



September 2, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: South Orange County Multimodal Transportation Study Update

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Overview

The Orange County Transportation Authority is conducting a long-range multimodal transportation study for the south Orange County area. Objectives of the study are to document transportation issues and opportunities, engage with key stakeholders, partner agencies, and the public to identify potential long-term multimodal solutions. A status report on the study is provided for Board of Directors' consideration.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) conducts planning studies to address the long-term transportation needs of Orange County. Multimodal transportation studies serve as the foundation of the long-range planning process by engaging stakeholders, providing analysis of transportation issues, and recommending a vision for the study area. This vision is often referred to as the locally preferred strategy (LPS).

Once a LPS is approved by the Board of Directors (Board), recommended improvements can be considered for inclusion in the OCTA's Long-Range Transportation Plan (LRTP) project list. This project list is used as input for the Regional Transportation Plan (RTP) developed by the Southern California Association of Governments (SCAG). Projects included in the RTP are eligible to proceed through project-level development and can compete for state and federal funding.

Achieving consensus on a LPS involves engagement of local jurisdictions, transportation and environmental resource agencies, elected officials, residents, businesses, and other key community organizations in the study screening and decision-making processes. As such, the LPS recommendations represent a locally-supported vision for the study area's long-term transportation needs.

In August 2020 and February 2021, updates were provided to the Board on the South Orange County Multimodal Transportation Study (SOCMTS). The August 2020 item reviewed the study area (Attachment A), background, phasing, stakeholder, and partner agency engagement approach, as well as transportation issues and opportunities. The February 2021 item reviewed the study's Purpose and Need Statement (Attachment B) and the initial alternative strategies (Attachment C). The current update primarily focuses on the initial screening of alternative strategies and the approach for defining a reduced set of multimodal alternative strategies.

Discussion

The study is being informed by the technical analysis of the transportation system in the study area, and refined through stakeholder, partner agency, and public input. A full report, summarized below, of the latest online survey results and public engagement activities can be viewed in Attachment D.

- Six meetings of the Technical Working Group comprised of technical planning and public works staff from cities within the study area.
- Six meetings of the Transportation Agency Working Group comprised of staff from the California Department of Transportation (Caltrans), the Transportation Corridor Agencies (TCA), SCAG, the San Diego Association of Governments, the Southern California Regional Rail Authority (Metrolink), the North County Transit District, the Federal Transit Administration, and the Federal Highway Administration.
- Individual agency meetings offered by OCTA and requested by and held with Caltrans, Metrolink, TCA, and the cities of Dana Point, Irvine, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, and Newport Beach.
- Two city council presentations to the cities of Lake Forest and San Clemente.
- Two key stakeholder roundtables, two elected official roundtables, one public webinar, one telephone town hall, and two online surveys.
- The online surveys and promotional materials were available in Spanish, Mandarin, Vietnamese, and Korean, a telephone helpline was also offered in the multiple languages, and the telephone townhall included a Spanish simulcast. In addition, multilingual postcards were mailed to low-income and disadvantaged communities.

This winter, a third and final outreach campaign will be conducted to seek public feedback on the draft multimodal alternative strategies. Similar to the outreach campaigns for earlier study phases, the third phase will include a public webinar and a final online survey available in multiple languages, both of which will be promoted via social media, blogs, and eblasts. The telephone helpline will continue, postcards promoting the online survey and webinar will be distributed, and a third set of key stakeholders and elected official roundtables will be held.

Analysis of Initial Alternative Strategies

As indicated in the February 2021 item, an initial set of alternative strategies were developed that add to the 2045 Baseline scenario. These were analyzed to understand how well each focused strategy could address the study's Purpose and Need Statement.

The 2045 Baseline scenario includes transportation improvements from voter-approved Measure M2 (M2), currently funded capital improvement programs, and the following near-term projects identified at the conclusion of the SR-241 Toll Road extension efforts in south Orange County:

- Los Patrones Parkway extension from Cow Camp Road to Avenida La Pata as a non-tolled facility.
- Ortega Highway widening between Calle Entradero and Reata Road.
- Interstate 5 carpool lane extension from Avenida Pico to the San Diego County Line.

The initial set of alternative strategies evaluated during the second study phase included:

- Maximize rail and transit.
- Revise roadway system operations.
- Eliminate roadway bottlenecks.
- Repurpose road space - enhance transit/active transportation.
- Demand management - support tele-everything.
- Demand management - emphasize user pricing and managed lanes.
- Demand management - subsidize mode shift.
- Maximize emerging technologies.

Utilizing a combination of quantitative and qualitative analysis, as well as input from stakeholder agencies, these initial alternative strategies were evaluated by comparing the performance measures listed below to 2045 Baseline scenario conditions:

- Percentage of trips made by non-single-occupant vehicle (SOV) modes
 - Desired outcome: Increases the non-SOV mode share.

- Access to transit and active transportation
 - Desired outcome: Increase in geographic coverage of transit and active transportation for routine trips.
- Total daily vehicle trips
 - Desired outcome: Reduces the number of daily vehicle trips.
- Travel time savings
 - Desired outcome: Reduces daily person hours traveled.
- Vehicle Miles Traveled (VMT)
 - Desired outcome: Reduces total daily VMT.

Ease of implementation was also considered for each of the initial alternative strategies. This was a qualitative evaluation that considered factors, such as relative cost, environmental risks, and likely public and/or political support.

