

# 2018 Long-Range Transportation Plan Draft Overview



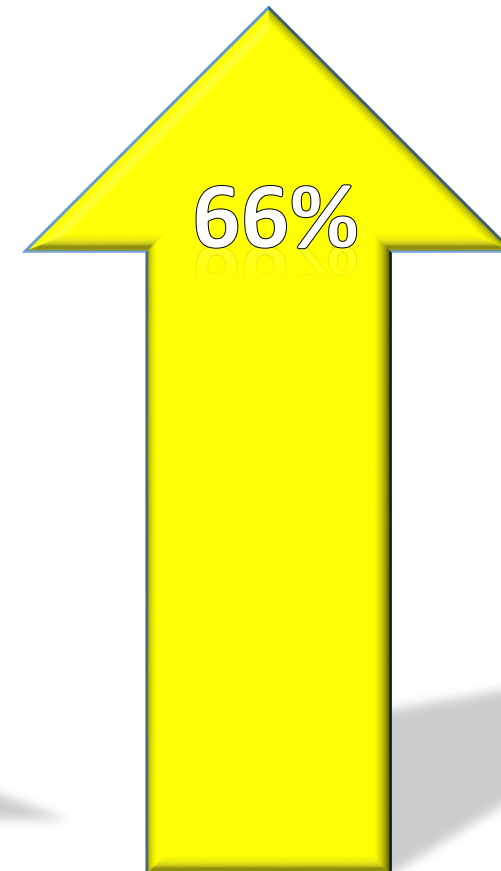
# Key Issues for 2018 LRTP

- Growing traffic and limited land
- Changing travel demand and patterns
  - High cost of housing
  - Evolving transit market
  - Disruptive technologies and services
- Transportation funding uncertainties
- Challenging emission standards



# Growing Traffic and Limited Land

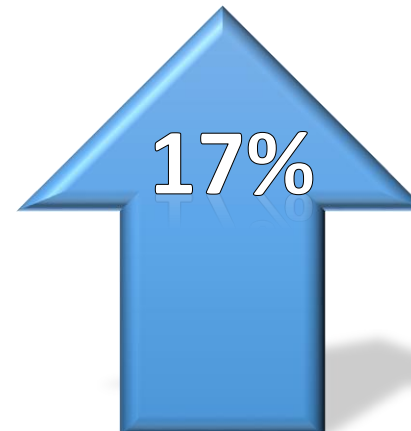
| Metrics (daily)                         | 2015 Base Year | 2040 Baseline | % Change |
|---|----------------|---------------|----------|
| Total hours of delay from congestion    | 330,619        | 547,996       | 66%      |
| Delay as a percent of travel time       | 15.2%          | 21.4%         | 41%      |
| Transit trips                           | 149,000        | 165,000       | 11%      |
| Freeways - AM peak average speed (mph)  | 38.3           | 36.2          | -5%      |
| Arterials - AM peak average speed (mph) | 25.7           | 24.3          | -5%      |



