



***June 6, 2022***

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Long-Range Transportation Plan Update

### ***Overview***

The Long-Range Transportation Plan defines a vision for Orange County's transportation system that reflects established plans and policies and responds to forecasted system needs. This vision also guides the Orange County Transportation Authority's input for the Regional Transportation Plan, prepared by the Southern California Association of Governments. Measure M2 and the Orange County Transportation Authority's public transit services are the cornerstones of the Long-Range Transportation Plan. However, consideration of additional strategies is warranted to ensure that the established goals and objectives are addressed.

### ***Recommendation***

Direct staff to develop a draft Plan scenario for the Long-Range Transportation Plan that incorporates strategies that address the goals and objectives and public input received to date and return to the Board of Directors for approval.

### ***Background***

The Orange County Transportation Authority (OCTA) is preparing the Long-Range Transportation Plan (LRTP) as input into the Southern California Association of Governments' (SCAG) 2024 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). This LRTP analyzes travel conditions based on a 2045 horizon year, which assumes a nine percent growth in population and a 12 percent growth in employment. The population and employment forecasts were developed by the California State University of Fullerton's (CSUF) Center for Demographic Research (CDR), in consultation with Orange County local agencies and the Orange County Council of Governments.

This growth is reflected in an initial set of scenarios that are being analyzed in concert with the LRTP goals, which were presented in September 2021. The goals focus on delivering existing commitments identified in Measure M2 (M2) and state and federal transit operator requirements, improving system performance, expanding system choices, and supporting sustainability. These goals address several factors that are influencing Orange County's transportation system. These factors were also presented in September 2021 and include growing travel demand and limited land, evolving travel trends, increasing climate-related risks, a changing funding outlook, and a commitment to address diversity, equity, and inclusion more explicitly.

### ***Discussion***

In developing the LRTP, a set of scenarios is being created to address 2045 transportation planning needs and to identify a financially constrained program of projects, services, and strategies that will ultimately be recommended for inclusion in SCAG's 2024 RTP/SCS. For this discussion, the 2045 No Build scenario and the M2 Sunset scenario are presented. These scenarios provide context for considering additional strategies that look beyond the sunset of M2. These additional strategies will be included in the draft Plan scenario that will be presented to the Board in the near future.

#### **2045 No Build**

The 2045 No Build scenario assumes no changes to the 2019 transportation system in Orange County, but it does account for the projected growth of population, housing, and employment based on the 2018 Orange County Projections developed by CDR. The purpose of this scenario is to understand the impact that socioeconomic growth, alone, has on the transportation system.

#### **M2 Sunset**

The M2 Sunset scenario assumes the same socioeconomic growth as the 2045 No Build. In addition, it also includes Measure M2 projects and certain freeway and roadway projects that are generally consistent with the 2018 LRTP (Attachment A).

Also consistent with the 2018 LRTP is the assumption that Orange County's carpool lane system will be transitioned over time by the California Department of Transportation (Caltrans) to a tolled express lane system. This includes increasing the high-occupancy vehicle (HOV) requirement from two to three persons and allowing non-HOVs access for a fee. This transition is intended to address the fact that many of Orange County's managed lanes are not or will not be meeting federal managed lane performance standards. Caltrans has completed system level plans for this transition and is currently advancing a

project level environmental analysis study on Interstate 5, approximately from State Route 55 to the Los Angeles County Line.

Additionally, OC Bus service levels are assumed at 1.625 million revenue vehicle hours through 2045, consistent with OCTA's recent funding projections. However, since M2 is scheduled to sunset in 2041, programs funded by M2 are assumed to have expired prior to 2045. This is reflected in the transportation model as a significant drop in Metrolink commuter rail service on lines serving Orange County, since M2 revenues make up the majority of OCTA's funding contribution to commuter rail. The loss in revenue results in a drop from 55 weekday trains serving Orange County in 2019 to approximately 20 weekday trains in 2045. Additionally, the sunset of M2 results in the Regional Traffic Signal Synchronization Program (RTSSP) ending in 2041. This is reflected in the transportation model by assuming a reduction in throughput on Orange County arterials.

