

# DESTINATION 2035

DRAFT

Moving Toward a Greener Tomorrow





# Table of Contents

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<b>Executive Summary</b>	01
<b>Goals and Objectives</b>	01
<b>Public Involvement Plan</b>	02
<b>The Transportation System</b>	02
<b>Future Challenges</b>	03
<b>Financial Forecasts</b>	04
<b>Options for Orange County</b>	04
Transit Strategy	04
Freeway Vision	04
Streets and Roads Vision	05
Transportation System Management/Transportation Demand Management	05
<b>Orange County Tomorrow</b>	05
<hr/>	
<b>Introduction</b>	07
<b>Why Does OCTA Prepare a LRTP?</b>	08
<b>Parallel Planning Efforts</b>	08
Regional Transportation Plan	08
Senate Bill 375 and The Southern California Sustainable Communities Strategy	09
Other Efforts	09
<b>Changes Since the 2006 LRTP</b>	09
Approval of Measure M2	09
Passage of Proposition 1B	09
Environmental Legislation	10
Economic Recession	10
<b>Developing Destination 2035</b>	10
Establish Goals and Objectives	11
Develop Planning Priorities	11
Forecast Revenues Through 2035	11
Develop and Analyze Alternatives	11
<b>Public Involvement Process</b>	12

<b>The Transportation System</b>	13
Background	13
Current Demographics	13
Recent Transportation Accomplishments	16
Measure M1	16
Proposition 1B	16
<b>Orange County’s Transportation System</b>	17
Freeways	17
Arterials and Local Roads	20
Rail Transit	20
Bus Transit	21
Goods Movement	21
Demand Responsive Services and Travel Demand Management	25
<b>The Transportation System and the Environment</b>	26

---

<b>The Future: Challenges Ahead</b>	29
Demographic Forecasts	29
Travel Patterns	36
<b>2035 Baseline</b>	38
Intersection Improvement Program	38
Regional Interchange Program	38
Grade Crossing Safety Enhancements	39
Metrolink Service Expansion Program	39
Freeway Capacity Enhancements	39
Roadway Capacity Enhancements	39
<b>Finances and Revenue Forecasts</b>	42

---

<b>The Toolbox: Options for Orange County</b>	43
<b>LRTP Goals and Objectives</b>	44
Goal 1: Expand Transportation System Choices	44
Goal 2: Improve Transportation System Performance	44
Goal 3: Ensure Sustainability	44
<b>Transit Strategy</b>	45
Target High-Demand Corridors and Initiate BRT Service	45
Invest in Metrolink and Go Local Feeders and Support California High-Speed Rail	45
Explore Express Bus Opportunities	45
Improve Access to Regional Bus Service and Local Destinations	45
Coordinate Service Planning with Local Land-Use Agencies	46
Seek Funding and Savings for Transit Operations	46

<b>Freeway Vision</b>	50
Deliver Committed Projects, including M2	50
Expand Access for High-Occupancy Vehicles (HOV)	50
Improve Freeway Travel Options	51
Consider Recent Transportation Studies	51
Promote Environmental Sustainability	52
Seek Additional Funding Opportunities	52
<b>Arterial Roadways</b>	55
Master Plan of Arterial Highways	55
Traffic Light Synchronization Master Plan	55
Roadway Pavement Management Plan	56
<b>Measure M2 Early Action Plan</b>	60
<b>Transportation System Management (TSM)</b>	63
Intelligent Transportation Systems Program	63
Southern California 511	64
Toll and Express Lanes	64
<b>Transportation Demand Management (TDM)</b>	64
Vanpool and Rideshare Programs	64
Park-and-Ride	65
Bicycle Programs	65
Pedestrian Programs	66
Other TDM Programs	66
<b>Emerging Transportation Technologies</b>	68

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<b>The Plan: Orange County Tomorrow</b>	69
<b>Year 2035 Preferred Plan</b>	70
Transit Projects	70
Freeway Projects	72
Street Projects	76
<b>Achievements of the Year 2035 Preferred Plan</b>	79
Expand Transportation System Choices	79
Improve Transportation System Performance	79
Ensure Sustainability	80
<b>Year 2035 Unconstrained Plan</b>	82
Transit Projects	82
Freeway Projects	84
Street Projects	86
<b>Conclusion</b>	87

