund (HTF) has failed to meet its obligations, necessitating transfers from the Treasury's General Fund totaling $34.5 billion to keep it solvent

- SAFETEA-LU expired September 30, 2009
  - Currently on 8th extension to SAFETEA-LU without any substantive agreement on a long-term solution to adequately fund the HTF
  - Congressional leadership is needed on a sustainable path forward
  - Two national commissions established under SAFETEA-LU call for an immediate increase in gas taxes and a longer-term transition to a mileage-based user fee system

State Resources Insufficient to Meet Highway Needs



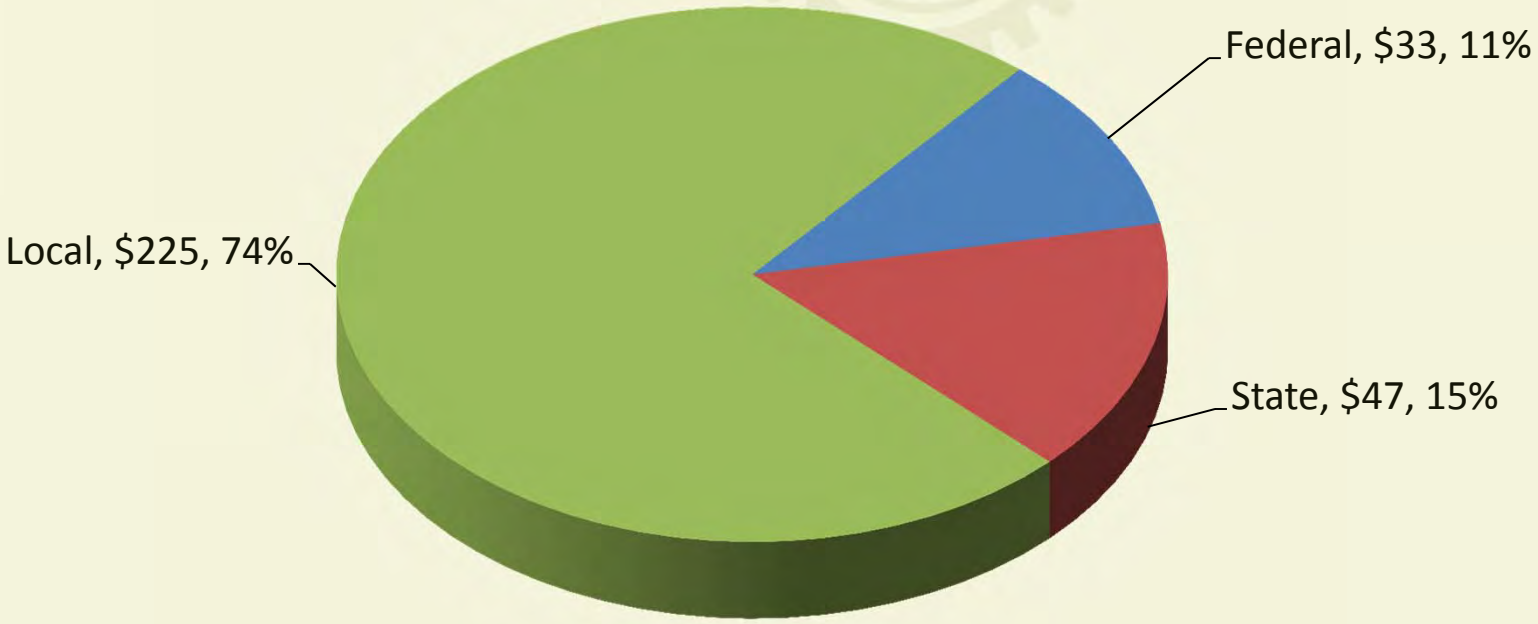
Only 45% Funding Capacity for Transportation System Needs Statewide

Statewide Ten-Year Forecast of Costs-Revenues
(Millions of 2010 Dollars)

	Preservation	System Management	System Expansion	Total
Costs:				
Highways*	$79,660	$7,542	$78,066	$165,268
Local Roads	$102,900	$2,295	$24,156	$129,351
Public Transit	$142,357	$1,122	$30,817	$174,296
Intercity Rail	$170	$94	$6,165	$6,429
Freight Rail	$64	$387	$21,924	$22,376
Seaports	$4,600	$403	$7,097	$12,100
Airports	$10,420	$954	$4,554	$15,928
Land Ports	$935	$0	$34	$969
Intermodal Facilities	$0	$0	$5,943	$5,943
Bike / Pedestrian	$0	$571	$2,931	$3,501
Total Costs	$341,106	$13,367	$181,686	$536,160
Revenues:				
Federal	NA	NA	NA	$30,900
State	NA	NA	NA	$53,100
Regional / Local	NA	NA	NA	$158,400
Total Revenues				$242,400
Net Revenues				-$293,760
Percent Funded				45%

