



CITY COUNCIL AGENDA REPORT

MEETING DATE: 6/17/2025

DEPARTMENT: Public Works

SUBJECT:

LAKE FOREST TRANSPORTATION MITIGATION PROGRAM FIVE-YEAR REVIEW

RECOMMENDED ACTION(S):

Staff recommends the City Council to:

1. Approve alternative improvements for the following Lake Forest Transportation Mitigation Program intersection projects:
 - a. Los Alisos Boulevard and Rockfield Improvement Project
 - b. Lake Forest Drive and Rockfield Improvement Project
 - c. Lake Forest Drive and I-5/Avenida de la Carlota Improvement Project
 2. Approve the removal of the Bake and Rockfield Improvement Project from the Lake Forest Transportation Mitigation Program.
 3. Approve the adjusted project cost estimates for the remaining Lake Forest Transportation Mitigation Program projects and revised Lake Forest Transportation Mitigation Program Fee Schedule.
 4. Approve the Lake Forest Transportation Mitigation Program Five-Year Update.
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EXECUTIVE SUMMARY:

The Lake Forest Transportation Mitigation Program (“LFTM”) requires the City to review and reassess the development impacts associated with participating properties every five years. The most recent update was completed in 2019 and approved by the City Council in 2020, prompting the need to conduct a new five-year update. This update includes a comprehensive traffic analysis, incorporating revised land use data, changes to the roadway network, and updates to the Lake Forest Traffic Analysis Model (“LFTAM”). With the support of the City’s traffic modeling consultant, Stantec, staff has completed the LFTM Five-Year Update for the City Council’s review and approval.

The LFTM Five-Year Update did not identify any major intersection improvement changes, except for the following proposed intersection adjustments:

- **Los Alisos Boulevard and Rockfield:** A proposed alternative improvement would involve restriping Los Alisos Boulevard to create a 19-foot eastbound de-facto through-right turn lane.
- **Lake Forest Drive and Rockfield:** A proposed alternative improvement would modify the signal timing to include overlap phasing for the southbound Rockfield Boulevard right-turn movement.
- **Lake Forest Drive and I-5 / Avenida de la Carlota:** A proposed alternative improvement would restripe the northbound Avenida de la Carlota middle lane to serve as a shared left- and right-turn lane.
- **Bake Parkway and Rockfield Boulevard:** Proposed no intersection improvements due to the intersection's current adequate level of service.

These proposed revisions to the LFTM Program are designed to minimize community impacts, avoid unnecessary widenings, and eliminate improvements that are no longer required.

In addition, the LFTM Five-Year Update includes revised cost estimates for the remaining LFTM Intersection Improvement Projects that reflect the 2024 California Construction Cost Index (“CCCI”) and current construction cost trends, driven by inflation and rising labor costs. The increase in project costs correlates with the increase in the LFTM Program Fee Schedule.

Therefore, staff recommends that the City Council approve alternative improvements for three intersection projects, remove the Bake and Rockfield project from the LFTM Program, adopt updated cost estimates and a revised fee schedule, and receive and file the 2024 LFTM Five-Year Update.

BACKGROUND:

In July 2008, the City Council adopted Ordinance No. 186, which amended Chapter 7.19 of the Lake Forest Municipal Code as the Lake Forest Transportation Mitigation Program. LFTM was established for the purposes of providing funding for the coordinated and phased installation of traffic and transportation improvements to serve, benefit, and mitigate the impacts of development in the area of the City referred to as the “Opportunities Study Area” (“OSA”). The LFTM Program established a list of citywide transportation improvements at 18 intersections throughout the community to mitigate the impacts of development, and to maintain adequate levels of service on the City’s arterial street system.

In 2011, the City Council approved the one-time Baseline Adjustment to the LFTM Program that analyzed trip generation and traffic patterns based on actual land uses and unit counts at the time, as compared to those forecasts in 2008. The Baseline Adjustment Study resulted in a reduction of intersection improvements from 18 intersections to 15 intersection locations at a cost of \$9,881,000. These costs include the total base costs of improvements and associated administration, and environmental costs related to project delivery.

The LFTM Ordinance stipulates a Five-Year Update of the LFTM Program. The requirement for a Five-Year Update was included in the LFTM Ordinance to ensure that the LFTM Program continues to address the City's future roadway improvement needs. The Five-Year Update is a complete review of the LFTM Program to be conducted by the City in five (5) year intervals after the effective date of the LFTM Program. The purpose of the review is to update cost estimates, update allocations, propose alternative mitigation measures costing no more than the original mitigation measures as adjusted pursuant to the formulas within the LFTM Ordinance, or eliminate specific traffic and/or transportation improvements that are no longer necessary.