<b>Glossary of Terms</b>	G1
<b>Appendix A</b>	
Detailed Year 2035 Baseline Project List	A1
<b>Appendix B</b>	
Detailed Year 2035 Preferred Plan Project List	B1
<b>Appendix C</b>	
Detailed Year 2035 Unconstrained Project List	C1
<b>Appendix D</b>	
MPAH Build-out	D1
MPAH Additional Projects	D23

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# Table of Figures

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<b>Figure E-1:</b> Preferred Scenario Performance Analysis (compared to 2035 Baseline)	06
<b>Figure 1-1:</b> LRTP Inputs into Other Transportation Plans	08
<b>Figure 1-2:</b> Online Survey Results	12
<b>Figure 2-1:</b> Base Year (2008) Population Density	14
<b>Figure 2-2:</b> Base Year (2008) Employment Density	15
<b>Figure 2-3:</b> Base Year (2008) Freeway System	18
<b>Figure 2-4:</b> Base Year (2008) AM Peak Freeway Congestion Levels	19
<b>Figure 2-5A:</b> Master Plan of Arterial Highways - Existing Number of Lanes - (North County)	22
<b>Figure 2-5B:</b> Master Plan of Arterial Highways - Existing Number of Lanes - (South County)	23
<b>Figure 2-6:</b> Orange County's Base Year (2008) Rail Transit System	24
<b>Figure 2-7:</b> Percentage of GHG Emissions in California	26
<b>Figure 2-8A:</b> Existing Bikeways (North County)	27
<b>Figure 2-8B:</b> Existing Bikeways (South County)	28
<b>Figure 3-1:</b> Orange County Population Growth from 2008 to 2035	30
<b>Figure 3-2:</b> Orange County Percent Change in Age Population (2008 - 2035)	30
<b>Figure 3-3:</b> 2035 Orange County Population Density	31
<b>Figure 3-4:</b> 2008-2035 Orange County Population Density Difference	32
<b>Figure 3-5:</b> Orange County Household Growth from 2008 to 2035	33
<b>Figure 3-6:</b> Orange County Employment Growth from 2008 to 2035	33
<b>Figure 3-7:</b> 2035 Orange County Employment Density	34
<b>Figure 3-8:</b> 2008-2035 Orange County Employment Density Difference	35
<b>Figure 3-9:</b> Orange County Daily Person Trip Growth (2008-2035)	37
<b>Figure 3-10:</b> Year 2035 Baseline Freeway Level of Service	40

<b>Figure 3-11:</b> Year 2035 Baseline Rail Transit System	41
<b>Figure 3-12:</b> Projected 25-Year Revenues (FY 2011-2035)	42
<b>Figure 4-1:</b> Priority High Frequency Bus Corridors and Planned BRT Routes	47
<b>Figure 4-2:</b> Priority Rail Improvements and Proposed Go Local Routes	48
<b>Figure 4-3:</b> Intracounty and Intercounty Express Bus Corridors for Further Study	49
<b>Figure 4-4:</b> Committed Freeway Improvements	53
<b>Figure 4-5:</b> HOV Continuous Access Construction Plan	54
<b>Figure 4-6A:</b> Master Plan of Arterial Highways - (North County)	57
<b>Figure 4-6B:</b> Master Plan of Arterial Highways - (South County)	58
<b>Figure 4-7:</b> Traffic Light Synchronization Master Plan	59
<b>Figure 4-8:</b> Measure M2 Freeway Early Action Projects	62
<b>Figure 4-9:</b> Vanpool Destinations and Opportunity Areas	67
<b>Figure 5-1:</b> Year 2035 Preferred Plan Transit Projects	71
<b>Figure 5-2:</b> Year 2035 Preferred Plan Freeway Projects	73
<b>Figure 5-3:</b> Lane Additions from 2008 Base Year to Year 2035 Preferred Plan	75
<b>Figure 5-4:</b> Year 2035 Preferred Plan Street Projects	76
<b>Figure 5-5:</b> Commuter Bikeways Strategic Plan	77
<b>Figure 5-6:</b> Traffic Lanes Necessary to Complete MPAH	78
<b>Figure 5-7:</b> Preferred Scenario Performance Analysis (compared to 2035 Baseline)	79
<b>Figure 5-8:</b> Improvement in Level of Service for Year 2035 Preferred Plan	81
<b>Figure 5-9:</b> Year 2035 Unconstrained Transit Projects	83
<b>Figure 5-10:</b> Year 2035 Unconstrained Freeway Projects	85
<b>Figure 5-11:</b> Year 2035 Unconstrained Street Projects	86
<b>Figure 5-12:</b> Unconstrained Plan Performance Analysis (compared to 2035 Baseline)	87
<b>Figure 5-13:</b> Improvement in Level of Service for Year 2035 Unconstrained Plan	88



