CITY OF HIGHLAND
REGULAR MEETING OF THE PLANNING COMMISSION AGENDA

REGULAR MEETING
January 19, 2021
6:00 p.m.
City Hall
Donahue Council Chambers
27215 Base Line
Highland, California

MEMBERS
Randall Hamerly, Chair
Chandra Thomas, Vice Chair
Edward Amaya, Commissioner
Jarrod Miller, Commissioner
Jessica Sutorus, Commissioner

STAFF
Lawrence A. Mainez, Community Development Director
Kim Stater, Assistant Community Development Director
Ashiq Syed, Associate Planner
Salvador Quintanilla, Associate Planner
Angela Tafolla, Planning Technician II
Camille Goritz, Administrative Assistant III

MISSION STATEMENT

Highland is dedicated to the betterment of the individual, the family, the neighborhood and the community. The City Council and the staff of Highland are dedicated to providing the quality of public facilities and services that its citizens are willing to fund and will do so as efficiently as possible.

Visit the City's Website at: www.cityofhighland.org

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Pursuant to Government Code Section 54957.5, any disclosable public records related to an open session item on a regular meeting agenda and distributed by the City of Highland to all or a majority of the Planning Commission, less than 72 hours prior to that meeting, are available for public inspection at Highland City Hall, 27215 Base Line, Highland, CA 92346, during normal business hours.

SPECIAL NOTICE REGARDING COVID-19

In accordance with Governor Newsom's Executive Order N-25-20 and N-29-20, this meeting is being conducted via teleconference/Zoom. Anyone can join the meeting virtually or by phone:

To join the Zoom Meeting online: https://zoom.us/j/97840862536

- Listen to the meeting by calling (669) 900-9128 and enter the Meeting ID: 978 4086 2536#

Toll free phone numbers:
(877) 853-5247 or (888) 788-0099
Meeting ID: 978 4086 2536#

Submission of Public Comments: For those wishing to make public comments (items not on the agenda), please submit your comments by email to be read aloud at the meeting by the Community Development Administrative Assistant. Email comments must be submitted by 5:00 p.m. on January 19, 2021, to publiccomment@cityofhighland.org.
For those wishing to make a public comment regarding a public hearing item, please identify the agenda item in the subject line. Comments can be submitted any time prior to the meeting, as well as during the meeting up until the end of the corresponding item. Please email your comments to publiccomment@cityofhighland.org.
For those wishing to make a public comment regarding an item on the agenda, please identify the agenda item in the subject line. Email comments must be submitted by 5:00 p.m. on January 19, 2021, to publiccomment@cityofhighland.org. All email comments received by the deadline will be read aloud and shall be subject to the same rules as would otherwise govern speaker comments at the Planning Commission meeting.

PLANNING COMMISSION
REGULAR MEETING AGENDA
January 19, 2021 – 6:00 P.M.

CALL TO ORDER

Pledge of Allegiance

COMMUNITY INPUT (ITEMS NOT ON THE AGENDA)

CONSENT CALENDAR

1. Minutes from the December 15, 2020 Regular Meeting.
   RECOMMENDATION: That the Planning Commission approve the minutes, as submitted.

PUBLIC HEARING

2. City of Highland Active Transportation Plan (ATP); a comprehensive plan for the network of trails, bike lanes, sidewalks, and other elements to support safe walking and bicycling in the City [*continued from the December 15, 2020 Planning Commission meeting*].
   RECOMMENDATION: Staff recommends the Planning Commission:

   1) Adopt Resolution No. 2021 – ____, recommending the City Council approve and adopt the City of Highland Active Transportation Plan (ATP), and direct Staff to file a Notice of Exemption with the County Clerk of the Board.

3. Conditional Use Permit (CUP 20-003) to redevelop an existing 5,800 square foot commercial building into a convenience store and the addition of a covered fueling station facility with eight (8) fuel pumps on a 0.48-acre parcel. (8020 Palm Ave)
   RECOMMENDATION: Staff recommends the Planning Commission:

   1) Adopt Resolution No. 2021 – ____, approving Conditional Use Permit (CUP 20-003) to redevelop an existing commercial building to a convenience store with a covered fueling station area and eight (8) fuel pumps, subject to the Conditions of Approval and Findings of Fact; and

   2) Direct staff to file a Notice of Exemption with the County Clerk of the Board of Supervisors.

ANNOUNCEMENTS

ADJOURN

I, Camille Goritz, Administrative Assistant III, of the City of Highland, California, certify I caused to be posted this agenda on or before the 14th of January by 5:30 p.m. on our website at www.cityofhighland.org and in the following designated areas:

Highland Branch Library 7863 Central Avenue	Fire Station No. 1 26974 Base Line	City Hall 27215 Base Line

Date: January 14, 2021

Camille Goritz, Administrative Assistant III

STAFF REPORT

TO THE PLANNING COMMISSION

DATE: January 19, 2021

FROM: Lawrence Mainez, Community Development Director

PREPARED BY: Camille Goritz, Administrative Assistant III CG

SUBJECT: Minutes from the December 15, 2020 Planning Commission Regular Meeting.

RECOMMENDATION: Staff recommends the Planning Commission approve the Minutes as submitted.

PUBLIC NOTICE: The agenda for this item was posted at the three locations per Resolution No. 2011-047 and on the City's website.

Approved _____	Motion _____	Second _____	Agenda Item No. 7
Denied _____	Ayes _____		
Continued _____	Noes _____		File No. _____
Tabled _____	Abstain _____		
	Absent _____		

Recording Secretary

Community Development Director

MINUTES
PLANNING COMMISSION REGULAR MEETING
December 15, 2020 – 6:00 P.M.

This meeting was conducted as a video conference meeting in a remote location. All votes during the meeting were conducted by roll call.

CALL TO ORDER

The regular meeting of the Planning Commission of the City of Highland was called to order at 6:00 p.m. by Community Development Director Mainez through video conference.

Present:	Chair	Randall Hamerly
	Vice Chair	Chandra Thomas
	Commissioner	Edward Amaya
	Commissioner	Jarrod Miller
	Commissioner	Jessica Sutorus

Staff Present: Lawrence Mainez, Community Development Director
Kim Stater, Assistant Community Development Director
Salvador Quintanilla, Associate Planner
Carlos Zamano, City Engineer
Matt Bennett, Assistant Public Works Director
Camille Goritz, Administrative Assistant III

The Pledge of Allegiance was led by Chair Hamerly

COMMUNITY INPUT (ITEMS NOT ON THE AGENDA)

None

CONSENT CALENDAR

1. Minutes from the November 17, 2020 Regular Meeting.

A MOTION was made by Commissioner Miller, seconded by Commissioner Sutorus, to approve the minutes as amended. Motion carried on a roll call vote, 5-0.

PUBLIC HEARING

2. Accessory Sign Review Application (ASR 20-006) is a request to amend the 7-Eleven Sign Program to increase the height and the overall sign area of two future monument signs which identify the gas station and future tenants along Greenspot Road and Boulder Avenue. **(Continued from the November 3, 2020, Planning Commission Meeting)**

Chair Hamerly opened the public hearing.

Associate Planner Quintanilla presented the staff report.

Warner LeMenager, Applicant stated I think the height of the sign is adequate for capturing what we need.

Chair Hamerly asked what is the exact positioning of the proposed staff recommended location of that sign? Is it outside of the 25-foot line of sight triangle?

Associate Planner Quintanilla replied yes, it is the proposed location will be out of the line-of-sight location and it has been verified with the Engineering Department.

Chair Hamerly stated both the modified conditions three and four those two signs will essentially be identical; wouldn't that revert to the original definition of monument sign A that was in the previously approved sign program?

Associate Planner Quintanilla stated the previously approved sign program was 10 foot 6 with 96 square feet over the sign area. The modified sign is 11 foot with a sign area of 106 square foot. It is going 6 inches taller and 10 square feet larger in the sign area.

Chair Hamerly stated the previously approved sign program there was only one destination both the letter A's, two monument signs, and they were identical. If the new destination sign B would be redundant since both signs are now identical, again?

Associate Planner Quintanilla replied yes, we will modify and call them as A.

Chair Hamerly closed the public hearing.

A MOTION was made by Commissioner Sutorus, seconded by Vice Chair Thomas, to approve:

1) Adopt Resolution No. 2020-012, to approve Accessory Sign Application (ASR 20-006) to amend the previously approved 7-Eleven Sign Program to increase the height and sign area of two (2) monument signs, subject to the Conditions of Approval, and Findings of Fact; and
2) Direct Staff to file a Notice of Exemption with the County Clerk of the Board.

Motion carried on a roll call vote, 5-0.

RESOLUTION NO. 2020-012

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HIGHLAND, CALIFORNIA, APPROVING ACCESSORY SIGN REVIEW NO. 20-006, AN AMENDMENT TO THE 7-ELEVEN SIGN PROGRAM PREVIOUSLY APPROVED BY THE HIGHLAND PLANNING COMMISSION ON AUGUST 21, 2018 BY RESOLUTION NO. 2018-012. TO INCREASE THE HEIGHT AND THE OVERALL SIGN AREA OF TWO MONUMENT SIGNS. THE SITE IS LOCATED AT 28359 GREENSPOT ROAD (APN: 1201-361-28, -29, & -30).

3. City of Highland Active Transportation Plan (ATP); a comprehensive plan for the network of trails, bike lanes, sidewalks, and other elements to support safe walking and bicycling in the City.

Chair Hamerly opened the public hearing.

Community Development Director Mainez presented the staff report.

Samuel Zneimer, Applicant presented the Active Transportation Plan (ATP) presentation.

Commissioner Miller stated when we look at the regional state and federal grants the criteria to acquire those grants are very specific. Did we look at the criteria and take it into account when developing the prioritization framework?

Samuel Zneimer stated we did not use what the state criteria was for some of the grants. We made sure that what we are proposing could be supported by a grant of some sort. One of the big grants you will see is the Active Transportation Plan (ATP).

Chair Hamerly asked what the monitoring process involved to gage success in reducing trips per day? How do these goals reflect our inability to control some of the macro issues?

Samuel Zneimer replied that will always be an issue of how much you can affect for air quality and those goals can be modified. Unfortunately, some of these are at the state regional level and in that section, it is state metrics that are utilized on a consistent basis for measuring process for Active Transportation Air Quality. City of Highland cannot affect all of those, but they are usually within Active Transportation Plans. These plans are unique to a community, so we are removing those ones due to your specific issues with them is understandable.

Chair Hamerly stated the compromise on that might be is if we are identified as a community of need, because of poor air quality that might help us qualify for the grant. If the grant is not tied to a metric of monitoring where it shows we have reduced our bad air quality to a certain threshold, because of these programs. I do not think that would be achievable, so I would not include those in the goal statements for what we are trying to achieve.

Samuel Zneimer stated when implementing goal settings for each of these plans a lot of the times the goals that are set are the ways you will receive a grant. I have not seen a grant program where you not meeting that goal works against the future in terms of air quality especially at this regional level, however it will be essential how we will receive these grants. We like to do goal setting that is ambitious, that would help the City in the long run.

Commissioner Amaya stated I am glad that there is an emphasis on equity in the plan and using CalEnviroScreen. The 210 freeway intersects our city and especially on the western portion that is where there is a big need. Regarding safety on page 112, is that specifically make it safe towards walking and biking because there is a lot of traffic and cars speed. Did people give input that they did not feel safe walking, because there might be vagrancy theft or crime?

Samuel Zneimer replied it took into account though it was more focused on the actual collision history. We had community input about safety issues regarding code enforcement or not feeling safe which we factored in. In terms of the recommendation, I did factor in crime, loose dogs, and code enforcement in my idea of making it safe.

Commissioner Amaya asked is there any survey as far as getting these projects up and running, do we think there will be enough people wanting to bike or enough bike parking?

Samuel Zneimer replied I did not take account if there is going to be enough bike parking at one specific location if these projects are up and running. In general, I recommend placing them at locations and destinations of interest.

Commissioner Amaya stated regarding existing barriers and one of big main barriers on the western side some of the infrastructure needs to improve.

Samuel Zneimer stated it is a very common thing to see infrastructure improvements as a barrier and a lot of communities especially in the disadvantage section is probably the most sighted barrier that I have seen.

Community Development Director Mainez clarified the page numbers that were called out by Commissioner Amaya were referenced to the page numbers from the agenda packet and not from the Active Transportation Plan (ATP) packet. Please refer to the page numbering on the ATP packet.

Commissioner Sutorus stated that she has worked on an Active Transportation Plan in the past. What was helpful with writing the grants to be funded was a budget attached with estimates for prioritization. I did not see that on the plan, were you going to have an opportunity to come up with estimates or leave as is?

Samuel Zneimer stated for this practice we are going to base it as our prioritization scale, unfortunately for this grant opportunity there was not enough funds to go into detailed as cost estimations of each of these projects.

City Engineer Zamano stated doing cost estimates at this level is very difficult and expensive. Working on numerous amounts of grant applications for the city can be expensive, although I see in this report when I reviewed it Samuel included range for cost estimates. He gave it a rating of low, medium, and high, which there is some information, but this document is meant to serve as a planning guide to help the city identity what the needs are. In regard to the Capital Improvement Program you will be pleased to hear there is quite a few project already in the works that are going to help boost and complete the projects that are listed in the packet.

Chair Hamerly asked Community Development Director Mainez if this would be an element that would be added to the City's general plan document or is this a stand-alone document?

Community Development Director Mainez replied this is a stand-alone document. This document is consistent with the general plan.

Chair Hamerly stated I noticed the city had an interactive site plan. There is an application called Strava which is for running and cycling and the real power of these things is the

interactivity. For example, if you are riding and see a pothole a lot of the time those applications will show an interactive feature to report an issue. If there was an interactive feature hosted by the City's Maintenance Department would not have to be on 24-hour call. They would have community input essentially virtually with unlimited watch from the community constantly on these improvements. The City would benefit putting together an app that people could load onto their phones and it will show the best route. It will map out the new path that has created. It would show how far it is going to be, how long it would take to arrive at the destination, and while in route the person could report a maintenance issue to the application.

Community Development Director Mainez recognized Associate Planner Quintanilla working with other team members to acquire a grant, which to tie into the Planning and Building and Safety permitting and entitlement software. If anyone that has an application in house could track it in real time. Also, the new software will allow the public to submit complaints related to Code Enforcement, Public Works, and Engineering Departments.

Chair Hamerly stated there are two different standards that I have come across for pedestrian activities. One is a quarter mile radius from every location is considered an easily walkable community and others will use a half mile standard to arrive to your destination. What was the figure that we were using to determine a reasonable walking distance when creating a connected series of paths within the City?

Samuel Zneimer stated we use our standard half mile for bicycle facilities and a quarter mile for pedestrian facilities in terms of rating of accessibility.

Chair Hamerly replied most of the corridors within Highland are the major east/west arterials. I am wondering how we met the goals of creating viable pedestrian opportunities if the distance to key destinations within the city is not within those convenient walking distances?

Samuel Zneimer stated that is the toughest elements of active transportation is that it is best utilized by something that is nearby. A lot of the time is distance, effort, and time as the three big reasons why they do not utilize active transportation for all their trips. Unfortunately, it does limit some accessibility. The best is to provide them with the best infrastructure and the opportunity to make those trips comfortable and safe as much as possible is the only way I have seen people overcome those barriers.

Chair Hamerly stated within the distance constraints that we have since we have a linear city that is very long east and west it seems making the trip as pleasant as possible is one of the most valuable tools we must encourage. More frequent rest stops, increasing the amount of shade and access to water might be high priority items to make those routes attractive. On the exhibits I noticed that the street names did not correspond with their proper location on the maps and the quality of the copy was poor. One of the issues with walking through the city is that certain areas of the ATP referenced not only pedestrian safe routes, but also universal designs and accessibility. In certain neighborhoods there are four-foot walkway standards, frequently there will either have a transformer or meter that reduces the sidewalk down that it is not an accessible clear path of travel. The different strategies to consider for creating safe pedestrian routes is to think seriously about increasing the right-of-way or the sidewalk width if we are going to incorporating utilities and public infrastructure that is encroaching those walkways. It is preferred that the walkway is completely unobstructed, however that is not always achievable.

City Engineer Zamano stated we do that at the project level. The City identities that the utility needs to be relocated we will reach out to the utility company to coordinate as part of the effort with the project.

Chair Hamerly stated I know the bike lane widths are usually calculated from face of curb which is not always safe. Sometimes those gutters are steep slopes and gutters to get greater water flow capacity and that does not lend itself to a safe cycling condition. My recommendation is the bike lane be measured on the pavement and not face of curb becauseit is not usable if you are including the gutters. Church Street has very high velocity traffic and a lot of storm drains.

City Engineer Zamano stated the way we approach things now is much better whenever we implement or move forward with a pavement rehabilitation project. A new practice is to look at the striping very closely and we make sure we give the maximum width to the bike lanes.

Chair Hamerly asked are there programs for educating the public to be aware that they are driving a route to school and need to slow down?

Samuel Zneimer stated that is a huge concern. On page 142 it has a picture of the slow down sign, and there are different public awareness campaigns to maximize peoples understanding of safety concerns of the user. It does not specially target motorist; the signage is supposed help.

Chair Hamerly stated the Shelton Trail between Bacon and Cloverhill the trail cuts off and you have to hike down around the canyon and back up the canyon to get back to Cloverhill. There is a trail that cuts across between those two streets and was wondering when that was going to reopen.

Community Development Director Mainez stated it is private property and the city does not have jurisdiction. The Trails Committee would be the one to review that issue.

Commissioner Miller stated on page 139 green infrastructure is mentioned and says the City of Highland will include green infrastructure when feasible. What is the city's vision for incorporating green infrastructure within these projects? Will green infrastructure be used as a tool and inquire additional funding and grants for these projects?

Community Development Director Mainez stated every project that is built in our city both private and public is required under state and federal law to implement green standards. We call it low impact development.

Commissioner Miller replied I am on board with that. I am very familiar with those requirements for LID. A lot of these different bike projects and smaller permit projects as it relates to transportation are exempt. Is it going to be only incorporated when its required or will there be additional consideration to include green infrastructure to maybe expand the funding options?

Community Development Mainez stated since we are an agency in California, we need to start thinking from that perspective. Even though we are exempt and not required, we need to explore how to make this green.

City Engineer Zamano stated the purpose of this is bringing our attention to the possibility of introducing this to more projects. It is giving us flexibility to optimize the projects and do it in a manner that is the best interest of the city.

Commissioner Miller stated I would love to see a little bit more aggressive language in there. We have these different requirements, but it sounds like you are willing to consider this maybe even when it is not required. There is a lot of grants out there available for green infrastructure.

Community Development Director Mainez replied we can add that language.

City Engineer Zamano stated as we construct some of these green belts, we do need to consider maintenance and it is one thing to build them, but who is going to maintain them. If we do not have a funding mechanism for that sometimes it makes it difficult to go and construct these types of beautiful improvements. We will consider that wherever it is possible and practicable.

Commissioner Sutorus stated working on a grant for ATP in the past they wanted that specific language. They would not consider us if we did not have attributes such as bioswales and permeable pavements in the grant document request. It sounds like it is a multi-million dollar project that is going take several years and if you can receive grant funding to help support pieces of it along the way those environmental attributes will be important to be competitive.

Commissioner Miller stated maintenance costs would be one of the items to consider in any feasibility study.

Chair Hamerly replied one of the biggest elements of maintenance has to do with plant materials and ground cover materials that are selected. Choosing things that do not have natural spreading capabilities that can thrive into the climate in which they are planted makes it that we do not have significant supplemental irrigation. That goes along ways to make it an attractive natural environment.

Community Development Director Mainez stated I will work with City Engineer Zamano to come up with language that will appease both Planning Commissioners and balance the future cost.

Chair Hamerly stated traffic calming and a lot of the tier one projects are on the major east/west arterials and that is walking a tight rope because the more traffic calming you put on Base Line or Highland Avenue the more congestion you are going to have. I am a firm advocate of traffic calming which there might be certain corridors that might not be advisable because of the volume of traffic and we want to people to get from their house to the freeway as quickly as possible. The split between what we are developing for recreational use versus what we are viewing as alternative transportation and trying to reduce trips per day. I did not see any loops in the proposed system and loops are much less monotonous. Is there any consideration given to creating loops of varying distances that have mileage markers and directional signs similar to developed bike and trail markings?

Samuel Zneimer stated I did not focus on recreational loops. This one was a very much focused on shifting trips and while it did have share used trails as part of the recreational

aspect of the plan overall. As far as wayfinding signage we did not put specific locations for those elements. We do make the recommendation to include an update wayfinding signage.

City Engineer Zamano stated one of the locations where you will find wayfinding signage is along Base Line. You will find the signage throughout the city already, and we are looking to add more wherever we can.

Chair Hamerly stated for the safe routes for school, I recommend somehow make a game out of it and make incentives for adopting the program.

Community Development Director Mainez stated prior to COVID-19, I used to meet with the principals from both Redlands and San Bernardino Unified School Districts. That was one of things that they talked about and promoted where they would incentivize kids walking safely to school and a couple schools would have pizza parties in honor of the students who met their goals.

Chair Hamerly stated making it fun is the best ways to facilitate adoption. In the future, the 210 freeway improvements are going to be completed. When they initially opened the freeway years ago, on a Saturday they shut down the whole strip from I think San Bernardino Ave and Rancho Cucamonga and it was bikes and pedestrians only. I would like to throw that idea out to promote safe cycling and active lifestyle that we entertain on a weekend before they open the 210 freeway.

City Engineer Zamano stated I attended that event. It was from San Bernardino and Rialto. I remember how neat it was and very well published. This is something we can follow up with Assistant Public Works Director Matt Bennett.

Chair Hamerly stated on page 151 regarding prioritization given the primary objectives of the entire plan is to serve under served communities where the needs are the greatest. Where can we do low scale cost and get it done quickly, whereas the whole purpose of the program is to try to connect different parts of the city specifically focusing on the most under served areas. Why wouldn't the tier one projects be including the areas of the greatest need even though that might be logistically difficult to achieve?

Samuel Zneimer stated we did consider it to be apart of it, that is why we used the CalEnviroScreen shown on page 150. It was not the only metric we used, but it was one of our main metrics. We can change some of the prioritization and if you want it to have more points, we will have the equity score to be higher.

Chair Hamerly stated it just seems like if we are trying to sell this as connecting disadvantage, communities that probably choose one of the main arterials being Base Line east of the 210 freeway already has bike lines and is a fairly wide street.

Commissioner Amaya stated shown on page 153 the tier one projects table 11, those corridors that majority are west of the 210 freeway, correct?

Samuel Zneimer replied yes. Majority of the projects are west of the 210 freeway.

Chair Hamerly closed the public hearing.

A MOTION was made by Chair Hamerly, seconded by Vice Chair Thomas, to incorporate the feedback from the Planning Commission and the Community and will continue the Planning Commission regular meeting scheduled January 19, 2021.

Motion carried on a roll call vote, 5-0.

ANNOUNCEMENTS

Assistant Community Development Director Stater announced the Planning Commission regular meeting scheduled on January 5, 2021 will be canceled.

Community Development Director Mainez announced that he is working with the City Attorney to provide training workshops for the Planning Commissioners. Also, in the future provide the Commissioners an overview of the General Plan.

ADJOURN

There being no further business, Chair Hamerly declared the meeting adjourned at 8:27 p.m.

Submitted by:

Camille Goritz, Administrative Assistant III
Community Development Department

Approved by:

Randall Hamerly, Chair
Planning Commission

STAFF REPORT

TO THE PLANNING COMMISSION

DATE: January 19, 2021

FROM: Lawrence A. Mainez, Community Development Director

SUBJECT: City of Highland Active Transportation Plan (ATP); a comprehensive plan for the network of trails, bike lanes, sidewalks, and other elements to support safe walking and bicycling in the City [*continued from the December 15, 2020 Planning Commission meeting*].

LOCATION: City-wide

REPRESENTATIVES: Samuel Zneimer, Senior Planner, Alta Planning+Design, Inc.
Julia Lippe-Klein, Acting Program Manager, SCAG

RECOMMENDATION: Staff recommends the Planning Commission:

1) Adopt Resolution No. 2021 – ____, recommending the City Council approve and adopt the City of Highland Active Transportation Plan (ATP), and direct Staff to file a Notice of Exemption with the County Clerk of the Board.

FISCAL IMPACT: The City of Highland Active Transportation Plan (ATP) document is fully funded by the Southern California Association of Governments (SCAG) Regional Council as part of their Southern California Disadvantaged Communities Planning Initiative (no local funding match required). There is no significant impacts to the City's General Fund related to the drafting of the subject ATP and only Staff time was spent working closely with the SCAG representatives related to data collection, review of draft documents, assistance with public outreach efforts, and general project oversight.

ENVIRONMENTAL REVIEW: The Highland Active Transportation Plan meets the definition of a "Feasibility or Planning Study" under the California Code of Regulations (CEQA Guidelines), Article 18, Statutory Exemptions, Section 15262, and therefore exempt from environmental proceedings under the California Environmental Quality Act (CEQA).

Approved _____	Motion _____	Second _____	Agenda Item No. 2
Denied _____	Ayes _____		
	Noes _____		File No. _____
Continue _____	Abstain _____		
	Absent _____		

Recording Secretary

Community Development Director

PUBLIC NOTICE: As required by City Council Resolution, the Agenda was posted at the City's three (3) designated posting locations within the City. In addition, the Agenda was posted on the City's Website, and interested Agencies and Property Owners notified via mail. Also, the ATP project was consistently advertised on the City's website ("take a look" pop-up) with a link to www.highlandATPlan.com. No further notice is required.

PUBLIC COMMENT: Following the time of preparing this Staff Report no comments were received in response to the Notice of Public Hearing. As outlined in the draft ATP Section 5 (Community Collaboration), engaging the community was a top priority throughout the planning process which included the creation of a Community Advisory Committee, public events, on-line surveys, open house walking tours, an interactive mapping tool posted on the City's webpage, and a virtual Town Hall meeting held on October 13, 2020. These events were highlighted on Facebook (with nearly 16,000 followers) and Nextdoor (with over 34,500 followers). Comments received were considered and addressed in the draft ATP.