In 2014, the City Council approved the 2014 LFTM Program Five-Year Update which resulted in no change to the approved intersection improvement locations.

In 2020, the City Council approved the 2019 LFTM Program Five-Year Update which updated program costs, adjusted the calculation of the required annual escalator/deflator for 2019, and revised the LFTM fee structure based upon the updated information.

DISCUSSION:

Staff has completed the 2024 LFTM Five-Year Update to the LFTM Program and proposes to incorporate the following:

- Updates to the Citywide land use data
- Updates to the committed roadway network
- Updates to the Lake Forest Traffic Analysis Model ("LFTAM")
- Updates to the identified transportation intersection improvements
- Updates to the total cost of the program
- Revises the LFTM fee structure based on the above
- Annual Escalator/Deflator for 2024

The LFTM Program considers the following parts of the "committed" or "baseline" roadway:

1. New roadways or roadway improvements directly related to new development, and
2. Signalized intersections that provide project access.

The Five-Year Update of the LFTM Program focuses on the roadway improvements to augment the committed roadway system.

Subsequent to the 2019 Five-Year Update, the El Toro Road and Portola Parkway intersection widening improvement project was completed. Also, several LFTM Program improvements are currently under construction: Lake Forest Drive and Jeronimo Road widening, Lake Forest Drive and Rancho Parkway improvements, and Los Alisos Boulevard and Rockfield Boulevard improvements. These roadway improvements are included in the Five-Year Update.

Traffic forecasts for the Five-Year Update are prepared and evaluated based on the future land uses in the city. Future-year (2040) traffic forecasts on the City's arterial street system identify the transportation improvements that need implementation over time. The City's future traffic volume forecasts are based on the allowable land uses specified by the General Plan, including land use updates based on recent development project approvals. For the remainder of the County, traffic volume growth is based on 2040 demographic projections for the County of Orange.

Future traffic forecasts use the City's Lake Forest Traffic Analysis Model. LFTAM was originally developed in 2005 as a transportation planning tool for preparing long-range traffic forecasts and estimating future transportation needs in the city. LFTAM is a sub-area derivative of the Orange County Transportation Analysis Model ("OCTAM"), maintained and operated by the Orange County Transportation Authority ("OCTA"). LFTAM is developed according to the OCTA sub-area traffic modeling guidelines and certified as being consistent with the OCTAM parent model. For the purpose of the update, the revised LFTAM includes the most current land use projections and roadway network assumptions for the City of Lake Forest.

The Five-Year Update includes analysis of forty-two major intersections within the City and some locations within adjacent jurisdictions. This is the same study area utilized in the original LFTM study, the 2011 Baseline Adjustment study, the 2014 Five-Year Update study, and the 2019 Five-Year Update study. Evaluations use future traffic volume demand and capacity needs for a future year that is based on build out of the City's General Plan and regional growth projections for the year 2040. In accordance with the LFTM Ordinance, the Five-Year Update does not add any new LFTM improvements.

The analysis led to the following proposed revisions to remaining LFTM Program improvements, aiming to reduce community impacts, avoid unnecessary widenings, and eliminate unnecessary improvements:

- **Los Alisos Boulevard and Rockfield** – Proposes an alternative improvement by restriping Los Alisos Boulevard to create a 19-foot eastbound de-facto through-right turn lane that will provide an acceptable level of service. The previous improvement was to add a dedicated right-turn lane, which would require the full or partial right-of-way acquisition of four single-family homes and relocation of overhead utilities.
- **Lake Forest Drive and Rockfield** – Proposes an alternative improvement to modify the signal timing to include an overlap phasing for the southbound Rockfield Boulevard right-turn movement. The previous improvement was to add a shared left-turn/through lane and permanently change the signal timing operations to a split-phased operation, which is an operation that gives each direction of traffic their own green light one after the other potentially causing further delays at the intersection.
- **Lake Forest Drive and I-5 / Avenida de la Carlota** – Proposes an alternative improvement to restripe the northbound Avenida de la Carlota middle lane, allowing it to serve as a shared left and right-turn lane. The previous improvement was to convert the shared I-5 off-ramp left-turn/through lane to a third left-turn lane, widen the intersection to add a second left turn lane for Carlota, and widen the intersection to add a second through lane for the I-5 off-ramp.
- **Bake Parkway and Rockfield Boulevard** – Proposes no intersection improvements due to the intersection's current adequate level of service. The previous improvement was to reconfigure the westbound Rockfield approach to add a third left-turn lane, remove the free-flow right-turn lane and provide a de-facto right-turn lane.

