



July 6, 2026

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Draft 2026 Long-Range Transportation Plan

A handwritten signature in blue ink, appearing to read "Darrell Johnson", is written over the "From:" line of the header.

Overview

The Long-Range Transportation Plan is a multi-year planning document, developed every four years to define the long-term vision for Orange County's transportation system and serve as input into the Southern California Association of Governments' Regional Transportation Plan. The Draft 2026 Long-Range Transportation Plan reflects the Orange County Transportation Authority's existing commitments, plans, and policies while also addressing forecasted transportation needs through 2050. Staff has prepared the draft Directions 2050 LRTP Executive Summary, an overview of the full study, and is seeking direction to continue development of the final plan.

Recommendation

Direct staff to incorporate input received through the public review period as appropriate and return with a draft Final 2026 Long-Range Transportation Plan for approval.

Background

The Long-Range Transportation Plan (LRTP) is a long-term planning document that evaluates anticipated travel demand and transportation needs in consideration of established priorities, policies, and emerging trends. The LRTP is updated every four years to reflect changing conditions and to support the Orange County Transportation Authority's (OCTA) input into the Southern California Association of Governments' Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Regionally significant transportation projects must be included in the RTP/SCS to advance through the project development process and remain eligible for state and federal funding.

Over the past year, several LRTP-related items have been presented to the OCTA Board of Directors (Board), including key challenges and goals, the draft

Preferred Plan framework, and preliminary performance results for various analysis scenarios. This technical work was complemented by an initial public outreach phase conducted in fall 2025. The concepts, analysis, and input received through these discussions and engagement efforts informed the development of the draft Directions 2050 LRTP Executive Summary (Attachment A).

Discussion

2050 No Build Scenario

The Draft 2026 LRTP evaluates 2050 travel conditions in consideration of forecasted demographic growth through the year 2050. Based on the Orange County Projection (OCP)-2022 prepared by the Center for Demographic Research at California State University, Fullerton, Orange County is projected to add approximately 95,000 residents, 140,000 households, and 180,000 jobs between 2024 and 2050. OCP-2022 was the latest approved socioeconomic dataset available when technical analysis for the Draft 2026 LRTP began.

Unlike previous LRTP cycles that focused heavily on accommodating rapid population growth and increasing travel demand, the Draft 2026 LRTP reflects a shift toward maintaining and optimizing the existing transportation system in response to slowing demographic growth and changing travel patterns. The projected slowdown in growth is driven by factors such as declining birth rates, an aging population, and out-migration. The draft OCP-2026, an updated dataset currently under development, suggests these demographic trends are expected to continue and may become more pronounced in future planning cycles.

To better understand the effects of these changing conditions, the Draft 2026 LRTP includes a 2050 No Build Scenario that applies the OCP-2022 socioeconomic forecast for 2050 to the existing transportation network while removing the benefits of programs that would conclude with the 2041 sunset of the Measure M2 (M2) one half-cent sales tax for transportation improvements in Orange County. This includes the operational benefits associated with signal synchronization, roadway maintenance, and Metrolink service, and other M2-supported programs such as community-based shuttles and mobility programs for seniors and person with disabilities. This scenario is used to evaluate how the transportation system would be expected to perform in 2050 without additional transportation investments.

As shown in Table 1, this scenario results in more driving, fewer transit trips, slower peak-period travel, and substantially more delays. Daily vehicle trips increase by about four percent, transit trips decline by about five percent, and vehicle miles traveled (VMT) increase by about nine percent. Peak-period speeds decrease across freeways, arterials, and managed lanes, while total

daily vehicle delay increases by nearly 40 percent. These results show that Orange County will need continued investment to maintain reliable mobility through 2050.

Table 1: Performance for 2024 Existing and 2050 No Build

Performance Measure (Daily)	2024 Existing	2050 No Build
Vehicle Trips	10,970,000	11,406,000
Transit Person Trips	97,700	92,500
Vehicle Hours of Delay	245,000	337,000
Delay as Percent of Travel Time	11%	13%
Freeway Peak Period Speed	48.7 mph	46.0 mph
Arterial Peak Period Speed	28.4 mph	23.2 mph
Managed Lane Peak Period Speed	57.4 mph	54.4 mph
VMT	76,300,000	83,300,000

mph – miles per hour

M2 Buildout

With approximately 15 years remaining before the sunset of M2 in 2041, OCTA will continue to deliver investments across all transportation modes while maintaining strong accountability and transparency. As such, an M2 Buildout Scenario was modeled to reflect the delivery of the M2 capital project commitments while illustrating the consequences of not sustaining the recurring M2-supported program through 2050. The M2 Buildout Scenario builds on the 2050 No Build Scenario and assumes that all committed M2 capital improvements are fully delivered by 2041, which include the freeway program, OC Streetcar, and continued investments in arterial capacity improvements.