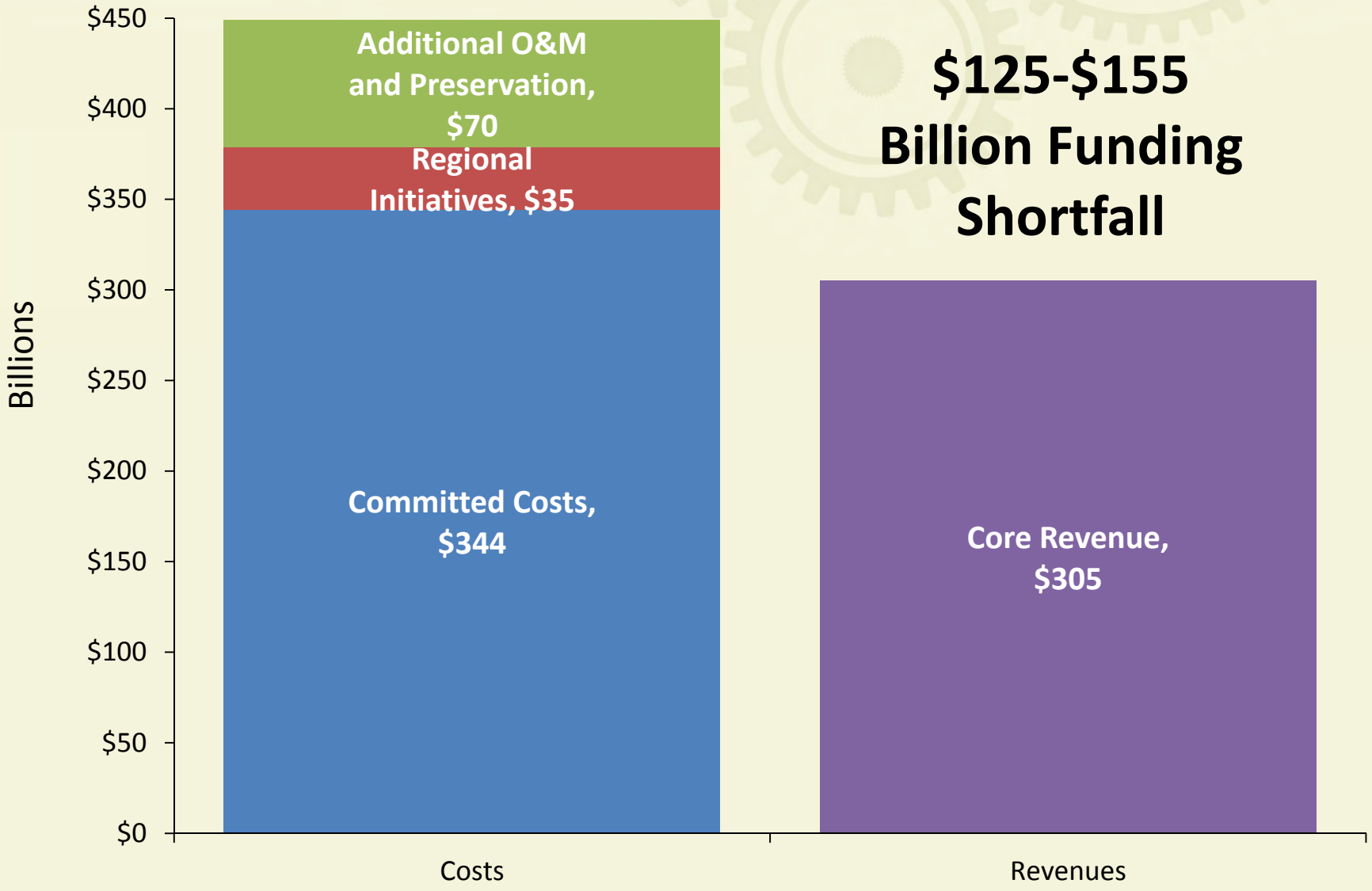
Extensive Reliance on Local Sales Taxes to Backfill Declining State and Federal Sources

$305 Billion (in nominal dollars)



Assumes existing state and federal gas tax rates, sales tax forecasts consistent with county transportation commissions, and no new revenue sources

Despite 7 Local Sales Tax Measures, Substantial Unfunded Investment Needs



$125-$155 Billion Funding Shortfall

Why Bridging the Gap Matters

To effectively compete in the global economy, we must strategically invest in our transportation system while ensuring maximum return on investment.

Every 10% reduction in travel time delay (2012 - 2035)

is associated with...

