



# North Coast Corridor: *Connecting People, Transportation & Environment*

Legislative Hearing: 11.8.10



# **North Coast Corridor** Region's Lifeline

## **A Regional Strategy** Mobility, Economy & Environment

## **North Coast Corridor's Vision** Providing Mobility & Improving the Environment

## **Express Lanes** Alternatives and Choices

## **Decision Process**

# North Coast Corridor Region's Lifeline



# Corridor Is Essential to San Diego County Residents



# Corridor Is Essential to San Diego County Residents



Activity  
Center  
Map



# Corridor Provides Jobs & Economic Prosperity for San Diego County Residents

In this corridor:

- **22%** of region's jobs
- Jobs increased **10 fold** since 1970
- Regions compete to attract and retain this corridor's **leaders and innovators**





# Corridor Provides Goods & Services for San Diego County Residents

- \$7.5 billion in 2007
- Increasing to **\$12.5 billion** in 2050
- 95% of goods movement is by truck



# Corridor Provides Recreational Opportunities for San Diego County Residents

Beaches

Fairgrounds

Legoland



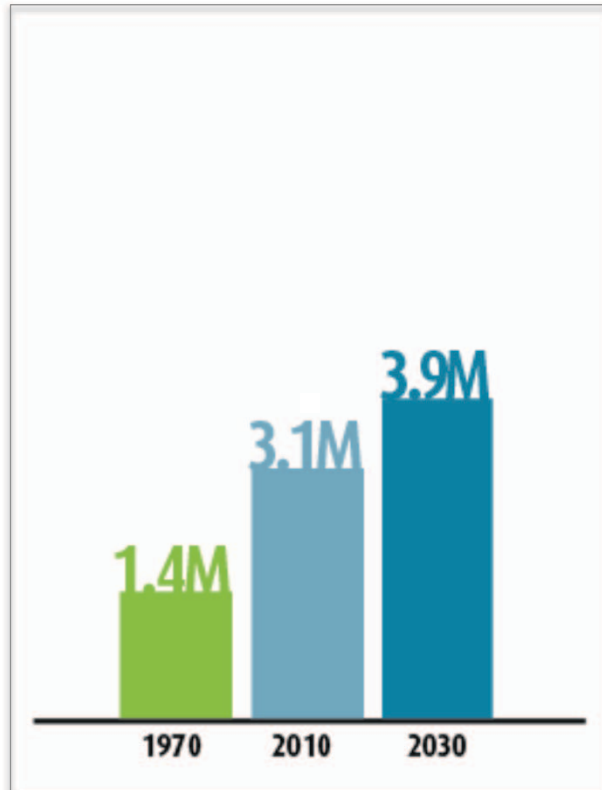
**6 Million  
Visitors / Year**

**Annual Visitors to Corridor =  
Attendance at 85 Super Bowls**

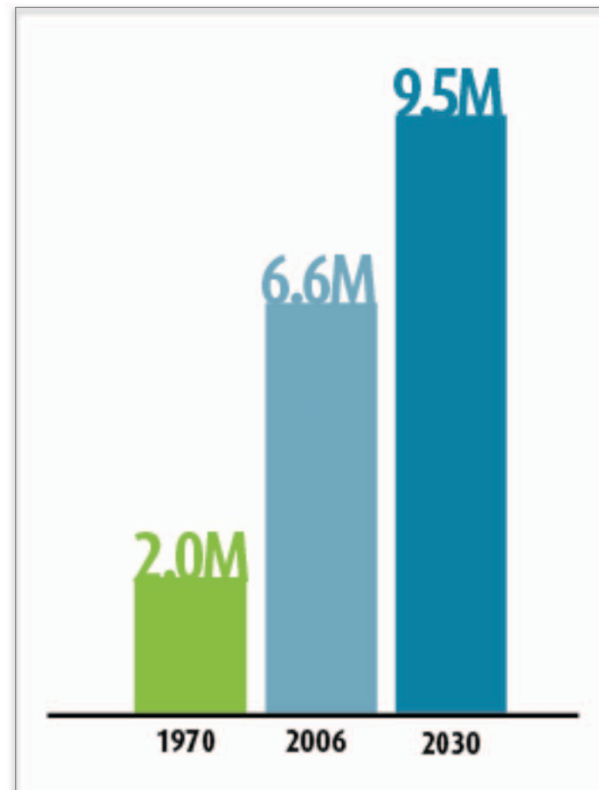




# Corridor's Importance Results in Travel Demand



San Diego County Population Growth



Neighboring Regions' Population Growth

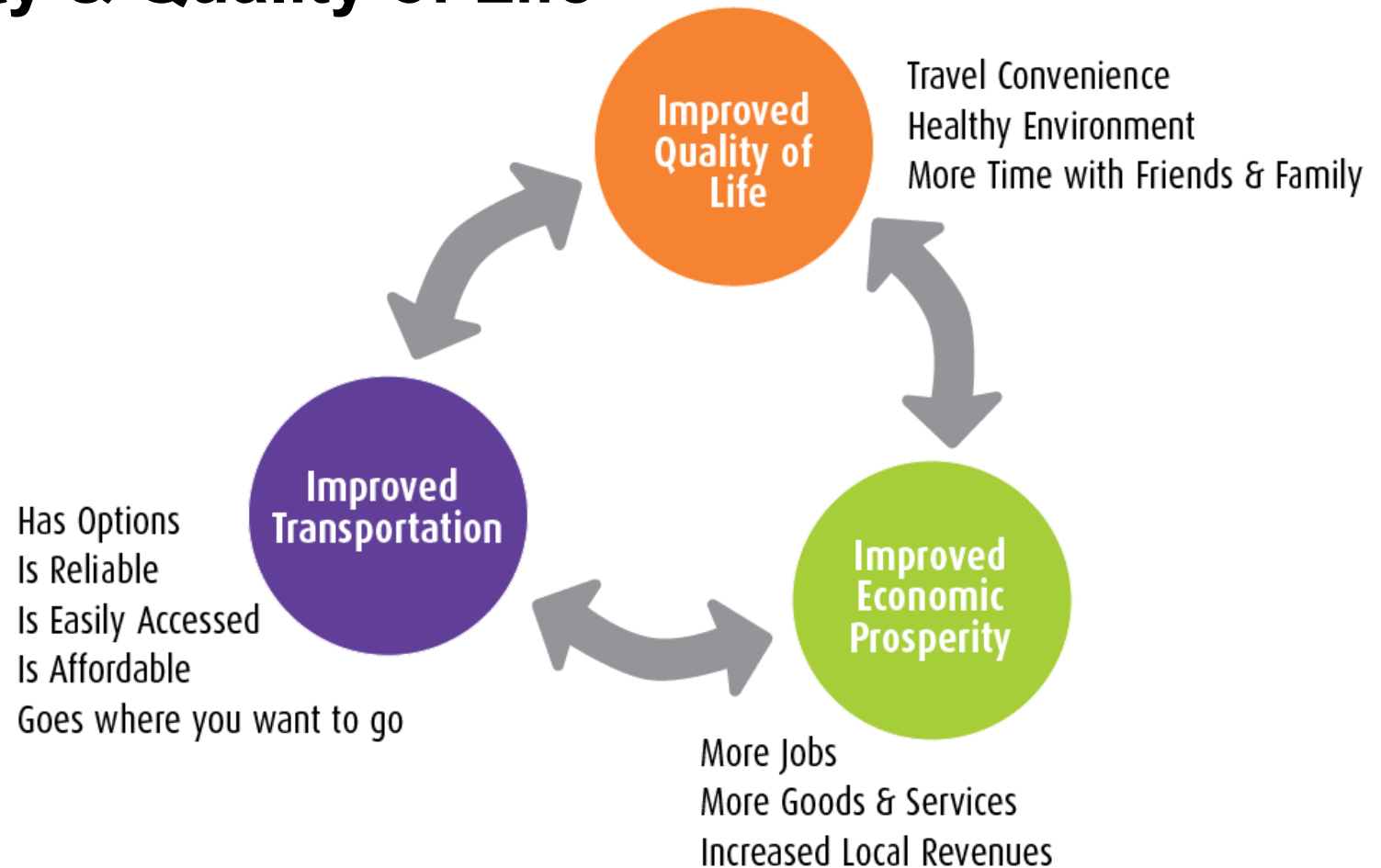


**1 Million  
Trips  
Daily in  
2030**

# A Regional Strategy

## Mobility, Economy & the Environment

# Connecting Transportation, Prosperity & Quality of Life





# Historical Background

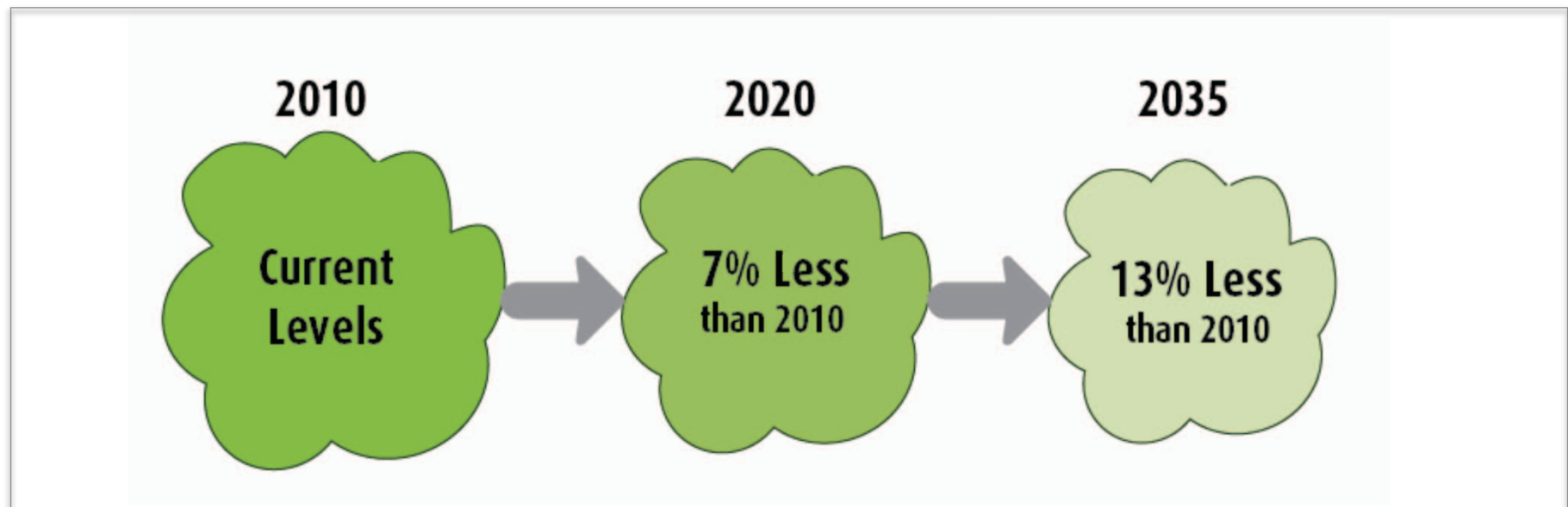


- Voter Approval
- Regional Planning: SANDAG
- Project Planning: Caltrans
- Planned Configuration

# 2050 RTP: A Bottoms-Up Approach to the Future

Planning components:

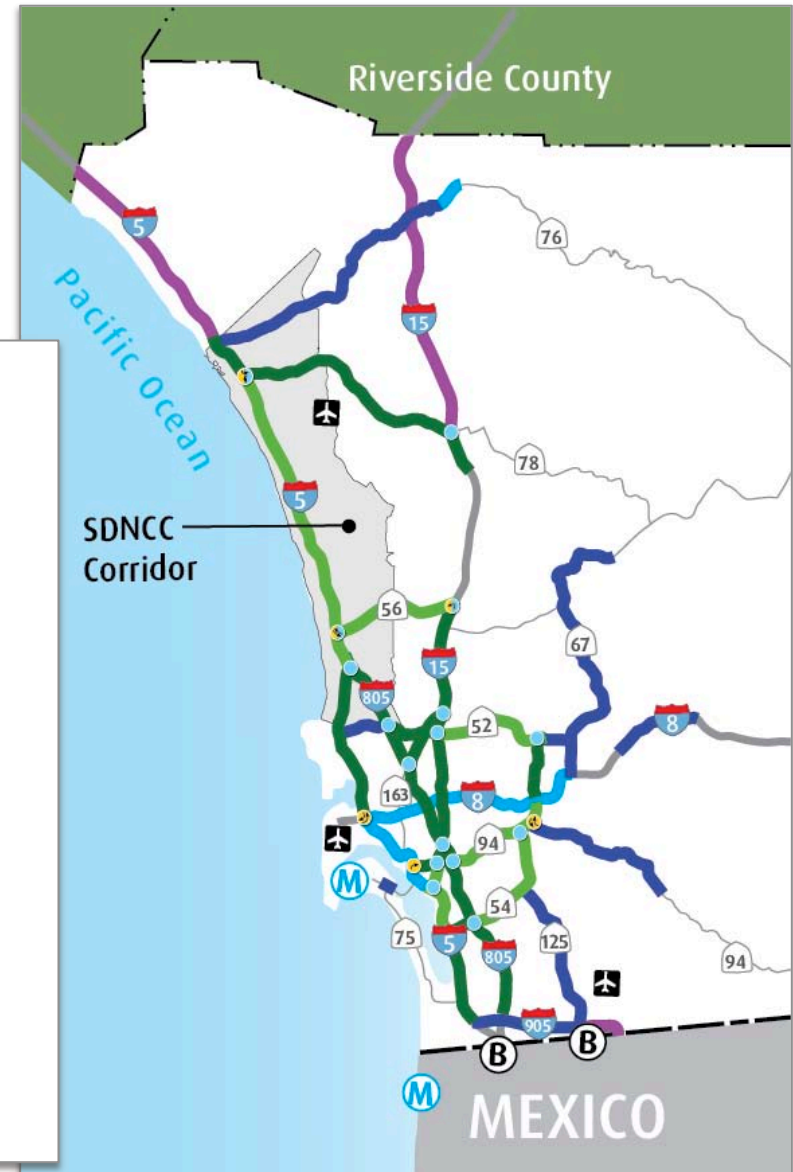
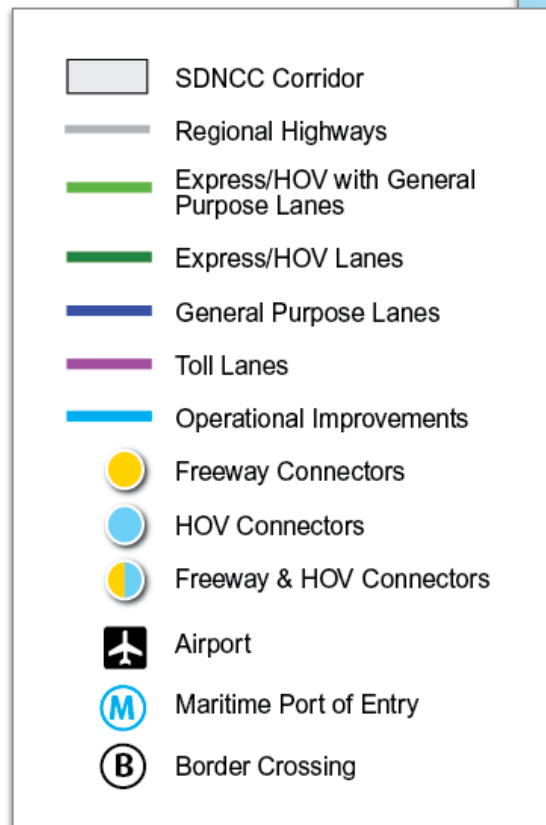
- Land use
- Bottleneck identification
- Multimodal choices
- Technology



*Result: Regional Carbon Emissions Reduced Per Capita*

# 2050 RTP: Highway Planning

Highway  
Map -  
2050





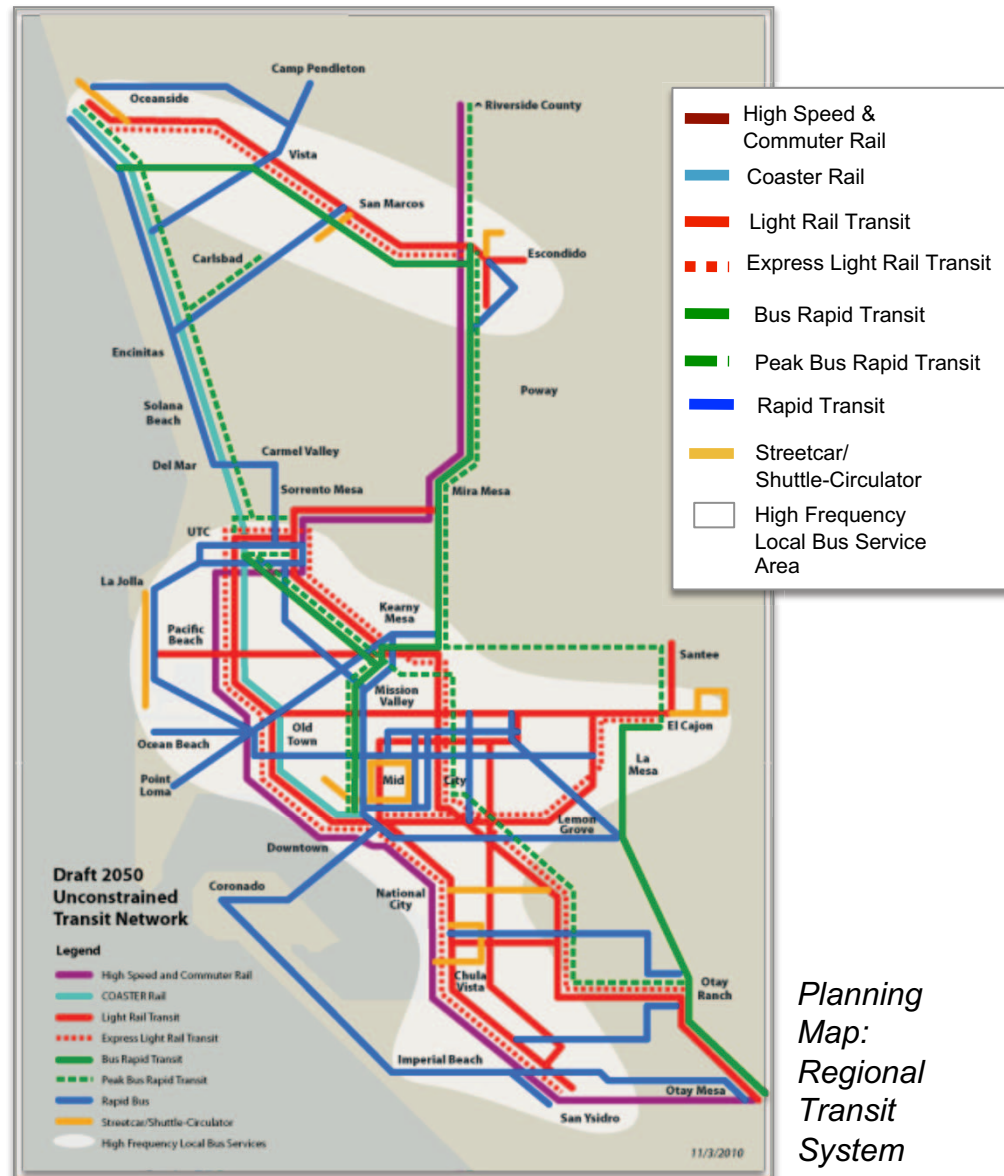
# 2050 RTP: Express Lane Planning

Express Lanes system will:

