Mobility and Infrastructure Committee Memorandum

City of Arts & Innovation

TO: MOBILITY AND INFRASTRUCTURE COMMITTEE DATE: AUGUST 13, 2026

FROM: PUBLIC WORKS DEPARTMENT WARD: 2

SUBJECT: LINDEN STREET RESTRIPING PILOT PROJECT

ISSUE:

The issue for Mobility and Infrastructure Committee consideration is review of the Linden Street Restriping Pilot Project and approval of the project.

RECOMMENDATION:

That the Mobility and Infrastructure Committee direct staff to conduct community engagement for a potential three-year pilot project that would temporarily convert Linden Street between Chicago Avenue and Iowa Avenue from a four-lane roadway to a two-lane roadway with a striped two-way left-turn lane median and buffered bike lanes and bring findings and recommendations to the City Council.

BOARD RECOMMENDATION:

The Transportation Board met on June 3, 2026, to review the proposed Linden Street Restriping Pilot Project. Five of seven active board members were present. The action to direct staff to conduct community engagement for the potential pilot project and bring findings and recommendations to the Mobility and Infrastructure Committee, was recommended unanimously.

BACKGROUND:

In June 2020, the California Strategic Growth Council (SGC) awarded the City of Riverside and its community partners two grants totaling $31,221,206 from the Transformative Climate Communities (TCC) and Affordable Housing and Sustainable Communities (AHSC) Grant Programs. The grant agreement directed some funds from this grant to be used for pedestrian and bicycle mobility enhancement projects. The City proposed using grant funds to construct a Class IV separated bike lane on Linden Street, between Chicago Avenue and Iowa Avenue.

After further analysis, it was determined that constructing a Class IV separated bike lane on Linden Street would present operational challenges to motorists and bicyclists. The City submitted a scope change request to SGC to transfer the proposed bicycle improvements to

another location in the City, while the City committed to constructing Class II striped bike lanes on Linden Street in conjunction with a future paving project.

Linden Street, between Chicago Avenue and Iowa Avenue, is an existing 4-lane, east-west roadway with 64-foot curb-to-curb width, bicycle lanes, and a curbside student loading zone adjacent to John W. North High School.

Per the Riverside 2025 General Plan Circulation and Community Mobility Element (CCM), Amended February 2018, Linden Street, between Chicago Avenue and Iowa Avenue is designated as a 2-Lane Collector, with an 80-foot public right-of-way width and 40-foot curb-to-curb width.

The existing roadway width and configuration matches the characteristics of a 4-Lane Arterial, with an 88-foot public right-of-way width and 64-foot curb-to-curb width.

To match consistency with the current General Plan, and to improve safety and operations of the roadway segment, the City proposes to restripe Linden Street in conjunction with a paving project. The project will maintain existing roadway width, revise the number of vehicular travel lanes from four to two, install a two-way left-turn lane (TWLTL), install buffered bike lanes, and enhance the existing on-street student loading zone adjacent to North High School.

On May 27, 2026, City staff met with Riverside Unified School District (RUSD) staff at North High School to observe traffic operations during student arrival times. RUSD staff indicated initial support for the proposed enhanced loading zone adjacent to the school. The enhanced loading zone would include extending the existing loading zone by signing, striping, and curb painting. In addition, RUSD requested that the City evaluate the intersection of Linden Street and Cranford Street for conversion to a traditional traffic signal.

DISCUSSION:

The Riverside 2025 General Plan, amended February 2018, is the guiding document that establishes the City's Circulation and Community Mobility Element (CCM). The major principles underlying the CCM are ensuring land uses are supported by an efficient roadway network, embracing innovative solutions to congestion on roadways, and supporting alternative modes of transportation.

Linden Street, between Chicago Avenue and Iowa Avenue, is designated in the CCM as a 2-Lane Collector, with an 80-foot public right-of-way width and 40-foot curb-to-curb width. It is oriented to serve east-west traffic as an alternative route to Third Street to the north and University Avenue to the south.

The Riverside 2050 General Plan update currently under development intends to maintain the existing designation of Linden Street, between Chicago Avenue and Iowa Avenue, as a 2-lane collector.

The roadway segment will be resurfaced as part of the Fiscal Year 25/26 Community Development Block Grant (CDBG) Street Improvements Project. The City of Riverside receives federal funding through the United States Department of Housing and Urban Development (HUD). Funding is administered by the Housing and Human Service Department

and can be used for street improvement projects.