**Population**



**Housing**



**Employment**

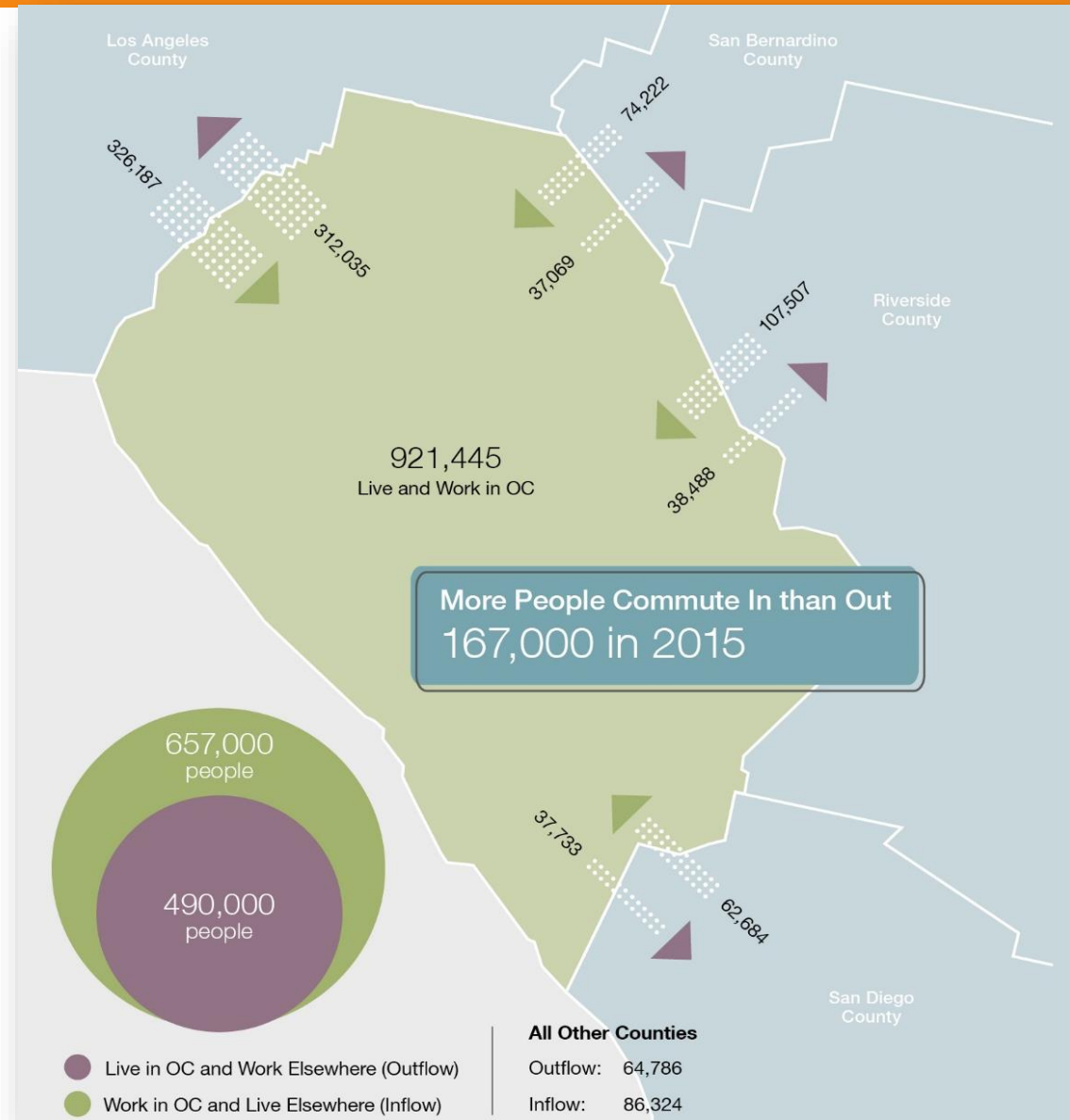
**Congestion Delay**

# Changing Travel Demand and Patterns

## Intercounty Travel Demand

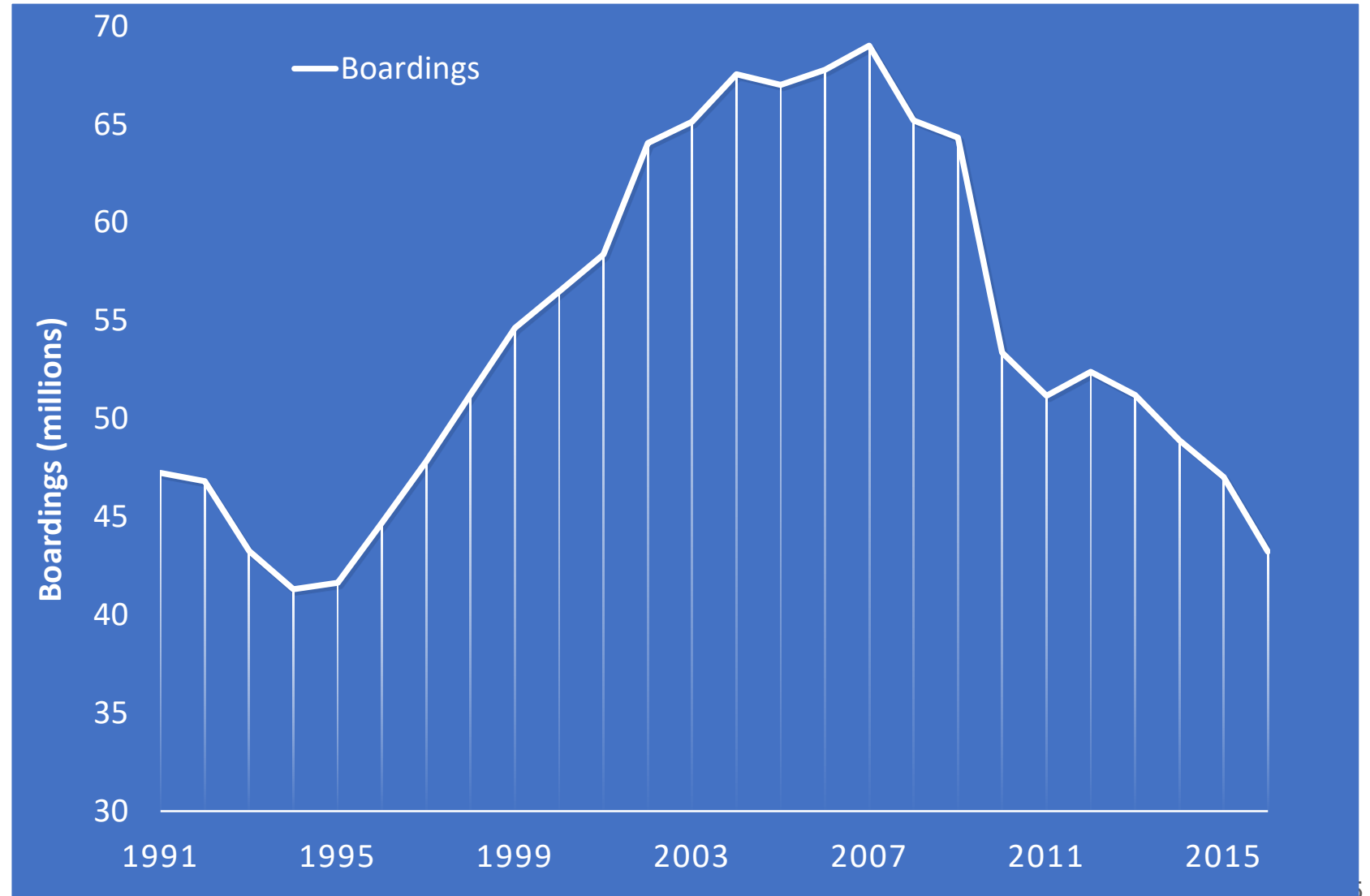
~650,000 daily work-commutes into Orange County