As shown in the following table, delivery of the M2 capital projects results in measurable improvements to system performance when compared to the 2050 No Build Scenario, including reduced congestion, improved travel speeds, and increased transit ridership. These results demonstrate the long-term value of the M2 capital investments and OCTA’s continued commitment to delivering the promised transportation improvements.

However, this scenario also highlights the limitations of relying solely on capital investments. Even with the M2 capital projects fully implemented, arterial speeds remain noticeably slower and VMT remain substantially higher than existing conditions. These results reflect the importance of recurring M2-supported programs such as regional signal synchronization and roadway maintenance in

sustaining long-term mobility and system performance beyond 2041. These findings demonstrate that both capital investments and ongoing operational programs are needed to support the Draft 2026 LRTP goals.

Table 2: Performance for 2050 M2 Buildout

Performance Measure (Daily)	2024 Existing	2050 No Build	2050 M2 Buildout
Vehicle Trips	10,970,000	11,406,000	11,421,000
Transit Person Trips	97,700	92,500	95,000
Vehicle Hours of Delay	245,000	337,000	286,000
Delay as Percent of Travel Time	11%	13%	11%
Freeway Peak Period Speed	48.7 mph	46.0 mph	47.5 mph
Arterial Peak Period Speed	28.4 mph	23.2 mph	24.1 mph
Managed Lane Peak Period Speed	57.4 mph	54.4 mph	55.6 mph
VMT	76,300,000	83,300,000	84,500,000

Preferred Scenario

The recommended 2050 Preferred Scenario includes all M2 capital project commitments and continuation of key M2-funded operational programs, while also incorporating additional strategies and improvements identified through completed OCTA studies. These include recommendations from the OC Transit Vision, Transit Optimization Study, Freeway Chokepoint Study, Climate Adaptation and Sustainability Plan, Goods Movement Vision, Mobility Hubs Study, and other recent planning efforts. Together, these projects and programs are intended to improve multimodal mobility, optimize system performance, enhance resiliency, and better position Orange County to respond to changing travel patterns and long-term transportation needs.

The M2-funded programs continued in this scenario include programs that have become integral to Orange County’s transportation system, including signal synchronization, arterial pavement maintenance through the Local Fair Share Program, and transit programs such as Metrolink, community circulators, senior mobility programs, and safe transit stop improvements.

Key transit investments within the Preferred Scenario include prioritizing the transit opportunity corridors identified in the 2024 OC Transit Vision for enhanced service and operational improvements, including transit signal priority, queue jumps, and other transit travel time improvements. The scenario also expands

the countywide bikeway network through gap closure and active transportation enhancements identified in the 2019 OC Active and 2023 Bike Connectors Gap Closure Feasibility Study. Additional investments include freeway chokepoint improvements, mobility hubs, transportation systems management and operations strategies, coastal rail resiliency improvements, goods movement strategies, and climate adaptation initiatives. The scenario also assumes continued development of the regional managed lanes network consistent with current Caltrans planning efforts. Together, these projects and programs reflect a shift toward maintaining and optimizing the existing transportation system while preparing for long-term mobility and funding needs beyond the M2 horizon. Attachment B provides a summary of the recent plans and studies referenced in the development of the Draft 2026 LRTP.

As shown in Table 3, the 2050 Preferred Scenario demonstrates substantial performance improvements when compared to the 2050 No Build Scenario, reflecting the combined benefits of the proposed multimodal capacity investments and operational enhancements. The Preferred Scenario expands transit revenue service by over 50 percent, increases regional arterial roadway capacity by ten percent, and increases the countywide bikeway network by more than 60 percent, directly supporting the Draft 2026 LRTP goals of expanding multimodal capacity.

Compared to the No Build Scenario, the Preferred Scenario demonstrates a shift toward more balanced and multimodal travel patterns by reducing daily vehicle trips by approximately ten percent and increasing transit ridership by approximately 25 percent. The Preferred Scenario also supports the Draft 2026 LRTP goal of improving operations by reducing daily vehicle congestion by approximately 40 percent. Peak period speeds for freeway, arterial, and managed lanes all improve under the Preferred Scenario, with the most notable improvements on arterial roadways demonstrating direct benefit from signal synchronization, additional roadway capacity, and continued investment in pavement maintenance.

The Preferred Scenario advances the Draft 2026 LRTP goal of enhancing accessibility, as demonstrated by improved access to jobs, key destinations, and high-capacity transit services throughout Orange County. These outcomes reflect the combined benefits of expanded transit service, transit opportunity corridor investments, mobility hubs, and transportation demand management strategies.