Existing and Proposed Configuration

Figures 1-2 below show cross sections of the existing and proposed roadway configuration.

Figure 1 – Existing Roadway Cross Section and Lane Designations

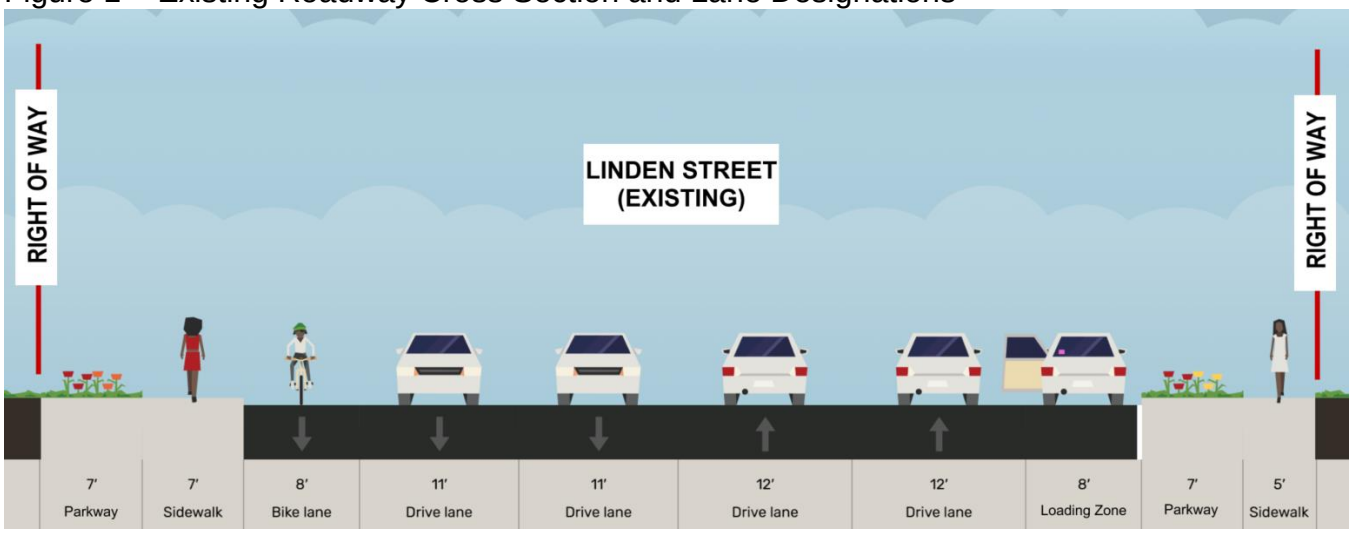
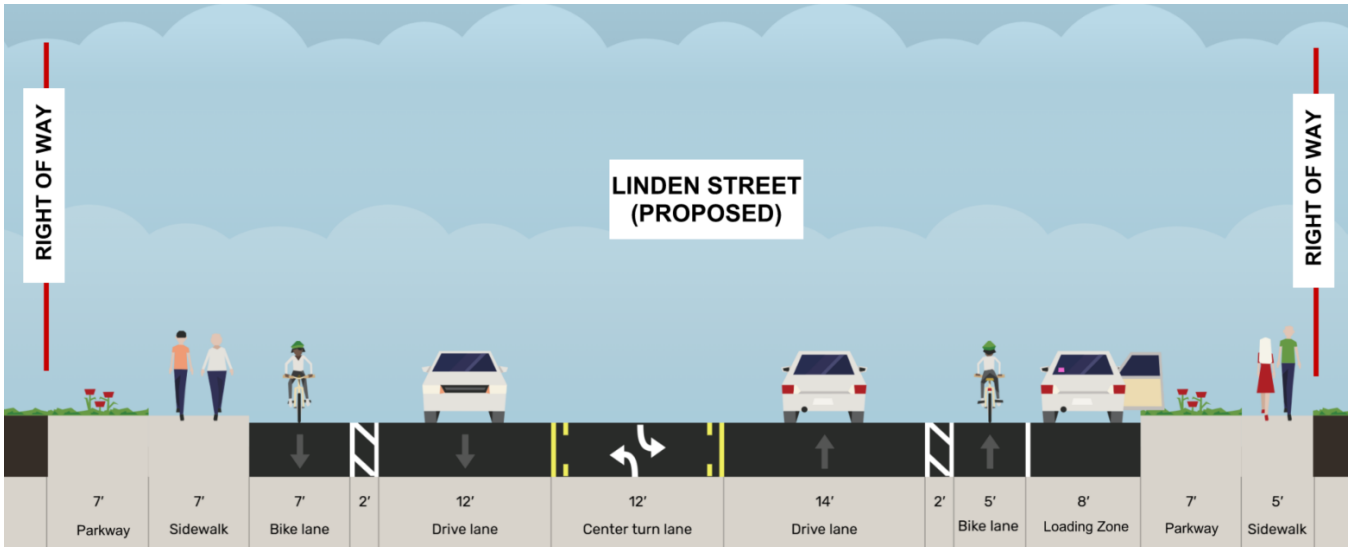


