



Administrative Report

H.7., File # 25-1626

Meeting Date: 12/2/2025

To: MAYOR AND CITY COUNCIL
From: ANDREW WINJE, PUBLIC WORKS DIRECTOR

TITLE

RECEIVE AND FILE A STATUS REPORT ON THE CITY'S MICROMOBILITY NETWORK

EXECUTIVE SUMMARY

As part of the City's Strategic Planning Process, the City Council requested staff provide a report on bicycle safety efforts, along with active transportation and micromobility projects that are included in the City's Capital Improvement Program (CIP). Micromobility is defined as transportation using lighter weight devices such as bicycles, e-bikes, scooters, and golf cart style neighborhood electric vehicles (NEV). The term, and its associated infrastructure, are intended to encompass the wide variety of existing and future mobility devices that have expanded in personal transportation in the South Bay Region.

In most cases, micromobility infrastructure also supports and complements pedestrian infrastructure. The City has advanced various efforts over the years including plans, guidelines and projects to support micromobility. Some examples include the South Bay Bicycle Master Plan (SBBMP), the adopted Living Streets Design Manual, and the South Bay Local Travel Network (LTN). These efforts have been incorporated and funded over a number of years in the City's operating budget and the CIP. At the time the SBBMP was adopted, 22%* of the adopted bicycle lane network was completed. Since adopting the SBBMP, the City has completed another 22%* (as of May 2025) of the adopted/proposed network. The City will continue to build out its portion of the SBBMP and LTN, subject to feasibility, funding, and City Council approval.

Some portions of the SBBMP and LTN also require the approvals from neighboring agencies. Currently, an additional 8% of the adopted network is in design, largely within the Metro Active Transportation (Redondo Beach BI) and North Redondo Bike Path Extension projects. Approximately \$8.25 million in Regional Measure M funds (non-local funds) have been approved for these projects thus far, with additional funds requested for construction. This item serves as a status update on the existing micromobility network, segments programed for construction in the CIP, and some high-level constraints that may complicate further implementation of the City's micromobility network in the future.

BACKGROUND

South Bay Bicycle Master Plan (SBBMP)

The SBBMP was adopted by the City Council in 2011 and serves as the primary guiding document for implementing bicycle facilities in seven South Bay cities. It promotes a continuous two-way

network of bicycle facilities that cross city boundaries. The plan promotes multi-jurisdictional facilities so that members of the public do not get stranded at City boundaries within the South Bay. The BMP consists of the following facility types that were commonly seen in California in 2011:

- Class I - Off-street shared-use path for cyclists and pedestrians
- Class II - Dedicated striped bicycle lane
- Class III - Shared-use street/bike route (typically slower and less busy streets)
- Bicycle Friendly Streets - Enhanced traffic calming on residential streets

Since adopting the SBBMP, new state law has prohibited the designation of Class III bike routes on higher speed arterials (>30 mph), and industry practice has largely removed distinctions between Class III bike routes and “bicycle friendly streets.” Advancements in e-bike technology has allowed more members of the public to more confidently ride on streets. In addition, a new Class IV category has emerged, which consists of on-street separated/protected bicycle lanes. Class II bicycle lanes differ from Class IV in that they offer dedicated space for cyclists but are simply delineated with striping. This results in bicycle lanes that can be occupied by parked vehicles and subject to safety issues such as turning conflicts, errant drivers and riders, exposure to higher vehicle speeds, and parked vehicle doors that open within the cyclist path of travel.

Class IV protected bicycle lanes address many of these issues by adding physical features and separation between cyclists and drivers. Class I and IV facilities are considered the most effective treatment on or adjacent to busier and faster streets to achieve desired safety and ridership outcomes. Bicycle facilities that provide separation from other transportation modes are especially important to potential bicycle riders who are “interested-but-concerned.” Not every street requires protected bicycle lanes, while not every street needs to be designated as a bicycle route. Oftentimes, streets with lower speeds and volumes reduce risks for drivers and cyclists, such that physical protective treatments are not necessary. The City must take into account existing constraints, costs, and demands within the right-of-way when deciding which treatments, if any, to apply to a public street. Oftentimes there is insufficient right-of-way to provide all of the desired vehicle and bicycle facilities. The Adopted SBBMP Map is attached to show the adopted map of SBBMP bikeways within Redondo Beach and the City’s existing/under-construction Class I, II, and IV bikeways.