- By 2040, in-bound commutes will increase 25 percent
  - Employment growth + high-cost of housing
- Accessibility to jobs is critical to Orange County's economy and quality of life



# Changing Travel Demand and Patterns (continued)

Orange County bus boardings have declined since the “Great Recession”



# Changing Travel Demand and Patterns (continued)

## Impact of Technologies

- Autonomous/connected vehicles
- Transportation network companies (Lyft/Uber)
- Shared mobility
- Real-time travel information
- Electric vehicles and charging

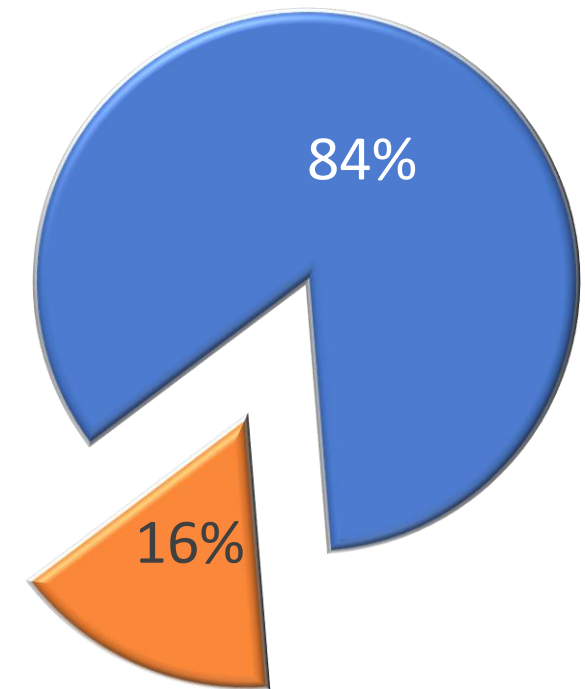


# Trend 2040

## Summary of expenditures

- Measure M2 projects and programs
- Additional freeway/roadway projects within available right-of-way
- OC Bikeways network buildout
- OC Bus 360° and OC Transit Vision
- Enhanced Metrolink service
- Operations and maintenance

Use of Projected  
\$42.3 Billion in Revenues



■ Committed ■ Discretionary



# Highway Improvements

- 2015 lane miles:  
**1,698**

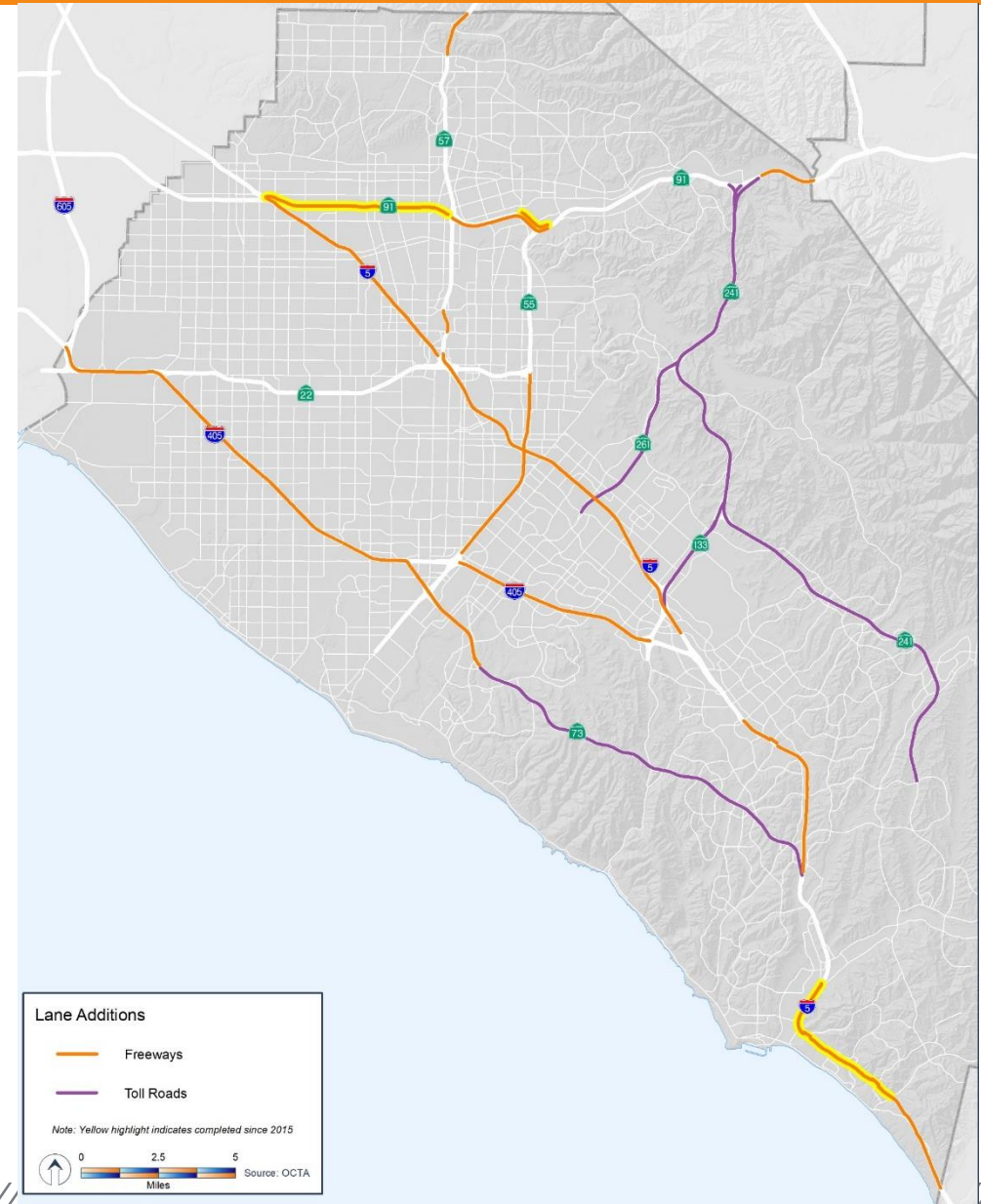
- Additional lane miles by 2040:

| Route        | Regular Lane Miles | Carpool Lane Miles | Express Toll Lane Miles |
|--------------|--------------------|--------------------|-------------------------|
| I-5          | 42                 | 42                 |                         |
| I-405        | 48                 |                    | 32                      |
| SR-55        | 14                 | 11                 |                         |
| SR-57        | 2                  |                    |                         |
| SR-73        |                    | 8                  |                         |
| SR-91        | 15                 |                    |                         |
| <b>Total</b> | <b>121</b>         | <b>61</b>          | <b>32</b>               |

## The Toll Roads lane additions

up to **150** lane miles on existing corridors

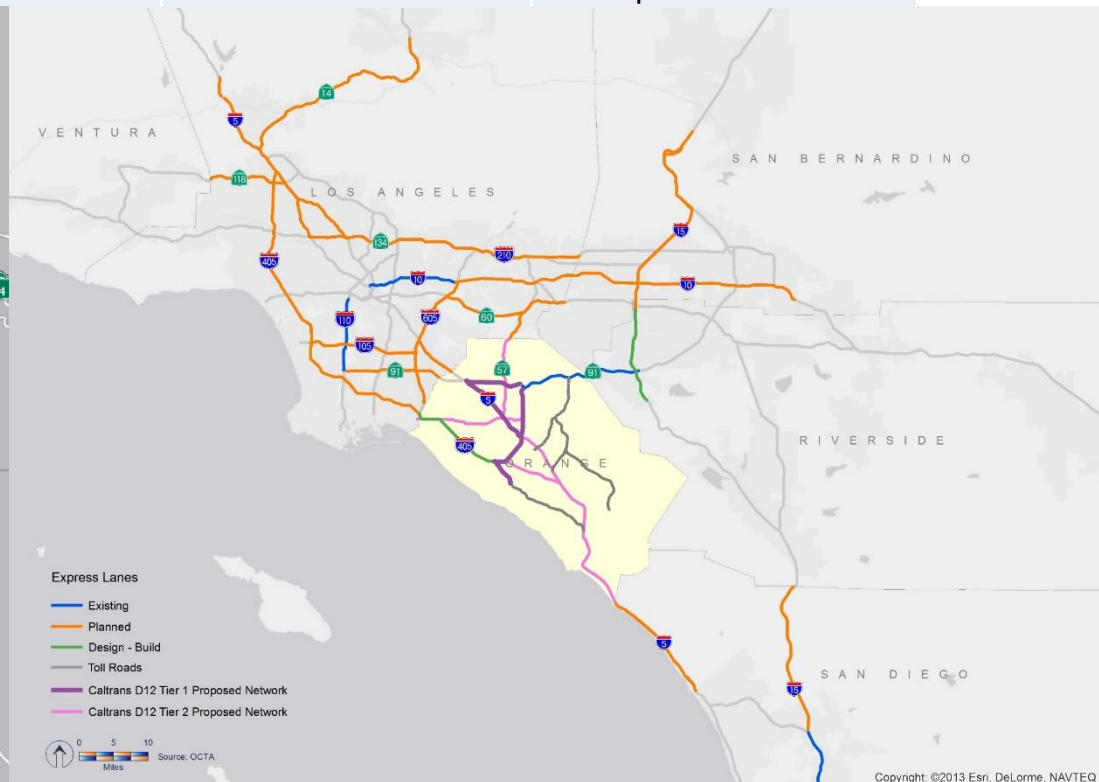
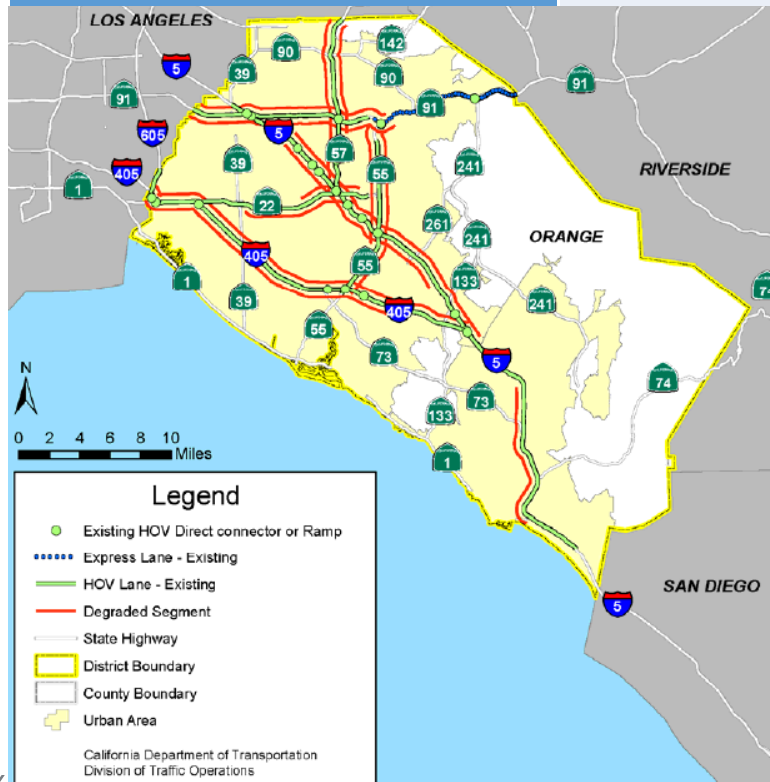
I-5 – Interstate 5  
 I-405 – Interstate 405  
 SR-55 – State Route 55  
 SR-57 – State Route 57  
 SR-73 – State Route 73  
 SR-91 – State Route 91