- Make bus, carpool & vanpool use more attractive
- Ensure trip time reliability for HOV users
- Adapt to changing traffic conditions, technological advances & future policies

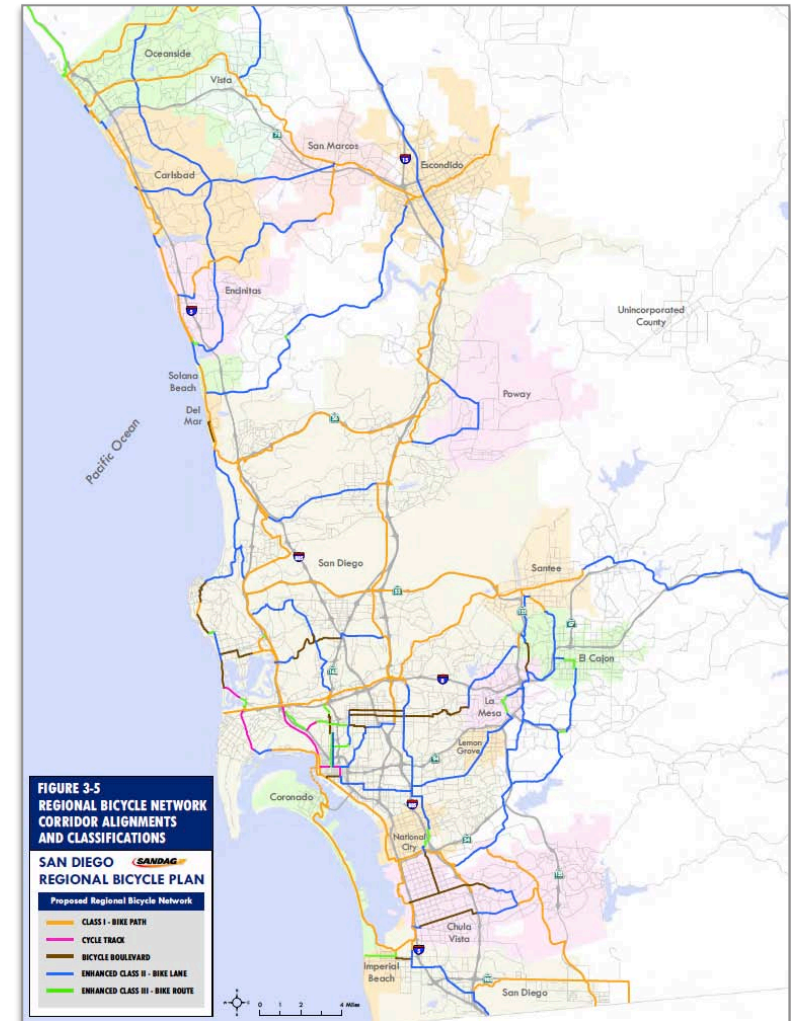
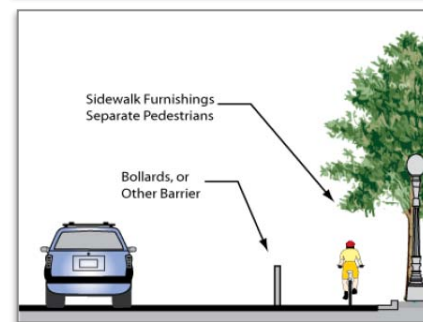
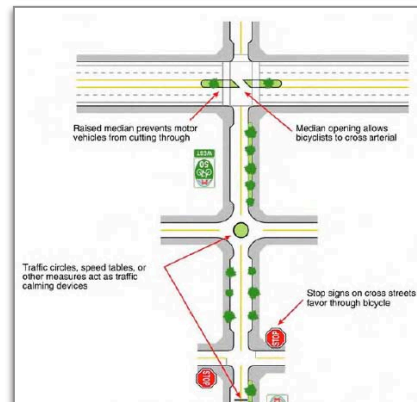


# 2050 RTP: Transit Planning



# 2050 Bike Plan

- \$2.5 Billion investment in Bike/ Ped facilities, which include:
- 275 miles of Regional Bike facilities
- Local bike network improvements
- Improving Safe Routes to Schools
- Improving Bike/ Ped access to transit



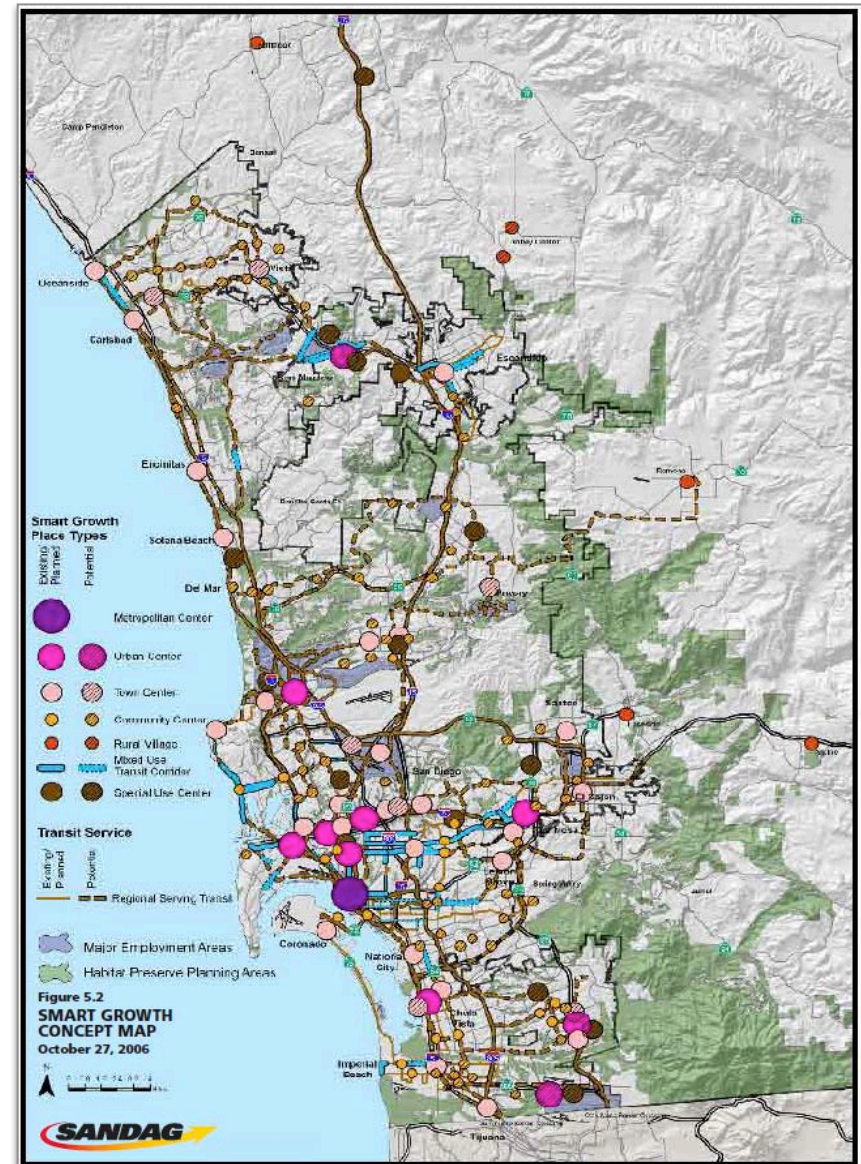
*Proposed Regional Bicycle Network*



# 2050 RTP: Land Use Planning

- Plans call for 83% of new housing built over the coming 40 years to be multi-family residences
- Denser communities facilitate transit options