All other LFTM Program improvements remain unchanged from the previous update. However, the 2024 LFTM Five-Year Update includes revised improvement costs, which have been adjusted according to the 2024 California Construction Cost Index (“CCCI”), in accordance with the LFTM Ordinance. The annual escalator/deflator for 2024 is 9.3%, and this adjustment has been applied to the estimated improvement costs for 2024. These costs encompass administration, design, environmental, right-of-way, and construction expenses. In addition to the CCCI adjustment, each remaining LFTM Program improvement has been updated to reflect current construction cost trends, driven by inflation and rising labor costs. As such, the revised LFTM Program costs are shown below:

Table 1 – LFTM Program Improvement Project Costs

Item	Int. No.	Intersection	Jurisdiction	Total Cost
On-Going Projects (Pre-Construction and Planning)				
1	10	Lake Forest Dr & Rancho Pkwy	LF	\$ 627,448
2	14	Bake Pkwy & Irvine Blvd/Trabuco Rd	LF/Irvine	\$ 2,226,251
3	22	Bake Pkwy & Jeronimo Rd	LF/Irvine	\$ 2,846,788
4	23	Lake Forest Dr & Jeronimo Rd	LF	\$ 1,392,922
5	34	Los Alisos Blvd & Rockfield Blvd	LF	\$ 906,678
6	31	Lake Forest Dr & Rockfield Blvd	LF	\$ 59,980
7	105	Alton Pkwy & Irvine Blvd	Irvine	\$ 676,214
8	36	Lake Forest Dr & I-5 Fwy SB Off-Ramp/Carlota	LH/Irvine	\$ 120,360
Completed Projects				
9	2	Bake Pkwy & Portola Pkwy	LF	\$ 72,240
10	12	El Toro Rd & Portola Pkwy/Santa Margarita Pkwy	LF	\$ 2,627,022
11	32	Ridge Route Dr & Rockfield Blvd	LF	\$ 1,144
12	37	Paseo de Valencia & Avenida de la Carlota	LH	\$ 79,000
13	39	El Toro Rd & Avenida de la Carlota	LH	\$ 78,000
14	117	Alton Pkwy & Toledo Way	Irvine	\$ 19,555
Summary				
Total Cost of Improvements				\$ 11,733,603
Administration & Environmental (25%)				\$ 2,933,400
TOTAL PROGRAM COST				\$ 14,667,003

As this is a developer fee-based program, the participating properties are obligated to pay the balance of the LFTM Program. Four of the five participating properties including KB Homes (Whisler Ridge), Shea/Baker (Baker Ranch), Pacific Heritage (the Pinnacle at Serrano Summit) and Irvine Ranch Water District (Serrano Summit) have completed their payment obligations as of June 2024. Based upon the revised LFTM Program costs and spent to date costs and cash balance (which totaled \$12,147,752 as of June 30, 2024), the remaining LFTM Fee Schedule is calculated to be \$2,519,251 which will be distributed among the last remaining participating property. Currently, Portola Center is the last remaining participating property in the LFTM program.

Conclusion

The original LFTM program analyzed 42 intersections and identified 19 intersections as requiring potential improvements. Since that time, seven projects have been completed, four projects are no longer necessary, four projects are

under construction, and one project is under design. LFTM represents an investment of \$14.7 million in traffic improvements for the community.

The Five-Year Update of the LFTM Program identifies the improvements needed and associated costs to mitigate the transportation/traffic impacts of participating development projects. In accordance with the LFTM Ordinance, the LFTM fee has been reevaluated and recalculated based on updated land use information, recent circulation improvements, and the updated LFTAM. Sufficient funds have been identified to cover the improvements in the LFTM Program.

FISCAL IMPACT:

The Lake Forest Transportation Mitigation Program is a developer fee-based program. The proposed action will provide an additional \$2.5 million in revenue, which will be used to fund the LFTM program.

ATTACHMENTS:

2024 LFTM Five-Year Update

Initiated By: Tran Tran, Traffic Engineering Manager

Submitted By: Douglas A. Erdman, P.E., Acting Director of Public Works/City Engineer

Approved By: Debra Rose, City Manager