Reduced Set of Multimodal Alternatives

The analysis of the initial alternative strategies will be used to inform the development of a refined set of multimodal alternatives to consider in the ultimate goal of identifying a LPS. The reduced set of multimodal alternatives will evaluate different combinations of the most promising elements from the initial alternative strategies in addition to the 2045 Baseline scenario improvements.

Elements included in the reduced set of multimodal alternative strategies will include:

- OC Flex: A travel market analysis was conducted as part of the initial screening analysis to identify potential on-demand, micro-transit service areas in addition to the existing OC Flex zone in the Aliso Viejo/Laguna Niguel/Mission Viejo area. Potential additional service areas being considered in the multimodal alternative strategy development include:
 - Laguna Beach,
 - University of California, Irvine/Newport Center,
 - Tustin/Irvine,
 - Irvine Spectrum,
 - Laguna Hills/Lake Forest,
 - Newport Beach/Costa Mesa,
 - Dana Point/San Juan Capistrano, and
 - San Clemente.
- Local circulators/shuttles: Although the effects of local circulators/shuttles (M2 Project V) were not specifically analyzed as part of the initial screening analysis, support was voiced for these services during public and stakeholder engagement. Both currently operating and previously operating Project V circulators/shuttles (as some services were

suspended due to the coronavirus {COVID-19} pandemic) are being considered in the multimodal alternative strategy development, including:

- Dana Point,
 - Irvine,
 - Laguna Beach,
 - Mission Viejo,
 - Newport Beach,
 - San Clemente,
 - San Juan Capistrano,
 - Laguna Niguel, and
 - Lake Forest.
- **Active transportation:** The development of the multimodal alternative strategy includes a recommendation for a geographic alignment of active transportation investments and transit investments. Specifically, active transportation investments would be targeted in areas where they can best capture short trips (i.e., less than three miles) and/or first/last mile trips to and from transit stations and mobility hubs (i.e., places of connectivity where different travel options – walking, bicycling, transit, and shared mobility – come together).
 - **Roadway operational improvements:** The multimodal alternative strategy development includes recommendations for roadway operational improvements (e.g., advanced traffic management systems, intelligent transportation systems, integrated corridor management, etc.) that can deliver increased roadway efficiency with relatively low cost and without providing new travel lanes that require additional right-of-way acquisition. Support for this type of investment was heard consistently during the public and stakeholder engagement process.
 - **High-frequency transit:** High-frequency transit refers to investments in high quality services such as freeway bus rapid transit on Interstate 5 (I-5) and State Route 55 (SR-55). The high-frequency transit considered for the multimodal alternative strategy development is consistent with the high-frequency transit vision identified in OCTA's Transit Master Plan.
 - **Transportation Demand Management (TDM):** TDM measures include strategies applicable to south Orange County, such as support for telework (e.g., work-from-home), support for carpool/vanpool/schoolpool, and transit subsidies. The TDM measures considered are aimed at reducing roadway congestion and demand by redistributing trips to alternative modes of travel, times outside of the peak period, and/or along less congested travel routes.

- Bottleneck improvements: The multimodal alternative strategy development recommendations includes spot capacity enhancements on freeways to address specific known bottlenecks that are not anticipated to be addressed by M2 projects. The bottleneck improvements currently under consideration for the multimodal alternative strategy include:
 - Braiding the southbound State Route 133 to southbound I-5 ramp with the southbound I-5 off-ramp to Alton Parkway.
 - Truck climbing lane on I-5 from Avenida Pico to Avenida Vaquero.
- Conversion of carpool lanes to express toll lane operation: The multimodal alternative strategy development assumes that by 2045 the California Department of Transportation will exercise its authority to make operational changes.

Based on the Purpose and Need Statement and performance measures described above, a set of performance targets will be developed that establish a vision for what a successful multimodal transportation system in south Orange County in the year 2045 would achieve. The performance measures will be used to evaluate the set of multimodal elements and determine whether the multimodal elements (as currently identified) can meet the set targets. If the identified multimodal elements are insufficient to meet the targets, some adjustments to the elements could be considered (e.g., more OC Flex zones, more high-frequency transit, more active transportation investment, etc.). It is anticipated that the recommended LPS will be comprised primarily of transportation programs (like the elements described above) rather than an extensive list of capital improvements.

Next Steps

During the next few months, OCTA will engage with the public, stakeholders, and partner agencies to review the performance of the reduced set of multimodal alternative strategies. Consistent with the Purpose and Need Statement, these recommended long-range multimodal alternative strategies will include improvements and policies that enhance travel choices, manage growing travel demand, address sustainability issues, and consider the implications of COVID-19 and possibilities of emerging technologies on mobility in the study area. The investments and policies will support convenient, competitive, and effective travel options beyond driving alone, will address the travel needs of disadvantaged communities and transit-dependent populations, and will be appropriate for implementation in south Orange County.

Summary

OCTA is developing strategies to improve travel in south Orange County. Study progress is presented for Board review. Technical analysis, in conjunction with input from stakeholder and public engagement efforts, will guide the development of the alternative strategies and be brought to the Board for consideration later this year.

Attachments

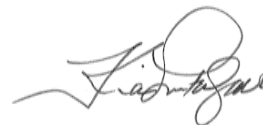
- A. South Orange County Multimodal Transportation Study Area
- B. South Orange County Multimodal Transportation Study Purpose and Need Statement
- C. South Orange County Multimodal Transportation Study Initial Alternative Strategies
- D. South Orange County Multimodal Transportation Study, Public Involvement Program Phase 2: Summary of Survey Results, July 2021

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