BACKGROUND: In January 2019, the Southern California Association of Governments (SCAG) formally launched the Disadvantaged Communities Active Transportation Planning Initiative to help improve safety, health, and access throughout the region by making active transportation plans and its implementation more accessible. To that end, the Initiative provides technical assistance to develop a low-cost, high-impact Active Transportation Planning "Model/Template" and Outreach Resources to cities with limited resources. Once adopted, the Active Transportation Plans are considered the effective planning tool to help a local and regional agency access program funding.

As part of SCAG's efforts, they retained the services of Alta Planning+Design firm to develop an Active Transportation Plan "Model/Template" in seven (7) cities throughout SCAG's six (6) County region. SCAG worked with its partner agencies to narrow down its participation of seven cities in their Disadvantaged Communities Active Transportation Planning Initiative, and they selected the City of Highland as one of the cities.

On December 15, 2020, the Planning Commission was presented with a rough draft of the subject ATP with the goal of obtaining preliminary feedback and comments from the Commission, staff, and public. Some of the comments received during the meeting are summarized within the December 15, 2020, Planning Commission Minutes (see Attachment 3, PC Draft minutes). Corrections were made to the identified directional notation errors and GIS mapping illustrations. Also, as recommended by staff the proposed ATP priority projects were reconciled with the City's current 5-year Capital Improvement Plan (CIP) (see ATP Chapter 8 – Implementation Tables). As a result of the feedback and comments, the draft ATP was modified for Planning Commission consideration and recommendation to the City Council.

2

PROJECT REVIEW: The subject ATP provides a comprehensive guideline for a network of bike lanes, sidewalks, crossing improvements, and other elements aimed at supporting safe walking and bicycling throughout the City, and providing connection to nearby destinations.

The Plan implements the vision set forth in the Highland General Plan (the City's long-range comprehensive planning document) and includes a comprehensive network of active transportation facilities to improve bicycle and pedestrian commuting and recreation opportunities throughout the City. This network will connect users to neighborhoods, parks, recreational open spaces, schools, places of interest, and will provide connectivity to the hiking and bike systems of adjacent cities and regional systems. In other words, the subject ATP will provide a blueprint for a future Highland where walking and biking is a safer and more convenient way to get around.

The Plan includes funding strategies and a phasing schedule for development of the active transportation network. Once the City's ATP is adopted, the City will proceed to seek funding and grant opportunities, such as the California Active Transportation Program fund in order to implement the City's adopted ATP.

As noted in the Public Comment section above, the ATP planning process included many community participation events intended to obtain input from residents, public agency stakeholders, and other community members.

Representatives from SCAG's consultant – Alta-Planning+Design Inc. will be available during the Planning Commission hearing to help answer questions.

The final draft ATP is attached for Planning Commission review and consideration (see Attachment 1).

Staff recommends the Planning Commission review the ATP, as modified, and if no significant changes are made approve the attached Resolution recommending the City Council adopt the ATP (see Attachment 2).

Attachments:

1. Highland Active Transportation Plan (dated January 2021)
2. Planning Commission Resolution 2021 – _____
3. December 15, 2020 Planning Commission draft Minutes

Attachment 1



City of Highland

Active Transportation Plan

December 2020

CITY of HIGHLAND
ACTIVE TRANSPORTATION PLAN

Acknowledgements

Thank you to the residents, community leaders, community-based organizations, agencies, and other stakeholders who have helped shape this Plan. We appreciate your vision, insights, and commitment to improving mobility and access for all residents.

COMMUNITY ADVISORY COMMITTEE

Lawrence Mainez, Highland Community Development Director
Matt Bennett, Highland Assistant Public Works Director
Carlos Zamano, Highland Public Works Director/City Enginner
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Inland Empire Biking Alliance

Table of Contents

Executive Summary 10

Goals & Objectives 11

Community Priorities 12

Our Community's New Approach 14

Making this Vision a Reality 23

1. Introduction 26

The Need for an Active Transportation Plan 26

Benefits of Walking, Biking, and Being Active 26

2. The Vision 35

Equity Framework 35

Vision 38

Goals, Objectives, and Actions 38

3. Local Background 49

Historical and Current Context 49

Equity Analysis 49

Land Use & Destinations 56

Existing Travel Patterns 60

Plans and Policies 61

4. Existing Conditions 65

Active Transportation Overview 65

Framing Active Transportation 74

Existing Support Facilities 75

Non-Infrastructure Programs 78

User Experience & Perceived Comfort 80

Existing Barriers 86
Collision Analysis 87
Needs Assessment 91

5. Community Collaboration 100
Community Advisory Committee 101
Events 102
Interactive Map 107
Refining the Draft Plan 107
Media 108
Key Needs in Our Community 109

6. Street Recommendations 112
How We Developed Recommended Projects 112
How Recommended Projects Advance Our Goals 114
Recommended Bicycle Projects 116
Recommended Pedestrian Projects 123
Benefits of Implementation 139
Support Facilities 139

7. Program Recommendations 146
Continue Existing Programs 147
Program Toolkit 148

8. Implementation 158
Administration 158
Prioritization Framework 159
Maintenance and Operations 182
Funding 183

Design Guidelines 187

9. Appendix **191**

Appendix A: ATP Compliance Checklist 191

Appendix B: Funding Sources 194

Appendix C: Maintenance and Operations 203

Appendix D: Plans and Policies 206

Appendix E: Resolution 226

List of Figures

Figure 1. Distribution of Ages....50
Figure 2. Percentage of Population Under 18....51
Figure 3. Percentage of Population 65 and Older....52
Figure 4. Percentage of Population that is Non-White....53
Figure 5. Percentage of Households without Access to an Automobile....54
Figure 6. Median Household Income....55
Figure 7. CalEnviroScreen 3.0 Scores by Census Tract....57
Figure 8. Land Use....58
Figure 9. Means of Transportation to Work....60
Figure 10. Existing Bikeways by Class and Length....71
Figure 11. Existing Bikeways....72
Figure 12. Previously Planned Bikeways....73
Figure 13. Bicycle Level of Traffic Stress....82
Figure 14. Bicycle Level of Traffic Stress Percentage of City of Highland Streets....84
Figure 15. Bicycle Level of Traffic Stress on All Roads....85
Figure 16. Pedestrian-Involved Collisions....88
Figure 17. Bicycle Involved Collisions....90
Figure 18. Clean Environment Conditions in Highland Compared to Other Cities in California....95
Figure 19. Neighborhood Conditions in Highland Compared to Other Cities in California....96
Figure 20. Network Development Process....113
Figure 21. Length of Recommended Bicycle Network....116
Figure 22. Recommended Bicycle Projects....117
Figure 23. Recommended Bicycle Projects-West....118
Figure 24. Recommended Bicycle Projects-East....119
Figure 25. Recommended Pedestrian Projects....125
Figure 26. Recommended Pedestrian Projects – West....126
Figure 27. Recommended Pedestrian Projects – East....127
Figure 28. Recommended Bicycle Projects by Prioritization Score....161

Figure 29. Recommended Bicycle Projects by Prioritization Score-West 162
Figure 30. Recommended Bicycle Projects by Prioritization Score-East 163
Figure 31. Prioritized Pedestrian Projects 167
Figure 32. Prioritized Pedestrian Projects – West 168
Figure 33. Prioritized Pedestrian Projects – East 169

List of Tables

Table 1. Number of Health Variables of Low, Medium, and High Priority 92
Table 2. High Priority Health Variables 92
Table 3. Key Themes from Community Feedback 101
Table 4. Public Input Guiding Network Recommendations 114
Table 5. Miles of Recommended Bikeways by Type 116
Table 6. Recommended Bicycle Projects 120
Table 7. Recommended Pedestrian Projects Including Quantity and Length 128
Table 8. Recommendations for Bicycle Parking Locations and Quantities 139
Table 9. Public Input Guiding Programmatic Recommendations 147
Table 10. Prioritization Criteria 159
Table 11. Recommended Bicycle Projects Including Length and Estimated Costs: Tier 1 164
Table 12. Recommended Bicycle Projects Including Length and Estimated Costs: Tier 2 165
Table 13. Recommended Bicycle Projects Including Length and Cost Estimates: Tier 3 166
Table 14. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 1 ... 170
Table 15. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 2 ... 174
Table 16. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 3 ... 178
Table 17. Average Maintenance Activity Costs 182
Table 18. Funding Sources 184

Executive Summary

The 2020 Active Transportation Plan ("Plan") represents a new commitment by the City of Highland to walking and biking. It is part of a move away from the auto-centric, inequitable approach of the past, and toward a sustainable, multi-modal transportation system that serves all residents, regardless of age, ability, identity, or income.

VISION: This Plan aims to make walking and bicycling more comfortable, convenient, and accessible for people of all ages and abilities throughout the city.

The Plan also introduces a comprehensive collection of programs and policies. Among the elements of the Plan are several innovations in active transportation planning for Highland. The Plan includes an implementation strategy that details the sequencing and priorities for the selection and installation of new pedestrian and bicycle facilities.

Collectively, the various strategies and components of the Plan assist the City to meet the four goals that have been established by this Plan: increase safety and health; improve access and comfort; reduce household transportation costs; and identify, develop, and maintain a complete and comfortable active transportation network. The Plan was created through intensive collaboration between various city departments, the Community Advisory Committee (CAC), community organizations, local schools, and most importantly, our residents. The Plan reflects best practices from cities around the country; it is the product of extensive public input, research, and detailed field work. Collectively the policies, programs, projects, and recommendations in this Plan will create an environment that increases, improves and enhances active transportation in the City of Highland, and makes walking and biking a safe, healthy, and enjoyable means of transportation and recreation.

GOALS & OBJECTIVES

The Plan is guided by an Equity Framework which prioritizes equity and the needs of vulnerable residents. **Equity, in this planning process, means that community members who have historically been left out of transportation investments and decisions will be prioritized, engaged, and included.**

Collectively, the various strategies and components of the Plan assist the City of Highland to meet the four goals established by this Plan, each of which is rooted in advancing our Equity Framework:



1. Improve Safety & Health



2. Improve Access & Comfort



3. Enhance Transportation Affordability



4. Commit to Maintain & Expand the Network



Safety & Health

A. Reduce bicycle and pedestrian collisions through safe and comfortable facilities
B. Promote an active lifestyle that includes walking and biking
C. Reduce air pollution, asthma rates, and greenhouse gas emissions
D. Reduce travel times for low-income households



Access & Comfort

A. Increase access to jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations
B. Address barriers so that vulnerable populations can take part in the improvements
C. Support public transit service
D. Prioritize the needs and trip patterns of vulnerable populations
E. Prioritize universal design standards



Affordability

A. Reduce the overall household transportation costs for all residents, both anticipated and existing

B. Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments



Maintain & Expand the Network

A. Integrate bicycle and pedestrian network and facility needs into all Highland planning documents and capital improvement projects
B. Leverage existing funding to maximize project delivery
C. Maintain designated facilities to be comfortable and free of hazards to biking and walking

COMMUNITY PRIORITIES

Community and stakeholder participation played a central role in shaping the project, from workshops and pop-up events to community surveys, and events with the local community. During this planning process, community members expressed support for:

- Improving pedestrian and bike facilities throughout the city.
- Strengthen and promote regional connectivity.
- Safer and comfortable walking and biking routes near schools.

Similarly, community members also shared many concerns that guided the recommendations in this Plan, including:

- Poor condition of pavement in the western part of the City of Highland, which presents hazardous conditions for walking, biking, and driving.
- Most routes to schools don't have the infrastructure to walk and/or bike safely to school.



City Staff out in the field helping shape this Plan, and who are committed to improving access, safety, and health for all.

OUR COMMUNITY'S NEW APPROACH

The Plan was created through intensive collaboration between various city departments, the Community Advisory Committee (CAC), community organizations, and most importantly, our residents. Using this feedback and analysis of existing conditions, collisions, and demographic data, the Plan designates an ambitious active transportation system and introduces a comprehensive collection of programs and policies. **Altogether, the recommendations for our streets envision 58 miles of bikeways and sidewalks, and represent an investment in multi-modal, equitable transportation in our community.** The street recommendations provide new, low-stress connections between schools, downtown, and community parks, helping ensure that people can more comfortably and safely access everyday needs.

The recommended programs work to address key community concerns, and include Safe Routes to School (SRTS) efforts; safety campaigns and roadway users alike, so that all of our community members can be responsible for safe travel behaviors.

Collectively the policies, programs, projects, and recommendations in this Plan will create an environment that enhances active transportation in the City of Highland, and makes walking and biking a safe, healthy, and enjoyable means of transportation and recreation.



The Plan envisions an active transportation network that improves access, health, and quality of life for all of our residents.

Bicycle Facility Types



CLASS I

Shared-Use Path

- Paths completely separated from motor vehicle traffic used by people walking and biking.
- Comfortable for people of all ages and abilities.
- Typically located immediately adjacent and parallel to a roadway or in its own independent right-of-way, such as within a park or along a body of water.



CLASS II

Bicycle Lane

- A dedicated lane for bicycle travel adjacent to traffic.
- A painted white line separates the bicycle lane from motor vehicle traffic.



CLASS IIB

Buffered Bicycle Lane

- A dedicated lane for bicycle travel separated from vehicle traffic by a painted buffer.
- The buffer provides additional comfort for users by providing space from motor vehicles or parked cars.



CLASS III

Bicycle Route

- A signed bike routes that people biking share with motor vehicles.
- Can include pavement markings.
- Comfortable facility for more confident bicyclists.
- Recommended when space for a bike lane may not be feasible.

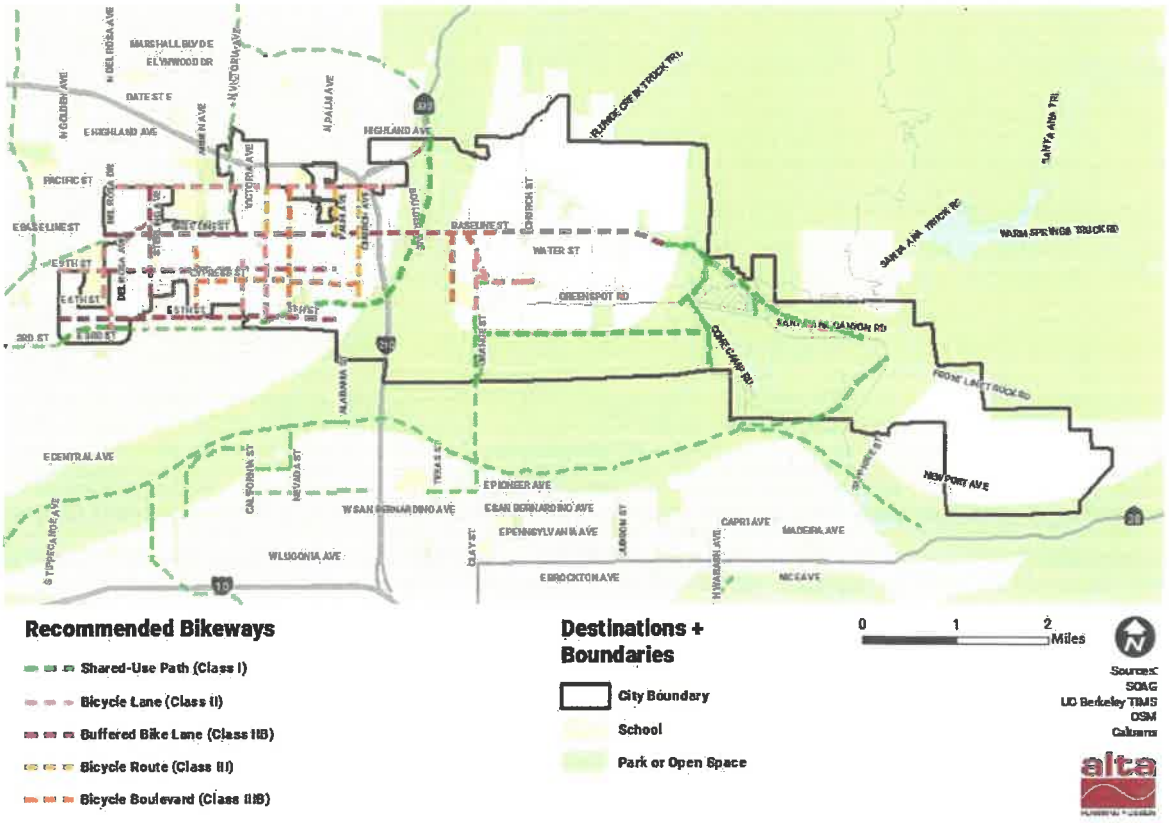


CLASS IIIB

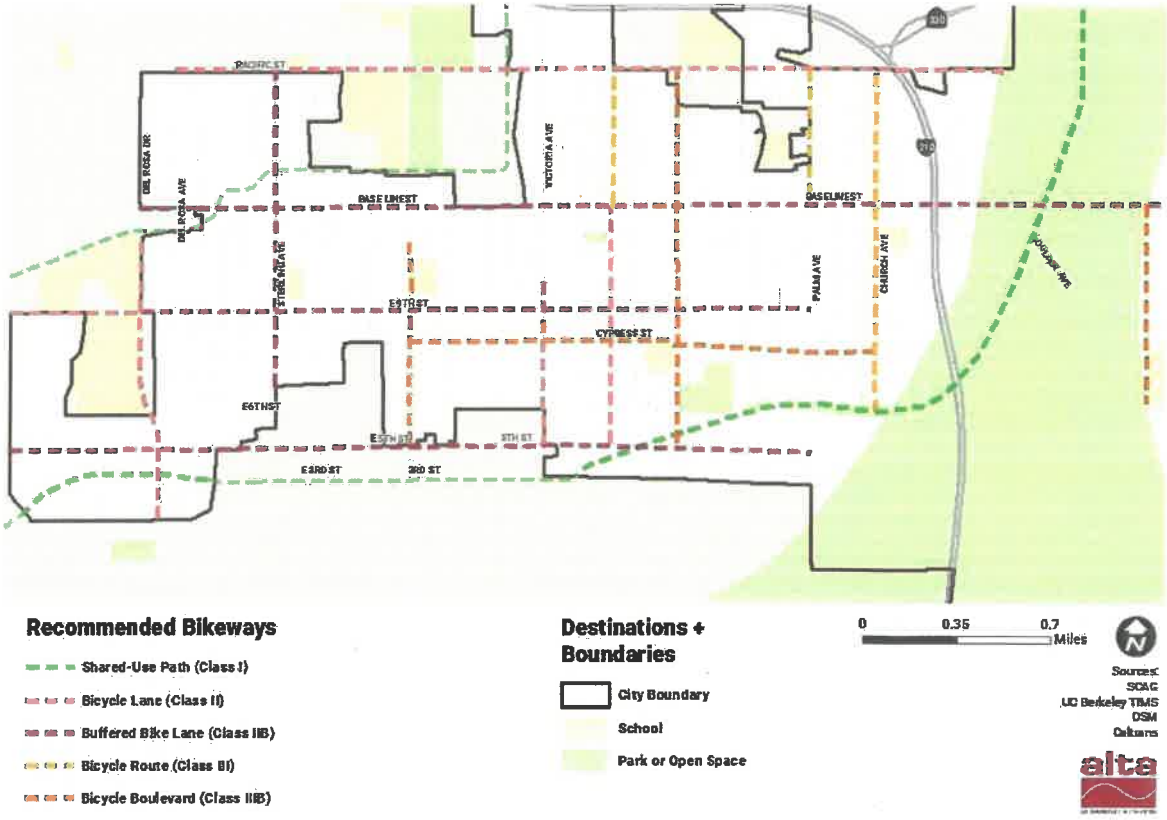
Bicycle Boulevard

- Calm, local streets where bicyclists have priority but share roadway space with motor vehicles.
- Shared roadway bicycle markings on the pavement as well as traffic calming features such as speed humps and traffic diverters to keep these streets more comfortable for bicyclists.
- Comfortable facility for bicyclists with wider range of abilities.

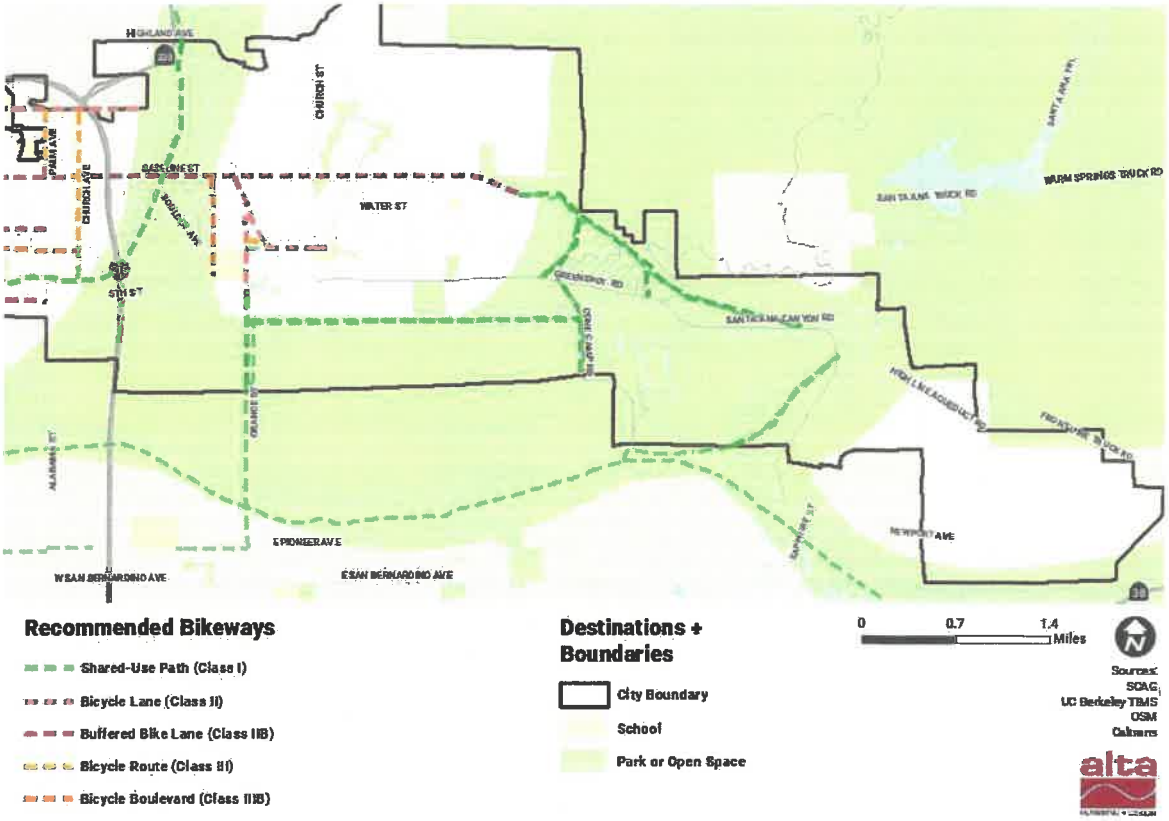
Recommended Bicycle Network



Recommended Bicycle Network-West



Recommended Bicycle Network-East



Pedestrian Facility Types



Sidewalks & Paths

- Completely separated from motor vehicle traffic.
- Used by people walking or using mobility devices such as wheelchairs.
- Sidewalks are typically located immediately adjacent and parallel to a roadway. Shared-use paths can be located in their own independent right-of-way, such as within a park or along a body of water.



Crossing Facilities

- Make crossing the street at intersections and midblock safer and more comfortable.
- High-visibility crosswalk markings are more visible to approaching vehicles and have been shown to improve yielding behavior.
- Advance yield markings, or "shark teeth," warn drivers they are approaching a crosswalk.



Curb Treatments

- Curb ramps allow users of all abilities to make the transition from the street to the sidewalk. They are required by the Americans with Disabilities Act (ADA) at all crosswalks, including those that are unmarked.
- Curb extensions create safer and shorter crossings for pedestrians. They can help slow vehicle traffic by visually narrowing the roadway. They also increase the available space for street furniture, plantings, and street trees.



Beacons & Signals

- Beacons and signals both indicate to drivers that someone may be crossing the street.
- Make crossing the street safer and more comfortable.
- Pedestrian countdown signals create a more predictable crossing environment and give adequate warning to pedestrians attempting to cross a roadway.
- Leading pedestrian intervals allow a pedestrian to begin crossing the street before the traffic signal turns green.



Traffic Calming

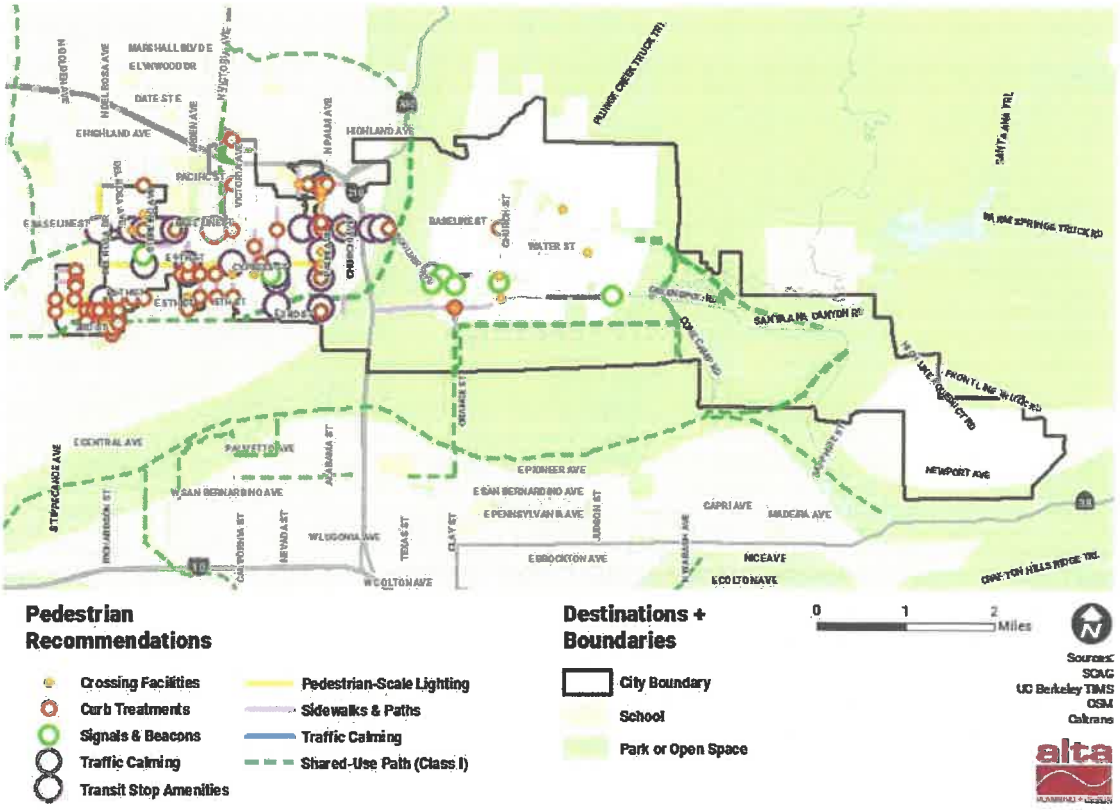
- Encourage drivers to travel at slower speeds.
- Some treatments alter the configuration of a roadway, while others change how drivers perceive and respond to a street.
- Can be used at targeted locations such as a dangerous intersection, or along corridors.