Annual GRP increase of approximately $17B (2010 $s) or 1.2%

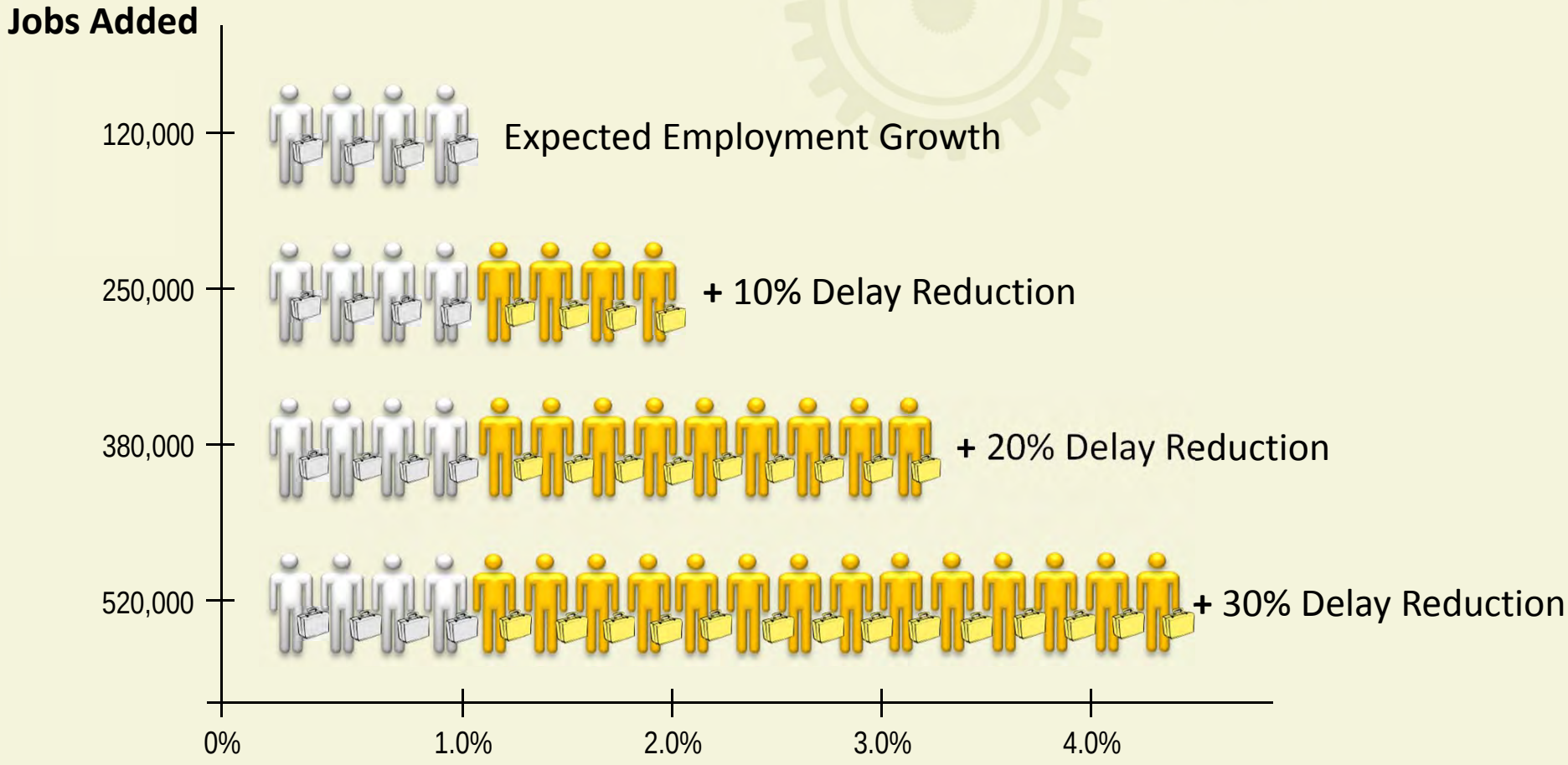
compare to average annual GRP growth rate of $44B or 3%

Employment increase of approximately 132K total jobs or annual increase of 1.2%

compare to average annual employment growth rate of 1%

Why Bridging the Gap Matters

Job growth (2012 – 2035) with delay reduction



Job growth isolating reduction in travel delay only; does not factor in any additional costs (and impacts to job growth) associated with achieving delay reductions

Guiding Principles for New Revenues

- Establish a user-based system that better reflects the true cost of transportation with firewall protection for transportation funds while ensuring an equitable distribution of costs and benefits

- Promote national and state programs that include return to source guarantees while maintaining flexibility to reward regions that continue to commit substantial local resources

- Leverage locally available funding with innovative financing tools (e.g., tax credits and expansion of TIFIA) to attract private capital and accelerate project delivery

- Promote funding strategies that strengthen federal commitment to the nation's goods movement system, recognizing the pivotal role that our region plays in domestic and international trade

Possible New Revenue Options

Revenue Option	Examples	Est. Revenue ($Billions)
Motor fuel-related sources	• Increase state and federal gas tax consistent with historical trends (range est. at $0.20 to as much as $0.40 gas tax increase adjusted to inflation from 2017-2024)	$11 to $24
Vehicle-related sources	• Regional/county vehicular-related fees (e.g., registration fees estimated at $10 per vehicle from 2017-2035)	$2.9
Broad-based taxes	• New sales tax measures (range from 0.25% to 0.50% sales tax measures for all counties from 2020 to 2035)	$21 to $42
Freight-related fees	• National freight cargo fees (est. at nominal $10 rate from 2020-2035) • E-Commerce Sales Tax (est. allocation in proportion to population from 2015-2035)	$4.8 $2.9
Tolling and pricing	• Mileage-based user fees (i.e., to replace gas tax and augment—estimated at about $0.05 to $0.07 per mile and indexed to maintain purchasing power from 2025-2035); est. reflects increment only • Tolling and congestion pricing (includes facility pricing for freight corridor and other toll facilities proposed in the region; also provides potential for private equity participation)	$54 to $83 $20 to $25