Most M2-funded programs are not easily modeled due to their often indirect or intermittent influence on the transportation system. However, many of these programs have become important contributors that support transit accessibility, community circulators, freeway and roadway performance, and other aspects of Orange County's transportation system and quality of life. The M2 programs that are assumed to lose funding in this scenario by 2041 include:

- Local Street Funding
- RTSSP
- Freeway Service Patrol
- Metrolink Service Expansion Program
- Extensions to Metrolink service
- Community Based Transit/Circulators
- Senior Mobility Program
- Fare Stabilization for Seniors and Persons with Disabilities
- Senior Non-emergency Medical Transportation Program
- Safe Transit Stops
- Freeway Environmental Mitigation Program
- Environmental Cleanup Program

Initial model results for the 2019 Base Year, 2045 No Build scenario, and the 2045 M2 Sunset scenario are presented below. Some key observations include:

- Daily transit ridership and total vehicle hours of delay increase between the 2019 Base Year and the 2045 No Build due to the rising travel demand from projected socioeconomic growth and the lack of capacity projects in the 2045 No Build.

- Daily transit ridership drops between the 2045 No Build and the 2045 M2 Sunset scenario because of slower arterial speeds impacting bus operations, as well as the reduced number of Metrolink trains. Again, this is reflective of the loss of M2-funded programs like the RTSSP and Metrolink Service Expansion Program.
- Congestion (as measured by total vehicle hours of delay and delay as a percent of travel time) is reduced in the 2045 M2 Sunset scenario when compared to the 2045 No Build scenario. This is due to the planned transportation improvement projects. However, congestion in 2045 is higher than the 2019 Base Year conditions due to growing travel demand and the loss of M2-funded programs.
- Daily vehicle miles traveled (VMT) increases approximately 12 percent when comparing the 2019 Base Year to the 2045 M2 Sunset scenario. However, when comparing the 2019 Base Year to the 2045 No Build scenario, daily VMT increases seven percent. This shows that most of the projected increase in VMT (seven percent) is due to socioeconomic growth, while capacity projects are likely responsible for the remaining five percent.
- Despite the capacity projects included in the 2045 M2 Sunset scenario, the loss of the RTSSP results in average arterial speeds being more than two miles per hour slower than the 2019 Base Year conditions.

	2019 Base Year	2045 No Build	2045 M2 Sunset
Daily Transit Trips	130,761	138,051	129,177
Total Vehicle Hours of Delay	341,299	453,901	408,119
Delay as Percent of Travel Time	15%	18%	16%
Daily VMT	76,396,589	81,852,780 (7% increase vs 2019)	85,681,639 (12% increase vs 2019)
Average Speed – Freeways – Peak Period	41.2	39.7	40.5
Average Speed – Arterials – Peak Period	26.0	25.2	23.7

To summarize the above findings, the benefits of the M2 Sunset scenario over the 2045 No Build scenario are highlighted by lower total vehicle delay, lower delay as percent of travel time, and better average freeway speeds during the peak period. However, this same comparison shows a decline in transit ridership

and more congestion on local streets due to the loss of M2 funding for ongoing operations.

This LRTP provides an opportunity to consider strategies beyond M2 that help address Orange County's mobility, accessibility, and sustainability needs for 2045. Several desired outcomes, referred to as the LRTP Tracks to Success, are listed below. The LRTP Tracks to Success were developed in consideration of the LRTP goals and the feedback received through public engagement. These are intended to guide what types of strategies should be considered in addition to the investments proposed in the M2 Sunset scenario.