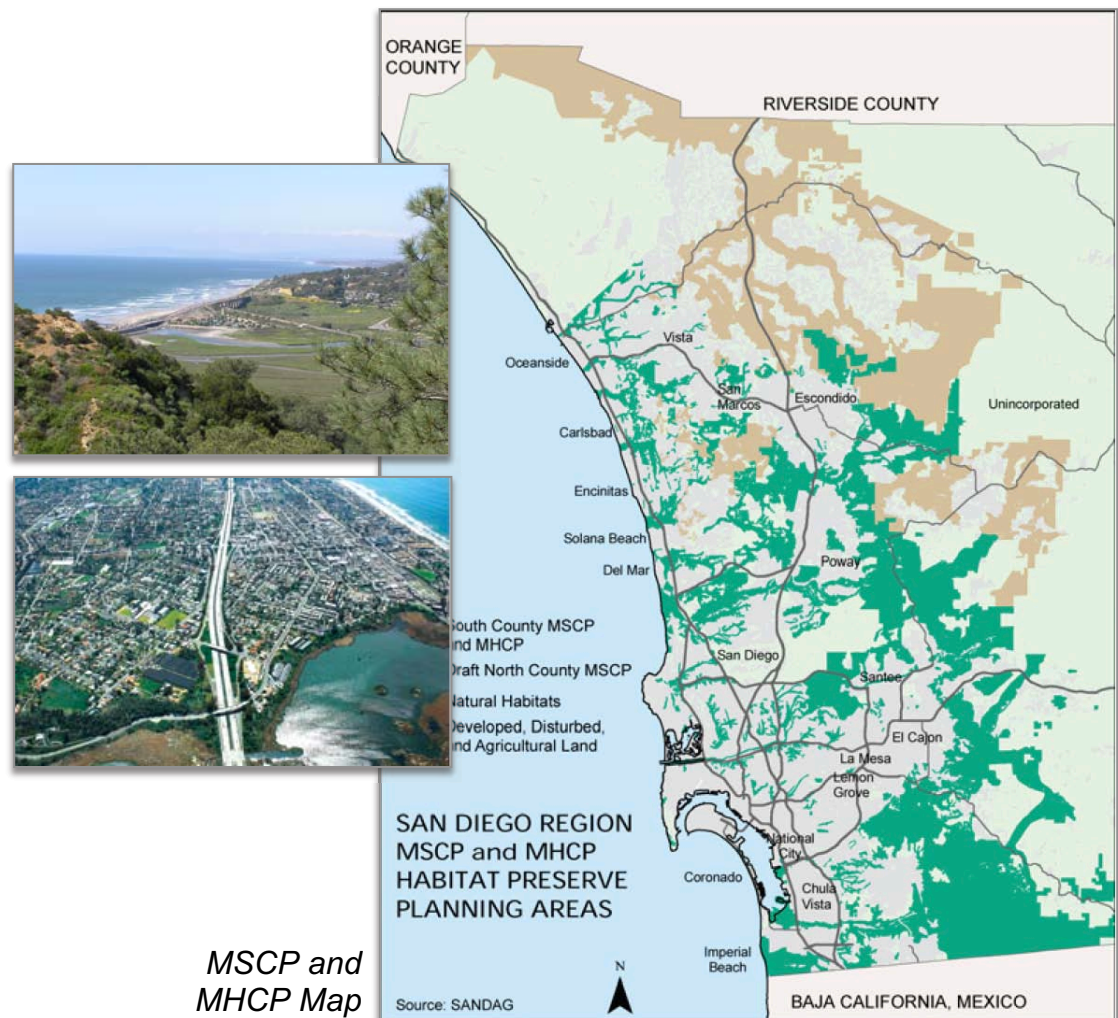
*Regional Smart Growth  
Concept Map*



# Natural Resources: Proactive Approach

*TransNet II* funding  
\$850 million Program:

- Improving the North Coast Corridor's environment is a priority
- Advance mitigation to purchase and protect habitat
- MSCP & MHCP Habitat Preserve Planning Areas



*MSCP and  
MHCP Map*

# North Coast Corridor Vision

## Providing Mobility & Improving the Environment



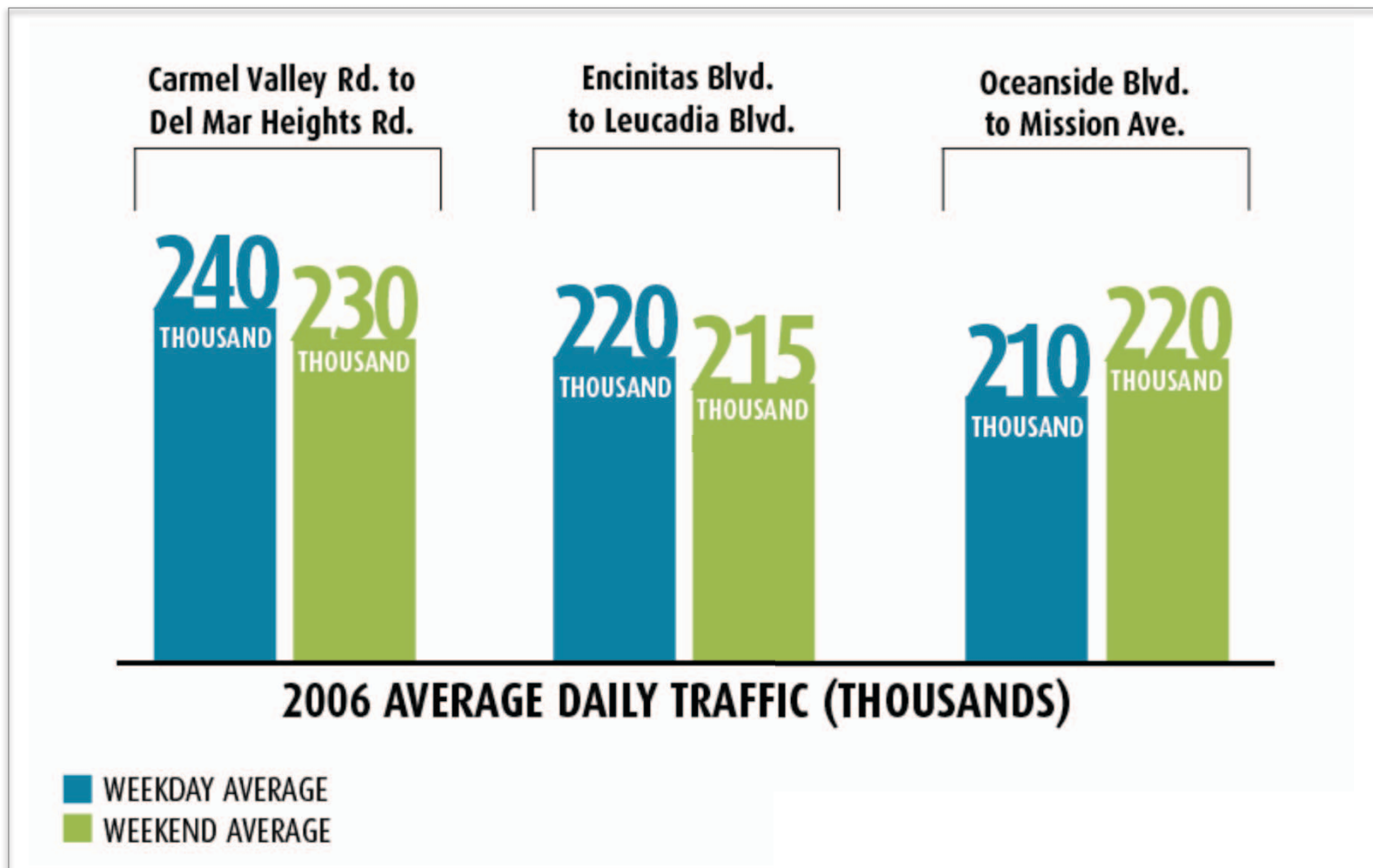
# Unique Corridor Needs Unique Solutions

- Gateway to San Diego
- 6 coastal cities
- 6 environmentally sensitive & unique lagoons
- 27 miles of coastline
- Different customers different needs

North Coast  
Corridor Map



# Unique Corridor Needs Unique Solutions



Daily Traffic Comparison

# Unique Corridor With Unique Opportunities

Provide people with:

- More travel choices
- Reduced congestion
- Reliable trip times for all modes
- Improved access to coast & area attractions
- Enhanced environment