# Executive Summary

This 2010 Long Range Transportation Plan (LRTP) outlines a vision for multi-modal transportation improvements throughout Orange County. These projects, programs, and improvements are designed to address the transportation needs of Orange County residents, commuters and

visitors for the next 25 years. The Orange County Transportation Authority (OCTA) prepares the LRTP every four years to account for new planning efforts, as well as changes in demographics, economic conditions, and available sources of transportation funding.

## Goals and Objectives

The program of projects and vision for transportation improvements set forth in this LRTP are based on three goals established by OCTA. These goals are:

### 1 Expand Transportation System Choices:

Expand access to travel options across all travel modes, improve connectivity to major destinations, and improve integration between transportation modes.

### 2 Improve Transportation System Performance:

Improvements to travel speeds, travel times, person throughput, and roadway and transit service levels.

### 3 Ensure Sustainability:

Timely maintenance of transportation infrastructure, implementation of environmental protection strategies, and use of innovative project delivery methods to reduce taxpayer costs.

The planned and funded transportation projects and programs outlined in this LRTP's Year 2035 Preferred Plan fulfill these goals, while providing an expanded range of transportation choices for Orange County residents, commuters, and visitors. This LRTP is just the beginning of the project development process. Following the adoption of the plan by the OCTA Board of Directors, OCTA will continue to advance and monitor the progress of the projects and programs included in this plan.

*"Multi-modal transportation improvements are planned through the LRTP."*



## Public Involvement Plan

The LRTP public outreach effort is an integral part of the development of the plan. This outreach effort complements the technical analyses and helps shape the content of the plan. The primary elements of the public outreach effort include discussions with the Citizens Advisory Committee (CAC) and the Orange County Council of Governments (OCCOG) Technical Advisory Committee, meetings and briefings with City staff, updates and surveys posted to the OCTA website,

and public meetings offering opportunities for residents to view the contents of the plan, ask questions and provide feedback to OCTA.

The development of the LRTP is also coordinated in concert with other government agencies that have a stake in the transportation future of Orange County, including the California Department of Transportation (Caltrans), the Southern California Association of Governments (SCAG), the Transportation Corridor Agencies (TCA), local jurisdictions, neighboring counties, and others.



*"In the Year 2035 Baseline Condition, about 50 percent of Orange County's freeways will operate under congested conditions in peak hours."*

## The Transportation System

Orange County is a regional metropolitan center that serves as a major economic engine for Southern California. The transportation network that supports Orange County is an integral part of the region's development and economic future. Orange County is a leader in developing and implementing innovative transportation projects, with one of the most extensive high occupancy vehicle (HOV) lane and toll road networks in the State, a master plan of arterial roadways that outlines a county-wide plan for improving

mobility, and an extensive bus and rail transit system. This LRTP seeks to continue Orange County's transportation leadership, outlining the transportation improvements necessary to keep Orange County moving and thriving, economically and environmentally, for the next 25 years.

With the sunset of the original Measure M in 2011, OCTA is charged with the implementation of a new program of projects and improvements contained in Measure M2, which was approved by Orange County voters in 2006. The continuation of this important local transportation funding source helps

to ensure that the transportation improvements outlined in this LRTP can be implemented in a timely fashion. The Measure M2 Early Action Plan advances the scheduled implementation year for many projects so that Orange County can realize the project benefits sooner.