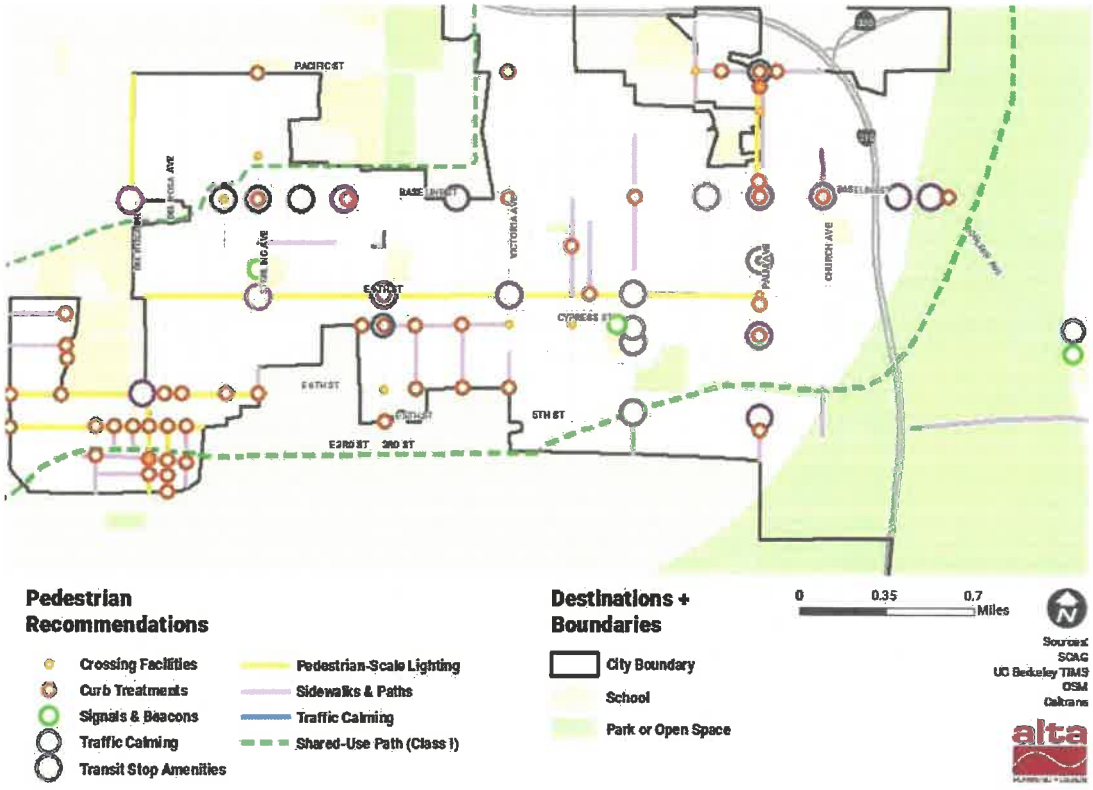
Pedestrian-scale Lighting

- Improves visibility for people walking, as opposed to street lights intended to light the roadway.
- Additional care and emphasis on pedestrian lighting should be taken at and near crosswalks.

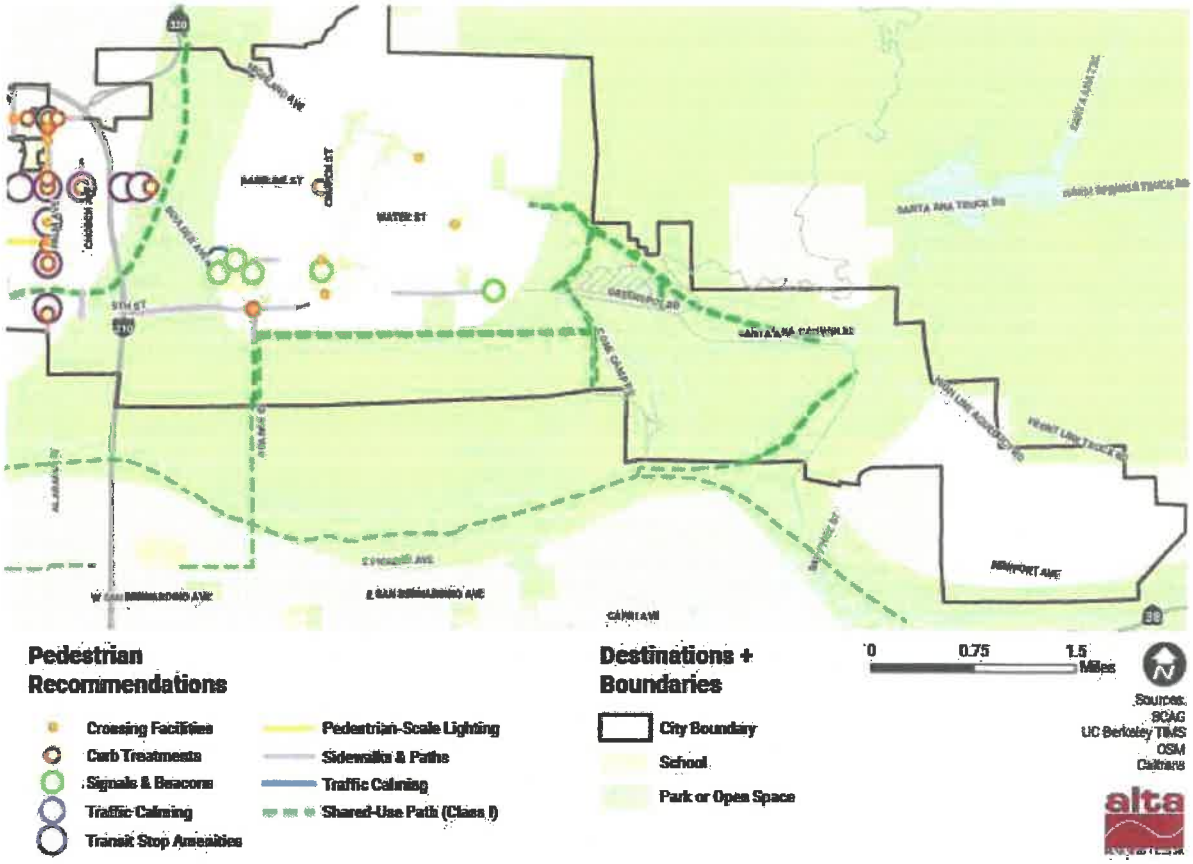
Recommended Pedestrian Projects



Recommended Pedestrian Projects-West



Recommended Pedestrian Projects-East

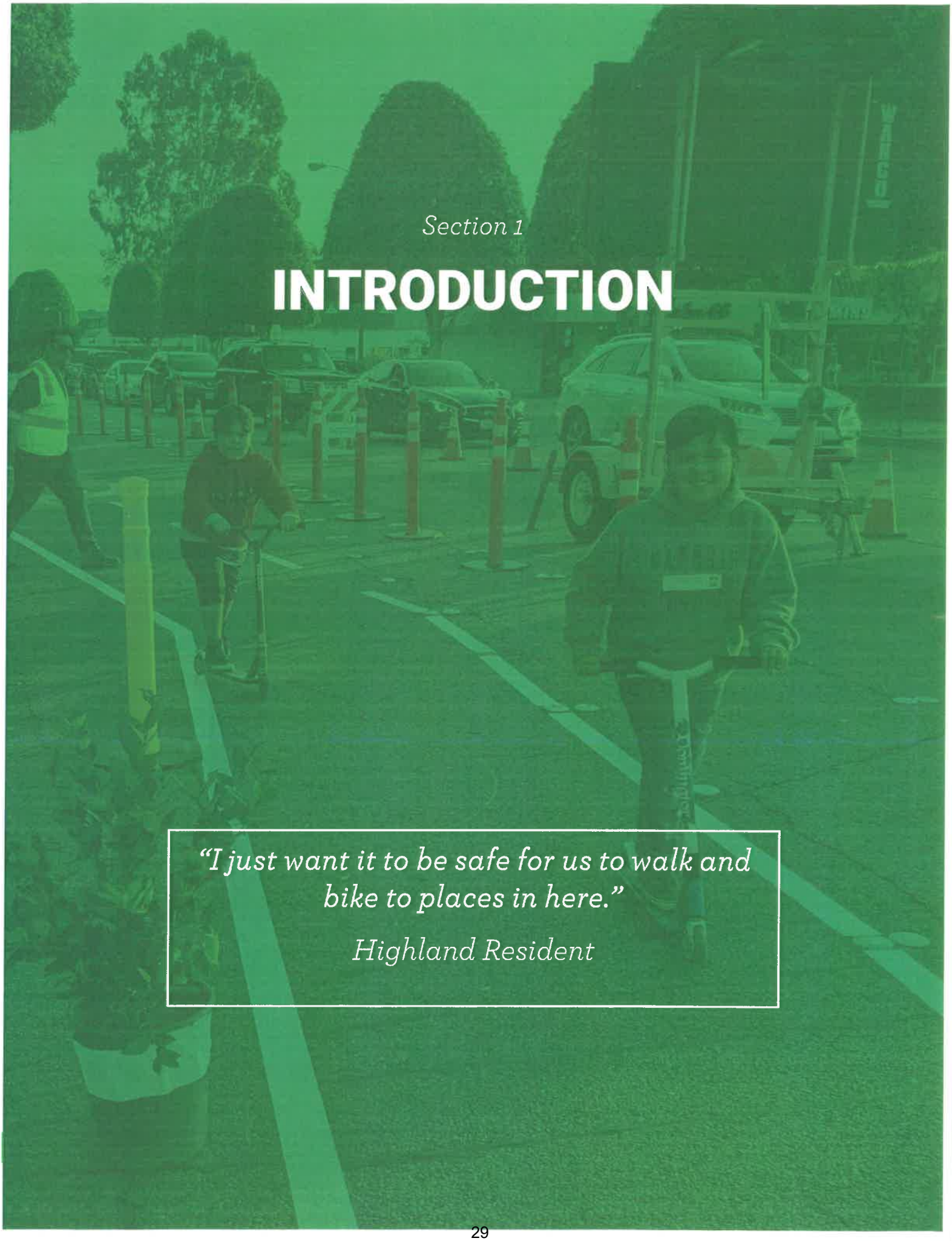


MAKING THIS VISION A REALITY

Following the implementation strategy outlined in Chapter 8, the City will work to secure funding for high-priority projects and programs, with the hopes of expanding our network by 15% by 2025. As the City of Highland works to implement the Plan, we will continue to engage with our residents and, most importantly, follow the Equity Framework to ensure that the most vulnerable members of the community voice is heard and the needs are met.



This Plan sets the City of Highland on track to expand walking and biking routes by over 55 miles.



Section 1

INTRODUCTION

"I just want it to be safe for us to walk and bike to places in here."

Highland Resident

1. Introduction

THE NEED FOR AN ACTIVE TRANSPORTATION PLAN

Highland is committed to improving the quality of life for residents and visitors by ensuring walking and biking are convenient, comfortable, and healthy modes of transportation and recreation. This Active Transportation Plan establishes a long-term vision for improving walking and biking in Highland. The Plan is a critical tool for guiding city staff and the development community in building a balanced transportation system that encourages biking and walking. The ultimate goal is shifting more automobile trips to walking and biking as a normal part of daily life.



Our community aims to build an active transportation network that improves mobility options for all of our residents.

BENEFITS OF WALKING, BIKING, AND BEING ACTIVE

Collision Reduction

Conflicts between people walking, biking, and driving can result not just from poor behavior, but from insufficient or ineffective design. Encouraging development that supports biking and walking can enhance safety and comfort for all users. Bike lanes and physical barriers between bicyclists and motor vehicle traffic have been shown to increase individuals' use of bicycle infrastructure.[1] Shaded sidewalks with landscaped buffers from vehicle traffic and curb ramps, high-visibility crossings, and rest areas similarly create comfortable experiences for people walking. However, existing transportation networks

[1] Hoffman et al. *Bicycle commuter injury prevention: it is time to focus on the environment*. 2010.; Pucher et al., *Infrastructure, programs, and policies to increase bicycling: An international review*. 2010.



Providing safe and accessible facilities is a priority in our community.

are often designed primarily for safe and efficient motor vehicle travel. Most roadways poorly protect bicyclists and pedestrians, making them more vulnerable to injury and, in some cases, death. Non-motorists are more likely to suffer injury or death in a collision and are about 1.5 times more likely than motorists to die when getting around.[2]

There are many ways to improve safety for bicyclists and pedestrians while maintaining an efficient transportation system for motor vehicle travel. Successful bicycle and pedestrian improvements on existing facilities tend to focus on changing traffic volume and speed[3] and increasing the separation from vehicles.[4] Additional methods include the design of smarter multi-modal streets, reduced vehicle/bike or vehicle/pedestrian conflict zones, enhanced visibility, and requiring new facility design standards that consider bike/pedestrian safety as a top priority.

This Plan outlines an active transportation network and programmatic changes to help us reduce collisions, improve traffic safety, and protect the historically marginalized members of our community.

Public Health Improvements

Physical inactivity is now widely understood to play a significant role in the most common chronic diseases in the United States, including heart disease, stroke, and diabetes. Each year, approximately 280,000 adults in the United States die prematurely due to obesity-related illnesses. A 2004 study published in the American Journal of Preventive Medicine by Frank et al. reported that for each additional 60 minutes spent in a car daily, one's chance of becoming obese increases by six percent. A

[2] Beck et al. *Motor vehicle crash injury rates by mode of travel, United States: using exposure-based methods to quantify differences*. 2007; Centers for Disease Control and Prevention. *Motor Vehicle Crash Deaths in Metropolitan Areas — United States, 2009. Morbidity and Mortality Weekly Report*. 2012.
[3] Harris et al. *The Bicyclists' Injuries and the Cycling Environment study: a protocol to tackle methodological issues facing studies of bicycling safety*. 2011; Miranda -Moreno et al. *The link between built environment, pedestrian activity and pedestrian-vehicle collision occurrence at signalized intersections*. 2011.
[4] Lusk et al. *Risk of injury for bicycling on cycle tracks versus in the street*. 2011.

2019 report by the Outdoor Foundation found that Americans are spending less time outdoors: Nearly half of the U.S. population doesn't participate in any outdoor recreation at all, and only 17.9% got out at least once a week in 2018. The result? One billion fewer hikes, climbs, rides, and other outdoor excursions in 2018 than in 2008. The report also found an alarming impact on youth: Children took part in 15% fewer outdoor activities in 2018 than they did six years before.[5] However, walking and biking is highly impacted by people's ability, or rather inability, to access safe places to do so. Studies demonstrate disparities in the quantity and quality of park spaces between low-income and affluent communities.



Walking helps to improve mental health, foster social connections, and lower the risk of chronic diseases.

Creating infrastructure that encourages biking and walking—while improving access to parks or active recreation opportunities for all residents—is a key strategy to fighting obesity and inactivity. Better yet, it has been shown to have substantial benefits on public health with relatively minimal public investment. Biking and walking can help improve mental health, facilitate social connections, encourage activity among older adults, foster healthy habits among youth, lower risk of chronic diseases, and improve air quality. The World Health Organization identified atmospheric particulate matter (PM) with a diameter of less than 2.5 micrometers (PM2.5), ozone (O3), and oxides of nitrogen (NOx), all of which are related to automobile emissions, as the primary pollutants of concern for environmental and human health.[6] These pollutants have both short- and long-term effects on

[5] Outdoor Foundation. *2019 Outdoor Participation Report*. 29 January 2019. https://outdoorindustry.org/resource/2019-outdoor-participation-report/?utm_source=media&utm_medium=press-release&utm_campaign=participation

[6] World Health Organization. *Review of Evidence on Health Aspects of Air Pollution: REVIHAAP Project*. Copenhagen, Denmark: WHO Regional Office for Europe; 2013.

respiratory health, cardiovascular health, cancer, reproductive health, and premature mortality in humans.[7] Further, there is increasing evidence that links these emissions to increased systematic inflammation and diabetes risk.[8] Nitrogen dioxide from motor vehicles was found to cause 60% of pediatric asthma cases in urban areas worldwide.[9] Poor air quality particularly impacts vulnerable populations such as older adults, youth, and people with respiratory ailments.

Reducing our reliance on motor vehicles and increasing the use of active transportation will help break the cycle of air pollution and the corresponding negative health impacts. Altogether, the Plan will identify interventions that support safe walking, biking, and recreation opportunities as effective strategies for addressing public health concerns in our community.



Environmental Benefits

Fossil-fuel driven **transportation generates the largest share of greenhouse gas (GHG) emissions of any economic sector in the United States, amounting to almost 30% of all GHG emissions and surpassing those generated from electricity production and industry.**[10]

Transportation generates the largest share of greenhouse gas (GHG) emissions of any economic sector in the United States: 30%.

Biking and walking cause no direct air or water pollution, require minimal land use impacts, and emit negligible noise and light pollution. Bicyclists and pedestrians occupy less space than cars and help reduce demand for road space and parking, freeing up land for public space, buildings, food production, and housing. Replacing driving trips with biking or

[7] U.S. Environmental Protection Agency. *Provisional Assessment of Recent Studies on Health Effects of Particulate Matter Exposure.* Washington DC 2012.
[8] Jerrett M, Brook R, White LF, et al. Ambient ozone and incident diabetes: A prospective analysis in a large cohort of African American women. *Environment International.* 2017;102:42-47.
[9] Pattanun A, Brauer M, Hystad P, Anenberg S. Global, national, and urban burdens of pediatric asthma incidence attributable to ambient NO2 pollution: estimates from global datasets. *The Lancet Planetary Health.* 2019.
[10] United States Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Accessed May 28, 2019, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

walking trips reduces emissions associated with mobility, translating into less carbon dioxide, nitrogen oxides, hydrocarbons, and other pollutants in the air.

Implementation of this Plan not only reduces our contribution to climate change, but will also enhance our resilience to it. Creating viable alternatives to private vehicles reduces pressure on road infrastructure and provides options for people to remain mobile when other transportation modes are disrupted by climate events. It will also improve the health of residents who are vulnerable to asthma or other chronic respiratory diseases associated with air pollution.

Equity

Many people in our community, including children, older adults, people with physical disabilities, low-income community members, and those who do not own or have access to a vehicle, rely on walking, biking, and transit to get where they need to go on a daily basis. When age and physical abilities are not a barrier, costs associated with car ownership can still significantly inhibit mobility in car-centric environments. A study cited by the Victoria Transport Policy Institute found that **households in automobile-dependent communities devote 50% more of their income to transportation (more than**



Ensuring everyone has access to safe and affordable transportation options helps improve the wellbeing of our community.

$8,500 annually) than households in communities with better conditions for walking and biking (less than $5,500 annually). Indeed, transportation typically accounts for a household's second-largest expenditure behind housing. For low or under-resourced households, however, this high cost of driving can consume a high portion of peoples' incomes and make them transportation burdened. Unsurprisingly, people with low incomes have the highest rates of walking and bicycling to work, with the greatest number of bicycling trips taken by people of color.[11]

When affordable housing is not located near opportunities for work or school, low-income residents endure longer commutes and incur greater transportation costs. Longer travel distances mean less time spent with family, less time to exercise and rest, and less time for obligations like picking up children from childcare, visiting the doctor, or grocery shopping. Impeding access to these and other basic necessities can have health consequences and exacerbate health inequities.[12]

Active transportation options increase mobility for vulnerable populations, enabling safe, affordable access to economic and social opportunities.

Environmental factors and infrastructure deficiencies also disproportionally affect low-income and minority communities. For example, inadequate walking and biking infrastructure (e.g., missing or broken sidewalks, limited street lighting, lack of marked crosswalks and traffic islands, substandard or no bike lanes, etc.) and perceived safety issues create barriers to walking and biking. Bicyclists and pedestrians in low-income communities and communities of color have higher injury and fatality rates. In the United States, Latinx and African American bicyclist/pedestrian fatality rates are double that of White Americans.[13] Children[14] and older adults[15] are

[11] Safe Routes to School National Partnership. *At the Intersection of Active Transportation and Equity.* 2015.
[12] PolicyLink Prevention Institute Convergence Partnership. *Healthy, Equitable Transportation Policy: Recommendations and Research.* 2009.
[13] Safe Routes to School. 2015.
[14] Wong et al. *GIS measured environmental correlates of active school transport: A systematic review of 14 studies*. 2011; Rothman et al. *Walking and child pedestrian injury: a systematic review of built environment correlates of safe walking*. 2014; Rothman et al. *Motor Vehicle-Pedestrian Collisions and Walking to School: The Role of the Built Environment*. 2014.
[15] Lusk et al. *Risk of injury for bicycling on cycle tracks versus in the street*. 2011; Moran et al. *Understanding the relationships between the physical environment and physical activity in older adults: a systematic review of*

especially vulnerable sub-populations whose tendencies to walk and bike are particularly impacted by vehicle traffic speed and volume, as well as available or missing infrastructure that creates safe or unsafe environments. Further, when these populations choose to walk or bike, often times, they are faced with health risks associated with greater air and noise pollution, as many sources of air pollutants are located near these communities,[16] and people with low incomes and people of color are more likely to live near major roads, highways, or truck routes.[17]

For older adults, youth, people of color, people with disabilities, and people with low wealth, not having safe, sufficient infrastructure to access destinations by foot or bike means increased vulnerability to traffic related injury and fatalities as well as indirect health implications.[18] Active transportation plans that improve biking and walking provide an opportunity to improve mobility for vulnerable populations who might not own or are unable to operate a motor vehicle, enabling safe, affordable access to economic and social opportunities that are known to predict health later in life.

The Plan will enhance the accessibility of pedestrian and bicycle networks in our community, making daily transportation and physical activity more viable for children, older adults, people of color, and people with physical disabilities. The Plan will be designed to create opportunities for affordable, safe, and convenient transportation for all people, especially those who may not have access to a motor vehicle or who have limited income.



Quality of Life

The design, land use patterns, and transportation systems that comprise the built environment profoundly impact one's experience of being in a community. Creating conditions in which walking, biking, and using other active modes are accepted and encouraged increases a community's livability and sense of connectedness, and by extension, residents' quality of life. Communities become more pleasant when noise and air pollution are reduced, and when urban space is reserved for facilities that enable people of all ages and abilities to travel in safe and enjoyable settings. This Plan works to increase the quality of life for all residents in our community.

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qualitative studies. 2014; Yen et al. *How design of places promotes or inhibits mobility of older adults: realist synthesis of 20 years of research*. 2014.

[16] Miranda et al. *Race/Ethnicity, Residential Segregation, and Exposure to Ambient Air Pollution: The Multi-Ethnic Study of Atherosclerosis.* 2014.

[17] Bae et al. *The exposure of disadvantaged populations in freeway air-pollution sheds: a case study of the Seattle and Portland regions.* 2007.

[18] Policy Link Prevention Institute. 2009.



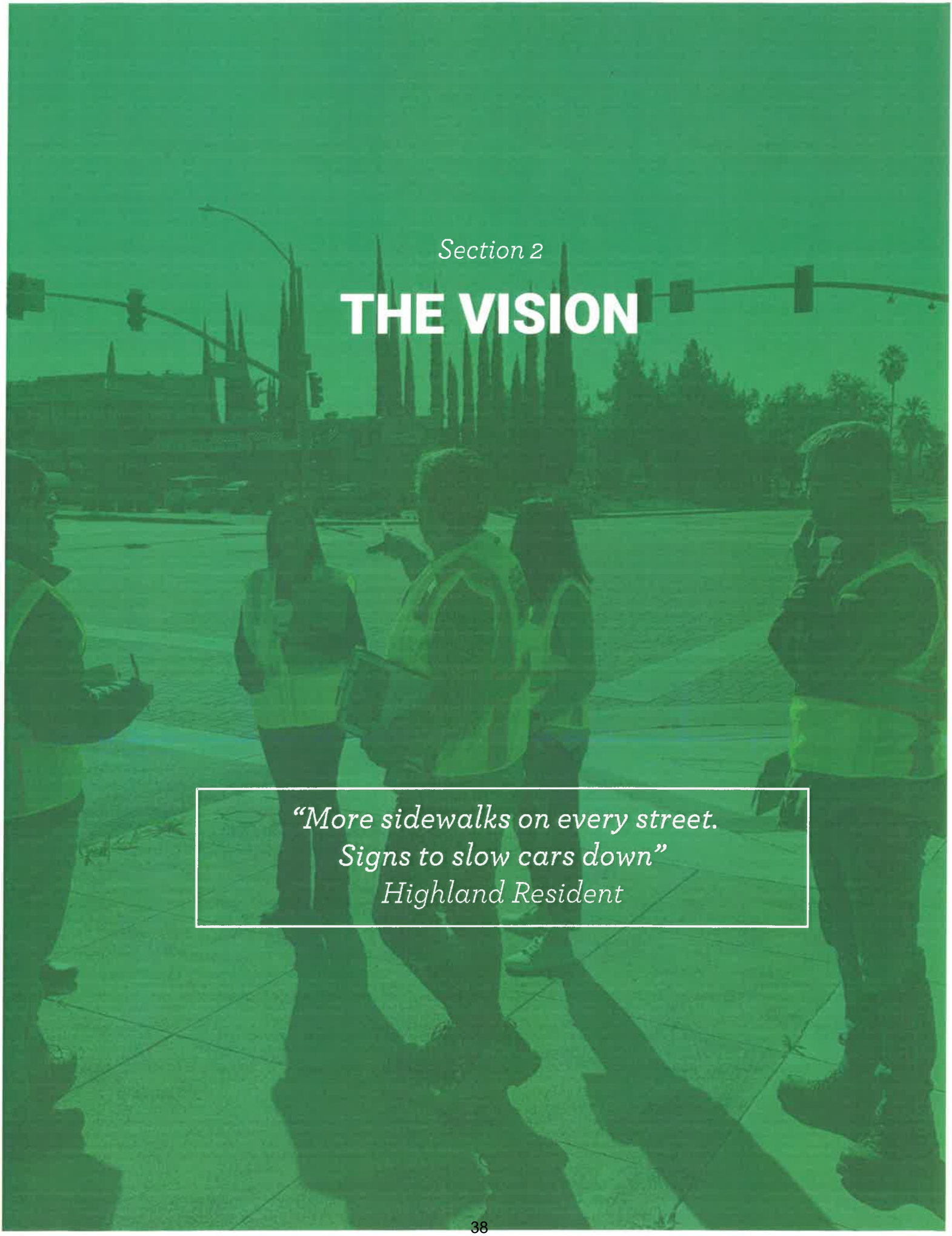
Economic Benefits

Active transportation is economically advantageous to individuals and communities. Replacing automobile trips with walking or biking can reduce vehicle maintenance and fuel costs. These savings are accompanied by potential reductions in health care costs, as regular physical activity can minimize health complications associated with an inactive lifestyle. In 2009, the CDC estimated that the direct medical costs of physical inactivity to the country totaled more than $147 billion.[19]

According to the Bureau of Labor Statistics, in 2017, households spent 13% of their earnings on transportation—the second highest household expenditure after housing.[20] Increasing opportunities for non-automobile travel can reduce spending on transportation, which may allow for households to increase spending on health-promoting activities such as healthcare, education, and nutritious food.