# Managed Lane Conundrum

| Trend 2040 Managed Lane Scenarios                    |  |  |   |
|--|--|--|---|
| Metrics  | HOV 2+   | HOV 3+                                 | Express Toll  |
| Meets federal performance standard                   | ✗  | ✓                                      | ✓   |
| Managed lane capacity used during morning drive time | 70%  | 30%                                    | 60%   |
| Findings Summary                                     | Does not meet federal standard due to overuse. | Meets federal standard, but underused. | Meets federal standard and doubles use compared to HOV 3+ |



HOV – high-occupancy vehicle

# Street Improvements

- 2015 lane miles:

**6,377**

- Additional lane miles by 2040:

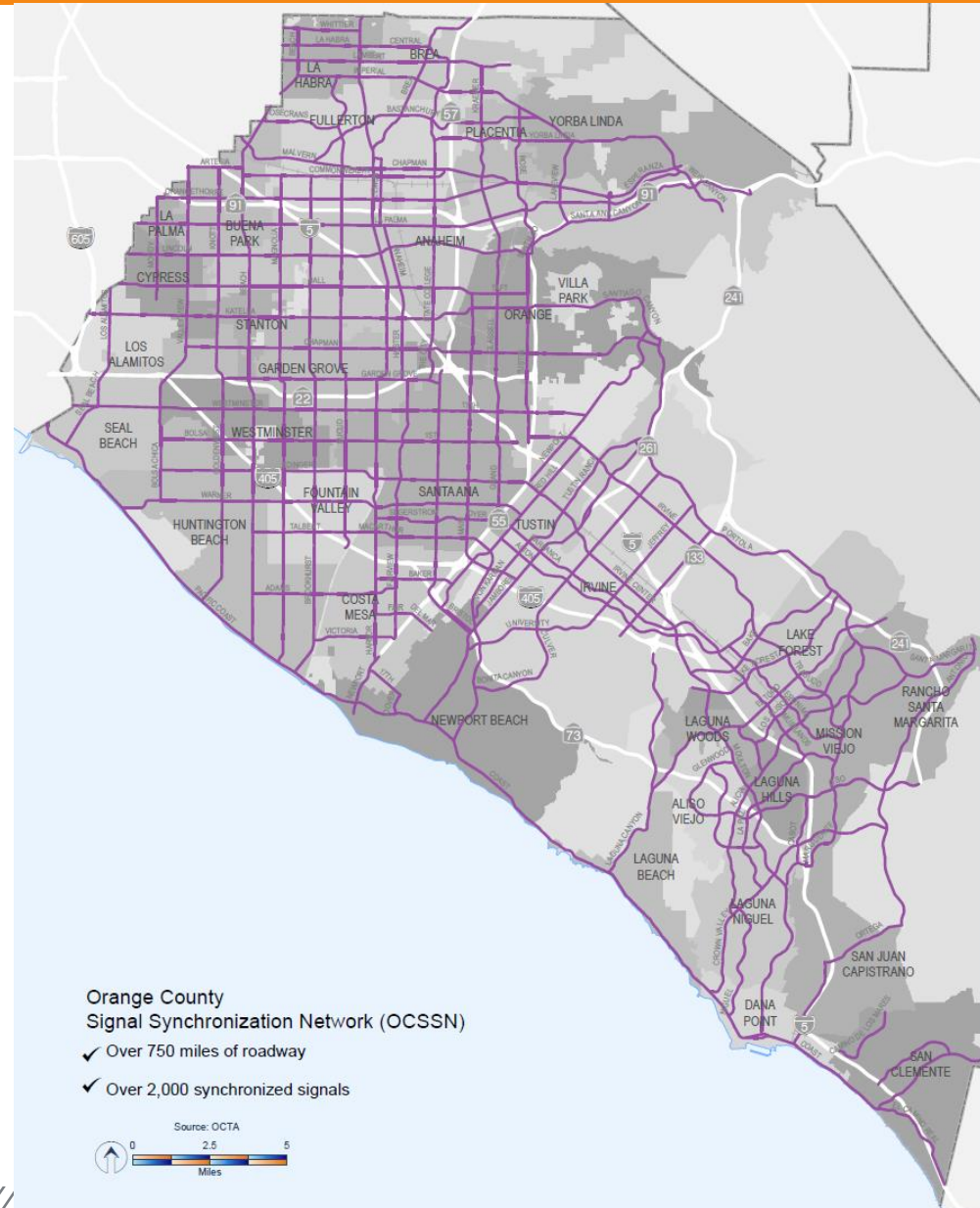
**651**

- Synchronized intersections:

**2,000+**

|   |   |
|---|---|
| <b>13%</b> reduction in travel time   | <b>15%</b> improvement in travel speed                          |
| <b>20%</b> better travel experience with reduced travel times, stops and delays allow more time spent with family and friends | <b>36</b> million gallons in fuel consumption use reductions*   |
| <b>728</b> million pounds in greenhouse gas reductions  | <b>\$70.47</b> million dollars spent on signal synch since 2010 |

**OC SYNC**



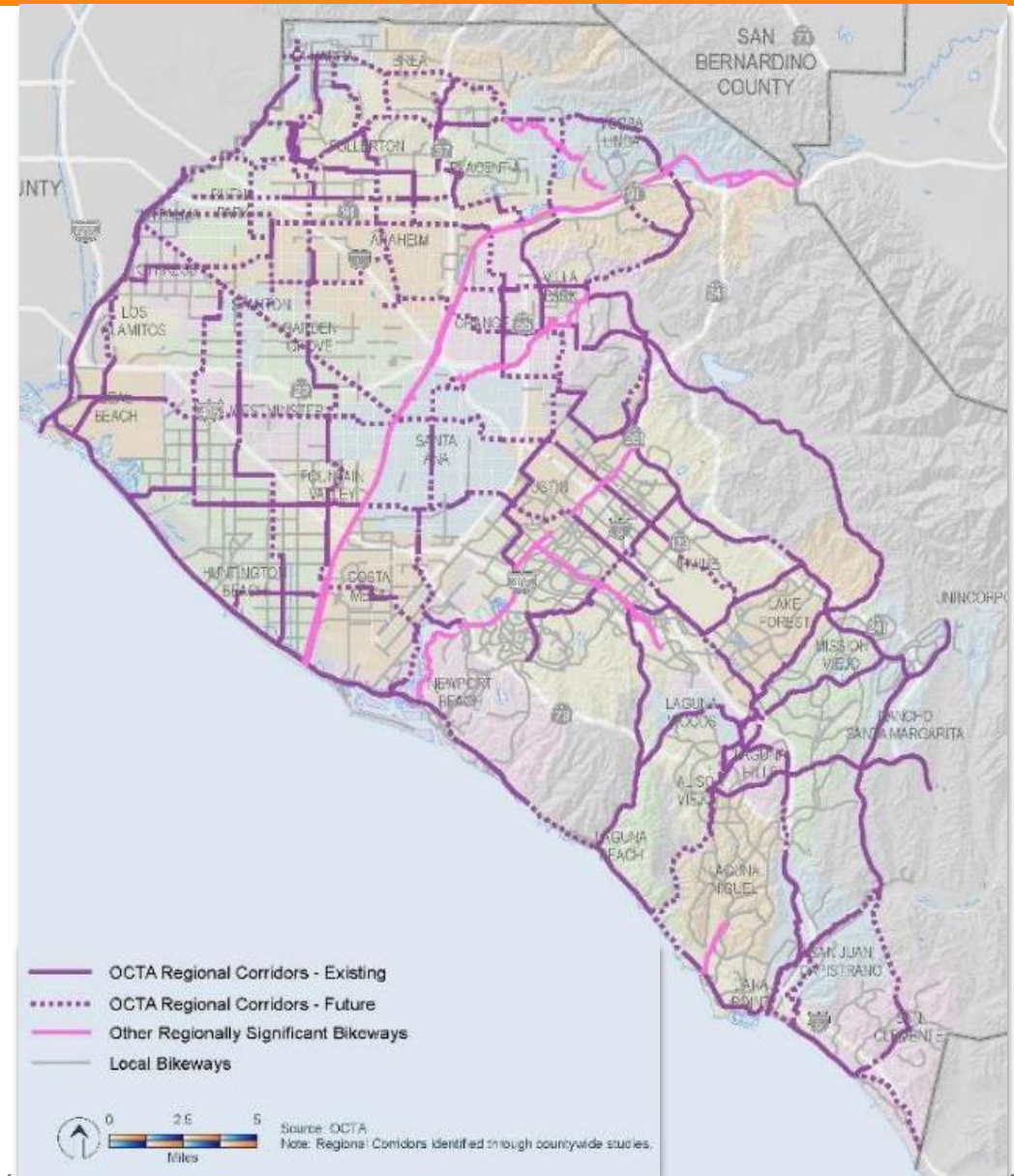
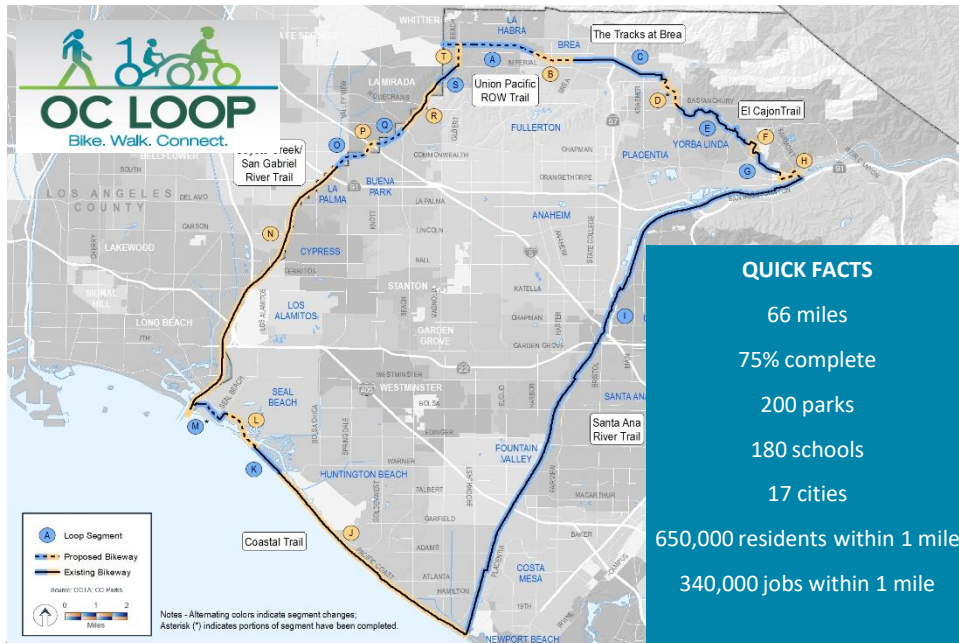