Orange County's transportation system is a multi-modal network comprised of freeways, streets, bus lines, rail corridors, and bicycle and pedestrian facilities that allow residents, commuters and visitors to travel between destinations conveniently and efficiently on a daily basis. Orange County's travel network is anchored by an extensive freeway system that includes both toll roads, express

lanes, and the most comprehensive carpool lane network in the nation. The freeway system is complemented by an arterial roadway system that serves both regional and local travel. Orange County is also served by an extensive commuter rail network (Metrolink) and OCTA and local bus transit providers offering over 80 bus routes. In addition, Orange County's transportation system includes over 1,000 miles of bikeways. These elements are combined with other transportation programs (vanpools, taxi services, paratransit services) to provide an integrated transportation system.

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## Future Challenges

Travel patterns within Orange County are continuously evolving and changing with population and employment growth, new development, and the emergence of new destinations and activity centers. The transportation network must also grow and evolve to continue to effectively and efficiently meet Orange County's travel needs. Over the next 25 years, Orange County will continue to grow, both in terms of population and employment. Travel demand and person trips are also forecast to increase. Improvements to the transportation system are necessary to keep pace with this anticipated growth to ensure continued economic growth in Orange County and to maintain the region's quality of life.

Over the next 25 years, the population in Orange County is forecast to increase by 14 percent. Employment will increase by over 10 percent during the same period. Combined with a forecasted 12 percent increase in daily person trips, these changes will place additional demands on the transportation system. By 2035, daily vehicle miles traveled (VMT) are expected to increase by 30 percent over the Year 2008 figure. The increase in VMT leads to slower

average travel speeds, with the system-wide average speed dropping 33 percent from 2008 to 2035.

Future travel patterns and trip volumes are anticipated to worsen freeway and roadway congestion levels when compared to those experienced today. It is forecast that by 2035, about 50 percent of Orange County's freeways and about 20 percent of Orange County's roadways will operate under congested conditions during peak hours.

The increased number of vehicles traveling on Orange County's freeways and roadways challenges the transportation system in several ways. On top of the increases in congestion levels and travel times, the increased traffic levels intensify the need for and cost of maintenance. Regular maintenance is necessary for all roadways and freeways. As Orange County's transportation system ages and serves increasing travel volumes, the maintenance frequency will increase and require more financial resources. Appropriate maintenance levels help to avoid pavement deterioration and greater maintenance expenses down the road.

## Financial Forecasts

Forecast revenues for the next 25 years for transportation projects in Orange County come from a variety of sources, including local, State, and Federal funding programs. About \$39.4 billion in transportation funding is forecast to be

available for Orange County projects through 2035. Local funding sources, including Measure M2, are anticipated to comprise nearly 70 percent of this amount. State and Federal funding programs and grants will supplement local dollars and help to complete the funding picture.



*“OCTA provides a range of transit services to serve different travel markets.”*

## Options for Orange County

The 25-year transportation plan outlined in this LRTP is based on a vision for a sustainable transportation system that offers long-term mobility and supports a desirable quality of life for Orange County. The Goals and Objectives developed for this LRTP are used in the identification of specific strategies and visions for transportation improvements across all travel modes. These are outlined below:

### Transit Strategy

The transit strategy identifies broad objectives for prioritizing future transit improvements to meet future demand as effectively and efficiently as possible. These objectives will serve to meet as much of the forecast transit demand as financially feasible and support OCTA's existing transit goals:

- Target high-demand corridors for improvements to fixed-route frequencies and hours of operations;
- Initiate bus rapid transit (BRT) services;
- Invest in Metrolink and Go Local feeders, and support California high-speed rail;
- Explore express bus opportunities;
- Improve access to regional bus service and local destinations with community circulators and rideshare programs;
- Coordinate service planning with land-uses; and,
- Seek funding and savings for transit operations.