Furthermore, active transportation facilities require significantly less capital to construct and maintain than roadway or highway projects. **Active transportation investments allow cities to do more with fewer taxpayer dollars.** And in many cases, such projects result in higher spending at local businesses.[21] This Plan sets Highland on track to help residents spend less on transportation, and our community to do more with our existing resources.

[19] Center for Disease Control and Prevention. *Adult Obesity Causes & Consequences*. Last modified August 29, 2017, https://www.cdc.gov/obesity/adult/causes.html.
[20] Bureau of Labor Statistics. *Consumer Expenditures—2017*. Published September 11, 2018, https://www.bls.gov/news.release/cesan.nr0.htm.
[21] New York City Department of Transportation. *The Economic Benefits of Sustainable Streets*. 2013.



Section 2

THE VISION

"More sidewalks on every street.
Signs to slow cars down"
Highland Resident

2. The Vision

EQUITY FRAMEWORK

This Plan is guided by an Equity Framework, which asks:

- Who are the most vulnerable groups in the community?
- What outcomes do the most vulnerable residents want to see come from this planning effort?
- How can implementation of the Plan work towards these outcomes?

The Plan identified vulnerable user groups as well as a vision and supporting goals that we believe will advance equity: safety and health, access and comfort, affordability, and an enhanced network. The Plan also defined future actions and ways to measure progress on these four goals.

Equity in this Plan means that community members who have historically been left out of transportation investments and decisions will be prioritized, engaged, and included.



This Plan works to improve transportation for all residents of our community, especially those who have historically been excluded from transportation decisions and investments.



This Plan aims to serve existing residents and reduce disparities in access to affordable, safe, and comfortable transportation.

State-Identified "Disadvantaged Communities"

This Plan also works to improve conditions in state-identified "disadvantaged communities" within Highland. In 2012, the California Senate passed SB 535 requiring that a portion of all revenue from the state's Greenhouse Gas Reduction Fund be spent on projects that benefit disadvantaged communities, and charged the California Environmental Protection Agency (CalEPA) with determining which communities qualify as "disadvantaged." CalEPA developed CalEnviroScreen, an online tool that ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and prevalence of certain health conditions. Census tracts scoring in the top 25% qualify as disadvantaged. The largest source of state funding for active transportation projects, Caltrans Active Transportation Program (ATP), also defines communities with median household incomes at or below 80% of the state median as "disadvantaged." For Safe Routes to School projects, Caltrans accepts communities in which at least 75% of students qualify for free or reduced-price meals as "disadvantaged."

Serving Current Residents

Improvements to the public realm can increase the risk of displacement of existing residents. Too often, public projects are designed to attract new development and appeal to future hypothetical tenants, rather than serving the people who have historically called the community home before the project began. As housing costs continue to rise across Southern California, existing households (especially renters and working-class families) face the very real threats of unaffordable housing options and displacement. When forced to move, households potentially lose contact with the community they rely on and are connected to.

The project recommendations have been shaped by—and designed for—the existing residents of Highland. **Consistent with the Equity Framework, this Plan supports current residents' right to remain in their community as this Plan is implemented and improvements to our active transportation network are realized.** The City of Highland will prioritize the needs of existing residents and identify ways to not only improve their safety, comfort and health, but to enhance community access to public resources and create a healthier, more sustainable, and more inclusive community.



The Equity Framework not only guides the recommendations in this Plan, but will continue to guide the City during implementation.

VISION

This Plan aims to make walking and bicycling more comfortable, convenient, and accessible for people of all ages and abilities throughout the city.

GOALS, OBJECTIVES, AND ACTIONS

Safety & Health

This Plan will empower residents to live a more active lifestyle by providing a network of safe and comfortable walking routes and bikeways for everyone to enjoy.



Asking the Right Questions	How Do We Measure Progress?
• Will the Plan help reduce crashes and fatalities while increasing opportunities for physical activity among vulnerable populations? • Does the Plan help reduce air pollution, asthma rates, and greenhouse gas emissions, particularly within vulnerable populations?	• Reduce the number of severe and fatal collisions by 2040 • Increase percentage of K-12 students receiving bicycling education • Increase outreach and education events throughout the City of Highland, particularly in disadvantaged neighborhoods, by 20% • Increase walk/bike mode share by 5% by providing options for local trips • Decrease the number of poor air quality/smog days by 5% • Decrease rates or prevalence of obesity and chronic diseases (e.g.,

Asking the Right Questions	How Do We Measure Progress?
	cardiovascular disease, type 2 diabetes, cancer)



Objective		Action
A.	Reduce bicycle and pedestrian collisions through safe and comfortable facilities	1. Prioritize quick implementation of bicycle and pedestrian facilities on streets with high rates of traffic collisions (such as Palm Ave and Base Line) according to the Statewide Integrated Traffic Records System (SWITRS), and as collisions occur. 2. Annually evaluate data on bicyclist and pedestrian stops by local law enforcement. To deterime if there is need for additional active transportation enhancements. 3. Adopt design guidelines that promote safety through incorporating separation between bicyclists/pedestrians and drivers. Refer to national and state best practices. 4. Implement best practice facilities, including flashing beacons, bulb-outs, and protected intersections, to improve safety and reduce collisions throughout the city. 5. Fund safety education programs for both people driving and people biking that encourage safe behaviors. 6. Adopt a City Council resolution authorizing school zone speed limits as low as 15 MPH.
B.	Promote an active lifestyle that includes biking and walking	1. Dedicate City staff to implement programs that encourage residents to walk and bike together on city streets. 2. Fund programs that incorporate biking and walking into curriculum at district schools. Seek an Office of Traffic Safety Grant or other funding or resources for educational activities. 3. Provide more opportunities for outdoor recreation via parks, "recreation-friendly streets," and joint-use agreements with school facilities.



Objective		Action
		4. Develop a citywide bicycle map for public use. 5. Establish a bicycle-friendly business program to encourage biking and walking by employees and customers.
C.	Reduce air pollution, asthma rates, and greenhouse gas emissions	1. Build an active transportation network that encourages residents to choose modes of transportation other than driving by providing low-stress facilities, robust pedestrian networks, and first/last mile access to transit. 2. Achieve a 5% reduction in vehicle miles traveled as residents, workers, and visitors meet daily needs by walking, bicycling, and using transit.
D.	Reduce travel times for low-income households	1. Increase the overall mileage of the low-stress bicycle network in low-income neighborhoods by 10% by 2025.

Access & Comfort

This Plan will support increased access to neighborhood destinations such as grocery stores, libraries, schools, recreation centers, and transit stops. Pedestrian and bicycle facilities will be accessible and comfortable for people of all ages and abilities to use.

Asking the Right Questions	How Do We Measure Progress?
• Does the Plan prioritize the needs and trip patterns of vulnerable users? • Does the Plan remove barriers so that vulnerable populations can take part in or enjoy the improvements? • Does the Plan support and not impede public transit service? • Does the Plan consider universal design principles that serve all users, including those with physical disabilities?	• Increase the share of people walking and bicycling to work to 3% by 2025 • Increase the share of students walking or bicycling to school to 10% by 2025 and 15% by 2030 • Reduce the percent of streets that are Level of Traffic Stress (LTS) 4 from 7% to 5% by 2025 • Implement a Complete Streets policy • Implement a Safe Routes to School (SRTS) Program • Implement a Vision Zero program • Make a SCAG Safety Pledge • Complete Tier 1 projects recommended in this Plan by 2030 and Tier 2 projects by 2040

Objective		Action
A.	Increase access to jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations	1. Implement the recommended active transportation network to safely and comfortably connect residential neighborhoods with destinations like employment centers, grocery stores, community centers, schools, and shopping areas. 2. Increase bicycle parking at neighborhood destinations like schools, medical centers, grocery stores, and government offices.

Objective		Action
		3. Establish a transportation impact fee ordinance to leverage funding for installation of new bicycle and pedestrian facilities. 4. Evaluate all streets during pavement resurfacing to determine if pedestrian or bicycle facilities can be provided (e.g. bike lanes, wider curb lanes or shoulders) on an ongoing basis. 5. Incorporate routine accommodation for pedestrian and bicycle facilities when developing priority lists for overlay and construction projects, maintenance, and traffic control plans. 6. Install wayfinding signage, informational kiosks, and other amenities at key destinations to help guide bicyclists and pedestrians. 7. Ensure street furniture supports active transportation. Allocate benches, shade, and hydration amenities in areas with high volumes of people walking and biking. 8. Maintain a pedestrian through zone free from all types of obstructions including poles, benches, utility boxes, etc. Work with local businesses to prevent obstruction of pedestrian walkways by items such as restaurant seating and merchandise.
B.	Address barriers so that vulnerable populations can take part in the improvements	1. Seek funding to provide opportunities for walking/biking supplies giveaways. 2. Provide free basic bicycle maintenance training and bicycle tool lending at libraries to empower residents to fix bicycle issues for minimal cost. 3. Provide bike parking, fix-it stations, and hydration stations at key community destinations.
C.	Support public transit service	1. Design bikeways on transit streets using best practices that do not impact transit reliability or bicycle/pedestrian movement (e.g. floating bus islands, bus/bike lanes). Best practices can be found in design guidelines such as the Urban Street Design Guide (2013), produced by the

Objective		Action
		National Association of City Transportation Officials' (NACTO). 2. Work with OmniTrans to improve bicycle and pedestrian access (first/last mile connections) to transit stations and the comfort of transit stops and onboard transit vehicles, especially during peak commute hours, and to provide secure bike parking, benches, and covered waiting areas at stations and stops. 3. Work with OmniTrans to require and install rear wheel guards on all agency buses. 4. Install more secure, long-term bicycle parking at major transit hubs.
E.	Prioritize the needs and trip patterns of vulnerable populations	1. Increase the overall mileage of the sidewalks and low-stress bicycle network in low-income neighborhoods by 10% by 2025. 2. Prioritize the construction of facilities that connect existing active transportation networks and address disparities between neighborhoods. 3. Develop Safe Routes to School Plans for each K-12 school in Highland in collaboration with the schools and school districts to identify specific improvements for school-age pedestrians and bicyclists through focused studies.
F.	Prioritize universal design standards	1. Prioritize design that facilitates access, comfort, and ease for all users, including people with physical disabilities, strollers, food carts, etc. 2. Install or upgrade curb ramps to comply with current Americans with Disabilities Act standards. 3. Repair potholes and pavement cracking, including those in crosswalks, during routine maintenance. 4. Provide ample crossing time at signalized crossings, particularly those adjacent to destinations heavily used by people who move at slower rates, including children, older adults, and people with physical disabilities.



Affordability

This Plan will work to reduce the burden of transportation costs on households.

Asking the Right Questions	How Do We Measure Progress?
• Does the Plan help reduce the burden of transportation costs? • Is implementation of the Plan likely to reduce transportation costs in the long run (e.g. by reducing the need for vehicle ownership or for parking in new developments)? • Does the Plan enhance affordability for existing residents?	• Build a complete network of low-stress bikeways by 2040 • Connect all major transit stops and community destinations with bicycle and pedestrian facilities by 2030 • Demonstrate a reduction in vehicular trips and an increase in walking and bicycling with traffic counts by 2030



Objective		Action
A.	Reduce the overall household transportation costs for all residents, both anticipated and existing	1. Build an active transportation network that provides low-stress bicycle and pedestrian facilities for people, particularly those in low-income neighborhoods, and encourages the use of biking and walking as low-cost transportation. 2. Build facilities that provide first- and last- mile connections to public transit stations and major bus stops. 3. Integrate sustainable transportation improvements with housing projects, particularly affordable housing. 4. Establish "Cultural Corridors" around large transportation investments to bolster cultural celebration, local economic growth, and ability to stay in place. 5. Develop an "Equity Scorecard" to assess new projects within the community to ensure priorities, goals, and desired outcomes related to equity are being met.



Objective		Action
B.	Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments	1. Review the Highland Planning Code and identify opportunities to reduce or eliminate parking minimums. 2. Update the Highland Planning Code to require more bicycle parking in major development projects. 3. Update the Highland Planning Code to require end-of-trip-facilities, such as showers and changing rooms, in major non-residential developments. 4. Update the Highland Planning Code to require pedestrian improvements (such as sidewalks, bulb-outs, and ADA compliant curb ramps) in major development projects. 5. Revise the menu of transportation demand management (TDM) options to include fix-it stations and hydration stations.



Maintain & Expand the Network

This Plan will help our community identify, develop, and maintain a complete and convenient bicycle and pedestrian network.

Asking the Right Questions	How Do We Measure Progress?
• Does the Plan adequately position our community for successful implementation? • Does the Plan ensure equitable distribution of proposed facilities?	• Triple the mileage of existing bikeways by 2040 • Double the number of short-term and secure long-term bicycle parking locations by 2030 • Maintain adequate pavement quality, striping, and sign visibility and signal/beacon functionality on all bicycle and pedestrian facilities. • Start tracking and begin publishing annual bicycle and pedestrian counts

Asking the Right Questions	How Do We Measure Progress?
	to SCAG's Active Transportation Database (ATDB) by 2021

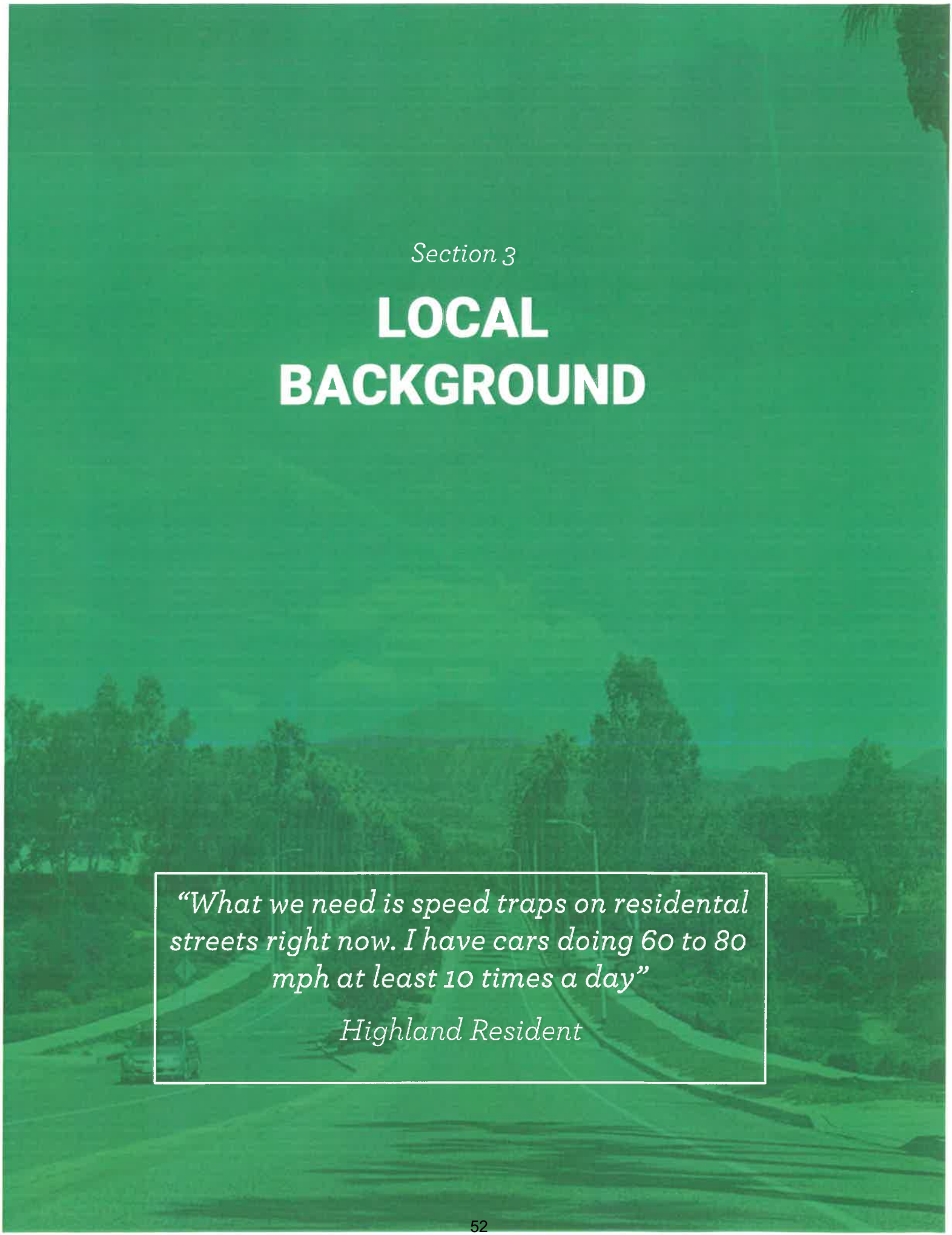


Objective		Action
A.	Integrate bicycle and pedestrian network and facility needs into all Highland planning documents and capital improvement projects	1. Review the City of Highland's Capital Improvement Program (CIP) list on an annual basis to ensure that recommended projects from this Plan are incorporated at the earliest possible stage of both new capital projects and maintenance of existing facilities. 2. Evaluate all streets during pavement resurfacing to determine if additional bicycle and pedestrian facilities can be provided (e.g. bike lanes, wider curb lanes or shoulders, wider sidewalks) when the striping is reapplied. 3. Ensure that all traffic impact studies, analyses of proposed street changes, and development projects address impacts on bicycling and walking facilities. 4. Require new development, or reconstruction if applicable, to address the pedestrian and bicycle circulation element based on the above considerations. 5. Conduct regular pedestrian and bicycle counts before and after project implementation following SCAG's methodology. Upload counts to SCAG's ATDB. 6. Conduct a report every three years on the implementation status of the Plan.

Objective		Action
B.	Leverage existing funding to maximize project delivery	1. Utilize City funds as a local match if needed, aggressively pursue funding from available grant sources. 2. Actively develop projects from the Plan to position the City of Highland to best compete for grant funding. 3. Follow the Plan's prioritization recommendations, which include equity and other funding-agency-determined factors in scoring. 4. Continue preparing an annual Work Plan including the status of pedestrian and bicycle projects in this Plan that have been completed, are in progress, and are proposed for the budget year showing scope, schedule, and budget by fund source. 5. Through the CIP process, assess and prepare for upcoming staffing, consultant, and capital funding needs as projects arise. 6. Establish a development fee requirement to provide for construction and maintenance of sidewalks, bikeways, and trails serving the new development.
C.	Maintain designated facilities to be comfortable and free of hazards to biking and walking	1. Sweep streets regularly, with priority given to those with higher pedestrian and bicycle traffic. 2. Trim overhanging and encroaching vegetation to maintain a clear path of travel along pedestrian and bicycle facilities. 3. When an off-street facility is constructed, establish an inspection and maintenance program. 4. Develop a procedure for inspection and maintenance of bicycle parking facilities. 5. When roadway projects occur, require roadway to be of satisfactory quality for smoothness and restriping suitable for bicycling. 6. Publish a triennial report on the state of walking and bicycling in Highland to monitor and evaluate the City's progress on implementing the Plan.

Section 3

LOCAL BACKGROUND



"What we need is speed traps on residental streets right now. I have cars doing 60 to 80 mph at least 10 times a day"

Highland Resident

3. Local Background

HISTORICAL AND CURRENT CONTEXT

There is great potential to expand the role and use of active transportation in the City of Highland. The city is located in the southwestern corner of San Bernardino County near the Cities of Redlands, Loma Linda, and the City of San Bernardino. Incorporated in 1987, the city's population has grown by approximately 84% since incorporation. The city continues to develop to meet the needs of the population while still maintain a high percentage of open space. Due to its proximity to the San Bernardino National Forest and the Santa Ana River, open space is designated in more than 20% of the community.

While the city has grown and modernized, Highland has maintained some of its historical commercial and residential structures particularly around "Old Town." The Highland Historic District, as it is formally called, is generally bounded by Nona Avenue to the north, Main Street to the south, Orange Street to the west, and Church Avenue to the east. It contains an interesting blend of early 1900s architecture, including Craftsman Bungalows, Victorian-influenced designs, Gothic Revival, and early commercial styles. Highland Historic District is designated with the National Register of Historic Sites. A community with roots spanning long before our incorporation as a City, Highland has a history in the citrus industry.

EQUITY ANALYSIS

The project team conducted an analysis using existing demographic information from the US Census Bureau. All data was obtained from the 2017 American Community Survey (ACS) Five-Year Estimates and analysis was conducted at the census tract level for Highland. For this analysis, the following indicators were used:

- **Age:** Individuals under the age of 18 and over the age of 65 comprise this indicator. These two age groups are displayed separately to better identify the differing needs of these populations.
- **Race:** This indicator measures the percentage of the population that identifies as non-white.
- **No Access to a Vehicle:** This indicator measures the percentage of households who do not have regular access to a vehicle.
- **Income:** This indicator measures the median household income.
- **CalEnviroScreen 3.0:** This indicator identifies disadvantaged communities as compared to other places in California.

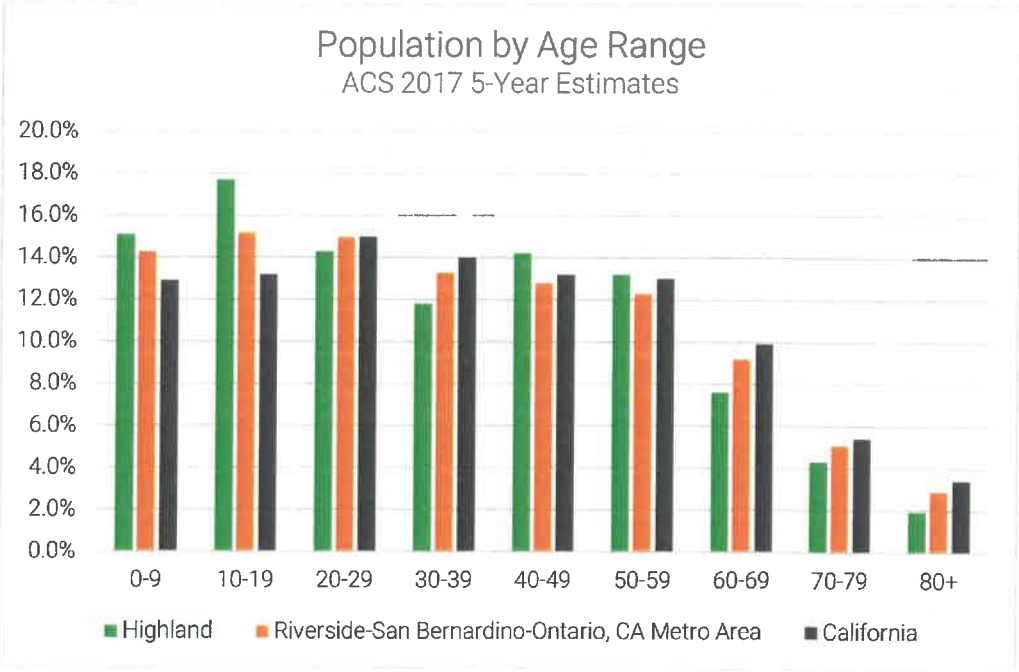
Demographics

Highland is home to approximately 55,000 residents. San Bernardino County, on the other hand, has a population of over 2.1 million people.

Age

When compared to the county population, Highland is younger , with more between 10 and 39 years old, than that of the County or State, as shown in Figure 1. The median age in Highland is 32.4 years, whereas the median age for the county is 34 years.