Possible New Revenue Options

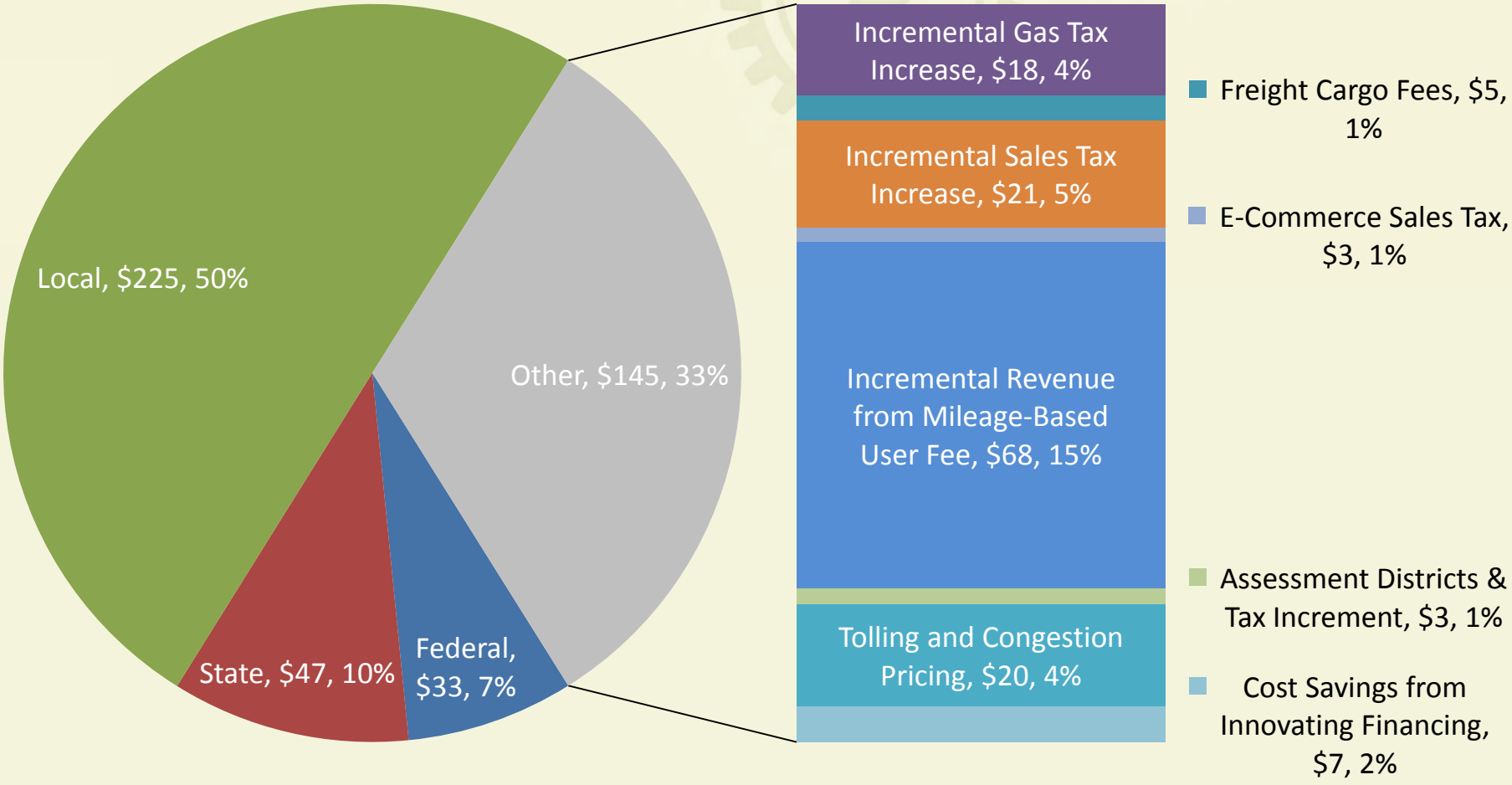
Revenue Option	Examples	Est. Revenue ($Billions)
Value capture	• Regional development impact fee dedicated to transportation • Assessment districts, community facilities districts and tax increment	$3.4 $3.0 to $8.9
Innovative financing and delivery tools	• Public private partnerships, infrastructure banks, tax credits, low interest loans – technically not new revenue but can result in substantial cost savings from accelerated project implementation in combination with lower cost debt financing instruments (range estimated based on approximation of potential private equity participation for economically viable projects with creditworthy revenue streams, interest savings and earnings from bond proceeds, etc.)	$7 to $10

Packages of Options to Bridge Gap
Unfunded Costs and Incremental Revenues*

* Additional gas tax revenues are assumed to start 5 years after RTP adoption (2017); new sales tax assumed to start in 2020; transitions from gas tax to mileage-based user fee starting in 2025