# Active Transportation Improvements

- 2015 miles of bikeways:
- Additional miles of bikeways by 2040:

**1,130**

**+655**



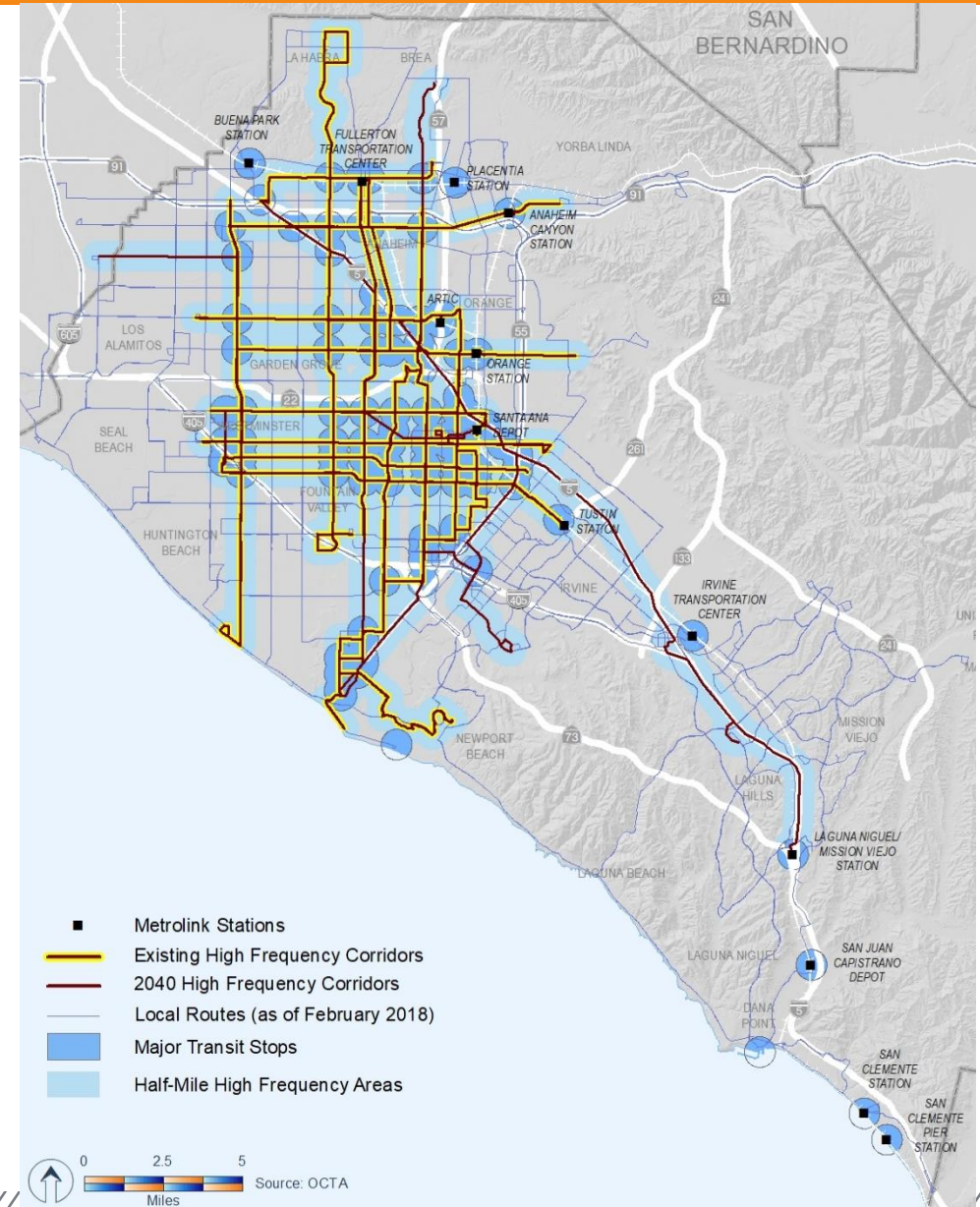
# Transit Improvements

- 2015 hours of service:

**1.6 million**

- Additional service hours by 2040:

**+480,000**





# Metrolink Improvements

- 2015 daily trains:

| <u>OC Line</u> | <u>IE/OC Line</u> | <u>91 Line</u> |
|----------------|-------------------|----------------|
| 29             | 16                | 9              |

- Additional daily trains by 2040:

| <u>OC Line</u> | <u>IE/OC Line</u> | <u>91 Line</u> |
|----------------|-------------------|----------------|
| +6             | +12               | +14            |

 **TIER 4 LOCOMOTIVE** | CLEAN POWER  
**METROLINK PROUDLY INTRODUCES THE NEW, INDUSTRY-LEADING TIER 4 LOCOMOTIVE.**



IE – Inland Empire  
 OC – Orange County



# Trend 2040 - Results

| Metrics (daily)                              | 2015 Base Year | 2040 No Build | Trend 2040* |
|--|----------------|---------------|-------------|
| Delay as a percent of travel time            | 15.2%          | 21.4%         | 15.5%       |
| Transit trips                                | 149,000        | 165,000       | 174,000     |
| Freeways - AM peak average speed (mph)       | 38.3           | 36.2          | 39.5        |
| Managed lanes – AM peak capacity utilization | 77%            | 83%           | 60%         |
| Arterials - AM peak average speed (mph)      | 25.7           | 24.3          | 25.8        |

\*Trend 2040 assumes managed lanes are operated as tolled express lanes

# Trend 2040 Achievements

## Growing Traffic and Limited Land

- Expands facilities with minimal ROW impacts
- Improves efficiency of highways and roadways
  - Eliminates bottlenecks
  - Synchronizes signals
  - Provides express lane options
- Supports alternatives to driving alone

## Changing Travel Demand and Patterns

- Supports access to Orange County jobs
- Focuses transit service on high-demand corridors
- Coordinate with public and private sectors to address emerging technologies and policies

## Funding Uncertainties

- Prioritizes Measure M projects and programs
- Implements cost-effective transit services
