CITY OF GLENDALE, CALIFORNIA

REPORT TO THE CITY COUNCIL

AGENDA ITEM

Report: Project Update- Bicycle Transportation Plan

1. Motion providing direction on the update of the Bicycle Transportation Plan.

CITY COUNCIL ACTION

Item Type: Action Item

Approved for July 30, 2024 **calendar**

EXECUTIVE SUMMARY

The City Council initiated the update of the Citywide Bicycle Transportation Plan (BTP) in February 2022, with a vision to shape the next two decades of safe, convenient, and inviting biking infrastructure in Glendale.

Engaging the public through an interactive online map and significant outreach events, as well as input from the city staff and Buro Happold Consulting Engineers technical team, Project Development Team (PDT), Planning Commission (PC), Sustainability Commission (SC), and Transportation and Parking Commission (TPC), resulted in the development of a well-connected citywide proposed Bikelane Network. In this report, staff presents an update on the progress of the BTP development, and requests further input and direction from the City Council on the proposed Bikelane Network (Exhibit 1), implementation phasing (Exhibits 2 & 3), cost estimate (Exhibit 4), and policy recommendation (Exhibit 5). The overarching goal for the BTP is to establish an all-ages, all-abilities Bikelane Network for the entirety of Glendale.

RECOMMENDATION:

Provide direction on the update on the Bicycle Transportation Plan.

ANALYSIS:

On February 15, 2022, City Council awarded a contract to Buro Happold Consulting Engineers, Inc., to update to Bicycle Transportation Plan. The purpose of the updated BTP is to address components of a complete system including infrastructure, community outreach, and evaluation of policy and infrastructure improvements that will ensure greater success of the city's multi-modal infrastructure.

The BTP update has been informed by plans that have been newly adopted and those that are still in progress, including the recently adopted Citywide Pedestrian Plan, the West Glendale Sustainable Transportation, the Verdugo Wash Visioning, and the Metro NOHO Pasadena Bus Rapid Transit project. The BTP also includes new insights and ideas in today's context as well as interventions developed in active transportation planning at the regional and state levels. The BTP seeks to improve bicycle and pedestrian safety, both of which are important Council priorities.

The following aspects (tasks) have been assessed and included in the updated BTP:

- Identifying viable bicycle and pedestrian corridors, linking to the city's existing mobility policy and plan structure, including the Citywide Pedestrian Plan, Safe Healthy Streets Plan and West Glendale Sustainable Transportation, Safe Routes to School, and Citywide Safety Education Plan.

- Assessing intersections and corridors with high bicycle collision rates, as well as identifying intersections with high bicycle and pedestrian volumes.

- Targeting improvements and developments of bicycle infrastructure, which provides safety and connectivity in Glendale's multimodal system.

- Creating a coordinated and targeted community outreach strategy throughout the update of the plan development, including coordination with any ongoing city education and safety programs, so that each effort informs the others.

- Ensuring equity and that disadvantaged communities fully share in BTP program benefits; and

- Incorporating policy and infrastructure recommendations based on field work assessments, best practices in active transportation, and feedback received from the community and technical team.

Project Goals:

- **Safety:** Create a bike network that feels safe and encourages people to ride. Decrease frequency and severity of crashes while increasing biking overall.

- **Connectivity:** Create a connected bike network across the city that links major destinations to primary bike corridors.
- **Accessibility:** Create an all-ages, all-abilities bike network that is easy and enjoyable to use.
- **Equity:** Prioritize bike infrastructure in areas of equity concern.
- **Implementable:** Create a plan that is ambitious yet implementable, phased to meet current and future challenges.
- **Public Health**: Increase public health by encouraging active transportation.
- **Environment:** Reduce single occupancy vehicle trips for local trips.