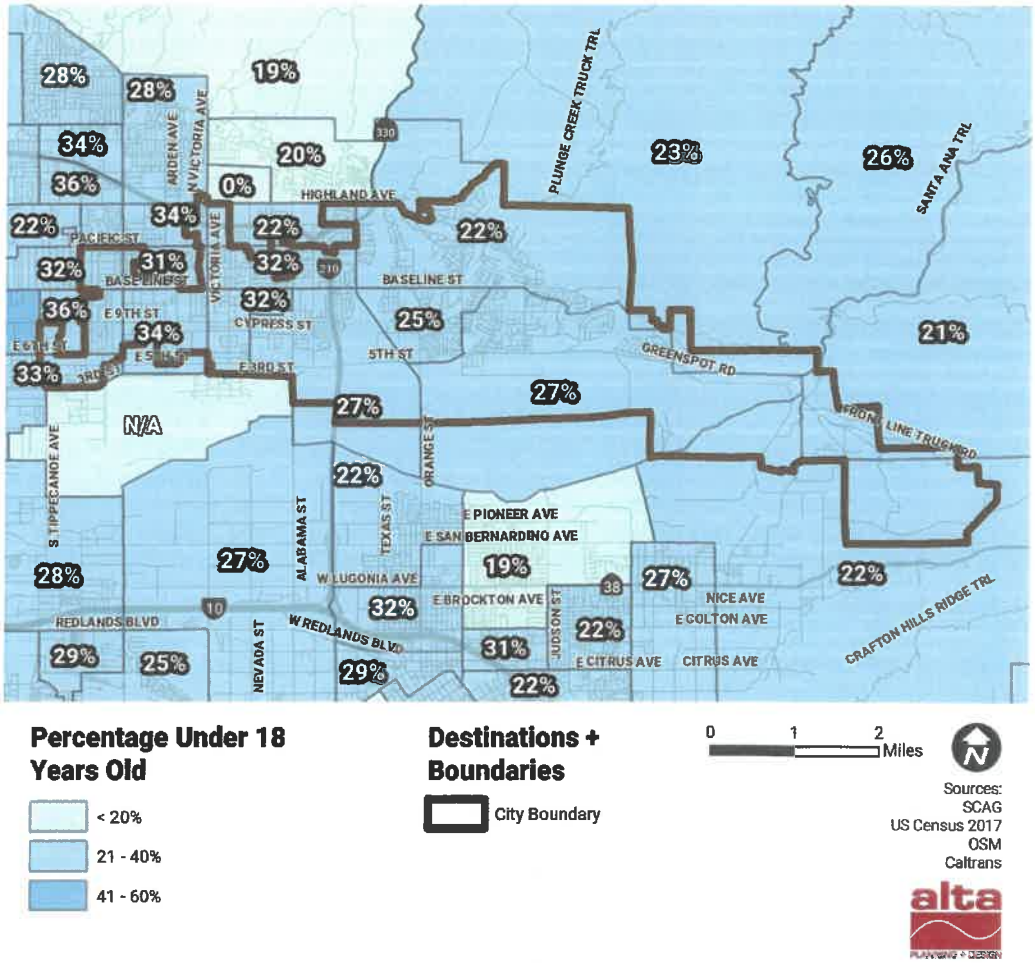
Figure 1. Distribution of Ages



UNDER 18

In total, approximately one-third of our residents are 18 years and younger. Youth comprise larger portions of the population throughout the western portion of the city. Youth comprise between 36% and 22% of the population across all census tracts. Higher concentrations of those under the age of 18 are not in close proximity to the existing bikeway network.

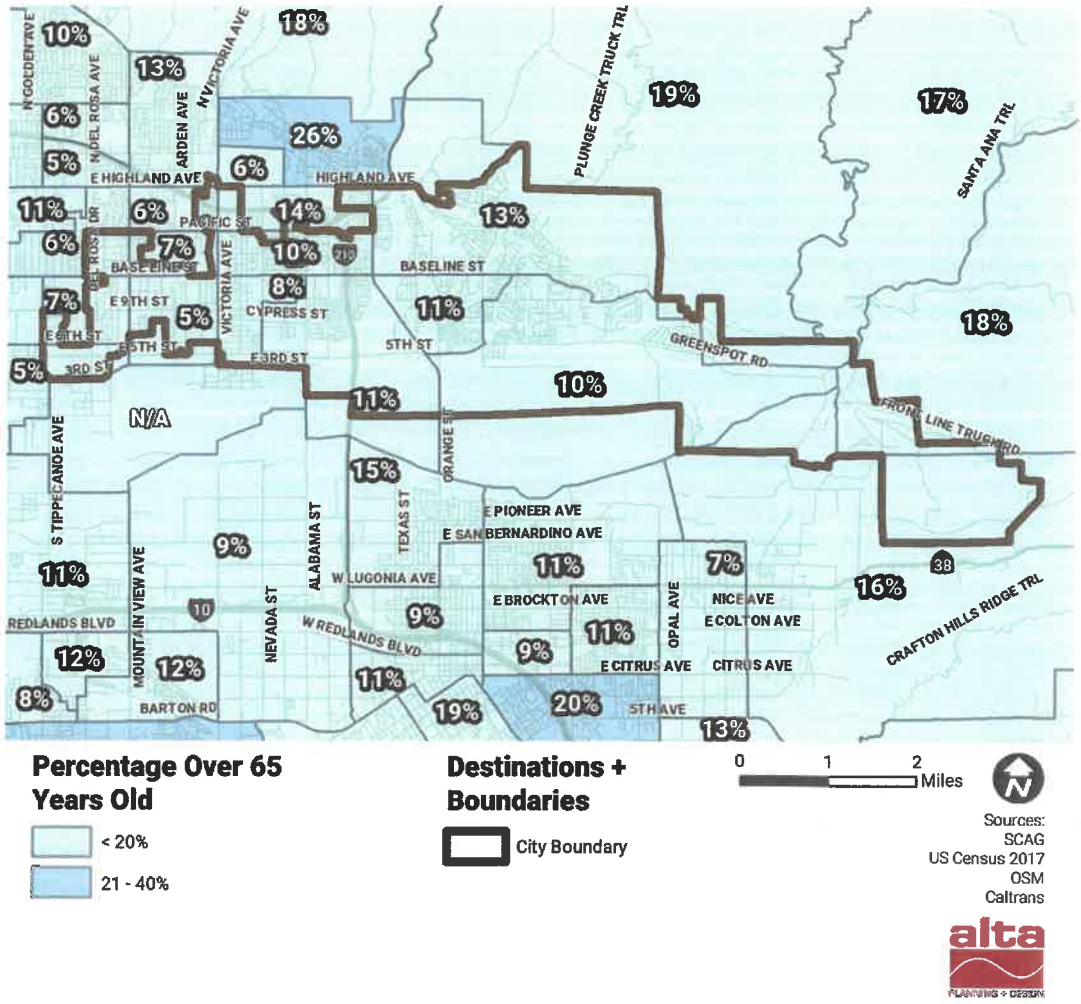
Figure 2. Percentage of Population Under 18



OVER 65

Residents over 65 years of age comprise 13% of our population, a much smaller percentage compared to youth in our city. The concentration of population over the age of 65 has different spatial distribution to that of the population under the age of 18; with more older adults throughout the eastern part of the city. Census tracts range from having 5% to 13% or residents over 65. Higher concentrations of those over the age of 65 are in close proximity to the existing bikeway network, and could use the bicycle facilities if the facilities were more inviting or programs helped facilitate their use.

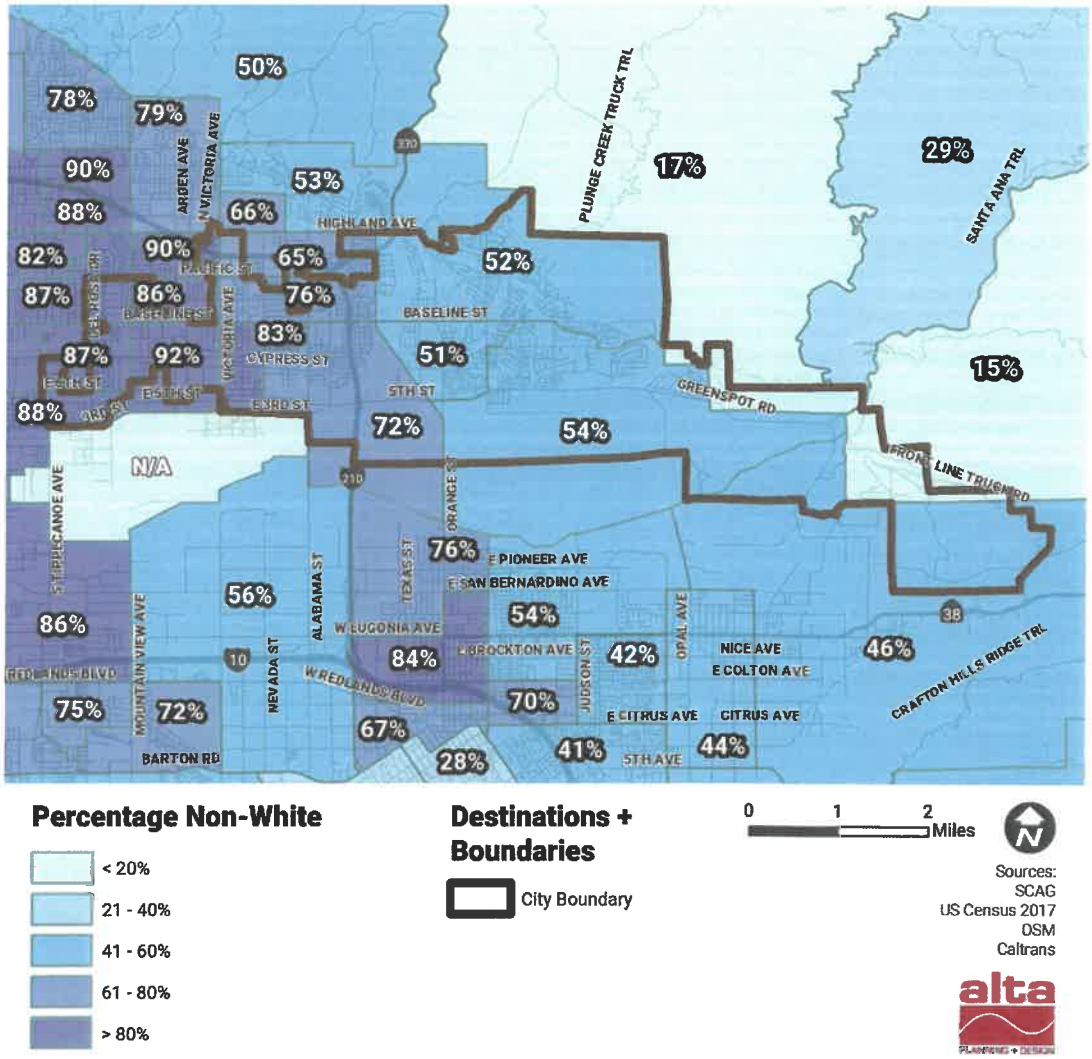
Figure 3. Percentage of Population 65 and Older



People of Color

Approximately 72% of Highland residents identify as non-white. Census tracts' populations can range from 54% people of color to 92%. Higher concentrations of non-white populations are located within the western part of the city away from existing transit corridors.

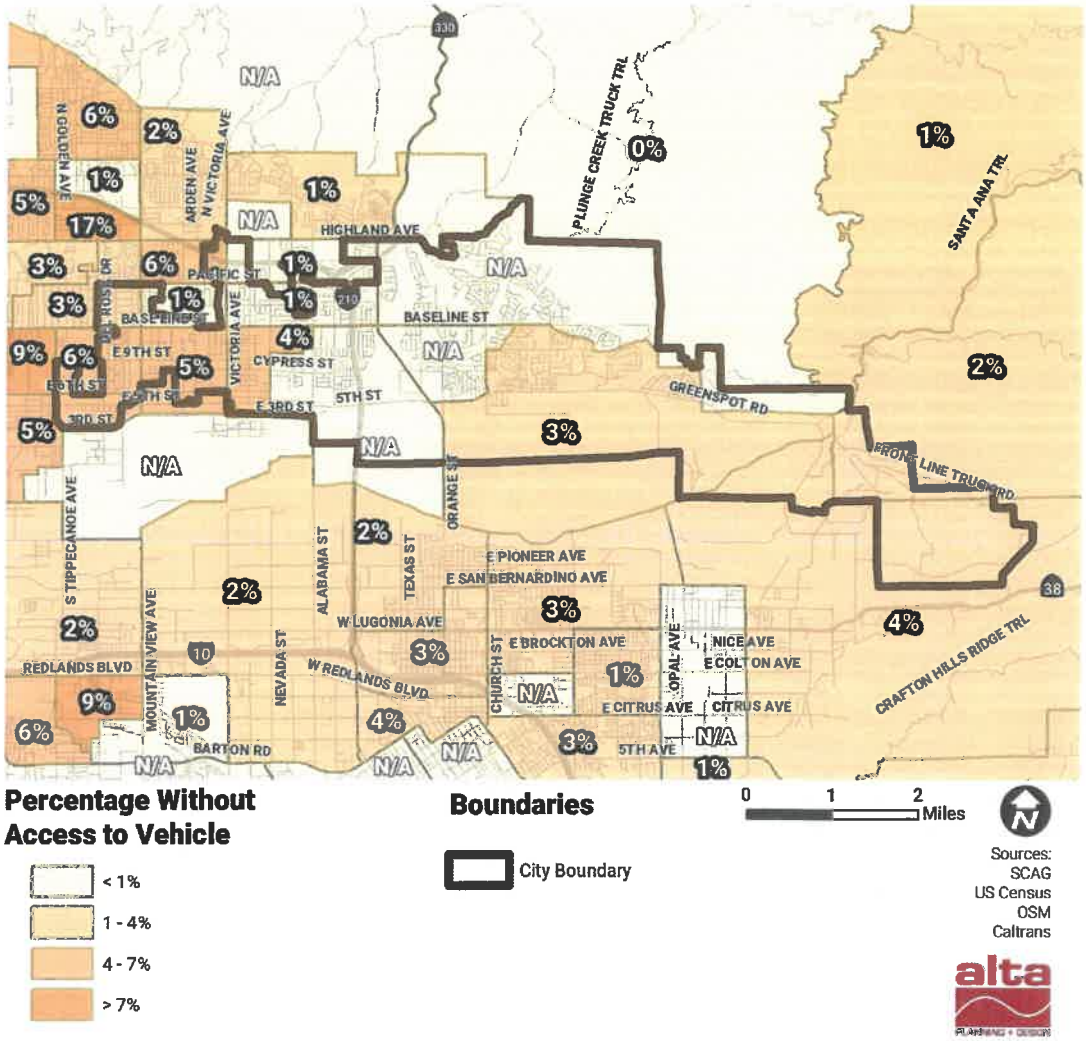
Figure 4. Percentage of Population that is Non-White



No Access to Vehicles

In general, areas with higher concentrations of no motor vehicle access are found in the western parts of the city, where the existing active transportation network is limited. Census tracts range from having 1% of households not having access to a motor vehicle, up to nearly 5% of the population. Approximately 1.9% of households do not have access to a vehicle.

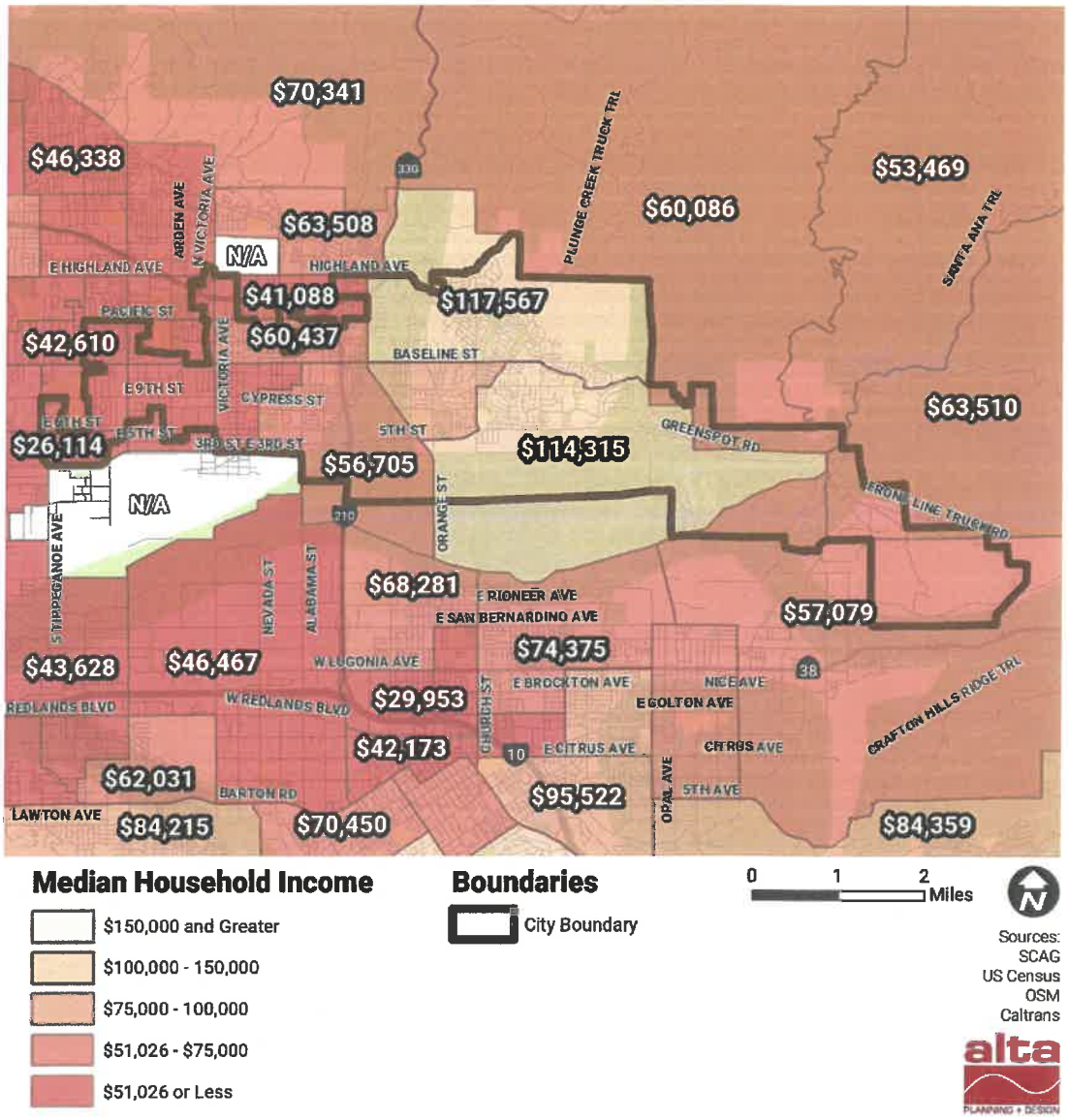
Figure 5. Percentage of Households without Access to an Automobile



Median Household Income

The overall median household income in Highland is $55,130, which is lower than the Riverside-San Bernardino-Ontario metro area median household income of $59,173. Households in the eastern portion have significantly higher household incomes compared to those on the west side ($117,000s and $42,000s, respectively).

Figure 6. Median Household Income



CalEnviroScreen 3.0

The California Office of Environmental Health Hazard Assessment developed the CalEnviroScreen tool to help identify communities that are disproportionately burdened by multiple sources of pollution. It combines pollution data (such as ozone concentrations and drinking water contaminants) with population indicators (such as birth weight and educational attainment).

This is also a tool used in California's Active Transportation Program grant application scoring. Communities that score in the most burdened 25% of the state are considered to be disadvantaged and receive a small advantage in the competitive funding process. Areas in Highland that meet this threshold are indicated in Figure 7.

LAND USE & DESTINATIONS

Land uses in Highland are shown in Figure 8. Highland is primarily comprised of commercial, industrial, and single-family residential uses. Open spaces and parks are found north outside of the city boundaries while industrial facilities are located south near 3rd Street. Commercial and businesses are concentrated along Base Line and west of the city. In addition to a large single-family residential presence throughout the city, Highland has large number vacant lands located east of the city.

Figure 7. CalEnviroScreen 3.0 Scores by Census Tract

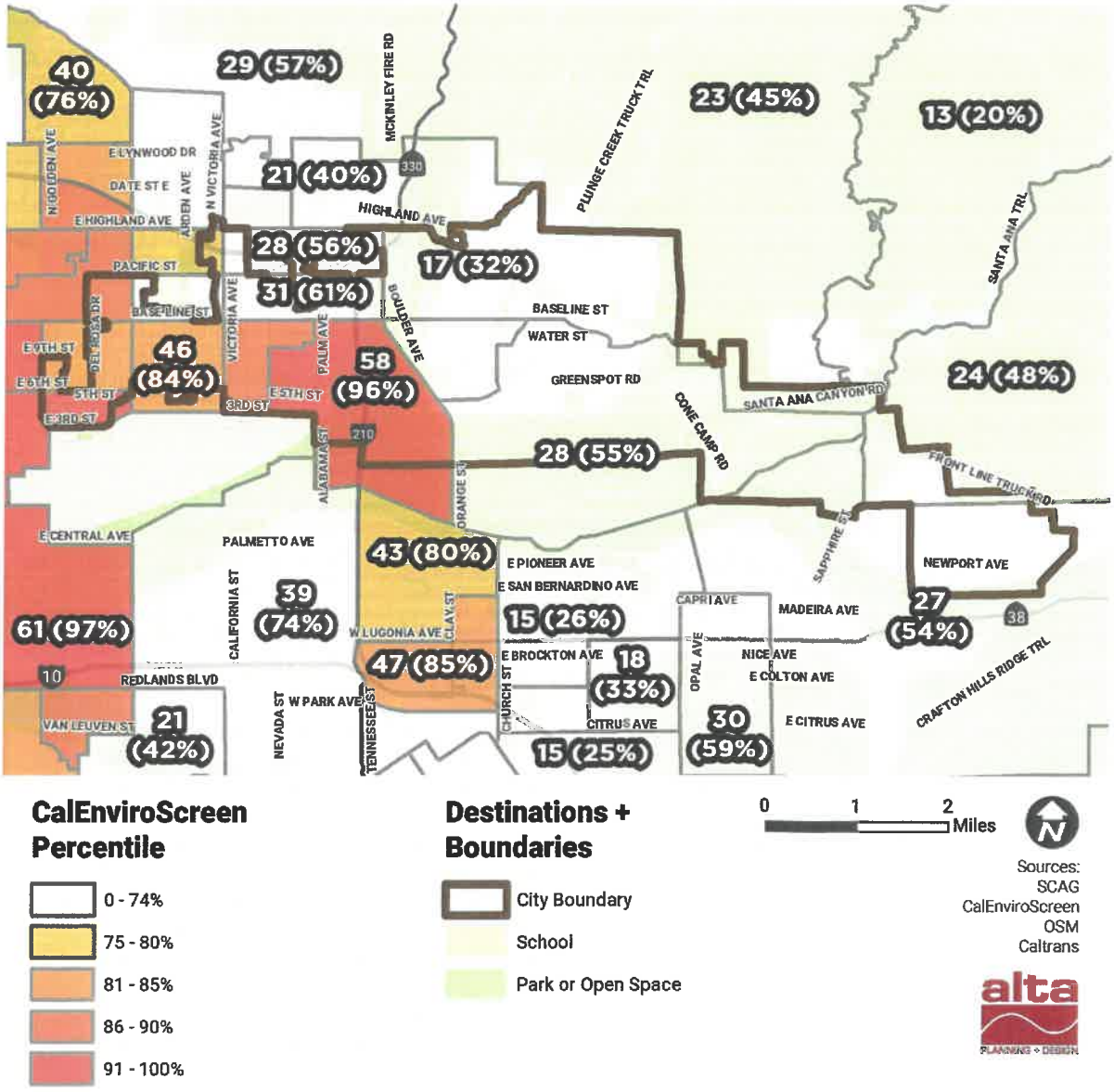
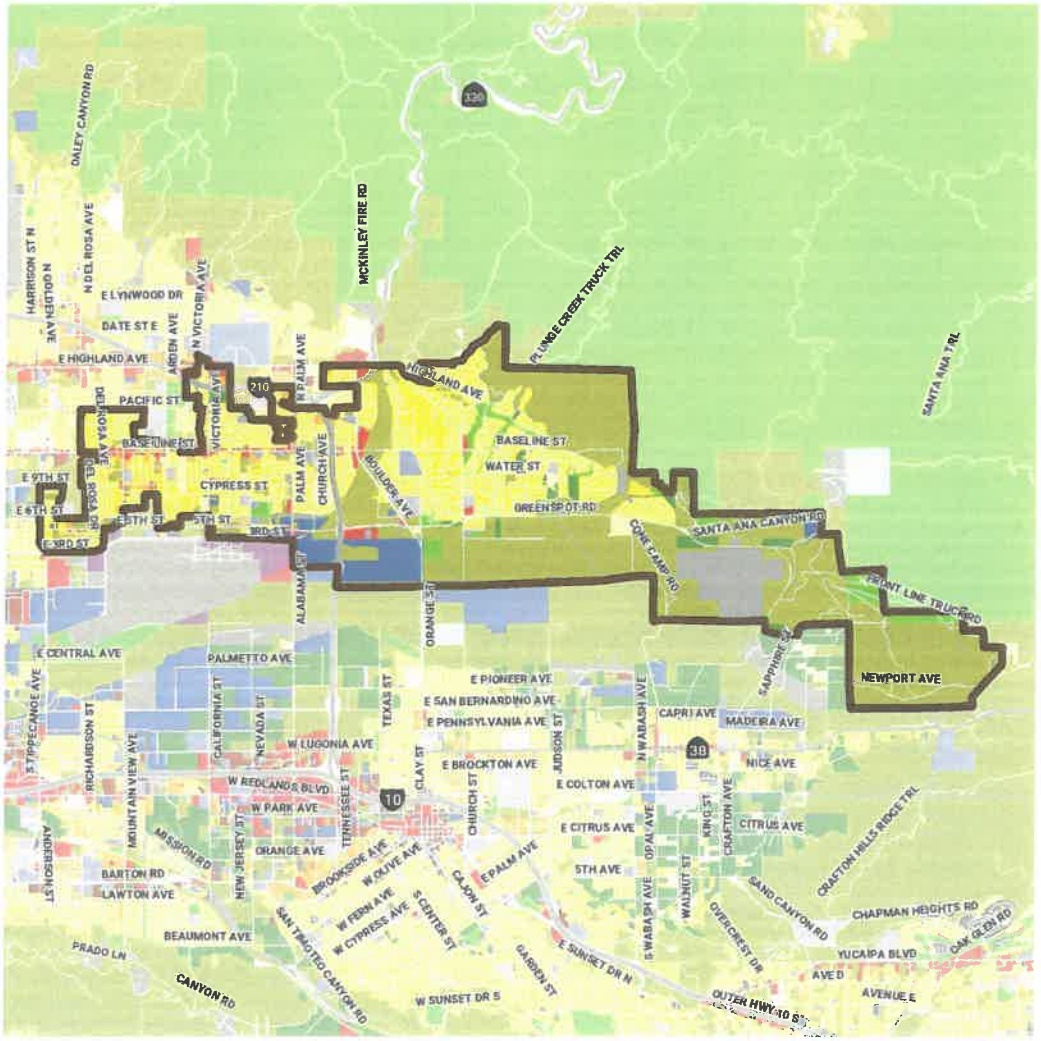


Figure 8. Land Use



Transit Access

Highland is served by several transit providers and routes that offer connections to local and regional destinations. Major transit hubs include:

- **Route 3/4:** Operated by Omnitrans and connects Highland with San Bernardino via Base Line
- **Route 15:** Operated by Omnitrans and connects Fontana, San Bernardino, and Redlands
- **Route 5:** Operated by Mountain Transit and connects Big Bear Valley, Running Springs, Highland, and San Bernardino; stops in the city at Highland Avenue and Boulder Avenue

The first two routes provide connections to the San Bernardino Downtown Metrolink Station, which is served by the San Bernardino Line (with service west to downtown Los Angeles), and the Inland Empire – Orange County Line (with service south to Oceanside).