- Includes projects in line with competitive funding goals
  - Active transportation
  - High-quality transit
  - Managed lanes

## Challenging Emission Standards

- Reduces delay on freeways and roadways
- Expands system choices
  - Increases transit services
  - Builds out bikeways
  - Adds managed lanes
- Zero-emission bus fleet and Tier 4 locomotives



# Short-Term Action Plan

## Orange County Planning Activities

Coordination with Local Partner Agencies

South Orange County Mobility

Corridor Studies and Improvements

OC Transit Vision Feasibility Studies

Transit Support Services

Managed Lane Studies

Freeway Chokepoints

Signal Synchronization

Transportation Demand Management

Active Transportation Investments

Sustainable Transportation Strategies

Joint Development Studies

Asset Management

## Regional Planning Activities

Coordination with Regional Partner Agencies

Trade Corridors/Goods Movement

2020 RTP/SCS

2028 Olympics

Metro Countywide Express Lanes Strategic Plan

San Diego's I-5 Toll Lane Project

West Santa Ana Branch/ Pacific Electric ROW

Gold Line Eastern Extension – Phase 2

LOSSAN/Green Line Connection

## Emerging Issues

Monitor New Technology

Connected Infrastructure Needs Assessment

State and Federal Regulation

State and Federal Funding

## Transportation Outreach and Education

Active Transportation Safety

Transit Use and Trip Planning

RTP/SCS – Regional Transportation Plan/Sustainability Communities Strategy

I-5 – Interstate 5

LOSSAN – Los Angeles-San Diego-San Luis Obispo Rail Corridor

# L RTP Outreach To-Date

- 11,000+ public survey responses
- Engagement with OCTA stakeholders:
  - Citizens Advisory Committee
  - Special Needs Advisory Committee
  - Diverse Community Leaders Committee
  - Teen Council
- Elected Officials Workshops
- Transportation Planning Directors Forums
- OCTA Board/Committee presentations
- OCTA Board Workshop: Managed Lanes
- Thought-leader interviews
- Focus group interviews
- Engagement with partner agencies and interest groups



# Next Steps

## Summer 2018

- Public Outreach
  - 40-day public review period
  - Online survey
  - Community events/pop-ups
  - City and stakeholder outreach
  - Telephone town hall
  - Open house

## Fall 2018

- Finalize 2018 LRTP