Progress to Date

The BTP project team presented the proposed draft of the Bikelane Network to the Project Development Team on September 21, 2023 and January 10, 2024, Transportation and Parking Commission on November 21, 2023, the Sustainability Commission on December 06, 2023, and Council on January 9, 2024. Subsequently, adjustments were made based on the feedback to formulate the recommended Bikelane Network along with a comprehensive 20-year phasing plan. This phasing plan is delineated into four distinct phases, reflecting the project's priorities concerning safety, connectivity, community input, trip potential, trade-offs, social equity, and geographic equity. Staff then presented both the bike lane network and project phasing to the Project Development Team on March 11, 2024, Planning Commission and Sustainability Commission on March 6, 2024, and the Traffic and Parking Commission on March 25, 2024 for final comments, input, and recommendations. All the comments and questions from the commissions are attached in **(Exhibit 6).**

Also included in the report is a cost estimate and policy recommendations for the Bicycle Transportation Plan 20-year implementation plan. The final steps in this process, after receiving the comments and recommendations from the Council, include undertaking a California Environmental Quality Act (CEQA) analysis, initiating a 30-day public comment period, and ultimately presenting the finalized draft plan to the City Council for consideration of its adoption in early summer 2024.

Proposed Bikelane Network Recommendation:

Technical Analysis

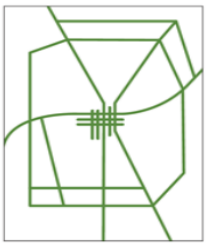
Developing the proposed Bikelane Network recommendations was a careful process that combined analysis of existing conditions, extensive public feedback, and input from staff, the Project Development Team, Commissions, and the City Council. The goals for the project were established through outreach with the public and the PDT, with the greatest priorities being to create a safe, connected, and all-ages, all-abilities network. Other priorities include incorporating public feedback and developing an implementable network. With project priorities in mind, the project team established two network

principles: “spiderwebs” (i.e., connections between neighborhoods) and connected neighborhoods (i.e., connections within neighborhoods). An analysis was then conducted to combine the crash and destinations data with public input on where people would like to bike. This analysis produced the first proposed draft network. Using guidance from the Federal Highway Administration (FHWA), Caltrans, and the National Association of City Transportation Officials (NACTO), a facility type was selected for each corridor based on three primary factors: road typology, vehicle volume, and speed limit. The facility selected for each corridor maximizes safety and connectivity for cyclists.

The proposed bike network went through a rigorous drafting process that involved key stakeholders throughout. The project team developed Draft #1 in August 2023, based on the technical analysis, including the crash analysis, public outreach, and connecting key destinations and neighborhoods. The complimentary network principles of “spiderwebs” and “connected neighborhoods” were used to develop this first draft. “Spiderweb” offers a centralized network of bicycle routes supporting short, all-purpose trips which are fed by direct routes that support longer-distance trips. “Connected neighborhoods” create smaller neighborhood networks of facilities which are connected by longer-distance “distributor routes.”

Network Principles

Spiderweb



Connected Neighborhood

Draft #1 was reviewed by city staff in the Community Development Department (CDD) and Public Works Department (PWD) and was modified to create Draft #2 in August 2023. The second draft was then presented to the Project Development Team (PDT) and edited based on their feedback to create Draft #3 in October 2023. This third draft was presented to the public at open houses and online through the webmap, to the Transportation and Parking Commission, and Sustainability Commission. Based on the feedback gathered during this critical phase, Draft #4 was created in December 2023 and presented to City Council for comments. Finally, based on the comments from City Council, Draft #5 was created in January 2024. This final version was then used for the phasing and costing analysis.

Facility Definitions

• **Class I Multi-Use Path**: An off-street facility with exclusive space for bicyclists and pedestrians, with minimal crossings by vehicle traffic.

• **Class II Bike Lane**: A conventional striped bike lane denoted by pavement markings.

• **Class II Climbing Lane**: A striped bike lane in the uphill direction that provides separation between bicyclists and vehicles for bicyclists ascending steep hills.

• **Class III Bike Routes**: Signed bike routes on low-stress streets that use a shared lane, designated through shared lane markings and signage.