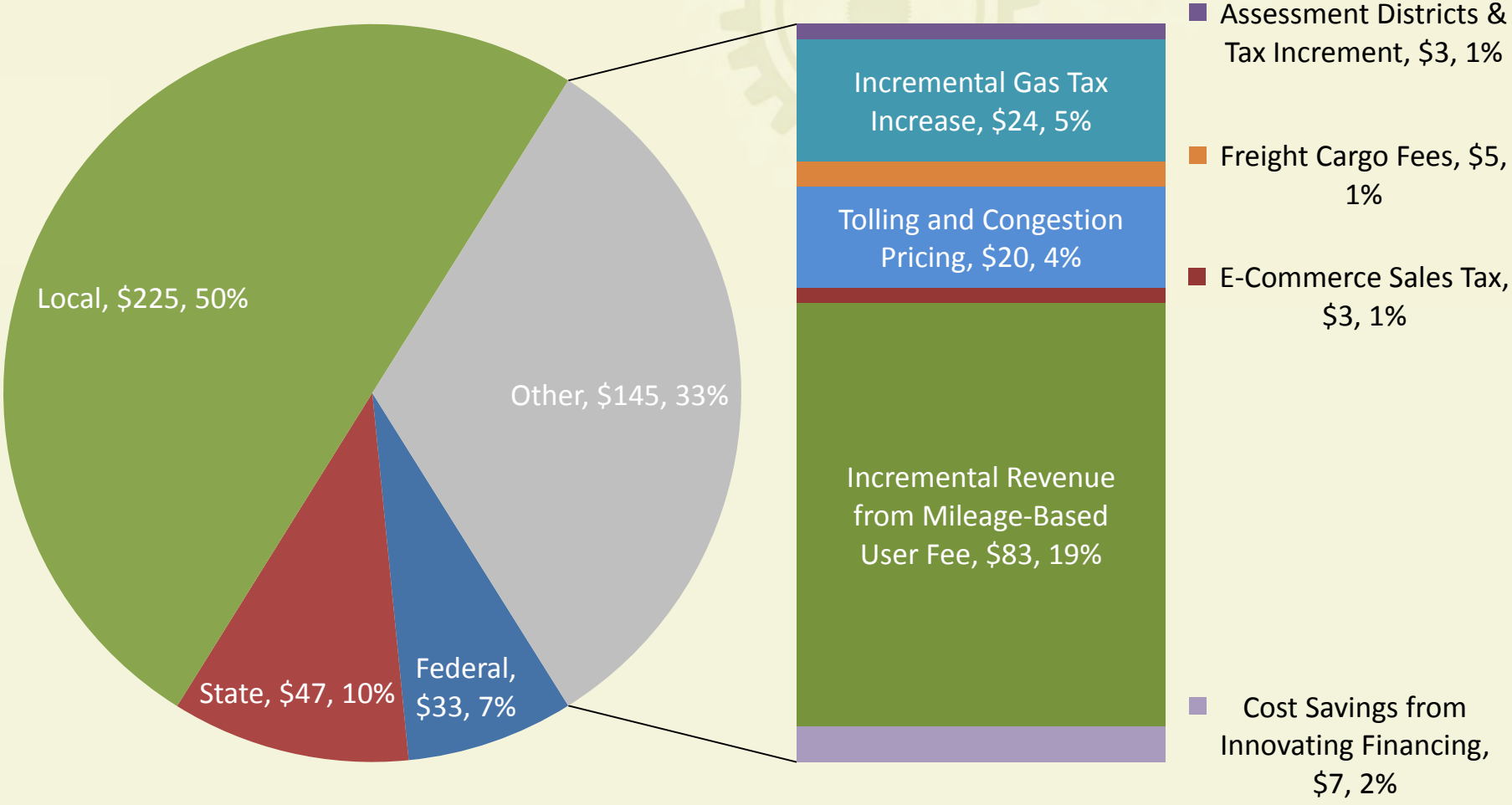
Staff Recommended Funding Plan

$450 Billion (in nominal dollars)