The Preferred Scenario supports the Draft 2026 LRTP goal of strengthening system resiliency by focusing on maintaining and optimizing the existing transportation system. The Preferred Scenario reduces VMT through expanding multimodal travel options and improving system efficiency.

Table 3: System Performance for 2050 Preferred

Performance Measure (Daily)	2050 No Build	2050 Preferred	Change
Goal: Expand Multimodal Capacity			
Transit Revenue Hours	1,520,000	2,293,000	51%
High-Capacity Transit Revenue Hours	76,600	615,400	704%
Number of Bikeway Miles	1,293	2,087	61%
Number of Master Plan of Arterial Highways lane miles	6,464	7,099	10%
Goal: Improve Operations			
Vehicle Trips	11,406,000	10,227,000	-10%
Transit Person Trips	92,500	115,900	25%
Vehicle Hours of Delay	337,000	202,000	-40%
Delay as Percent of Travel Time	13%	9%	▼
Freeway Peak Period Speed (mph)	46.0	47.7	▲ 1.7
Arterial Peak Period Speed (mph)	23.2	28.8	▲ 5.6
Goal: Enhance Accessibility			
Jobs Accessible within 30 Minutes by Transit	66,700	89,600	34%
Key Destinations Accessible within 30 Minutes by Transit	64	84	31%
Households with Access to High-Capacity Transit Stops	52,700	177,400	237%
Percent of Households with Access to High-Capacity Transit Stops	4%	14%	▲
Goal: Strengthen System Resiliency			
VMT (million)	83.3	80.4	-3.5%
Greenhouse Gas Emissions (million pounds)	46.9	45.3	-3.0%
Arterial Pavement Condition Index	75.4	79.1	▲ 3.7

Overall, the analysis indicates that the Preferred Scenario improves system performance across all LRTP goals demonstrated by reduced congestion, increased transit ridership, expanded accessibility to jobs and key destinations, and strengthening the transportation system's ability to accommodate future

changes. Together, these results demonstrate that a balanced combination of capital investments, operational improvements, and multimodal strategies is necessary to maintain long-term mobility and system performance. The Preferred Scenario provides a practical approach for sustaining Orange County's transportation system through 2050.

Financial Analysis

Implementation of the full 2050 Preferred Scenario is projected to require approximately \$63.9 billion in transportation investments between 2025 and 2050. Based on current forecasts, transportation revenues over the same period are estimated at approximately \$58 billion, resulting in a funding shortfall of approximately \$5.9 billion. This shortfall is driven largely by the loss of local revenues due to the 2041 sunset of the M2 sales tax that would have otherwise generated approximately \$4.3 billion of transportation investment from 2041 to 2050.

While the Draft 2026 LRTP does not assume a specific funding solution to address the shortfall, the financial analysis helps quantify the magnitude of the long-term funding need and informs subsequent discussions on potential future funding strategies.

Short-Term Action Plan

A Short-Term Action Plan was prepared that identifies planning efforts intended to advance the strategies included in the Draft 2026 LRTP over the next several years. These efforts are designed to further refine the projects and programs proposed in the Preferred Scenario, respond to evolving transportation trends and policy requirements, and inform future LRTP updates. The recommended Short-Term Action Plan is included in the draft Directions 2050 LRTP Executive Summary.

Public Engagement

With Board direction, the Draft 2026 LRTP will be released for public review following Board review. To ensure broad reach and participation from across Orange County, OCTA will implement a combination of traditional and innovative outreach methods, providing the public an opportunity to learn about the Draft 2026 LRTP and share input on future transportation priorities. Engagement efforts will target the general public, stakeholders, community-based organizations, advisory groups, and city and elected officials.

Outreach tools will include social media, an online and paper survey, community webinar, pop-up events, roundtables for elected officials, city staff, and community leaders, and a telephone townhall. Survey and outreach materials will be available in multiple languages to help ensure participation from a diverse and representative audience.

Summary

The Draft 2026 LRTP has been developed and will be released for public review. The recommended Preferred Scenario successfully addresses the challenges and goals of the Draft 2026 LRTP, as well as stakeholder input received to date, as demonstrated through the forecasted system performance. With direction from the Board, a final Draft 2026 LRTP will be prepared that addresses input received during the public review period, as appropriate, and brought back to the Board before finalizing.

Attachments

- A. Directions 2050, Long Range Transportation Plan, Executive Summary, Draft, July 2026
- B. Draft 2026 Long-Range Transportation Plan Summary of Supporting Transportation Plans and Studies

Prepared by:



Kristin Tso
Section Manager III
(714) 560-5496

Approved by:



Rose Casey
Executive Director, Planning
(714) 560-5729