• **Class III Bike Boulevard**: Low-stress, marked bikeways located on low-volume, low-speed local streets that operate as shared streets. These require traffic-calming features such as neighborhood traffic circles, chicanes, and traffic diverters to maintain low vehicle speeds and volumes.

• **Class IV Protected Bike Lane:** Bike lanes that are physically separated from vehicle traffic and parking lanes using vertical and horizontal features, such as bollards, planters, barriers, and parked vehicles. **Exhibit 7** illustrates facility types.

These recommendations are the culmination of almost two years of analysis, public outreach, and collaboration between project team members, city staff, the public, stakeholders, Commissions, and City Council. **Exhibit 1** illustrates the draft proposed Bikelane Network recommendations.

Proposed Bikelane Network Mileage:

Facility Type	Proposed Miles
Class I Multi-Use Path	0.3
Class IV Protected Bike Lane	46.7
Class II Bike Lane	13.2
Class II Climbing Lane	3.5
Class III Bike Boulevard	24.9
Class III Bike Route	1.6
Total	90.3

Crash Analysis

The crash analysis utilizes data on bicycle involved crashes from California's Statewide Integrated Traffic Records System (SWITRS) and Glendale Police Department and reflects requested changes from both city staff and the PDT, including expanding the date range from 5 to 10 years from 2012 to 2021 to better understand pre- and post-pandemic trends. Property Damage only crashes were also included in the analysis after comments from the PDT.

Overall, the data on **Exhibit 8** shows crashes involving cyclists declining over the analysis period. Compared to Pasadena and LA County, Glendale has lower crash rates. The crash analysis also highlighted corridors with a greater safety concern. These corridors tend to be the wider arterials through downtown that carry large volumes of traffic during rush hour and have higher speeds when not congested. These include

segments of Glenoaks Blvd., South Brand Blvd., Colorado St., Broadway, South Glendale Ave., North Glendale Ave., Verdugo Rd., Pacific Ave., San Fernando Rd., South Central Ave., and Chevy Chase Dr.

The crash analysis, along with an analysis on equity, demographics, trip demand, PDT recommendations, public input and survey results informed the proposed draft Bikelane network.

Project Phasing

A phasing plan was developed for the final proposed network using the project goals to establish a ranking criterion, mixed with a deep understanding of local needs, priorities, and geography. (**Exhibit 2**)

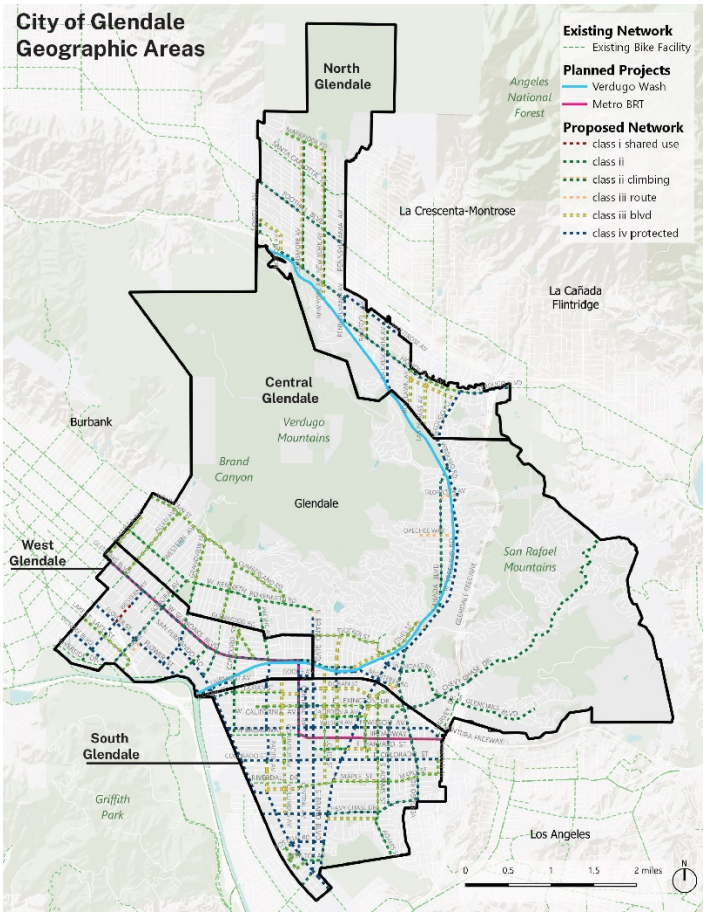
Given that Glendale does not have an existing connected bike network, it was important to build key corridors in the first phase to create connected neighborhoods. Phase 1 are those key corridors, which are drawn from our network principles of “spiderwebs” and “connected neighborhoods.” The projects in the subsequent phases were selected based on their connectivity to prior phase(s), geographic equity, and weighted score among seven criteria listed below. Adjustments were made to ensure that the project phasing created a safe, connected, and buildable network.