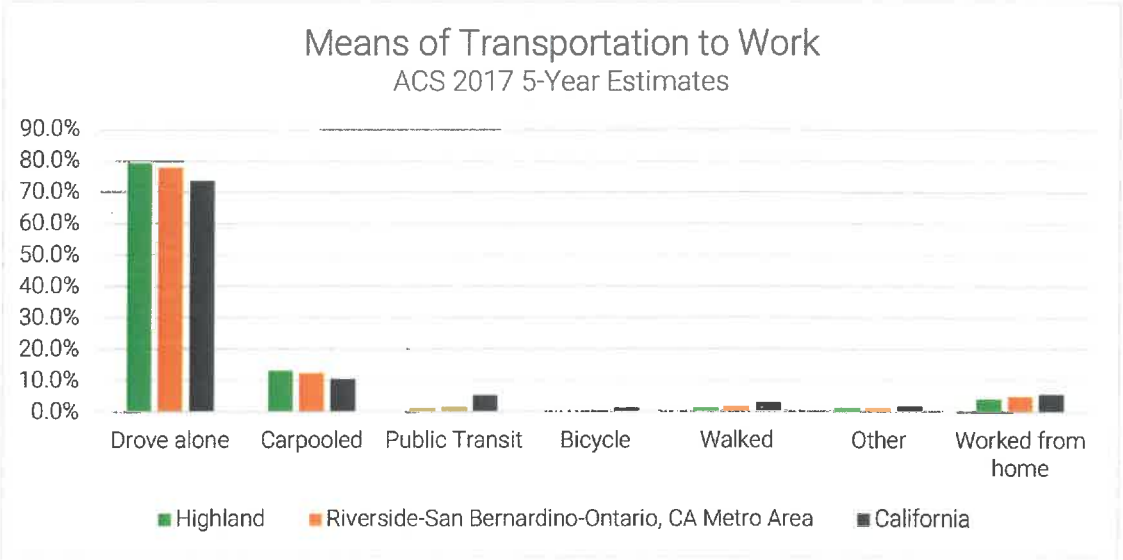
Omnitrans serves as the main transit hub in Highland, providing connections to local and regional destinations.

EXISTING TRAVEL PATTERNS

Mode Share

Of the 22,300 Highland residents 16 or older officially in the workforce as of 2017, only 1% are estimated to walk and 0.2% are estimated to bike to work. However, rates of walking and biking are likely higher than this, as ACS does not factor recreational trips or trips where commuters use more than one mode when traveling to work, such as taking a bus partway then riding a bicycle to the final destination. Almost 2 percent of workers (about 423 total) reported that they do not have access to an automobile. These workers would rely on transit, walking, bicycling, or carpool to get to work.

Figure 9. Means of Transportation to Work



PLANS AND POLICIES

This Plan is consistent with and builds upon the efforts of various planning, policy, and regulatory documents. These include the Highland's own documents, such as the General Plan, Code of Ordinances, and Greenspot Specific Plan. Highland also intends to design a bicycle and pedestrian network that complements existing and planned bikeways and pedestrian projects in surrounding jurisdictions. Therefore, the planning context also includes bicycle and pedestrian plans, policies, and projects of neighboring jurisdictions, San Bernardino County, and the State of California.

This Plan will help Highland continue to meet the following goals. See Appendix D for all of the relevant plans and policies.

Local

General Plan

LAND USE ELEMENT

- **Goal 2.10:** Create a new Town Center where Highland residents, employees and visitors can live, shop, work, recreate and socialize in a vibrant, safe and pedestrian-friendly environment.

CIRCULATION ELEMENT

- **Goal 3.1** Provide a comprehensive transportation system that facilitates current and long-term circulation in and through the City.
- **Goal 3.7** Protect and encourage bicycle travel.

CONSERVATION & OPEN SPACE ELEMENT

- **Goal 5.12** Develop and maintain trail and bikeway connections to recreational facilities, schools, existing transportation routes, natural features and regional trail systems.

PUBLIC HEALTH & SAFETY ELEMENT

- **Goal 6.8** Reduce mobile and stationary source air pollutant emissions through cooperation and endorsement of the San Bernardino Regional Air Quality Plan and support of feasible techniques, incentives, and regulatory measures to achieve significant air quality improvements and any necessary air quality related lifestyle and economic changes while sustaining continued economic growth.

Code of Ordinances

- Require secured bicycle parking at all new nonresidential and multi-family developments
- Provide for non-motorized circulation on residential developments
- Participate in the implementation of the countywide bicycle plan

Greenspot Specific Plan (2008)

1.3.1. COMMUNITY DESIGN

- To provide easy pedestrian connections between residential neighborhoods and shopping opportunities

1.3.2. LAND USE

- To establish distinctive residential neighborhoods, each with safe and convenient pedestrian access to a central open space area, as well as to commercial opportunities

1.3.3. CIRCULATION

- To provide for safe and efficient vehicular, pedestrian, and bicycle movement within and through the Specific Plan area
- To provide safe and convenient pedestrian and bicycle connections between residential neighborhoods, the open space areas and commercial uses within the Specific Plan area
- To augment major roadway improvements along Greenspot Road and Boulder Avenue

1.3.4. OPEN SPACE

- To encourage outdoor activity by providing trails and open space that is connected by pedestrian walkways to residential and non-residential areas

Regional

San Bernardino County Transportation Authority (SBCTA) Non-Motorized Transportation Plan (2018)

- Increased bicycle and pedestrian access
- Increased travel by cycling and walking
- Routine accommodation in transportation and land use planning
- Improved bicycle and pedestrian safety.



This Plan advances many local, regional, and state goals of increasing walking, biking, and community health.

SBCTA Points of Pedestrian Plan (PIPP) (2016)

- Identify potential gaps in pedestrian mobility, enabling more citizens to reach more places in a more affordable, healthier manner

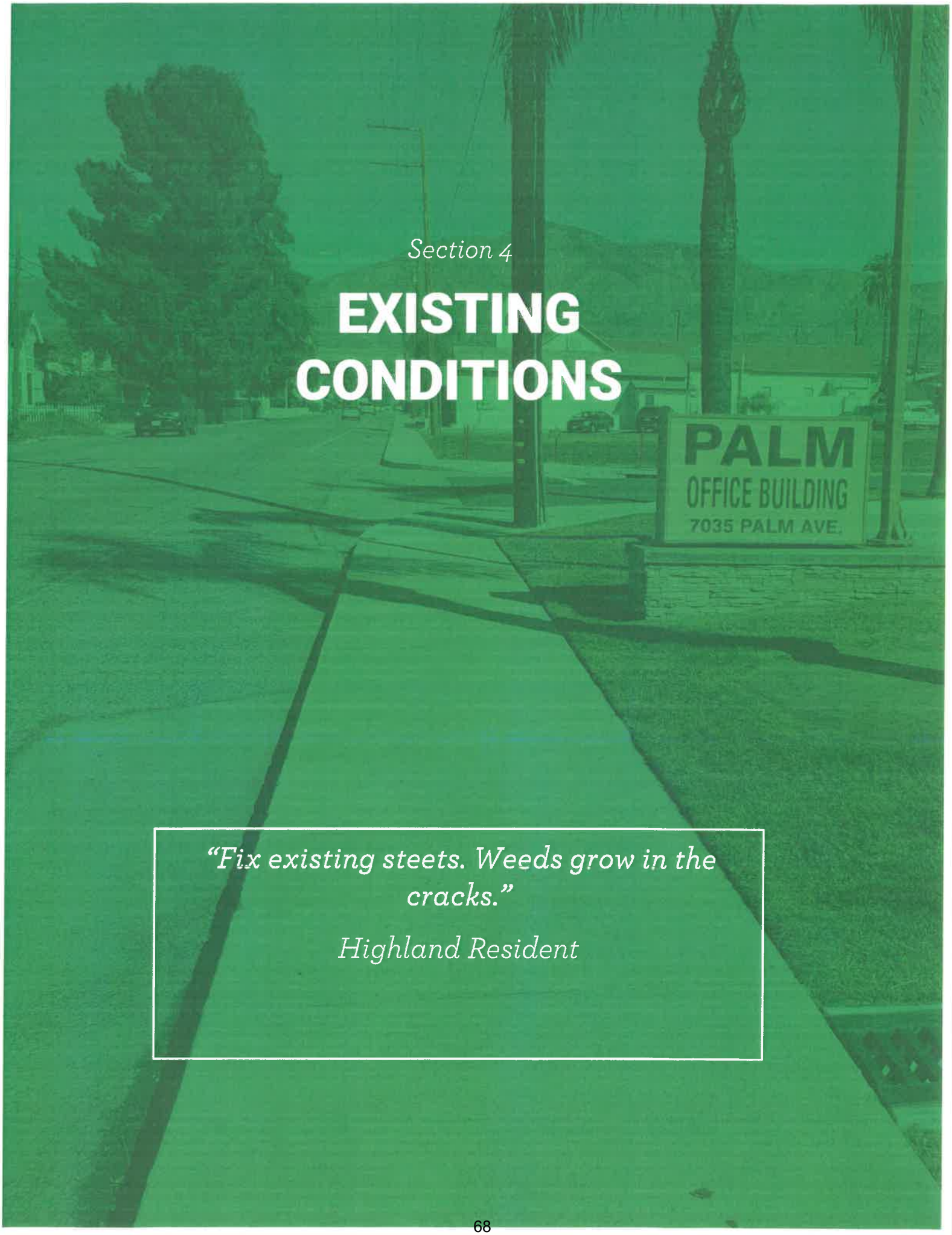
San Bernardino Countywide Transportation Plan (2015)

- Improve safety and mobility for all modes of travel in San Bernardino County by residents, businesses, employees, students and visitors

State

Toward an Active California: State Bicycle and Pedestrian Plan

- Triple bicycling trips and double walking and transit trips statewide by 2020 (relative to 2010).



Section 4

EXISTING CONDITIONS

"Fix existing steets. Weeds grow in the cracks."

Highland Resident

4. Existing Conditions

ACTIVE TRANSPORTATION OVERVIEW

Types of Active Transportation

Any human-powered mobility classifies as "active transportation." Beyond walking and biking, active transportation also encompasses people roller skating, skateboarding, using a scooter, and using a wheelchair or other mobility device. In addition to people walking, "pedestrian" also refers to people using mobility devices or skateboards in California per the California Vehicle Code. Active transportation promotes positive public health outcomes, diminishes environmental impacts related to transportation, expands accessibility and mobility choices, and decreases the financial burden of getting around.

The increased prevalence of technology such as electric bicycles ("e-bikes") and other motor-assisted vehicles has introduced a new element to "active transportation" considerations, fraught with potential and tensions. This Plan aims to advance e-powered devices in so that they support, and not compromise or inhibit, walking and biking.

Types of Pedestrian and Bicycle Facilities

Pedestrian Facilities

There are many features that contribute to a convenient and comfortable walking environment. Significant investments and commitments to future improvements have been made that continue to enhance the pedestrian experience in Highland.

SIDEWALKS

Sidewalks form the backbone of pedestrian transportation networks. Many streets in newer neighborhoods have shaded and well-landscaped sidewalks on both sides of the street. Some even have paseo networks which connect cul-de-sacs, parks, and other neighborhoods on pedestrian and bicycle-only paths. Older neighborhoods, particularly those on the west side of town, have incomplete



Landscaping and shade trees create pleasant walking conditions on this sidewalk.

sidewalks or lack them altogether. In some areas such as Pacific Street near Cole Avenue, the sidewalk and driveway are elevated for a stormwater drainage. This results in an unusually high curb, which could be difficult for children, older adults, and people with mobility impairments to navigate. Within the city limits, sidewalk maintenance is the voluntary act of the property owner and not a City, this requirement associated with applications for new developments or construction.[22]



Sidewalk on Orange Street near Highland Pacific Elementary School.



Elevated driveway and sidewalk on Pacific Street.

[22]City of Highland. *Public Works Policies Procedures and Standards (September 13, 2016).*

CROSSWALKS

Crosswalks are a legal extension of the sidewalk and provide guidance for pedestrians who are crossing roadways by defining their path of travel. Crosswalks are not required to be marked, however marked crosswalks alert drivers of a pedestrian crossing point and increase yielding to pedestrians. Markings can be standard parallel lines or the "continental" high visibility pattern shown in the image to the right, which enhances visibility of the crossing and is becoming best practice. Crosswalks in school zones are yellow.



Crosswalks near schools, such as these by Highland Pacific Elementary, are marked yellow.

CURB RAMPS

Curb ramps are the design elements that allow all users to make the transition from the street to the sidewalk or vice versa. A sidewalk without a curb ramp can be useless to someone in a wheelchair or pushing a stroller, forcing them back to a driveway and out into the street for access. Many streets in our downtown have curb ramps; however, most feature the "diagonal" approach as opposed to the recommended "perpendicular" approach of placing curb ramps in both directions of travel.



Crossings without curb ramps (such as this one on Main Street and Palm Ave) present difficult conditions for children, older adults, and people using wheelchairs, strollers, or other mobility devices.

PEDESTRIAN HYBRID BEACONS

Pedestrian hybrid beacons are used to enforce motorist yielding to pedestrians at uncontrolled crosswalk locations. The beacon, when

activated by a person wishing to cross, flashes yellow before displaying a solid red signal to motorists, requiring them to stop. Pedestrians are then shown a WALK signal, and may cross the road. When the WALK phase is complete, the beacon flashes yellow before returning to a dark inactive state.

Rectangular Rapid Flashing Beacons or RRFBs increase visibility of uncontrolled or midblock crosswalks with bright LED lights activated by a pedestrian push button. Highland has multiple RRFBs throughout the city, including near the Arroyo Verde Elementary School, City Hall on Base Line near Palm Avenue, and on other major corridors such as 9th Street.



A high-visibility crosswalk enhances the visibility of pedestrians at this crossing on Base Line at Reedy Avenue. In-street lights, activated with a push button, further alert vehicles of a pedestrian's presence at the crosswalk.

Bicycle Facilities

As of 2019, the California Department of Transportation (Caltrans) designates four classes of bicycle facilities: Class I shared use paths, Class II bicycle lanes, Class III bicycle routes, and Class IV separated bikeways. The City of Highland's current bicycle network has approximately 21.67 miles of bikeways (see Figure 10). Descriptions of each bikeway class are included in the following section, and bikeways are mapped in Figure 11 to show where they currently exist in Highland.



The paseos in east Highland serve as a Class I shared use path.

CLASS I SHARED USE PATHS

Class I shared use paths are paved trails completely separated from the street. They allow two-way travel by people bicycling and walking, and are often considered the most comfortable facilities for children and inexperienced riders as there are few potential conflicts between people bicycling and people driving.

There are currently 5.97 miles of Class I shared use paths in Highland.



Class II bike lane on Base Line.

CLASS II BICYCLE LANES

Class II bicycle lanes are striped preferential lanes on the roadway for one-way bicycle travel. Some bicycle lanes include a striped buffer on one or both sides to increase separation from the traffic lane or from parked cars where people may open doors into the bicycle lane (buffered bicycle lanes are referred to in this Plan as "Class IIB").

There are currently 15.70 miles of Class II bicycle lanes in Highland.

CLASS III BICYCLE ROUTES

Class III bicycle routes are signed routes where people bicycling share a travel lane with people driving. Because they are shared facilities, bicycle routes are only appropriate on quiet, low-speed streets with relatively low traffic volumes. Some Class III bicycle routes include shared lane markings or "sharrows" that recommend proper bicycle positioning in the center of the travel lane and alert drivers that bicyclists may be present. Others include more robust traffic calming features to promote bicyclist comfort and are known as "bicycle boulevards" (referred to in this Plan as "Class IIIB"). The Highland Fire Department will be included in discussions about new or altered features on bicycle boulevards, to ensure access for emergency responders is maintained.

There are no Class III bicycle routes in Highland.

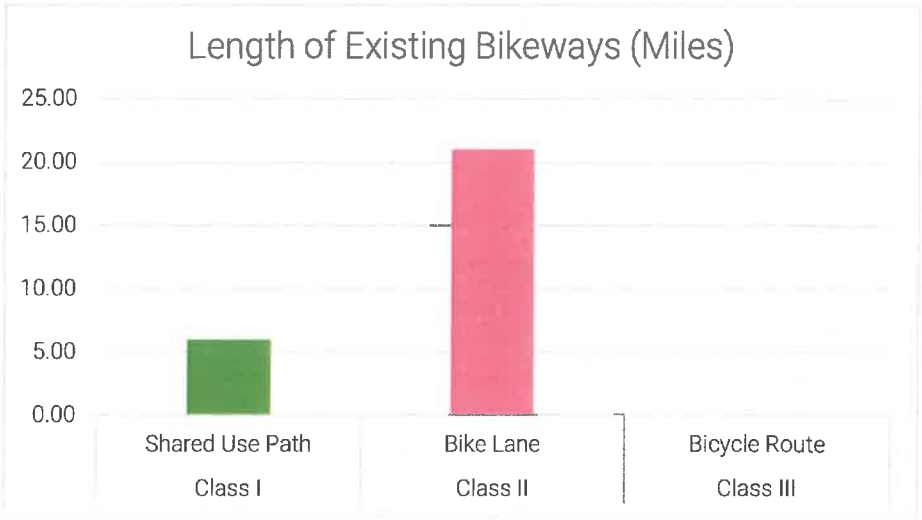


Class III facilities provide bike routes on low-speed streets.



Bicycle Boulevards incorporate traffic calming measures such as diverters to maintain low vehicular volumes.

Figure 10. Existing Bikeways by Class and Length



Previously Planned Facilities

While Highland's existing bikeway network covers over 21 miles, previous planning efforts have offered visions for a larger and more connected network spanning more than 54 total miles. Figure 12 shows the locations and types of bicycle facilities recommended in the SBCTA's Non-Motorized Transportation Plan. This planning effort builds on those recommendations and will provide an updated vision of Highland's active transportation network.

Figure 11. Existing Bikeways

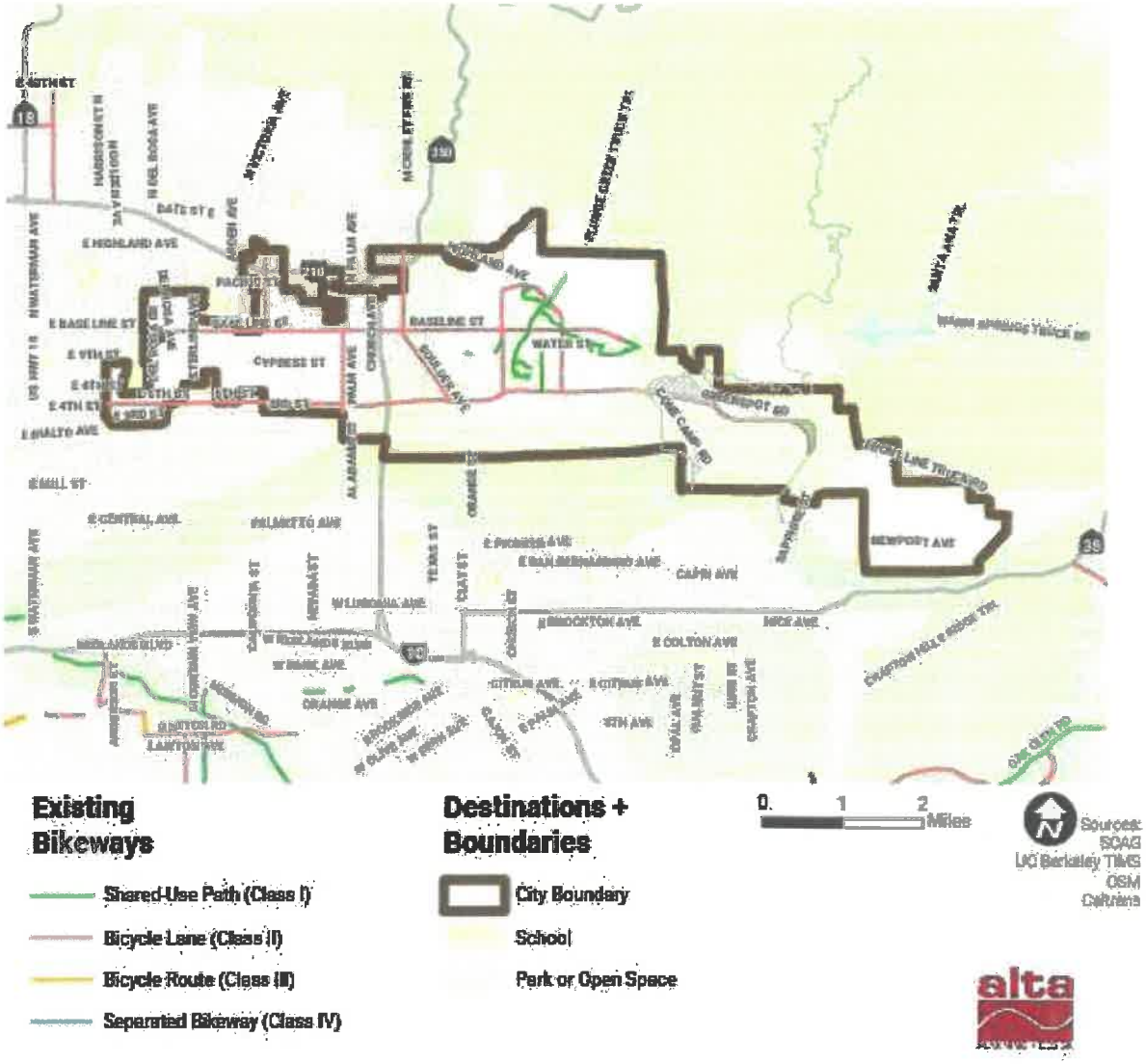
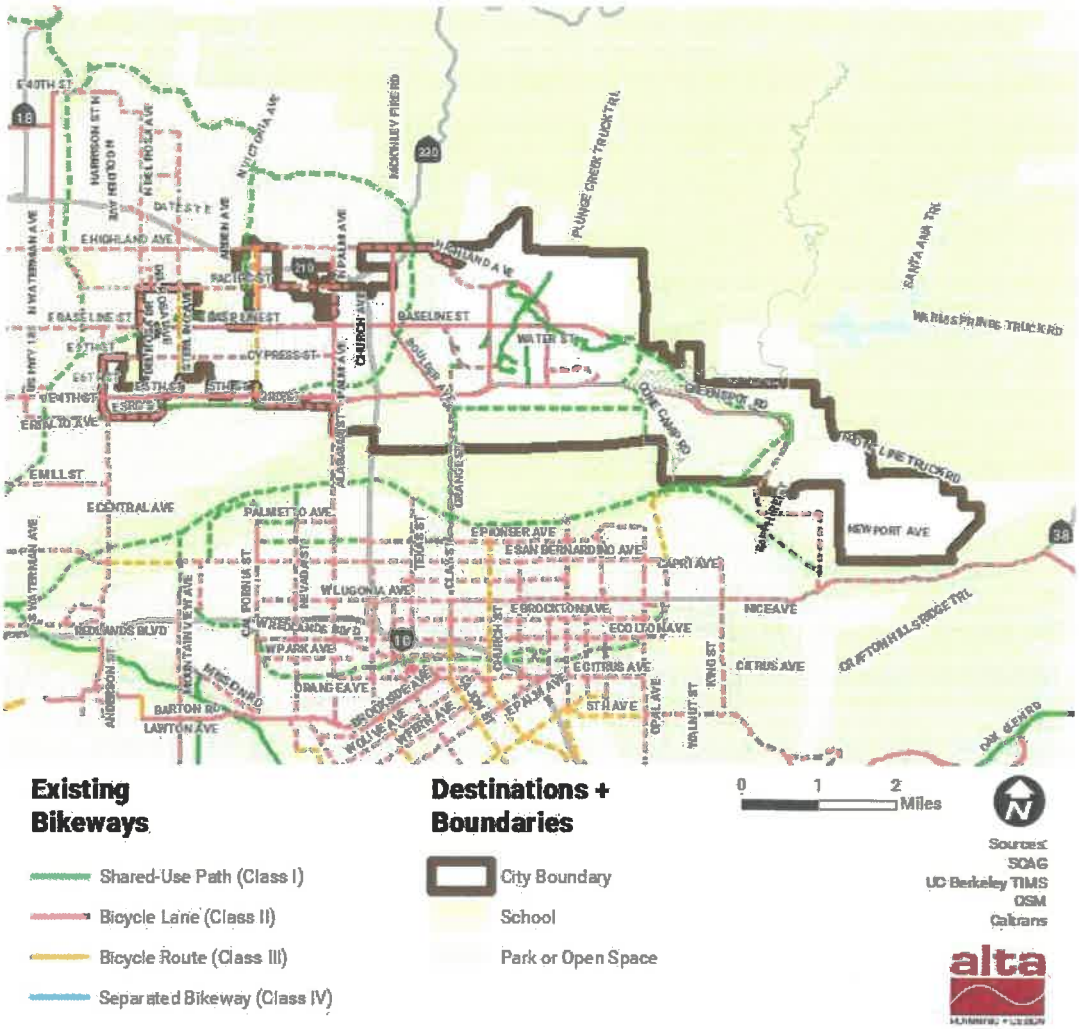


Figure 12. Previously Planned Bikeways



FRAMING ACTIVE TRANSPORTATION

For the Future

Mobility options in many cities have changed drastically in recent years with the rise of bike share programs, transportation network companies (TNCs) such as Lyft and Uber, microtransit, and autonomous vehicles. Shared mobility, micro-mobility, and on-demand mobility are likely to continue being part of our transportation landscape, and often align with our goals of reducing household transportation costs and improving access.



Scooters, bike share, and on-demand mobility services have greatly impacted the transportation experience.