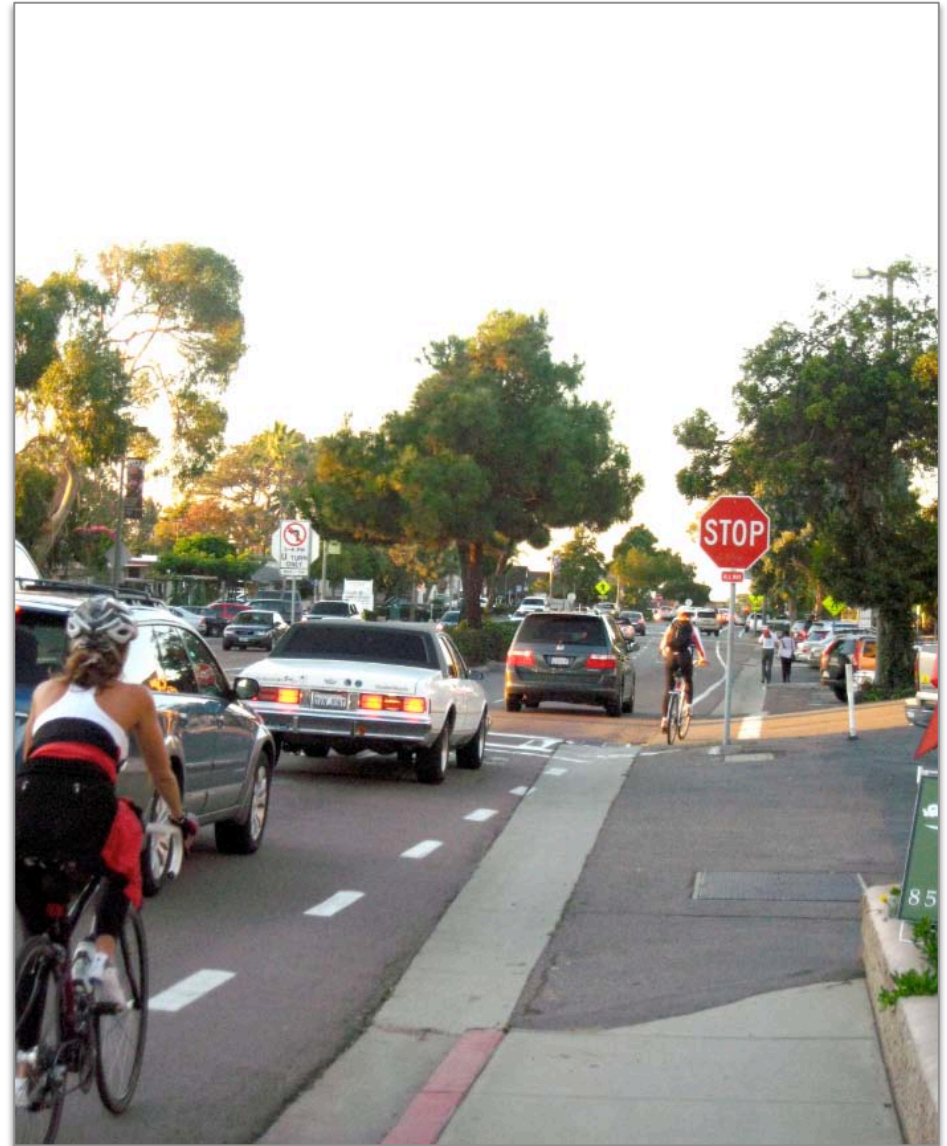
*North Coast Corridor Map*





# Unique Corridor Has Unique Constraints

- Coastal resources
- Topography
- Existing development patterns
- Limited options for local trips
- Funding





# Corridor's Solutions: Connect People, Transportation & The Environment

Provide many ways to travel:

- Within the corridor
- To the corridor
- From the corridor

*Many Ways  
to Travel*



# Corridor's Rail Service Constraints

- 51% of the track is single track
- Extended mid-day service gaps for COASTER
- Limited weekend service
- Frequency and reliability limits
- Limited parking
- Multiple rails operators: Amtrak, Coaster, BNSF & Metrolink

*Rail Double Track Improvements*

## Legend

- Existing Single Track
- Existing Double Track



# More Trains Require More Track

- Region has committed to fully double track the corridor
- 40 capacity increasing & operational improvement projects
- 18 projects have full/partial funding
- 2 projects in construction
- 4 projects scheduled to begin construction near-term

*Rail Projects*



**Legend**

- |||| New Double Track
- Existing Double Track
- Capacity Projects





# Corridor's Solution: More Than Triple COASTER Ridership by 2030

Passenger service will be increased through:

- Service all day
- Service 7 days a week
- 15 minute peak weekday frequency planned by 2020





# Corridor's Solution: Connections for Pedestrians/ Bicyclists

- To the coast
- To transit stations
- To job centers

*East/West  
Connections*



# Corridor's Solution: Provide New Express Lanes

Express Lanes will:

- Support buses, carpools & vanpools
- Operate at free flow speeds 24/7
- Adapt to changing traffic, future technological advances & regional policies



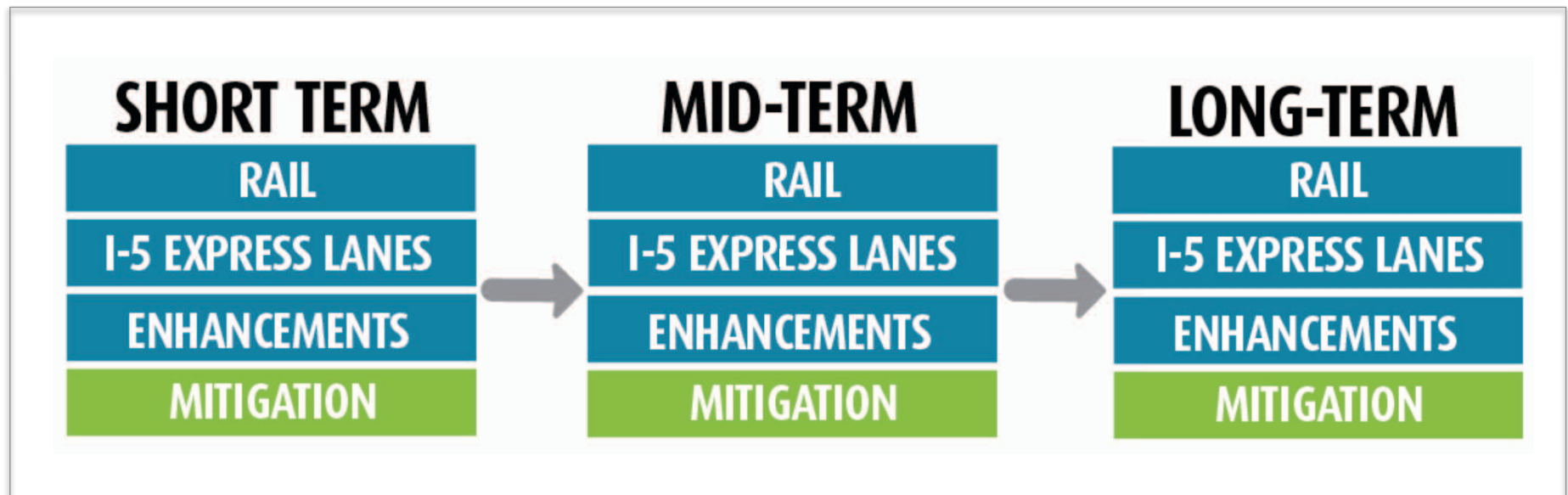


# Corridor's Solution: Coastal Protection Plan

- Comprehensive plan for rail and highway
- Address lagoon health as a system
- Partnerships with lagoon foundations & environmental agencies
- Tools: bridge lengthening, bioswales, and habitat preservation, restoration and creation



# Corridor's Solution: Comprehensive Phasing Plan



*Improvement Phasing Diagram*



# Express Lanes Alternatives & Choices

# Balancing Regional Goals & Objectives



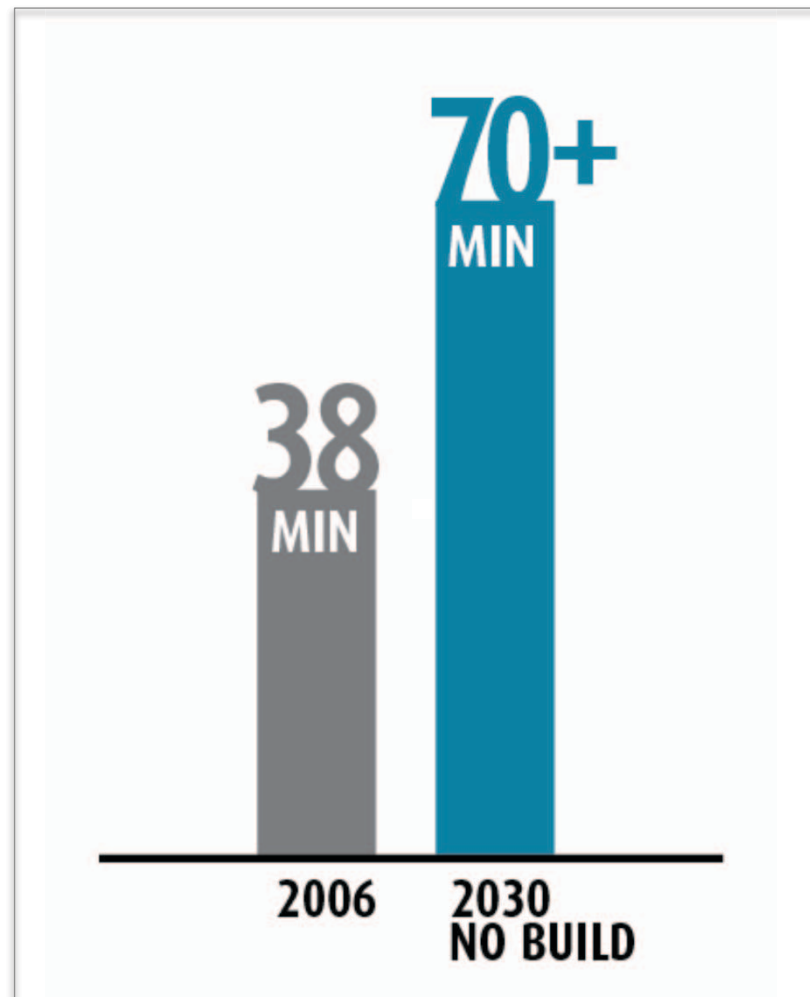
# What If... We Do Nothing to I-5?