Using the project goals, six ranking criteria were developed and confirmed with the PDT, Commissions, and the City Council. The criteria, ranked by priority, are:

1. **Safety**: Crash density, based on the crash analysis conducted.
2. **Connectivity**: Connected to key destinations, based on the destinations analysis conducted.
3. **Community Support**: Received support in online survey, web map, or in person events.
4. **Trip Potential**: Serves an area with a high concentration of short trips, based on the trip potential analysis conducted.
5. **Trade-Offs**: Requires a lane reconfiguration (i.e., a moving or parking lane is reallocated as a bike facility). Trade-offs on arterials were given a lower score than trade-offs on minor streets.
6. **Social Equity**: Serves an area of equity concern, as defined by the California Healthy Places Index.

A seventh criteria of geographic equity was used to evenly distribute projects between phases.

Geographic Equity: This criterion does not have an associated score. It was used to distribute projects evenly throughout Glendale for each phase. The four zones are shown in the map below and **Exhibit 3:**



Criteria 1 through 6 were assigned a weight based on overall project priorities based on feedback from stakeholders and policy makers. The distribution of weight is listed below, with safety ranking highest:

Criteria	Ranking	Weight
Safety	6	28.6%
Connectivity	5	23.8%
Community Support	4	19.0%
Trip Potential	3	14.3%
Trade-Offs	2	9.5%
Social Equity	1	4.8%
Total		**100%**

The proposed bike network was divided into individual projects based on corridor and facility type. Each project was then assigned a score for metrics 1 through 6 and adjusted to account for weighting listed above. It should be noted, the final weighted scores were not the only factor used to determine phasing. Connectivity to prior phase(s) and geographic equity impacted ultimate rankings, with further adjustments to balance phasing lane miles and project complexity. For example, La Crescenta Avenue received

a weighted score of 53% but was included in Phase 1 because it is an already planned project.

The proposed network is divided into four phases. Each phase is estimated to take five years, totaling 20 years to complete all improvements.

Cost Estimate

The cost estimates provided in this report represent planning-level assessments intended to provide an initial understanding of project expenses. These estimates serve as a foundation for individual bikeway projects, with further refinement expected during subsequent design phases. Cost estimates do not necessarily include the full cost of the associated capital project as bike projects are done in conjunction with larger repaving or reconfiguration projects. These estimates do not include the costs of items such as sidewalk ADA upgrades or full repaving.