#### LRTP Tracks to Success:

- Renew or revamp select M2 programs
- Expand transit services and accessibility
- Enhance active transportation and Safe Routes to Schools
- Explore mobility hubs and mobility as a service
- Eliminate select freeway chokepoints
- Embrace new technologies
- Elevate system maintenance and resilience investments

With direction from the OCTA Board of Directors (Board), strategies will be defined that address the LRTP Tracks to Success. Examples of new strategies include increasing the number of high-quality transit corridors and microtransit service areas, expanding Orange County's bikeway network, improving access to multimodal options, addressing key freeway chokepoints that remain after M2 freeway projects are implemented, providing a state-of-the-art signal synchronization system, and supporting implementation of charging facilities for the growing number of electric vehicles. Additionally, successful M2 funded programs such as Metrolink service, senior mobility programs, and maintaining the quality of the local road system will be revisited and updated as appropriate. The proposed strategies will be included in a draft Plan scenario that builds on the M2 Sunset scenario. Once developed, staff will return to the Board to present the draft Plan scenario, analysis findings, and the estimated level of funding needed to support the proposed strategies.

#### Community Engagement

Community input is a key factor for developing the strategies that shape the LRTP. To ensure input from a broad range of stakeholders and the general public, the engagement program utilizes both traditional and non-traditional methods. During fall 2021, OCTA began the first phase of public outreach to help identify transportation options, priorities, and challenges for 2045. The goal was to actively engage the community through an online survey, public webinar, community leaders' roundtables, telephone helpline, print and online resources, and digital media. Due to the coronavirus (COVID-19) pandemic, the LRTP team

primarily utilized digital tools, such as eblasts, texts, and social media messaging to promote the survey and virtual community meetings to abide by COVID-19 health and safety protocols. More than 1,800 online surveys were collected, and the full survey analysis report can be viewed in Attachment B.

To align with OCTA's diversity, equity and inclusion goals, methods were used to ensure all voices had the opportunity to be heard, regardless of ethnicity, language preference, or socioeconomic background. The survey and project collateral, such as fact sheets, eblasts and text messaging were made available in English, Spanish, and Vietnamese, and newspapers, Facebook, and Vietnamese radio advertisements were placed to connect with the Spanish and Vietnamese language communities. A telephone helpline offered in English and Spanish provided an alternative for commenting by telephone or requesting print versions of the survey. Closed captioning and interpretation were made available during the community meeting. A video recording of the webinar also was posted online, available for the public to view at any time. Finally, community and pop-up events were held to promote the survey in cities with the highest populations of residents with English as a second language to help reduce barriers to engagement.

In addition, two Community Leader Roundtables were held. These included participation by representatives from: Asian Pacific Islander Community Council, CSUF, OC Hispanic Chamber of Commerce, OC Human Relations Council, OC United Way, Santa Ana College, and Friends of Harbors, Beaches, and Parks. The LRTP team also regularly engages OCTA's Citizens Advisory Committee and Diverse Community Leaders Group.

### ***Summary***

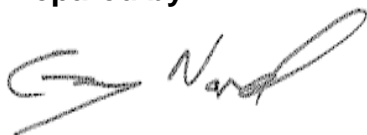
Scenarios have been developed for the LRTP that analyze the anticipated impacts from projected socioeconomic growth, and that highlight transportation system impacts from the sunset of Measure M2. The LRTP Tracks to Success look beyond the sunset of M2 to help identify additional strategies that support the LRTP goals and feedback received through outreach activities. With direction from the Board, strategies that are consistent with the LRTP Tracks to Success will be defined and analyzed as part of a draft Plan scenario. The defined strategies and the draft Plan scenario performance findings will be brought back to the Board for review and discussion.

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***Attachments***

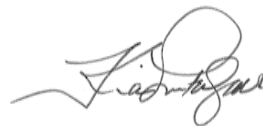
- A. Measure M2 Sunset Scenario - Modeled Projects
- B. Directions 2045, Long Range Transportation Plan, Survey Analysis Report, April 2022

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