The “No Build Alternative”  
**DOES NOT:**

- Address increased traffic congestion
- Meet region’s goal to complete a connected Express Lanes System
- Accommodate BRT
- Create opportunities to improve lagoon health, connect bicyclists and pedestrians to coast, and abate noise



# If We Do Nothing, Trip Times Nearly Double



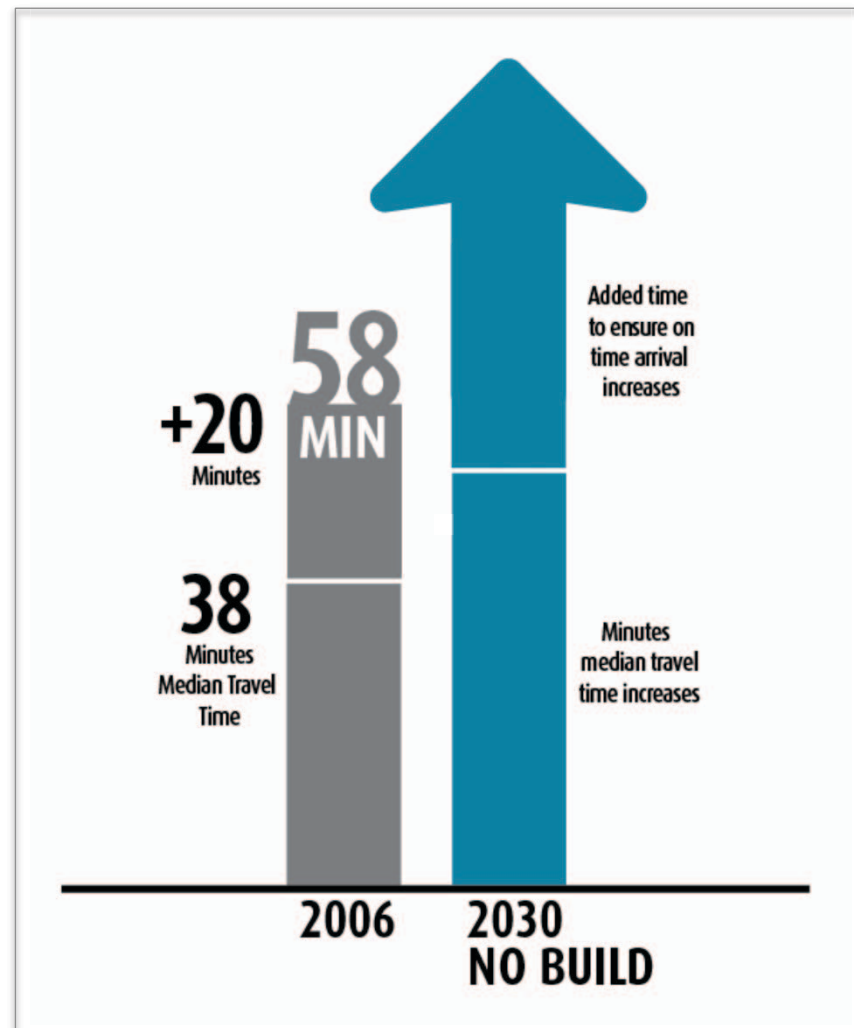
*Trip Times  
Comparison Chart:  
Northbound PM Peak*



# If We Do Nothing, Trip Times Become More Unreliable

Add time to be on time:

- Now, travelers add 20 minutes to their travel time
- In 2030, trip time will be longer and additional time will be needed for an on-time arrival

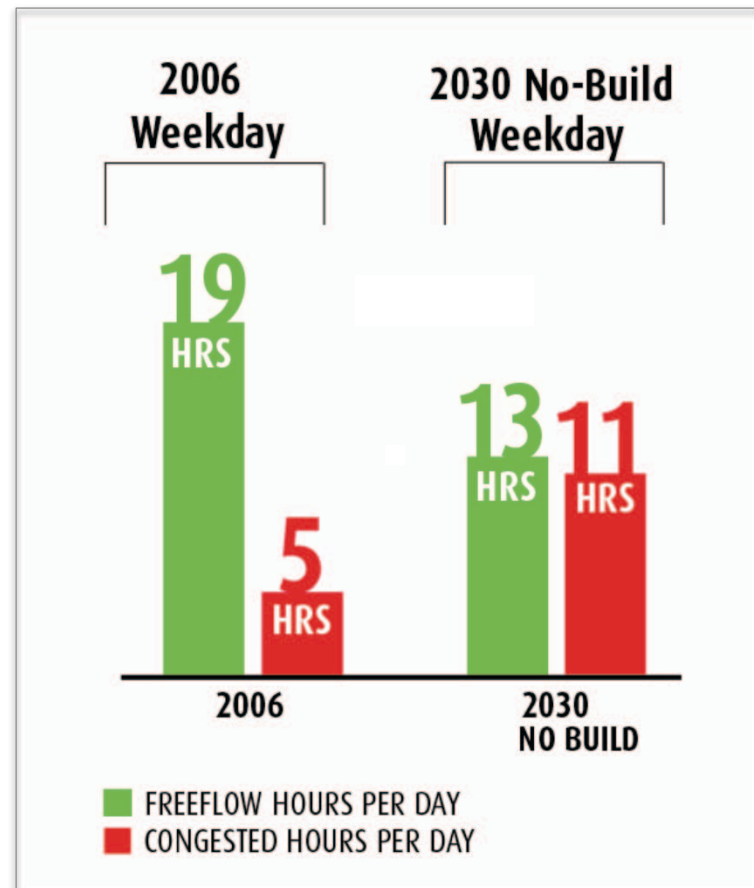


*Trip Time Reliability Comparison Chart*

# If We Do Nothing, I-5 Will Be Congested Throughout the Day

Severe traffic congestion will negatively effect:

- Other transportation elements
- Economic health & prosperity of the region



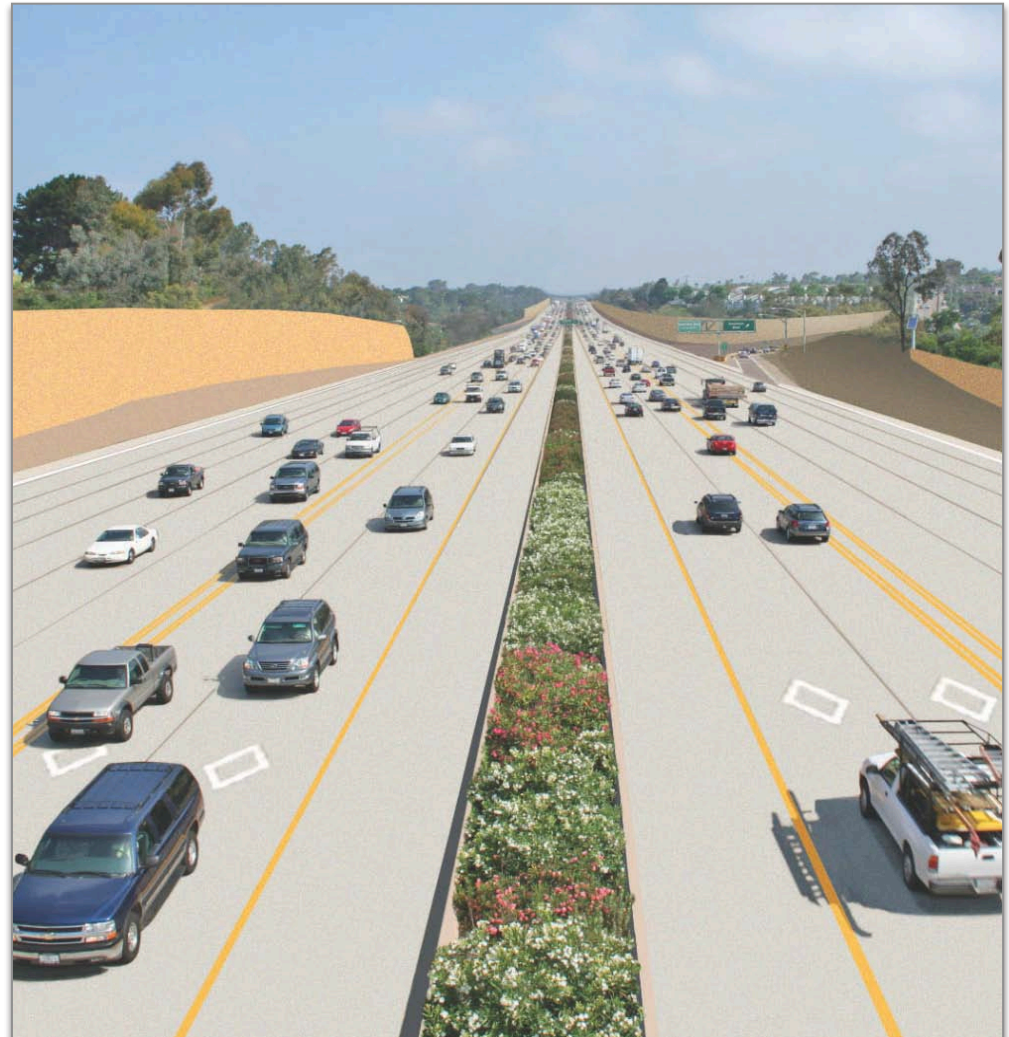
Hours of Congestion Comparison Chart



2030 No Build Northbound All Day

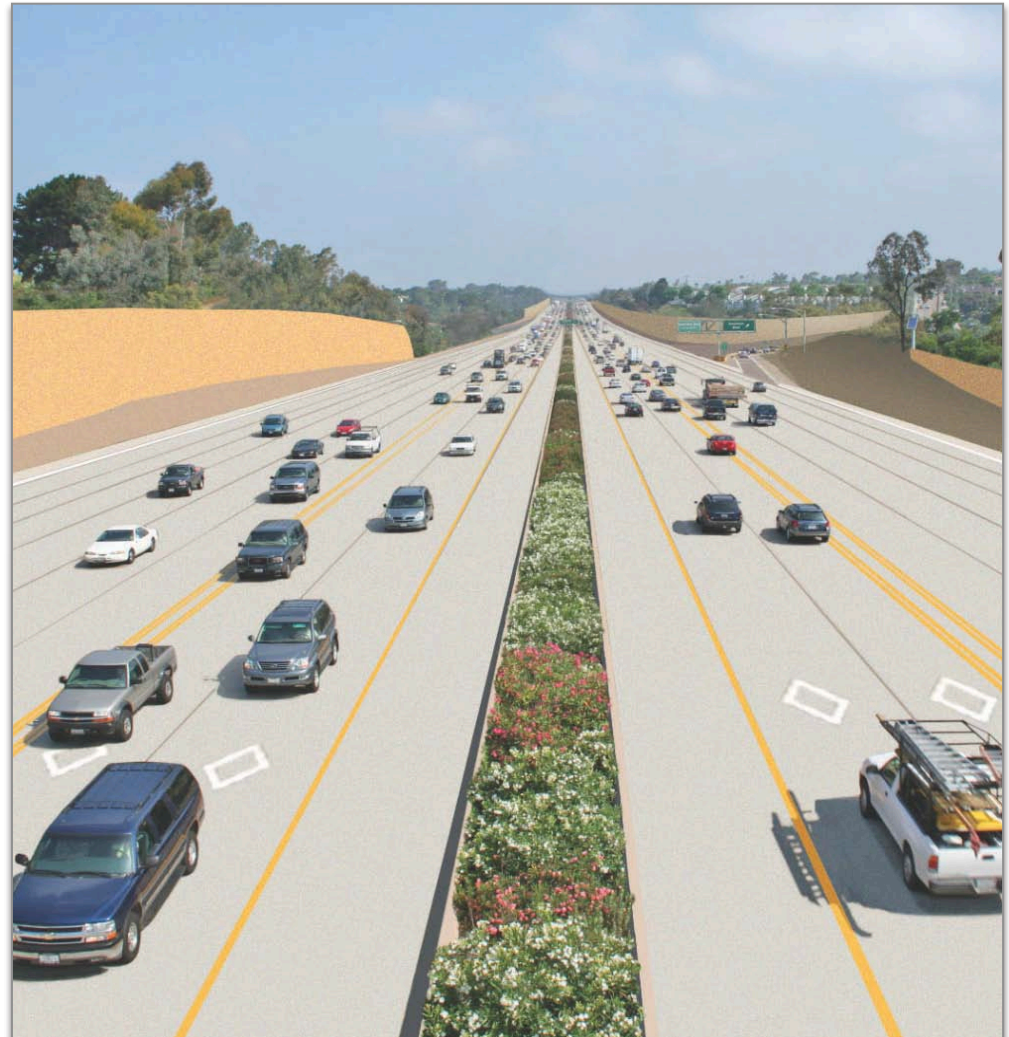
# What If...We Add 4 Express Lanes (2 Each Direction)?

- Make bus, carpooling and FasTrak more attractive & reliable
- Improve main lane operations
- No additional general purpose lanes
- Cost to add 4 Express Lanes:  
**with buffer: \$3.4 Billion**  
**with barrier: \$4.1 Billion**



# What If...We Add 4 Express Lanes (2 Each Direction) & 2 Main Lanes (1 Each Direction)?

- Maintain existing travel times while accommodating growth
- Provide best main lane performance
- Increase community & environmental impacts
- Cost to add 4 Express Lanes & 2 Main Lanes:  
     **with buffer: \$3.8 Billion**  
     **with barrier: \$4.5 Billion**





# All Build Alternatives Have Direct Access Ramps

- Strategic placement based on local infrastructure, employment centers & recreational sites
- Provide better access to express lanes system for carpoolers, vanpools, FasTrak & BRT users
- Reduce congestion at on-ramps
- Improve operation of main lanes

*Direct Access Ramp Map*



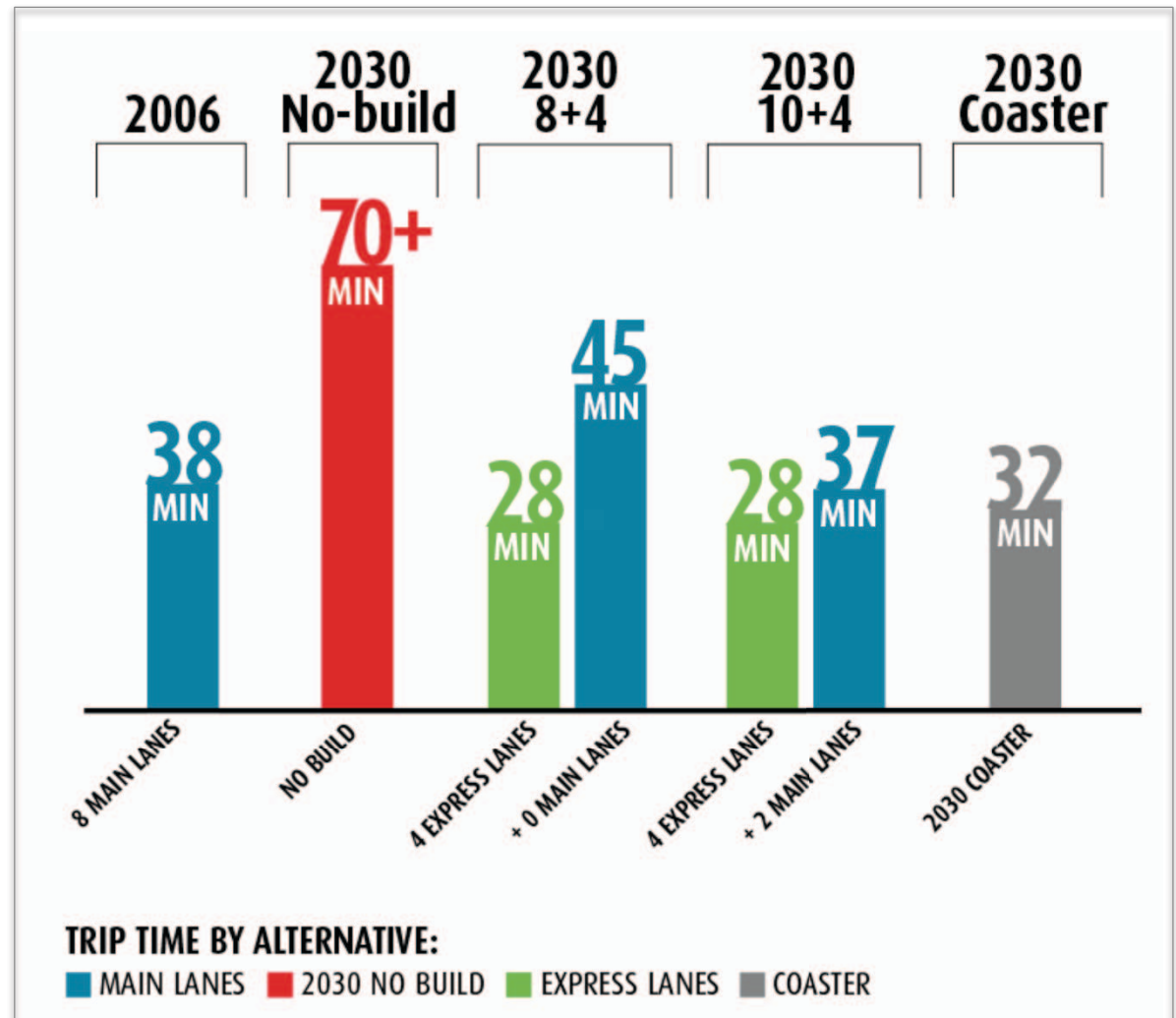
# Corridor Travel Times In 2030

In “8+4” and “10+4”

- Express Lanes, travel is at free flow speeds

In “No Build”

- Travel times nearly double



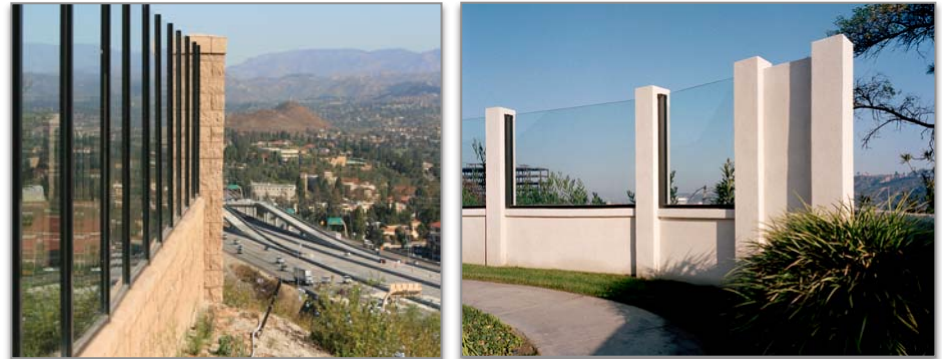
Travel Time Comparison  
2030 Northbound PM Peak