Although called "bikeways," such facilities are frequently used not just by people riding bikes, but also by other small-wheeled devices such as mobility scooters, skateboards, roller skates, and more. Further, bikeways may continue to be used by new modes such as e-scooters. California Vehicle Code also requires pedestrians use bike lanes if the sidewalk is unavailable.

This Plan works to advance all sustainable mobility options in our community, and considers the benefits, inclusion and potential impacts of non-traditional active transportation modes when making recommendations.

EXISTING SUPPORT FACILITIES

Support facilities are also needed to attract and maintain bicyclists and pedestrians by considering their needs throughout their journey. People are less likely to ride their bicycles to destinations without secure bicycle parking. Other support facilities include showers or lockers at destinations, repair stations with basic tools, drinking fountains, and wayfinding or guide signs to help people navigate along the way.



Bike racks are found at Highland's City Hall.

Bicycle Parking

A complete bicycle network must include secure bicycle parking at each end of every trip. Bicycle parking can generally be divided into two categories: short-term bicycle racks and long-term higher-security parking.

Short-Term Bicycle Parking

Bicycle racks are the preferred device for short-term bicycle parking. Racks serve people who leave their bicycles for relatively short periods of time—typically for shopping, errands, eating, or recreation. Though they may have a variety of designs, racks should have two points of connection between the bicycle and rack, allowing the frame and at least one wheel to be secured with a standard U-lock.



Best practices for bike parking allow for two points of contact between bikes and the rack.

Long-Term Bicycle Parking

Long-term bicycle parking typically includes bike lockers and bike rooms and serve people who intend to leave their bicycles for longer periods of time. Long-term parking is typically found at public transit stations, commercial buildings, and multi-family residential buildings.

Our community unfortunately doesn't have bicycle parking or bike racks throughout the city. The city hopes to address this and implement these facilities to support and increase bike ridership across Highland.



Bike lockers provide secure, long-term parking options, and complement short-term bike racks.

Wayfinding

Wayfinding signs help people traveling along bicycle, pedestrian, and trail networks by providing directional and distance information to community destinations. In Highland, bicycle lane and route signage are dispersed throughout the city. Additionally, there is wayfinding signage for local destinations such as the post office, Town Center trails. Other signage located on Base Line near Club View Drive display signage for private trail crossings School signage are located near schools. The City can explore mile markers on trail or other wayfinding signage.



Signage directs users to important location thoughout Highland.





Examples of existing wayfinding signage in Highland



Approved Wayfinding signage to be installed

NON-INFRASTRUCTURE PROGRAMS

Programs help support walking and bicycling by sharing information, promoting comfort, and creating a vibrant active transportation culture. Communities that have the highest rates of walking and bicycling consistently use a "6 Es" approach, with five types of programs complementing **Engineering** improvements:



Group rides give confidence and experience to new cyclists.

- **Engagement:** Listening to community members and working with existing community organizations
- **Education:** Providing safety education for people walking, riding bicycles, and driving, as well as education about the environmental and health benefits of active transportation and the facilities available in the community
- **Encouragement:** Promoting bicycling and walking as fun and efficient modes of transportation and recreation
- **Evaluation:** Monitoring the success of the effort through counts, surveys, and review of relevant data
- **Equity:** Increasing access and opportunity for all residents, including disadvantaged minority, and low-income populations

The City and our partners have been carrying out the following programs in recent years to support bicycling and walking.

Safe Routes to School

The San Bernardino Associated Governments (SANBAG) SRTS Strategy has completed two phases. The first phase evaluated existing resources and prioritize allocation of resources that promote active transportation options regionally. The second phase identified schools throughout the County to collect data and initial implementation in two schools in Highland: Lankershim Elementary School and Warm

Spring Elementary. The City website also shares 2010 Suggested Walking Routes for the Safe Routes to School Program for the following schools in Highland:

- Arroyo Verde Elementary School
- Cole Elementary School
- Cram Elementary School
- Cypress Elementary School
- Highland Grove Elementary School
- Lankershim Elementary School
- Thompson Elementary School
- Warm Springs Elementary School

USER EXPERIENCE & PERCEIVED COMFORT

The experience of being a pedestrian or riding a bike can differ greatly throughout any community. Roads with higher speeds, less separation between traffic and people, lack of adequate facilities, and other factors can create unpleasant experiences.

Increase Comfort, Increase Bicycling

Research indicates that the majority of people in the United States (56-73%) would bicycle if dedicated bicycle facilities were provided. Only a small percentage of Americans (1-3%) are willing to ride if no facilities are provided.[23] However, many of our community members who rely on biking for transportation do not always have the luxury of choosing a route based on comfort. This Plan provides a comprehensive network of comfortable bikeways that help entice new riders, and enhance the experience and safety for existing riders.



Not all community members are able to choose their bicycling routes based on comfort, but instead must ride on high-stress arterials that currently lack bikeways in order to reach their destinations—because no other route exists.

[23] *Roger Geller, City of Portland Bureau of Transportation. Four Types of Cyclists. https://www.portlandoregon.gov/transportation/44597?a=237507; Dill, J., McNeil, N. Four Types of Cyclists? Testing a Typology to Better Understand Bicycling Behavior and Potential. 2012.*

Bicycle Level of Traffic Stress

For people on bikes, the Level of Traffic Stress (LTS) is the perceived sense of discomfort associated with riding in or next to fast vehicle traffic. Studies have shown that traffic stress is one of the greatest deterrents to bicycling. **The less stressful—and therefore more comfortable—a bicycle facility is, the wider its appeal to a broader segment of the population.** A bicycle network will attract a large portion of the population if it is designed to reduce stress associated with potential motor vehicle conflicts and if it connects people bicycling with where they want to go.

Bikeways are considered low stress if they are on low volume roadways with slow speeds (e.g., a shared, low-traffic neighborhood street) or if greater degrees of physical separation are placed between the bikeway and traffic lane on roadways with higher traffic volumes and speeds (e.g., a separated bikeway on a major street).

A rating given to a road segment or crossing, the LTS indicates the amount of traffic stress use of a particular facility imposes on bicyclists. The analysis, based on methods developed by the Mineta Transportation Institute, considers posted speed, number of travel lanes, presence of bicycle facility and land use context to calculate a bicyclist's comfort level.

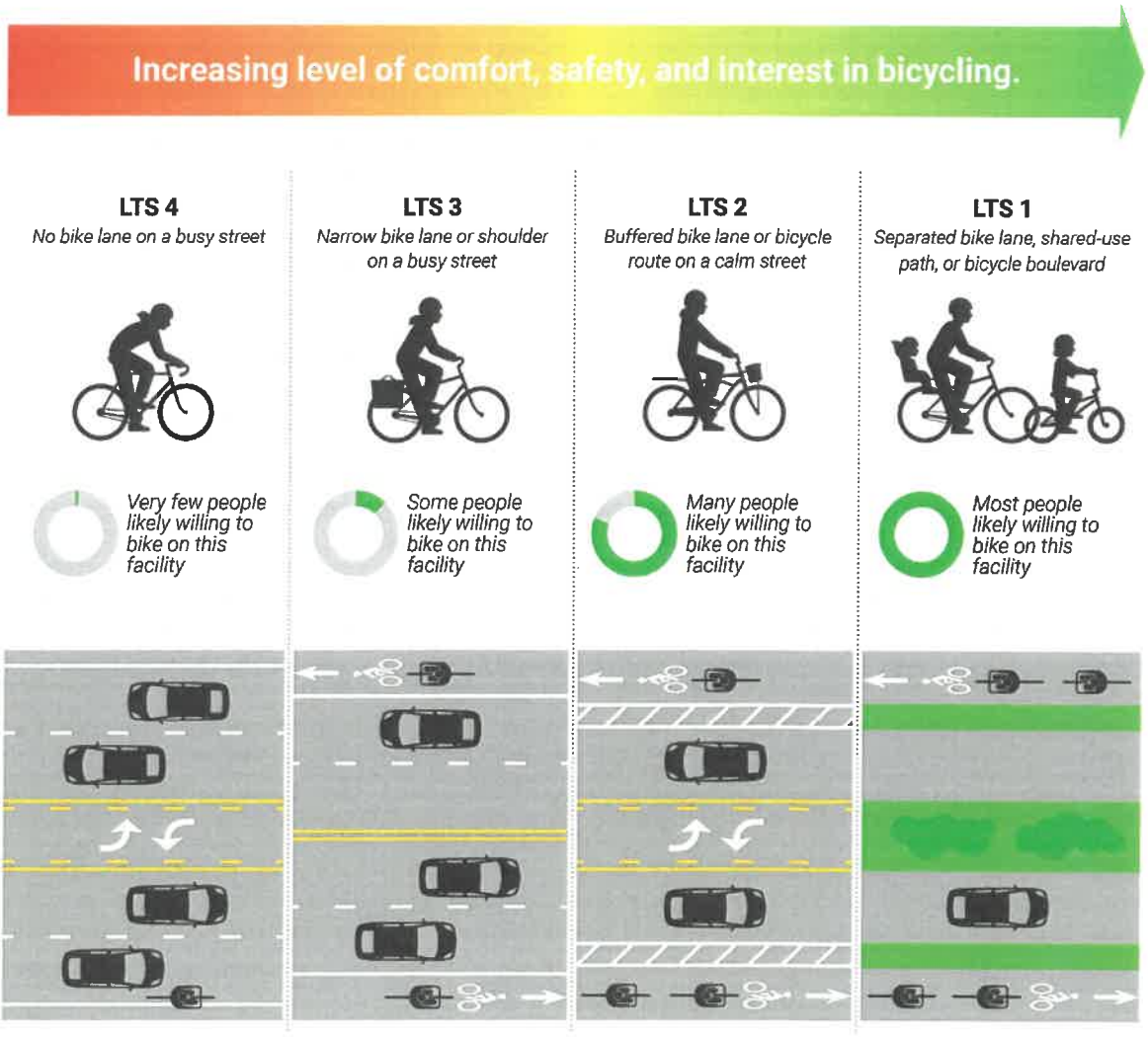
The combination of these criteria creates four levels of traffic stress for the existing roadway network. However, this Plan introduced a fifth level (LTS 1.5) to differentiate between streets without specific bike improvements which nevertheless remain low-speed and low-stress for most people on bikes, versus streets with specific improvements and facilities to create a low-stress experience for riders (LTS 1). The principal of the scale remains the same: the lower the number, the lower the stress and the higher the level of comfort for people on bicycles. LTS 1 and 2 roads are typically the roadways that appeal to the "Interested, but Concerned" cyclists. For this analysis, levels of traffic stress range from 1 to 4:

- **LTS 1 – Most Comfortable:** Strong separation from traffic and improvements for people on bikes. Simple crossings. Suitable for children.
- ***LTS 1.5:** Streets with low speeds and low traffic volumes, but does not feature a bicycle facility.
- **LTS 2:** Physical separation from higher speed and multilane traffic. A level of traffic stress that most adults can tolerate, particularly those sometimes classified as "interested but concerned."
- **LTS 3:** Involves interaction with moderate speed or multilane traffic, or close proximity to higher speed traffic. A level of traffic stress acceptable to those classified as "enthused and confident."

- **LTS 4 – Least Comfortable:** Involves interaction with higher speed traffic or close proximity to high speed traffic. A level of stress acceptable only to those classified as "strong and fearless."

  **Note: LTS 1.5 was introduced for this analysis and is not found within the Mineta Transportation Institute's approach.*

Figure 13. Bicycle Level of Traffic Stress



Findings

The level of traffic stress scores shown in Figure 14 illustrate the low stress connections and gaps throughout Highland. The Bicycle LTS results map approximates the user experience for the majority of Highland residents, however people may have differing opinions of traffic stress depending on their own experiences. While a majority of Highland's entire network scored a Level 1 and 2 (91% total), these facilities are minor local roads or off-street paths typically surrounded by higher stress arterials where most average adults would not feel comfortable riding. It is important to note that crossing these arterial roads would be required to complete most trips by bicycle in Highland. Therefore, safe crossings of these arterials will be critical in order to develop a comprehensive low stress cycling network in Highland.



Not all residents are ready to brave high-speed roadways on bikes, even when buffered bike lanes are present (such as on Palm Avenue south of Base Line, where the posted speed limit is 45 miles per hour).

While the paseos in eastern Highland offer a low stress route that helps cut across these barriers, the majority of residents may not feel comfortable bicycling outside their immediate neighborhood using local streets. This means that getting from residential areas to major destinations may not be possible given most people's tolerance for mixing with traffic—even on streets that have bicycle lanes.

Figure 14. Bicycle Level of Traffic Stress Percentage of City of Highland Streets

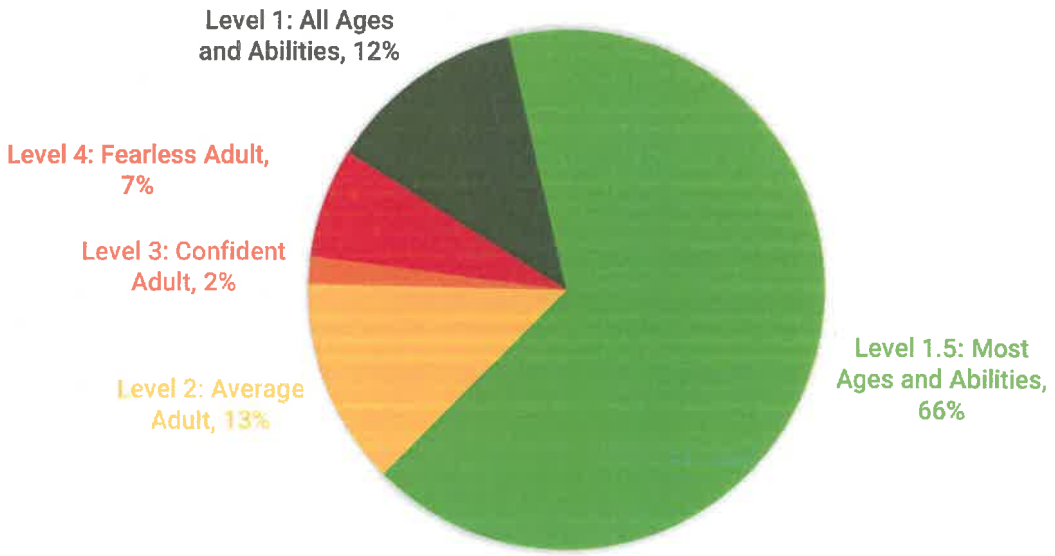
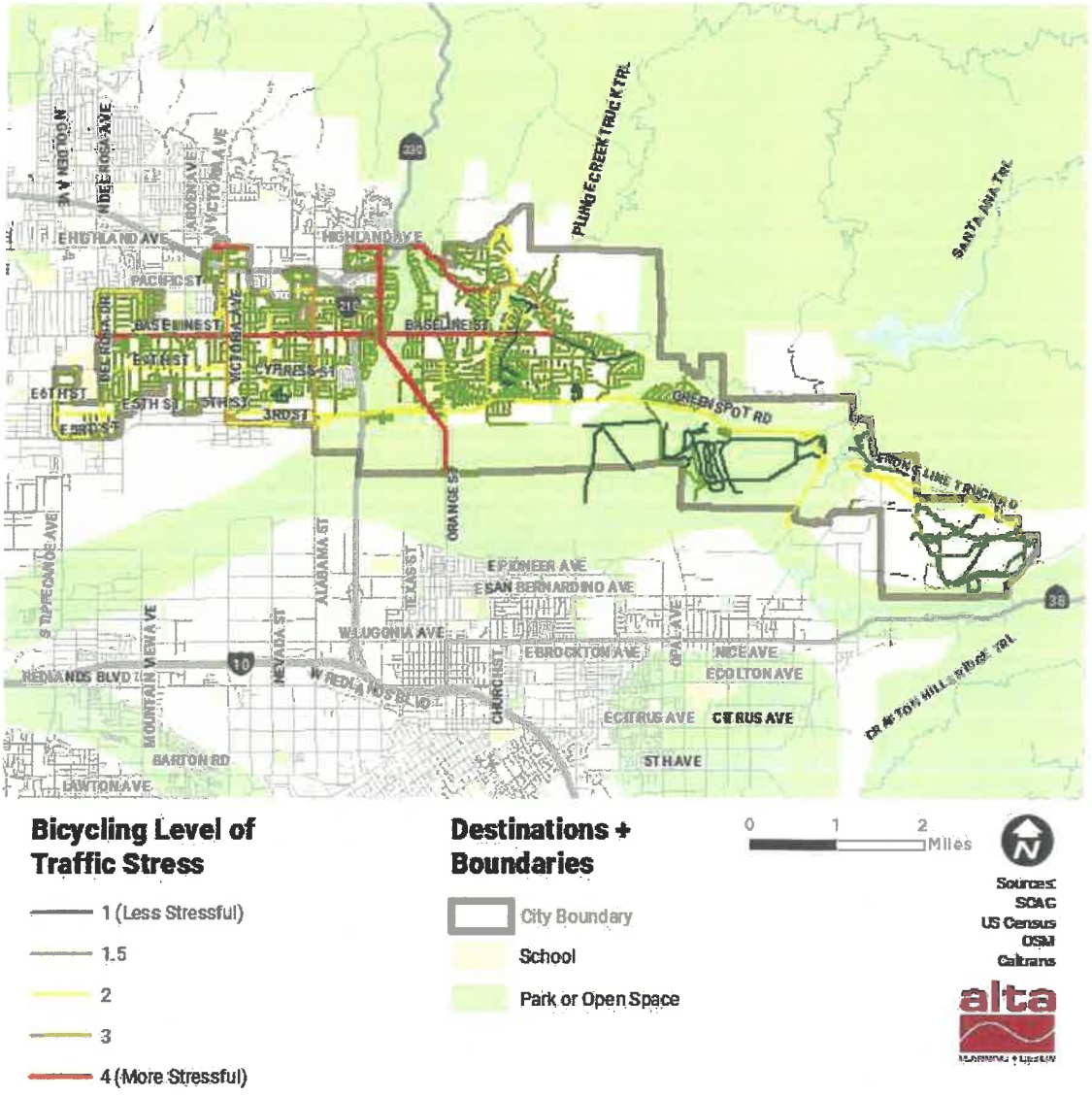


Figure 15. Bicycle Level of Traffic Stress on All Roads



EXISTING BARRIERS

The City of Highland is separated into East and West sections, divided by the 210 Freeway and the wash. There is a lack of connectivity between these two regions, including a lack of trail network connectivity that could help people cross the town and access recreation opportunities. Many streets in the western part of the city lack curb, gutter, and sidewalks. For example, on the intersection of Pacific Street and Orange Street near Highland Pacific Elementary School, the sidewalk is elevated with a large gutter entry way with little protection—where students frequently walk to get to and from school. Within a region that frequently experiences high levels of heat, the lack shade is also a concern for people walking and biking throughout much of the year. Many streets lack trees or other shade structures.

High-volume roadways such as arterials and freeways often act as barriers to walking and biking. However, arterials frequently experience significant volumes of active transportation users as they have many destinations and transit facilities, and are often the most direct route. They also tend to be the most challenging to modify to make safer and more comfortable for active transportation users due to the pressures associated with moving vehicles. As a result, high-volume roadways produce much greater amounts of air pollution than low-volume, local streets. Increased exposure to air pollutants due to proximity to freeways has been tied to higher rates of childhood asthma and other diseases.[24] This



Elevated sidewalk with large gutter entry way presents hazardous conditions (Pacific Street near Highland Pacific Elementary School).

[24] Gauderman et al. *Childhood Asthma and Exposure to Traffic and Nitrogen Dioxide*. 2005.

Plan acknowledges the complex environmental, public health, and quality of life issues related to active transportation on large roadways and works to improve conditions for all of our residents.

COLLISION ANALYSIS

Data on bicycle- and pedestrian-related collisions can provide insight into locations or roadway features that tend to have higher collision rates, as well as behaviors and other factors that contribute to collisions. These insights will inform the recommendations in this Plan to address challenges facing people bicycling and walking.

Collision data involving people walking and bicycling was acquired from the Statewide Integrated Traffic Records System (SWITRS), where the California Highway Patrol and local law enforcement agencies upload collision reports. Five years of data were evaluated, from January 1, 2014 through December 31, 2018.

A total of 664 collisions were reported in Highland during the study period, 5.1% of which involved people bicycling and 9.2% of which involved people walking. With just over 1% of residents estimated to be walking or biking to work, pedestrians and bicyclists are disproportionately represented in traffic collisions in our community.

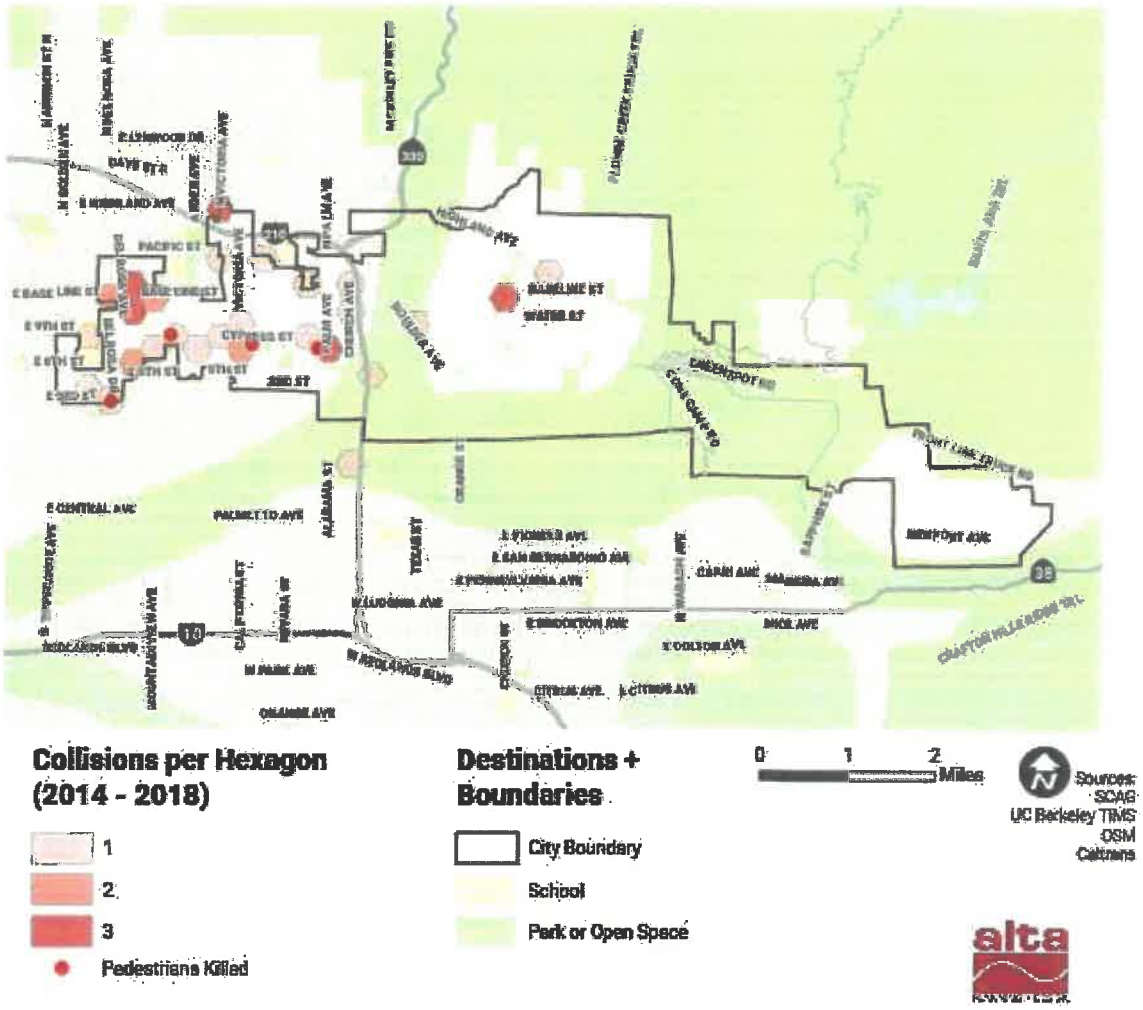
Pedestrian-Involved Collisions

During the study period, 61 collisions in Highland involved a person walking. Four of these were fatal collisions, and over 13 resulted in an injury (see Figure 16). Collisions and fatalities are heavily concentrated in the western region of the city. During the study period, just under 6.6% of pedestrian collisions were fatal. Nearly 21.3% resulted in severe injury, and only about 42% did not result in any injury and were attributed to a pedestrian violation in which they failed to yield the right-of way to vehicles. However, eight collisions (13%) were the result of vehicles failing to yield for a pedestrian in either a marked or unmarked crosswalk. Another eight collisions were attributed to unsafe speed.