### Freeway Vision

The freeway vision provides guidance for prioritizing freeway projects within the financially preferred plan for the LRTP. The objective of the



freeway vision is to ensure that the traveling public will have access to a well-performing freeway network that meets future travel demand, supports a variety of travel modes, such as express bus service and vanpools, and is sustainable for future generations. The vision includes the following guiding elements:

- Deliver committed projects, including Measure M2;
- Expand access for high-occupancy vehicles;
- Improve freeway system operations;
- Consider recent transportation studies;
- Promote environmental sustainability; and
- Seek additional funding opportunities.

### Streets and Roads Vision

Streets and roads form the foundation of Orange County's transportation system, supporting multiple transportation modes, including buses, automobiles, pedestrians, and bicyclists. The vision for improving the street and roads network within Orange County is based on three primary components:

- Completion of the Master Plan of Arterial Highways (MPAH)
- Implementation of the Traffic Light Synchronization Master Plan
- Continuation of the Roadway Pavement Management Plan

### Transportation System Management/ Transportation Demand Management

Transportation System Management (TSM) and Transportation Demand Management (TDM) measures are effective tools and programs designed to have the existing transportation network operate more efficiency and effectively. OCTA is planning several improvements under these programs, from intelligent transportation system upgrades, to increased vanpool and rideshare opportunities, to implementation of projects contained in the Commuter Bikeways Strategic Plan. Together, these improvements will expand the travel choices available to Orange County residents, commuters, and visitors, and allow the future transportation network to operate more efficiently than would otherwise be possible.

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## Orange County Tomorrow

This LRTP proposes a program of transportation improvements that can be achieved within the financial constraints faced by OCTA. This plan seeks to improve access to the transportation system and the performance of the system, using a sustainable and efficient approach that maximizes available project resources.

The Year 2035 Preferred Plan of projects outlines a menu of transportation improvements designed to help meet the transportation needs of Orange County for the next 25 years. The program of projects contained in this plan would result in increases to bus and rail transit services, additional freeway capacity, improved traffic flow on major

arterial streets and roads, and an increased range of alternative transportation options.

The primary achievements of the Year 2035 Preferred Plan of projects include:

- Expanding Metrolink commuter rail service within Orange County up to 76 trains per day, and to neighboring counties
- Expanding access to Metrolink stations for a greater number of Orange County residents and commuters
- Increasing OCTA fixed route bus service levels with the objective of adding about 400,000 annual service hours by 2035 to restore service hours to 2008 levels

- Coordinating traffic signals along 750 miles of roadways and at over 2,000 intersections to improve regional traffic flow
- Fixing bottlenecks and increasing capacity on freeways by adding over 150 lane miles to the system
- Converting nearly 90 percent of the high occupancy vehicle lane network to continuous access
- Improving safety and traffic operations by constructing 10 new rail crossing grade separations
- Expanding access to rideshare and vanpool services by more than doubling Year 2010 vanpool service levels by 2035

- Planning to increase bicycle facility miles to over 75 percent above 2008 levels

The performance of the transportation system with the implementation of the projects outlined in the Year 2035 Preferred Plan is compared to the Year 2035 Baseline condition in order to measure the level of improvement achieved and to measure the plan’s performance against the goals and objectives established for the plan (Figure E-1).

These forecasted improvements correspond well with the goals and objectives identified for this LRTP, which included improving access the transportation system, improving the performance of the transportation system, and ensuring the sustainability of the system for the next 25 years.

Performance Measure	2035 Baseline	2035 Preferred Plan
Daily vehicle hours traveled	3.4 million	Reduced by 24%
Daily hours of delay due to congestion	1.5 million	Reduced by 56%
Average peak period freeway speed (AM)	36 miles per hour	Increased by 14%
Average peak period HOV speed (AM)	41 miles per hour	Increased by 22%
Average peak period roadway speed (AM)	27 miles per hour	Increased by 7%
Daily transit trips	143,711	Increased by 10%*

**Figure E-1: Preferred Scenario Performance Analysis (compared to 2035 Baseline)**

\* Note: Forecasts prepared by the California High-Speed Rail Authority project an additional 10% increase in transit ridership in Orange County with the Phase I High-Speed Rail project.



*“The Year 2035 Preferred Plan of projects will expand transportation choices in Orange County.”*