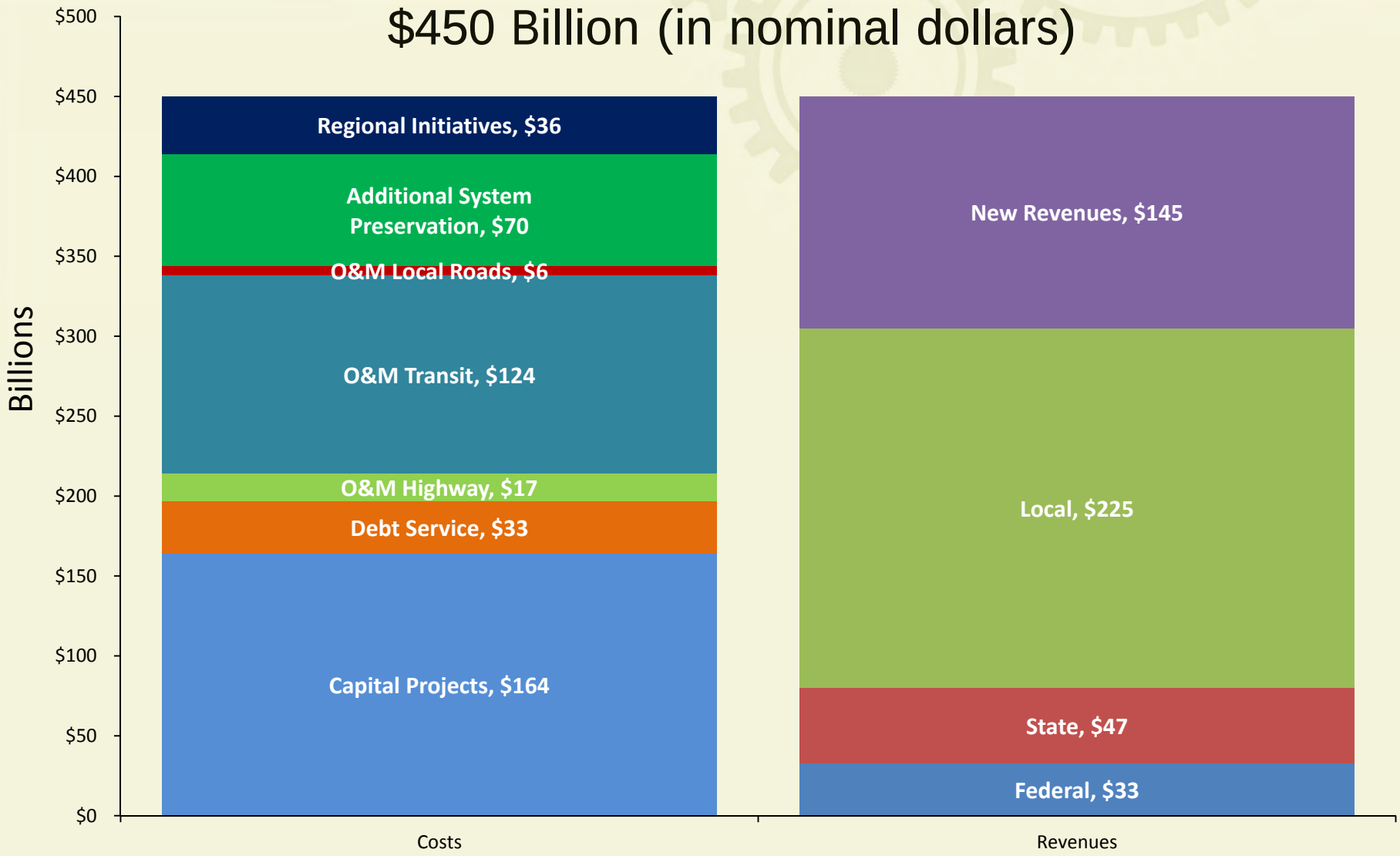


Staff Recommended Funding Plan Assuming No New Sales Tax Measures

$450 Billion (in nominal dollars)



Summary of Staff Recommended Sources and Uses



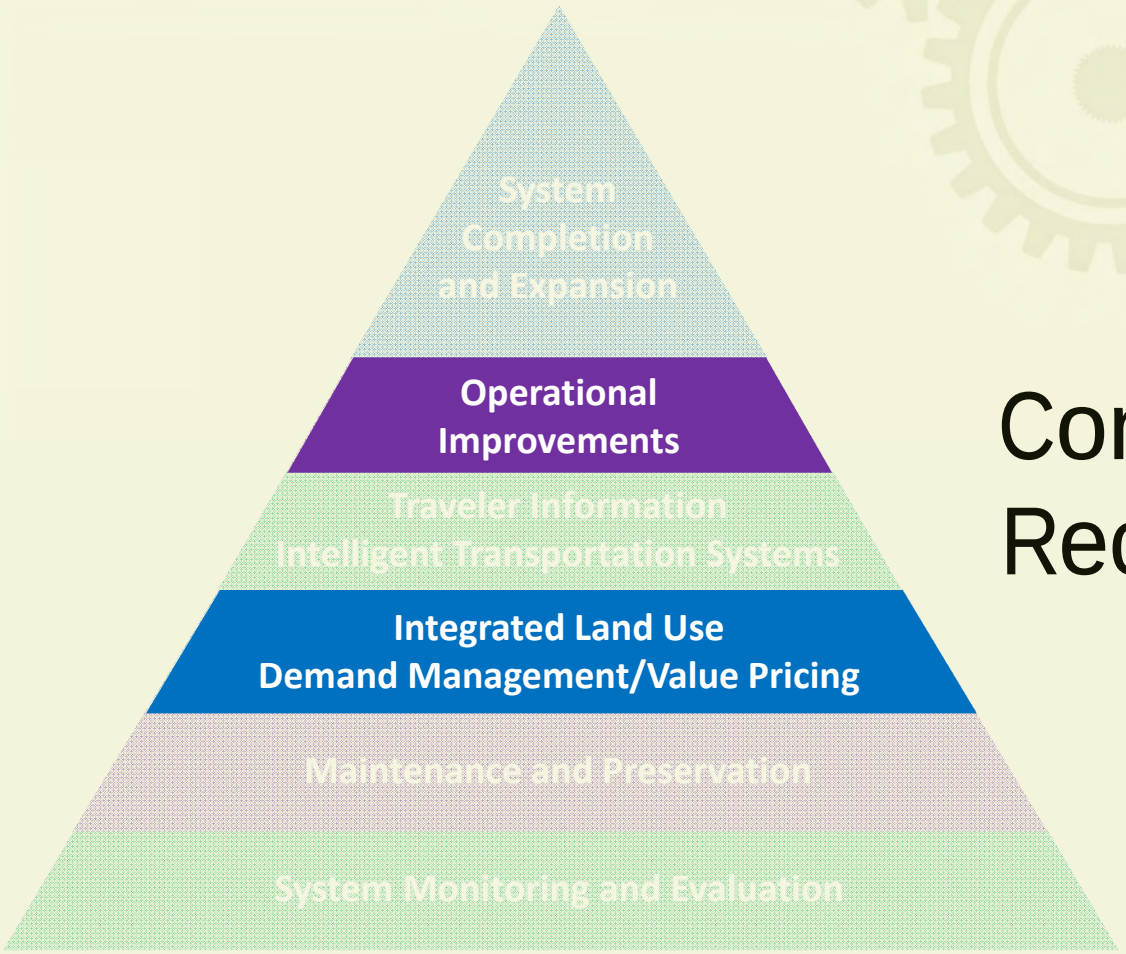
A Multi-Pronged Approach to Bridging the Gap