Figure 2 – Proposed Roadway Cross Section and Lane Designations



Collision Data

Tables 1-3 below show collision data on Linden between Chicago and Iowa between 1/1/2021 and 12/31/2025 (5 years):

Table 1 – Collision Severity Summary

Linden Street Segment	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	Property Damage Only
Chicago Ave to Cranford Ave	0	0	6	4	7
Cranford Ave to Iowa Ave	0	0	6	4	9

Table 2 – Active Transportation Collision Summary

Linden Street Segment	Pedestrian Collisions	Bicycle Collisions	Total Collisions
Chicago Ave to Cranford Ave	0	0	17
Cranford Ave to Iowa Ave	0	0	19

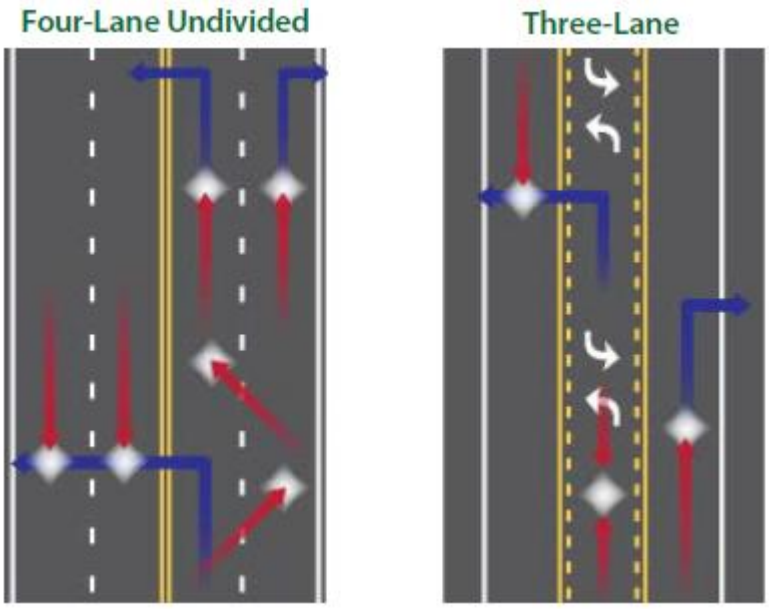
Table 3 – Primary Collision Factor Summary

Primary Collision Factor (Top 3)		
Rank	Collision Factor	Percentage of all collisions
1	Improper Turning	33%
2	Unsafe Speed	19%
3	Auto R/W Violation	17%

Data indicates that collisions occur at a rate higher than expected for a typical 4-lane undivided urban arterial.

Per the Federal Highway Administration (FHWA), reductions in vehicular travel lanes and installation of TWLTL and buffered bicycle lanes promote safety including reduced vehicle speeds, reduced vehicle-pedestrian, bicycle, and vehicle conflicts, and operational benefits. The figure below illustrates conflict points and safety issues related to turning movements for four-lane undivided roadways and three-lane cross sections.

Figure 3 – Conflict Point Comparison between Four-Lane Undivided and Three-Lane Highway



Source: https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/rdig.pdf

Operational benefits include separating left turns, side street traffic crossing, and speed differential reductions.

Pedestrian benefits include reducing exposure to conflicting vehicular movements and greater distance between vehicular travel lanes and sidewalks.

Bicyclist benefits include a painted buffer between vehicular traffic and bicycle traffic.

The conversion of a 4-Lane undivided highway into a 3-lane configuration with bike lanes is one of the Countermeasures supported in the City of Riverside Local Roadway Safety Plan.

Traffic Level of Service Impacts

The Public Works Department also analyzed current and future traffic capacity impacts of the proposed striping configuration.