A table is also included showing each existing and proposed Class I, II, and IV facility within Redondo Beach (or a street that is jurisdictionally split). The table does not include the Marvin Braude Bike Trail (Beach Bike Path/The Strand) south of Harbor Drive. It also does not include Class III bike routes. Many of the City’s residential streets are considered “bike-friendly” and experience slow speeds and low volumes to provide similar levels of comfort expected from designated Class III routes. However, many of these routes do require signalized crossings at major intersections to provide functional utility. A number of these routes also overlap with the South Bay Cities Local Travel Network (LTN). It is the City’s intent to utilize grant monies to harmonize the LTN and Class III network where possible in the same way, since both networks share the same key features. These features may include traffic calming (curb extensions/roundabouts/etc.), traffic signals at major street crossings, wayfinding, and detection improvements at existing traffic signals. The second page of the table shows additional dedicated bikeways built, under construction, or in design that were not originally adopted in the SBBMP. Approximately 0.6 miles of bicycle routes were upgraded and built as Class II bike lanes. The table also includes other undesignated roadway segments that could be

upgraded to dedicated bicycle lane corridors, subject to feasibility.

Based on the map of SBBMP bikeways, the City has implemented about 5.5 miles of dedicated bicycle lane infrastructure (I, II, IV) since adopting the SBBMP, adding to the existing 5.5 miles that were built before the SBBMP. The City is also looking to upgrade already-implemented segments to current design practices as part of other CIP improvements. Most notably the City has initiated marking bike facilities with green paint, which is an adopted standard and helps motorists to anticipate bike use in the roadway.

The map also provides a high-level analysis of constraints and opportunities that complicate further implementation of the SBBMP. These constraints are typically the necessity to remove parking and/or travel lanes to accommodate micromobility lanes. Further study and community engagement would be required to determine the feasibility and support for repurposing roadway space for micromobility devices. In some cases, repurposing car-oriented infrastructure could yield benefits, such as traffic calming, improved roadway safety, reduced speeding, reduced vehicle-miles-traveled (VMT), lower maintenance costs, and furthering the City's sustainability goals. However, the potential and significant drawback of increased vehicle congestion makes it important to thoroughly evaluate each corridor's current and future vehicle use, observed speeds, and practical alternatives, before advancing possible right-of-way use changes.

Some roadway segments that were originally built (and widened) for traditional peak period commuting via full-sized vehicles could be feasibly right-sized to the emerging travel needs, practices, and desires of society. Hybrid work schedules, e-bikes, e-commerce, an aging population, and evolving lifestyle preferences have changed travel patterns. In addition, the City is receiving increased traffic safety-related complaints due to the proliferation of faster and bigger SUVs and trucks and the rapid acceleration capabilities of electric vehicles.

South Bay Cities Local Travel Network (LTN)

The LTN is a grant-funded project that aims to provide an easily-identifiable, seamless network of slower neighborhood streets around the South Bay suitable for micromobility travel. This network uses existing slower-speed streets and does not add dedicated bicycle lanes. Because the majority of vehicular trips in the South Bay are less than three miles in length, these types of trips have the greatest potential to be made with smaller-sized mobility devices, such as neighborhood electric vehicles (NEV), golf carts, e-bikes, and scooters. The City Council approved the City's LTN network in February 2025 and City staff is currently preparing a contract award recommendation. The LTN will largely serve as the City's Class III/bicycle-friendly streets network, since it has been funded by a Metro Measure M grant (\$1,272,700). At this time, the City is in the process of installing network identification and wayfinding signage and sharrows that help guide micromobility devices through neighborhoods on slower-speed residential streets that cross major arterials at existing traffic signals. The current LTN Map is also included for reference. As a second phase, the City will improve signal detection capabilities and perform spot improvements at intersections to ensure that all micromobility devices are able to cross major streets more easily.

Future Projects

By providing a connected network of streets that facilitate safer micromobility usage, the City hopes to encourage and enable a shift from full-sized vehicles to create less traffic congestion, and lower maintenance and liability costs. The City is continuing to seek opportunities to implement the SBBMP and LTN with grant funding, or when streets are due for resurfacing. Here are the following

CIP projects that could include micromobility network improvements, subject to funding and feasibility:

- Artesia Boulevard Resurfacing (feasibility unknown)
- Aviation Boulevard Resurfacing (feasibility unknown)
- Bicycle Transportation Plan Implementation (ongoing)
 - FY25-26 monies to be used for bicycle racks, NRBB striping/signage refresh, Palos Verdes BI Class IV design, and other minor improvements
- Catalina Avenue Resurfacing - North of Ruby (feasibility unknown)
- Grant Avenue Resurfacing Phase 1 - Harkness to Green (Buffered Class II designed)
- NRB Bikeway Extension (Felton to Inglewood, nearly complete)
- NRB Bikeway Extension + Terraced Native Garden (Inglewood to Grant Design)
- Riviera Village Pedestrian and Multi-Modal Enhancements
- South Bay Local Travel Network (LTN)
- Citywide Traffic Calming Improvements (Ongoing)
- Traffic Signal Communications and Network System Phase 2 (feasibility unknown)
- Boat Launch Installation and associated Vehicle Ingress/Egress Modifications (Driveway/Harbor bikeway safety improvements)

Bicycle Count Data

The Redondo Beach community has experienced a significant uptick in active mobility in recent years. Various reasons for that include the pandemic's effects on outdoor recreation and health, proliferation of micromobility technology, more favorable alternatives for commuting (especially among students), increased "aging-in-place," and a desire to reduce car dependency and ownership costs. This shift has been coupled with regional and local efforts to construct micromobility networks to support these changes.

The City collected bicycle and pedestrian counts at seven locations, mostly around the northern neighborhoods where a large majority of RBUSD students live. 24-hour counts were collected on Thursday, May 2, 2024, and one year later on Thursday, May 8, 2025. Weather and school conditions were the same between both count days. While only two days of data were collected, high-level trends can be observed in the one year that passed from 2024 to 2025. Counts were taken at the following locations, shown in the attached Micromobility and Pedestrian Counts.

1. Beryl Street (Maria to Paulina)
2. Diamond Street (at Flagler alley)
3. Grant Avenue (Rindge to Slauson)
4. Rindge Lane (South of Artesia)
5. North Redondo Beach Bikeway (North of Artesia)
6. Vail Avenue (south of Manhattan Beach Boulevard)
7. Manhattan Beach Boulevard (Doolittle to Rindge)

As shown in the count, the City experienced significant increases in this 12-month period. Particularly, there was an approximately 27% increase in cyclists who pass by either Beryl Street or Diamond Street near Prospect Avenue, which is required for the vast majority of student cyclists going to/from RUHS. Nearly 500 cyclists per day are riding through the Flagler/Diamond alley bike

path, a key, low-stress connection between north and south Redondo Beach. Many of these trips would have otherwise been taken by car, which shows the ability for micromobility networks to reduce traffic. On Manhattan Beach Boulevard, where Class II bicycle lanes were installed between the count dates, cycling also increased, while the number of cyclists riding on sidewalks decreased dramatically. This points to how bicycle lanes can benefit other roadway users.

Bicycle/Pedestrian-Involved Collisions

City staff performed a high-level collision analysis for those involving bicyclists and pedestrians for the calendar years of 2020 through 2024, a five-year period that is also included as an attachment to this report. It shows year-on-year trends for collisions that involve at least one cyclist, and for collisions that involve at least one pedestrian. The number of collisions involving cyclists has increased over the past five years, including crashes that result in injuries. It is quite possible that the increase in the total number of collisions may be attributed to a corresponding increase in overall ridership, rather than an increase in per capita crash rates. A comprehensive roadway safety study would be required to draw any significant conclusions. Per the data, from 2020 to 2024 the City experienced six serious injury crashes involving cyclists, with no fatal cyclist crashes. With regards to pedestrian-related crashes, the total number of crashes has been relatively stable between 2020 and 2024, with the City experiencing one fatal pedestrian crash and 14 serious injury pedestrian crashes. In comparison, the City experienced seven fatal crashes and 55 serious injury crashes during 2020-2024 that only involved vehicles.

It is recommended the City Council receive and file this information to add to the City's public record regarding the micromobility and active transportation efforts undertaken and/or planned in the City.

COORDINATION

Engineering staff coordinated with local advocacy groups on the assumptions and parameters used to determine the current implementation percentage of the SBBMP.

FISCAL IMPACT

There is no fiscal impact associated with this item. Funding for the preparation of the status report is available in the Public Works Department's annual budget and work plan.

APPROVED BY:

Mike Witzansky, City Manager

ATTACHMENTS

- Map - Adopted SBBMP Map
- Table - SBBMP Class I, II, & IV Current Implementation and Constraints
- Map - Adopted SBCCOG LTN Map
- Table - 2024-2025 Micromobility and Pedestrian Counts
- Table - 2020-2024 Bicycle and Pedestrian Crashes