Table 1 illustrates the rounded per mile cost estimates for different facility types in the Glendale Bike Plan are as follows:

Facility Type	Rounded Per Mile Cost Estimate (2023)	
	Low Cost	High Cost
Class I	$ 9,000,000	
Class II	$ 710,000	$ 3,330,000
Class III - Bike Route	$ 470,000	
Class III - Bike Boulevard	$ 880,000	$ 1,770,000
Class IV	$ 2,590,000	$ 9,170,000

Table 2 outlines the rounded cost estimates by phase:

Phase	Rounded Cost Estimate (2023)	
	Low Cost	High Cost
1	$ 50,232,000	$ 180,219,000
2	$ 53,160,000	$ 166,800,000
3	$ 30,750,000	$ 103,470,000
4	$ 24,418,000	$ 81,451,000
Total	**$ 158,560,000**	**$ 531,940,000**

These estimates are detailed in **Exhibit 4** of the memo provided by consultant Buro Happold.

STAKEHOLDERS/OUTREACH

Outreach was conducted in two phases to provide the public with a tangible framework to ensure the most valuable feedback. During the first phase of the project, which established existing conditions and set project goals, the project team participated in a variety of public outreach events. Outreach was primarily focused on understanding how the community bikes or perceives biking in Glendale, and engage the public in the planning process. The team participated in seven events for the first phase of outreach in 2023:

1. April 22: City Earth Day Fair, Pacific Community Center & Park
2. April 27: Earth Day Celebration, Glendale Community College
3. April 27: Shaping the Future of Energy, Central Library
4. May 17: Bike to Workday
5. June 10: Mayor Bike Ride & Americana at Brand outreach event
6. June 22: Go Glendale Bike Safety 101 Workshop
7. June 24: Bike Safety Day, Pacific Park

During the seven events, attendees completed a survey, shared their opinions on interactive boards, and provided their contact information for further engagement. The survey was available online in English, Armenian, Spanish, and Korean and asked 17 questions about biking, safety, trip types, priorities, and demographics. Over 400 community members responsed to the survey.

Overarching themes from the survey and outreach events were that people wanted safe, connected, and useable bike infrastructure. Alongside the public events and survey, the BTP updates and progress were shared online on the City website and through non-profit organizations' websites such as Walk Bike Glendale and Go Glendale.

Additionally, details about the plan and outreach efforts were disseminated via e-newsletters from the Office of Sustainability, Community Services and Parks, Economic Development, and Walk Bike Glendale. Similarly, physical flyers were distributed to key locations, including bike shops, the Glendale YMCA, all City libraries, and during the Riverwalk Workday event.

Dates of the second phase of outreach for proposed Bikelane Network in 2023:

1. October 21: Glendale Annual Fall Festival, Pacific Community Center & Park
2. October 27: Youth & Student Workshop, Glendale Community College
3. November 8: Teen Workshop for 13- to 18-year-olds, Central Library
4. November 11: BTP Open House, Spar Heights Community Center
5. November 12: BTP Open House at the Adult Recreation Center

The second phase of outreach allowed the public to view the comments received from phase one in a visual format. Attendees of these events had the ability to comment both digitally and physically on display boards.

This second phase garnered greater interaction by the public as it demonstrated a map of the proposed Bikelane Network.

FISCAL IMPACT

There is no fiscal impact associated with this report.

ENVIRONMENTAL REVIEW (CEQA/NEPA)

N/A

CAMPAIGN DISCLOSURE

This item is exempt from campaign disclosure requirements.

ALTERNATIVES TO STAFF RECOMMENDATION

1. Note and file the report and provide further direction and refinement to the proposed Bicycle Transportation Plan.

ADMINISTRATIVE ACTION

Submitted by:
Bradley Calvert, Director of Community Development

Prepared by:
Arezoo Kamali, Planning Associate
Fred Zohrehvand, Principal Mobility Planner

Approved by:
Roubik R. Golanian, P.E., City Manager

EXHIBITS:

Exhibit 1: City of Glendale Proposed Bikelane Network
Exhibit 2: City of Glendale Proposed Network Phase 1 to 4
Exhibit 3: City of Glendale Geographic Areas
Exhibit 4: Cost Estimate
Exhibit 5: Policy Recommendation
Exhibit 6: TPC, SC, and PC Comments and Recommendations
Exhibit 7: Facility Definitions
Exhibit 8: Crash Analysis Findings