- Staff recommends a mileage-based user fee system, with deployment by 2025 ($.05 per mile to replace and augment), as the most viable long-term investment strategy
  - Establishes a direct linkage to usage
  - Reduces VMT by 4% and increases average speeds by 7% to 11% in 2035 (6% during peak periods)
  - Enables eventual application of variable pricing (by vehicle weight and/or time of day) to more dramatically improve travel time
- A coordinated regional, state, and federal implementation action plan is needed with immediate steps for conducting research, development and demonstration (RD&D) projects
  - Southern California should take a leadership role given our precedence for innovation in transportation

A Multi-Pronged Approach to Bridging the Gap

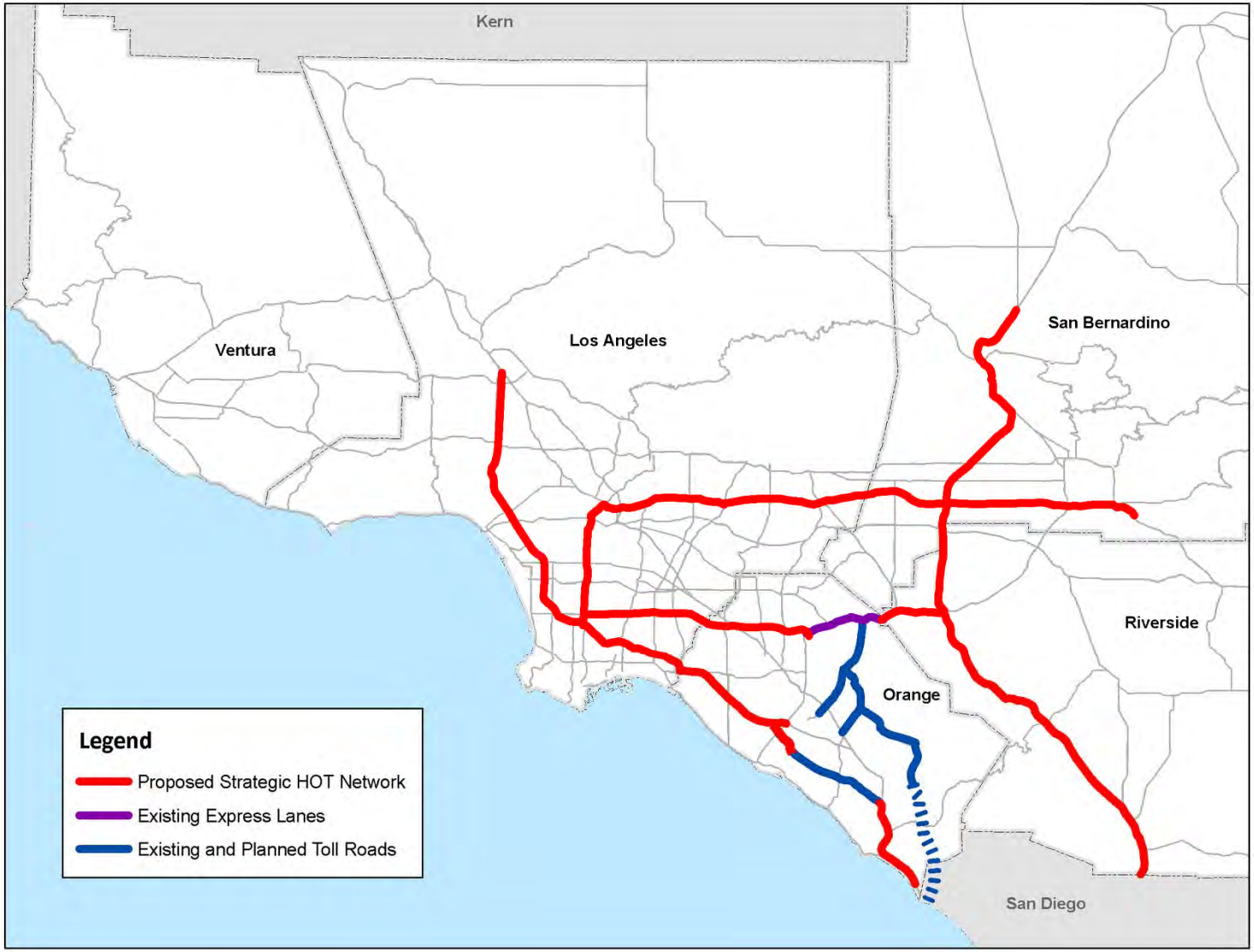
- Short-term actions should include modest increases and indexing of gas taxes ($.30 per gallon starting in 2017-2024) along with passage of .25% county sales tax measures (2020) as needed
  - Effectively addresses need for immediate resources with relatively low implementation costs or hurdles
- Integrate these revenue streams with innovative financing techniques including tax incentives to leverage private capital and accelerate project delivery
- Promote cost effective solutions that facilitate better use of the existing transportation system
  - Expand the region's express lane network, ensuring connectivity and seamless inter-county travel
  - Demonstrate cordon pricing or parking policies to encourage shifts to transit where significant investment has already been made