The City uses Level of Service (LOS) to measure the performance of roadway segments based on speed, travel time, freedom to maneuver, and delay. The methodology considers traffic volumes, roadway geometry, and other control conditions. Segments are graded on an A-F scale, in which LOS A is free flow traffic, and F is severe congestion.

While designated as a 2-lane collector, Linden Street effectively operates like a 4-lane arterial due to its curb-to-curb width and lane configuration. 4-lane arterials operate with acceptable average daily traffic (ADT) up to 22,000 vehicles per day. Traffic counts show over 6,300 motorists use Linden Street daily, well within acceptable levels.

Applying the counts to a 2-lane collector configuration, Linden Street still maintains LOS A.

Table 4 – Existing and Proposed Segment Level of Service (Current Year)

Roadway Segment		Effective Classification	LOS E Capacity	ADT	LOS
Existing Conditions	Linden St: Chicago Ave to Cranford Ave	4-Lane Arterial (88')	**22,000**	6,324	A
	Linden St: Cranford Ave to Iowa Ave	4-Lane Arterial (88')	**22,000**	5,743	A
Proposed Conditions	Linden St: Chicago Ave to Cranford Ave	2-Lane Collector (80')	**12,500**	6,324	A
	Linden St: Cranford Ave to Iowa Ave	2-Lane Collector (80')	**12,500**	5,743	A

The proposed reconfiguration of the 4-lane undivided arterial to a 2-lane collector with a TWLTL, bike lanes, and loading zones is functionally appropriate for the current traffic volumes.

Traffic on Linden Street is most impacted during the arrival and dismissal times of North High School. Parents and students occupy the number one eastbound lane on Linden Street at Cranford to make a left turn into the school driveway. This creates operational challenges and undesired conditions while traffic is stopped in a through lane. The proposed striping project will allow motorists to stack in the TWLTL which serves its intended purpose.

Parents and students also utilize the north side of Linden Street, east of Chicago Avenue, as a loading zone for students. There is no striping delineating the loading zone. The proposed project will delineate the loading zone with striping which will enhance utilization.

The traffic impacts to the signalized intersections of Chicago Avenue and Linden Street and Iowa and Linden were not studied as part of this analysis because both signalized intersection lane geometry is unchanged with the proposed striping revision.

Implementation of the Project would also increase safety for motorists by removing left-turning vehicles from through lanes, increasing sight distance, and discouraging speeding. Additionally, emergency vehicles would experience similar or improved access and response times with the proposed layout. The Project would directly improve pedestrian safety by reducing exposure across travel lanes. Cyclists would also benefit with the installation of the buffered Class II bike lanes. The enhanced bike lanes would provide increased separation of cyclists from vehicular traffic, while serving as a more comfortable alternate route for cyclists currently using University Avenue or Third Street while cycling between UCR and Downtown Riverside. Furthermore, enhancements made to the loading zone adjacent to North High School will facilitate student pick-up and drop-off operations.

Section 21080.19 Public Resources Code specifically exempts projects to restripe streets to relieve congestion. A major component of this Project is the installation of a center two-way left-turn lane to reduce the congestion and related accidents associated with vehicles stopping in a through lane waiting to turn left. Sections 15301(c) and 15304(h) of the CEQA Guidelines also exempt minor alterations to existing facilities and the creation of bike lanes in existing rights-of-ways. Furthermore, the proposed bike lanes are consistent with the City's Active Transportation Plan.

If approved and implemented, the Project would include ongoing observation by Public Works

Department staff to ensure proper and efficient progression over the three year pilot period. Should adjustments be necessary to optimize operations, changes to striping and/or signal timing can be executed to achieve desired performance.

FISCAL IMPACT:

The total fiscal impact of the proposed striping project is approximately $100,000. This is incorporated in the existing Pavement Management Program and is not an additional added cost. Funding is budgeted and available in the Measure A Fund, Major Streets Rehab Project account number 9888030-440313. The material and labor cost of installing the proposed striping design or maintaining the existing striping design is functionally equivalent.

Prepared by:	Brett Craig, Principal Traffic Engineer
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Certified as to availability of funds:	Julie Nemes, Finance Director
Approved by:	Kris Martinez, Assistant City Manager
Approved as to form:	James Johnson, City Attorney

Attachments:

1. Location Map
2. Circulation Element Excerpt
3. Traffic Count Data
4. Existing and Proposed Roadway Cross Sections
5. 6-3-2026 Transportation Board Meeting Minutes
6. Presentation