# With Express Lanes, Noise Can Be Reduced While Preserving Views

Save all public and private views

**Attenuate noise for 82% of impacted residents:**

- Without a project, no retrofit program for existing noise
- With a project, there is the possibility to advance mitigation projects & existing noise





# Enhancement Opportunity: Reflecting Local Character

- Streetscape enhancements
- Trail connections
- Community gardens
- Pedestrian-friendly bridges
- Enhanced aesthetics



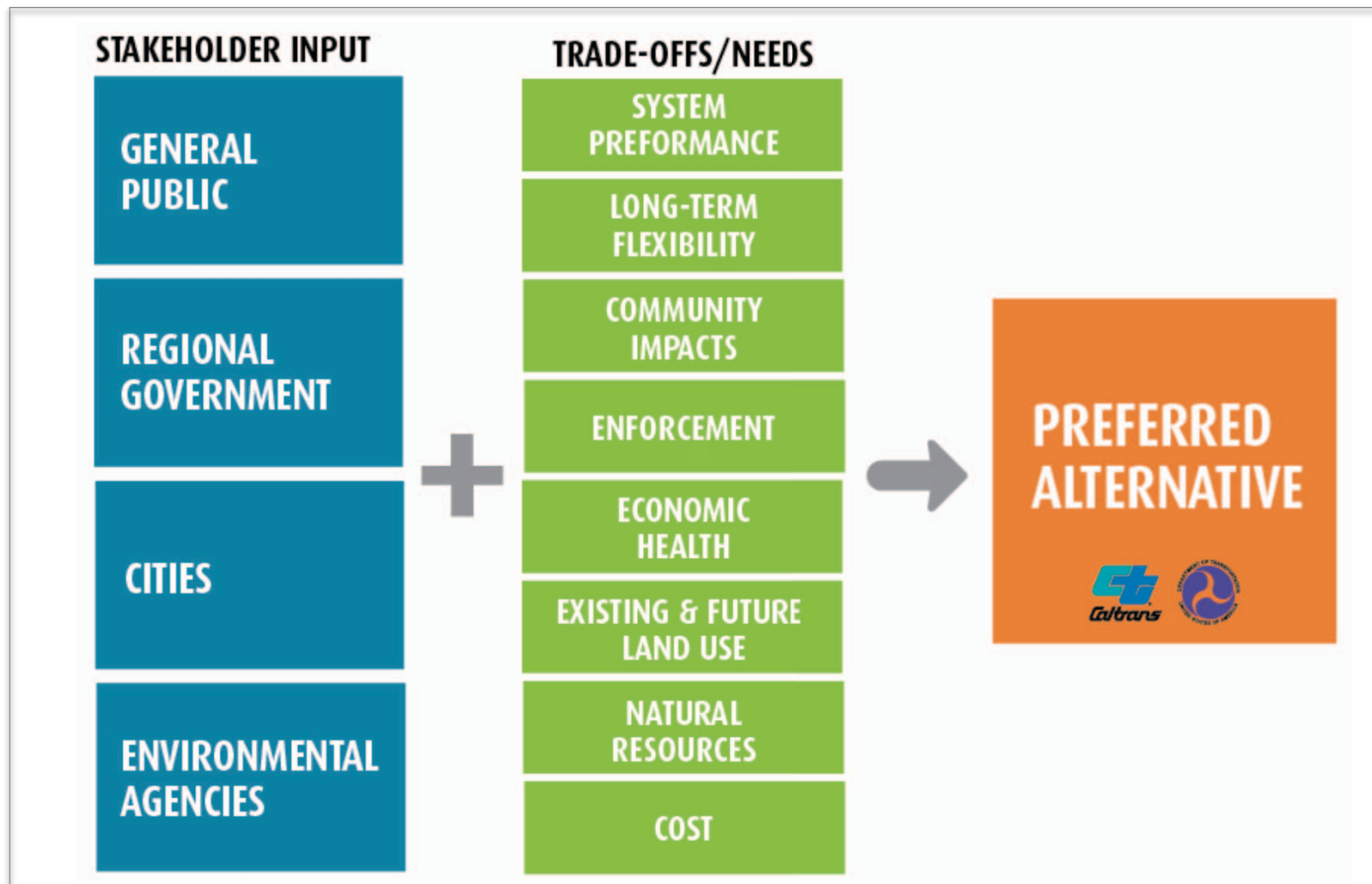
*Community  
Enhancement  
Plan*





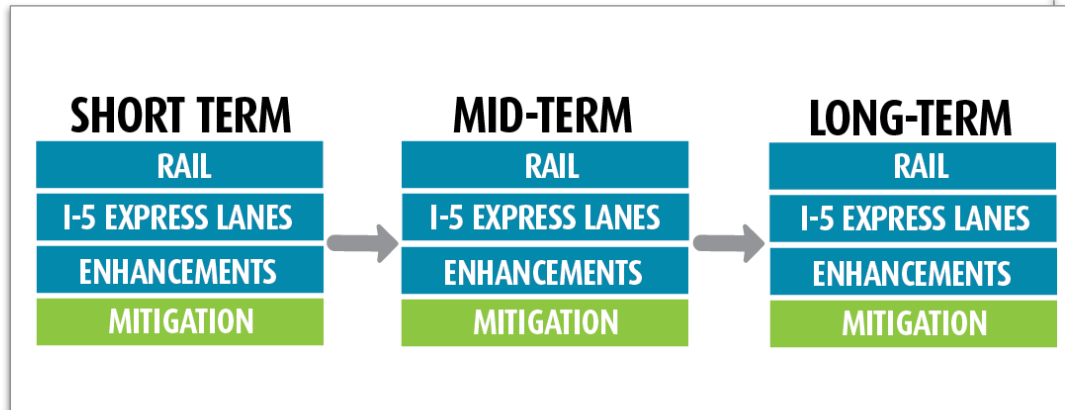
# Decision Process

# Select Alternative: Decision-making Process

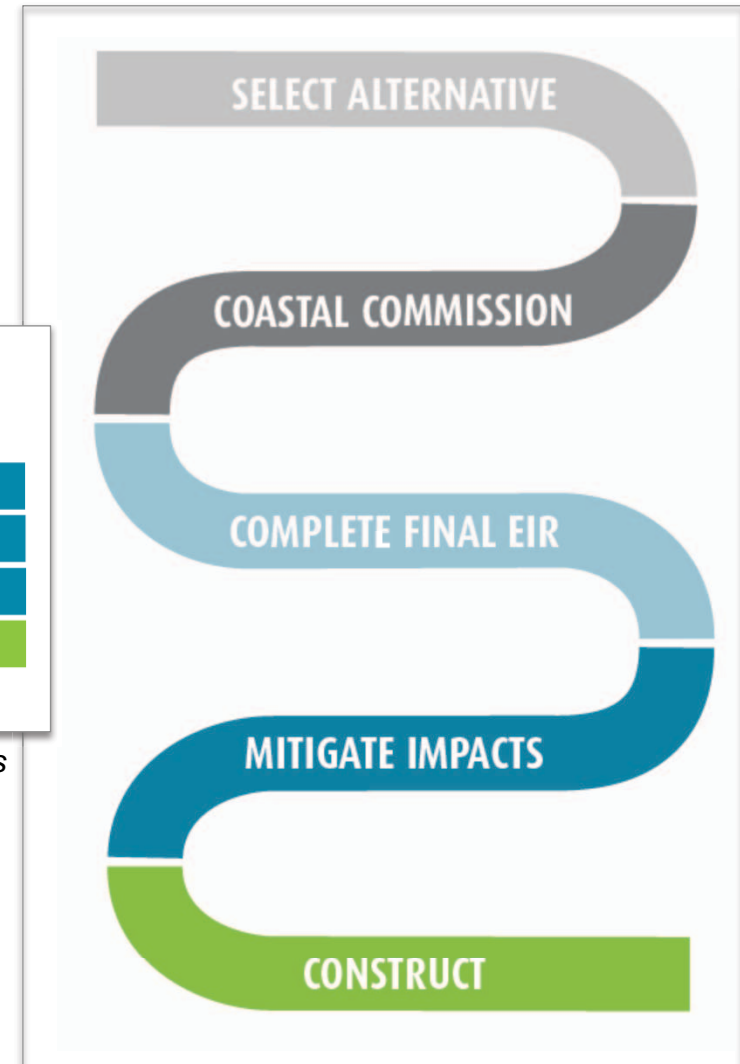


Process for  
Selecting a  
Preferred  
Alternative

# Connecting Improvements



*Phasing Diagrams*



# Key Points

## **Comprehensive Vision:**

*It is a transit and highway vision that will provide competitive travel choices*

## **Region's Lifeline:** Gateway to San Diego's Future

- *Work to minimize community impacts*
- *Improve community and coastal resources*
- *Sustain economic growth*