Discussion on Funding Plan Recommendations



Congestion Pricing Recommendations

Recommended Express Lane Network

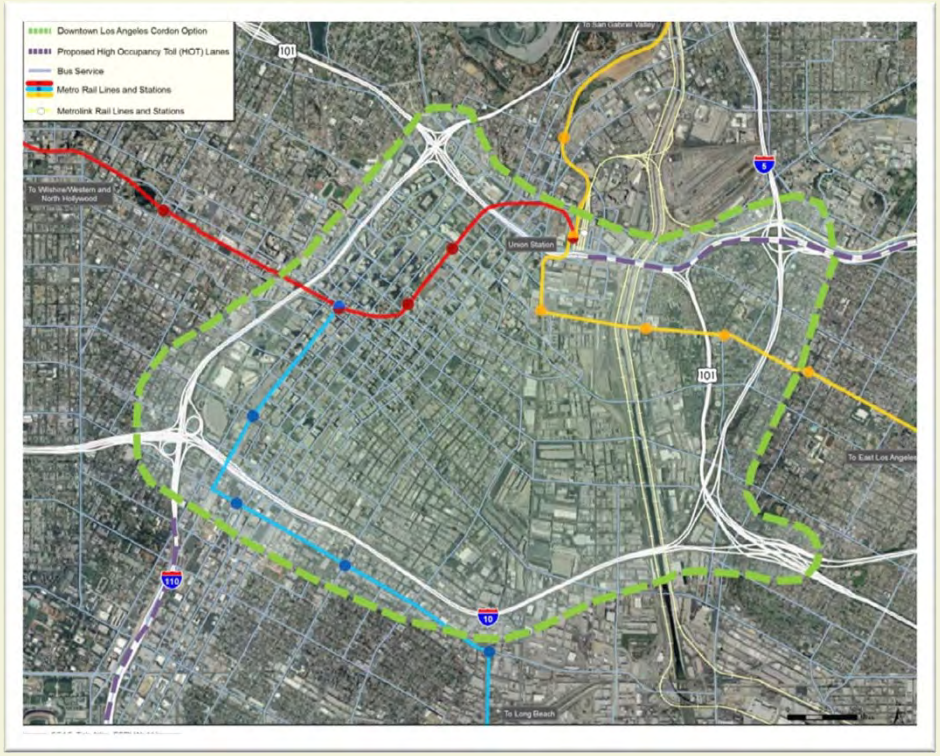


Why Express Lanes?
Express Lanes add travel options

- Price only one or two lanes on regional freeways
  - Motorists have choice of whether or not to use Express Lanes and pay toll
  - Focused on optimizing the efficiency of all lanes while generating revenue that is directed back into the same corridor

Los Angeles Cordon Opportunity

Potential Pilot Project



Why Consider Cordon Pricing Around Los Angeles?

- A number of potential cordon areas were identified as candidates for pilot projects through SCAG's Express Travel Choices Study
  - Interest expressed from LA Mayor's office
  - SCAG open to evaluating others if there is interest
- Potential to get better utilization of transit investment in and around Los Angeles
  - Excess transit capacity in high capacity transit service areas
- Potential to address multiple freeway traffic bottlenecks
  - Limited ability to expand freeway capacity

Los Angeles Cordon Opportunity

Potential Pilot Project

- Pricing applied to vehicles entering the cordon area
  - Currently evaluating impacts if cordon applied to through-trips vs. end-trips
- For evaluation purposes, cordon being tested as if demonstration was operational in 2035
- Intended to:
  - reduce congestion (in priced area and throughout region)
  - encourage shift to transit and carpooling
  - generate revenue, which would be dedicated to transportation in and around proposed Los Angeles cordon area

Discussion on Congestion Pricing Recommendations

Next Steps

- Finalize the Draft 2012 RTP/SCS based on input from today's meeting
- Present Draft 2012 RTP/SCS to the Joint RC and Policy Committees on Nov. 3, 2011 for their consideration to recommend release to Regional Council
- Release of the Draft 2012 RTP/SCS for formal public review and comments by Regional Council on December 1, 2011