Almost 60% of pedestrian-involved collisions took place at night. Approximately 56% of the victims were male. One-third of the collisions were hit-and-runs (18 total). Approximately 22% of victims were between 15 and 24 years of age; **one-third of the victims fell between 45 to 59 years of age.**

- **20 – 24 years:** 8 victims (12.5%)
- **45 – 49 years:** 8 victims (12.5%)
- **50 – 54 years:** 7 victims (11%)

Figure 16. Pedestrian-Involved Collisions



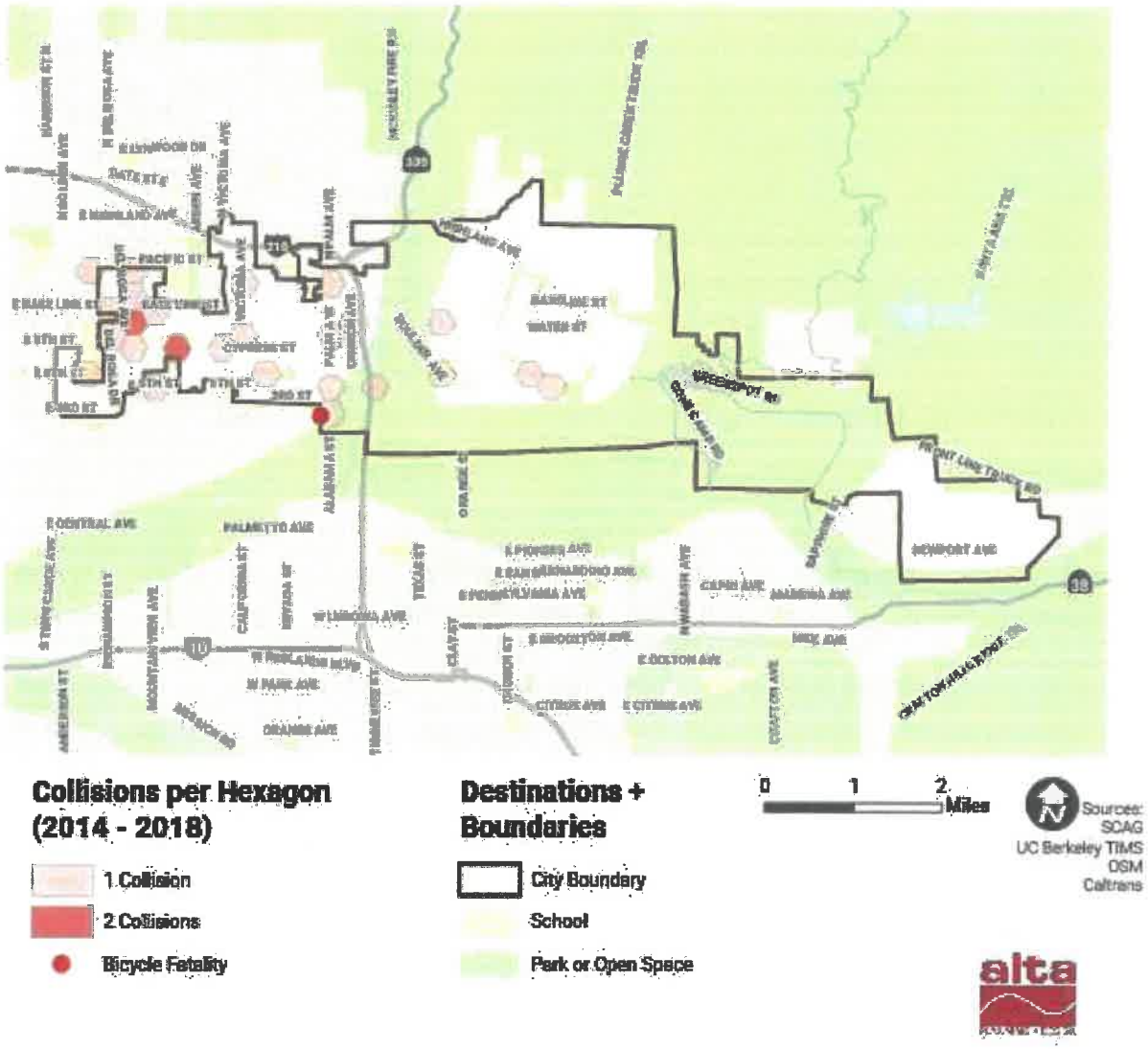
Bicycle-Involved Collisions

During the study period, 34 collisions in Highland involved a person riding a bicycle (see Figure 17). One of these were fatal collisions, and over 3 resulted in an injury. During the study period, just under 2.9% of pedestrian collisions were fatal and nearly 8.8% resulted in severe injury. Similar to pedestrian-involved collisions, bicycle-involved collisions were heavily concentrated in the western region of the city.

Six of the collisions were hit-and-runs. Twenty percent of collisions (7 total) were attributed to traveling on the wrong side of the road, the most common violation cited. Such behaviors, however, can be reduced by adding bicycle lanes or paths that give bicyclists more and safer routes. Around half (17 total) of bicycle-involved collisions occurred during daylight hours during the week. Approximately 76% of the victims were male. **As with pedestrian-involved collisions, the majority of victims were tended to be younger, with 18% of victims age being 14 or younger**; the most common victims were the following ages:

- **Age 14 or younger:** 6 victims (18%)
- **15 – 19 years:** 5 victims (15%)
- **50 – 54 years:** 5 victims (15%)
- **35 – 39 years:** 4 victims (12%)

Figure 17. Bicycle Involved Collisions



NEEDS ASSESSMENT

To further understand existing conditions in Highland, the project team conducted an assessment of health and community conditions related to active transportation using a customized score of the California Healthy Places Index[25] (HPI). The HPI, which pools data from 2006 to 2018 depending on the variable and data source, aggregates a collection of community characteristics that predict life expectancy and allow users to see how public health intersects with transportation, climate, and more. Characteristics included in the HPI score consist of social equity, healthcare access, economic, educational, housing, transportation, and environmental factors such as air and water pollutants.

The HPI then generates a composite score based on 25 weighted variables and additional support layers which can be used to compare the relative health impacts of living in different locations throughout California, and later, inform and drive policy decisions. The higher the score, the healthier the community conditions based on 25 community characteristics. The HPI is another tool used in California's Active Transportation Program grant application program. A census tract must be in the 25th percentile or less to qualify as a disadvantaged community. However, the HPI also offers subcategories and customizable scores that can be adjusted for targeted analyses. The tool allows for analysis at various geographic levels, including census tracts, zip codes, census-designated places, cities, counties, and more.

Highland has healthier community conditions than 27.1% of other California cities.

Overall, the HPI suggests that Highland has healthier community conditions than 27.1% of other California cities. To better understand conditions related to active transportation, we assessed 26 of the 84 indicators (including decision support layers) impacted by active transportation to create a custom score for Highland. This custom score suggests that Highland experiences healthier community conditions related to active transportation than 29.6% of other cities in California—or worse conditions than 70% of California cities. However, Highland's performance differs for each variable, which are detailed in the following sections on health and built environment.

[25] https://map.healthyplacesindex.org/

Variables were then assessed by level of concern for this planning effort. Variables in which Highland experiences poorer conditions than 61% or more of other cities in California were given high priority; medium priority was given to variables in which Highland experiences worse conditions than 40% to 60% of other cities; and low priority was given to variables in which Highland experiences poorer conditions than 39% or less of comparison cities. Table 1 illustrates the number of health variables that are high, medium, or low priority consideration during this planning effort. Twenty-two of the 26 health related variables in Highland classify as high priority (85%). Only 8% classify as medium priority and 8% as low priority. Table 2 lists the specific high priority variables.

Table 1. Number of Health Variables of Low, Medium, and High Priority

Category	Low	Medium	High
Physical Activity	1	0	11
Safety	0	0	1
Environment	0	0	5
Health Equity	1	2	5
Total Count	**2**	**2**	**22**
Total Percent	**8%**	**8%**	**85%**

Table 2. High Priority Health Variables

Category	Variables in which Highland experiences worse conditions than 61% or more of California cities
Physical Activity	1. Active Commuting: Low % of workers who walk, bike, or take transit to work 2. Obesity: Higher prevalence of obesity among adults 3. Physical Health Not Good: Higher prevalence of poor physical health 4. Stroke: Higher prevalence of strokes among adults 5. High Blood Pressure: Higher prevalence of high blood pressure among adults 6. Cancer: Higher prevalence of cancer (excluding skin cancer) among adults

Category	Variables in which Highland experiences worse conditions than 61% or more of California cities
	7. Coronary Heart Disease: Higher prevalence of coronary heart disease among adults 8. Diagnosed Diabetes: Higher prevalence of diagnosed diabetes 9. Life Expectancy at Birth: Lower life expectancy 10. No Leisure Time Physical Activity: High % of people who do not exercise or participate in physical activities (outside of their regular job) 11. Heart Attack ER Admissions: High rate of emergency department visits for AMI 10,000 12. Mental Health Not Good: Higher prevalence of poor mental health
Safety	13. Pedestrian Injuries: High rate of severe and fatal injuries, over the past five years, to people walking (per 100,000 people)
Environment	14. Clean Air - Ozone: High ozone concentration (ppm) in summer 15. Clean Air - Diesel PM: High exposure to diesel PM emissions in summer 16. Clean Air - PM 2.5: High concentration of PM 2.5 (very small particles from vehicle tailpipes, tires and brakes, powerplants, factories, burning wood, construction dust, and many other sources) 17. Asthma ER Admissions: High rate of emergency department visits for asthma 18. Asthma: High prevalence of current asthma among adults
Health Equity	19. Above Poverty: Lower % of people earning more than 200% FPL 20. Median Household Income: Lower median annual household income 21. Employed: Lower % of people aged 25-64 who are employed 22. Automobile Access: Lower % of households with access to an automobile 23. Park Access: Lower % of people within walkable distance of a park/beach/open space greater than 1 acre

Category	Variables in which Highland experiences worse conditions than 61% or more of California cities
	24. Retail Density: Lower rate of retail, entertainment, and education employment density on unprotected land 25. Supermarket Access: Lower % of people within walking distance of a supermarket/large grocery store 26. Tree Canopy: Low % of land with tree canopy (weighted by number of people per acre)

Health Assessment

Active transportation is an important element in efforts to improve community health. It has direct and indirect implications on human and environmental health outcomes. The major health benefits of active transportation relate to physical activity, traffic safety, health equity, and environmental conditions (air quality and noise).

Physical Activity

In Highland, 30% of people did not participate in physical activities or exercise, other than their regular job. This exceeds only 87% of cities in California, suggesting that Highland residents could benefit greatly from increased opportunities for physical activity. Only 3% of workers (16 years and older) commute to work by transit, walking, or biking; 74% of the other cities have higher rates of active commuting. Increasing the percentage of active commuters in Highland may help to increase rates of physical activity, especially for those who do not meet the recommended amount via leisure-time activities and exercise.

Health Conditions

Physical activity, whether through leisure time activities, exercise, or active commuting, helps to combat many chronic health conditions. **In Highland, 18% of adults reported 14 or more days during the past 30 days during which their physical health was not good, which is higher than 90% of other California cities. Similarly, approximately 18% of adults reported 14 or more days during the past 30 days during which their mental health was not good – a rate higher than 95% of other California cities.** As a result, both physical and mental health are of high concern in this planning process.

When considering body mass index, 32% of adults in our community have a score greater than or equal to 30.0 kg/m² – a rate that is higher than 90% of other California cities – making obesity another high

priority for the community. In addition, 29% of adults have high blood pressure, 6% of adults have angina or coronary heart disease, 11% of adults have diabetes (other than during pregnancy), and 4% of adults have cancer (except skin cancer). Of these three, diabetes is the only variable for which Highland performs worse than more than 61% of other California cities making it of high concern.

Approximately 11% of Highland residents have asthma – higher than 98% of other California cities. Furthermore, 72 per 10,000 emergency department visits were for asthma, a rate that exceeds 86% of other cities.

Safety

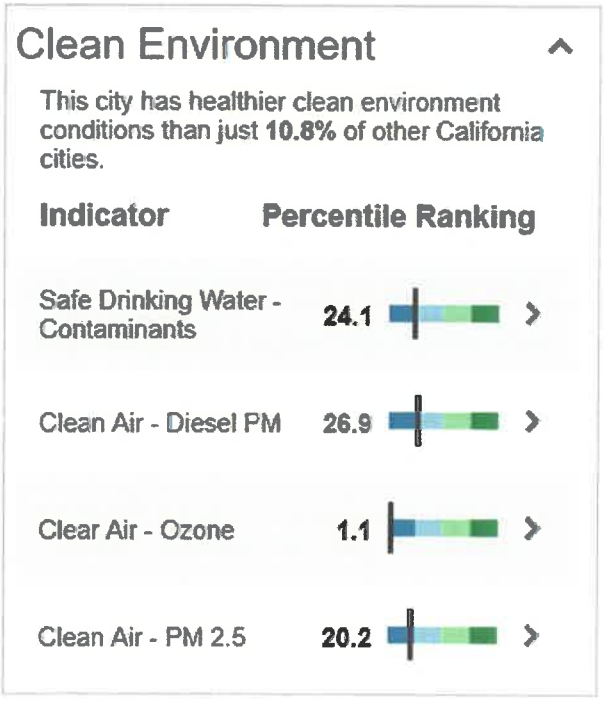
The 5-year annual average rate of severe and fatal pedestrian injuries in Highland per 100,000 people is 3.47, which is a higher average rate than 65% of other California cities. To see more details regarding where pedestrian- and bicycle-involved collisions have occurred in the city, refer to the Collision Analysis.

Environment

Replacing motor vehicle trips with active transportation modes can reduce the vehicle emissions that contribute to poor air quality conditions, and decrease people's exposure to harmful pollutants. **With low rates of active commuting and high rates of vehicle ownership, it is not surprising that Highland has healthier environmental conditions than just 10.8% of other California cities** (see Figure 18).

In fact, the yearly average of fine particulate matter concentration (very small particles from vehicle tailpipes, tires and brakes, powerplants, factories, burning wood, construction dust, and many other sources) is 11.69 µg/m^3, which is a higher yearly average than 80% of other California cities. The average daily amount of particulate pollution (very small particles) from diesel

Figure 18. Clean Environment Conditions in Highland Compared to Other Cities in California



sources (for July) is 13.3 kg/day, which is a higher average than 73% of other California cities. **Similarly, Highland has some of the highest rates of ozone in the state.** The average of daily maximum eight-hour ozone concentration during the summer months (May to October) over three years (2012 to 2014) was 0.07 ppm – a rate that exceeds 99% of other California cities.

Built Environment Assessment

Changing the built environment can increase opportunities for more active modes of transportation, and therefore physical activity, while also reducing greenhouse gas emissions. Both physical activity and improved air quality reduce one's risk for chronic health conditions and increase life expectancy. Compared to other cities in California, Highland experiences high levels of supermarket access and retail density. **However, that Highland has one of the lowest tree canopy coverages in the state.** Using data provided on the California Healthy Places Index website, the current built environment conditions for Highland are described in more detail below.

Figure 19. Neighborhood Conditions in Highland Compared to Other Cities in California



Access to Supermarkets

Having nearby supermarkets that are convenient to access by walking or biking can encourage a better diet and eating behaviors, lower the costs of obtaining food, reduce chronic diseases, and lower the risk of food insecurity. In Highland, 43% of people in urban areas reside less than half-mile from a supermarket or large grocery store. Highland has a lower percentage of people in urban areas who live less than a half mile from a supermarket/large grocery store, or less than one mile in rural areas than 67% of other California cities.

Destinations

Living in a community with a mix of uses and destinations can improve health by reducing household transportation costs, encouraging active transportation, and fostering community connections. One measure of destinations includes employment sites, which serve as destinations for both employees and patrons. In Highland, the number of retail, entertainment, and education jobs per acre on unprotected land amounts to 0.36, which is a lower than 58% of other California cities.

Parks

Parks can encourage physical activity, reduce chronic diseases, improve mental health, foster community connections, and support community resilience to climate change and pollution. In Highland, 53% of people live within walkable distance (half-mile) of a park, beach, or open space greater than one acre. Over 61% of other California cities have higher proportions of people living within walkable distances of parks.

Trees

Trees are beneficial for mental and physical health. Adequate tree canopy can provide shade and cool surrounding areas, reduce stress, and promote health, wellness, and physical activity. They also provide many ecosystem services, including absorbing carbon dioxide and improving air quality. **According to the Healthy Places Index, only 2.83% of land in Highland has tree canopy – an amount that exceeds only 87% of other California cities.** However, this percentage is a likely underestimation of overall tree canopy in Highland, as the Healthy Places Index data only captures trees within the public right-of-way. Although Highland has an arid climate and only gets an average of 13 inches of rain each year, improving tree canopy with climate-adaptive species in key pedestrian-orientated locations is important, particularly for providing shade from the summer sun and heat.

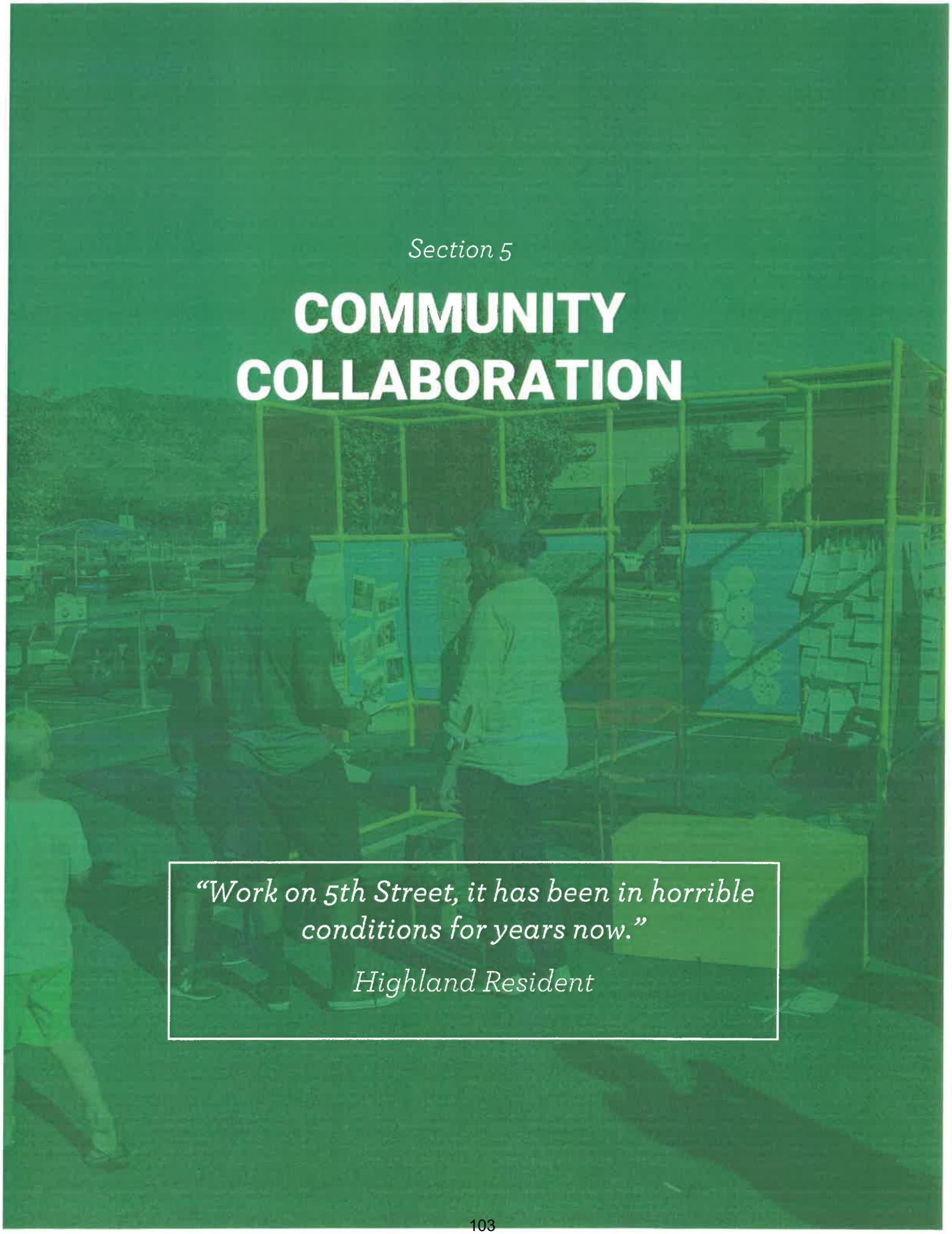
Findings

The top ten variables for which Highland experiences some of the worst conditions among cities in California, as identified in the health and built environment assessments, are (in order of severity):

1. High Rates of Ozone
2. High Rates of Asthma
3. Poor Mental Health
4. Poor Physical Health
5. High Rates of Obesity

6. Low Rates of Leisure Time Activity
7. Low Rates of Tree Canopy
8. High Rates of Asthma ER Admissions
9. High Rates of Strokes
10. High Rates of Particulate Matter (PM 2.5)

The health and built environment assessments highlight the intersections of health and transportation and the potential active transportation has to benefit multiple aspects of our community. Once complete, this Plan will be another extension of our efforts to improve health and wellness in our community.



Section 5

COMMUNITY COLLABORATION

"Work on 5th Street, it has been in horrible conditions for years now."

Highland Resident

5. Community Collaboration

Engaging the community has been a top priority throughout the planning process. A variety of opportunities were used to seek input from residents and community members. The plan development process also included extensive coordination with partner agencies such as the Public Works Department and other City departments to ensure this Plan meets community needs, advances initiatives of local and regional partners, and includes projects and programs that can feasibly be implemented. Overall, the project team engaged with stakeholders throughout the development of the Plan in order to:

- **Understand Walking and Biking Needs:** Residents weighed in on current barriers to biking and walking, and what destinations and routes could be made more bikeable and walkable. This information helped the project team develop an understanding of the needs and gaps of the citywide network.
- **Develop a Vision for Active Transportation in the City of Highland:** Stakeholders across different groups weighed in on the vision, policies, and objectives for the Plan, guiding the high-level direction of the Plan.
- **Refine Draft Recommendations:** The City of Highland presented the draft bicycle and pedestrian recommendations developed through the process. Stakeholders and the public helped the City clarify these recommendations, and identified additional areas for improvement.



The City of Highland used multiple avenues to gain authentic and robust community input on this Plan.

This chapter presents an overview of the format and approach for each outreach opportunity, along with a summary of feedback received. Overall feedback concentrated on three key themes (see Table 3).

Table 3. Key Themes from Community Feedback

Topic	What We Heard
Safety	**Biking and Walking Feel Unsafe** Many community members shared that existing conditions in Highland do not support safe walking and biking, and that the lack of safety prevents them from walking and biking.
Continuity	**Biking and Walking Facilities Do Not Get Me to Key Destinations** Although community members may feel comfortable walking or biking in their neighborhoods, many shared that the lack of safe, continuous routes discourages them from using biking and walking for transportation.
Comfortable	**Biking and Walking Are Not Comfortable** Community members from various groups (including residents, members of the CAC, and partner agencies) shared that the city lacks amentities for comfortable walking and biking especially near schools.



Members of the CAC helped identify locations in need of improvement to make it safer and more comfortable to walk and bicycle .

COMMUNITY ADVISORY COMMITTEE

To help guide this planning process, the City of Highland convened a Community Advisory Committee (CAC) at the outset. Various sectors, groups, and stakeholders were invited to join the CAC in order to be able to best articulate the many needs of the community. Altogether, eight people served on the Plan's CAC, representing various city agencies such as Engineer, Public Works, Planning Commission and community groups like the YMCA of the East Valley . The CAC convened six times throughout planning process, helping to shape the vision, analyses, events, partnerships, and recommendations.

EVENTS

Pop-Up Events

During the project, the City engaged the public at three pop-up events in the community:

- **Art Installation**: November 16, 2019, Greenspot Road, 350 estimated attendees
- **Go Human Training 1:** September 10, 2019, near Boulder Avenue, 40 estimated attendees
- **Go Human Training 2:** March 4, 2020, Real Journey Academies Entrepreneur High School, 5 estimated attendees
- **Total Pop-Up Event Attendees:** 355



To ensure outreach events were accessible and family-friendly, community workshops were facilitated in English and Spanish and included transportation-based activities for children.

Art Installation

To engage as many members of the public as possible, the project team collaborated with an existing community event, Discover Highland Event, early on in the planning process. The project team used two interactive activities to hear from residents about how we can improve biking and walking: a survey on high-priority streets, a map where participants could spatially identify where they currently face walking and biking challenges in Highland, and feedback board.

SURVEY: HIGH PRIORITY STREETS?

When asked which streets in the city should be considered as highest priority for improvements for walking and biking, participants selected:

- 45% of respondents:
  - Base Line
  - 5th Street
- 25-30% of respondents:

- Palm Avenue
- Victoria Avenue

SURVEY: WHAT IMPROVEMENTS WOULD YOU LIKE ON YOUR STREETS?

When asked what improvements in the city should be considered for walking and biking, participants selected:

- 54% of respondents:
  - Street Lights
- 33% of respondents:
  - Bike Lanes
  - Wider Sidewalks
- 5% of respondents
  - Repaving of Roads

FEEDBACK BOARD: HOW WOULD YOU LIKE TO GET AROUND?

A popular activity among the kids at the event, the feedback board invited children to place a green sticker on how they currently get to school and a pink heart on how they would like to get to school. Overwhelmingly, most participants drive as their current mode of travel. However, only 9% of people prefer driving. Instead, most participants would like to bike, take public transit, or walk to their destinations.



Kids expressed a desire to bike, take public transit, and walk more to school.

Go Human Trainings

The project team conducted two Go Human Trainings to familiarize community members with the concept and gather feedback in order to build capacity for future efforts. Highland Go Human trainings were rolled into the city's standing COPS (Community Oriented Problem Solving) meeting and school sites, which served as an opportunity for city staff, police, elected officials, and school district representatives to discuss ongoing projects, identify perceived issues within the community, and collaboratively develop solutions. The working group expressed concern on pedestrian and cycling access around the city's schools. Some of the suggestions included: sidewalk pavement, mid-block crossing (possibly raised) near school entrances, continental crosswalks, and Class II bike lanes near Highland Grove Elementary School and Beattie Middle School.



Participants suggested sidewalk pavement, mid-block crossings, and high-visibility crosswalks during Go Human Training gatherings.

Open House

The City convened one open house walk audit during the planning process to gather in-depth community input and refine recommendations.

- **Walking Tour**: February 14, 2020, Palm Avenue
- **Attendees:** 8



The City of Highland utilized a variety of events to reach as many residents as possible.

Walking Tour

To help better understand existing conditions along one of the high-priority corridors, the project team facilitated a walk audit to evaluate existing conditions along Palm Avenue between Base Line and Pacific Street. The first set of questions presented seven prompts about existing conditions related to shade, sidewalks, crossings, lighting, bicycle facilities, and overall perception of safety. The second section included three open-ended questions about additional suggestions and comments.

Overall, key concerns highlighted during the walking tour include:

- Lack of facilities for biking or walking
- Lack of shade
- Street pavement in poor condition
- Curb ramps and sidewalks are intermittent throughout the corridor
- Car speeding

Altogether, these conditions resulted in an overwhelming consensus that people feel unsafe walking or biking on Palm Avenue. Participants expressed the need to coordinate and cooperate in this area, as this segment of Palm Avenue is part of the the City of Highland, the City of San Bernardino, and the County of San Bernardino.



Much of the western side of Palm Avenue between Main and Messina Streets lack sidewalks.

INTERACTIVE MAP

An interactive mapping tool was posted on the City's website and used throughout development of this Plan to gather input and feedback from the community directly on a map of the city.

In early project phases from November 2019 through July 2020 community members were encouraged to draw routes or place pins on the map and add comments to identify desired walking or bicycling improvements, challenging locations, and other information about the walking and bicycling environment. This input informed the recommended bicycling and walking network improvements.

- Make it safe by improving connections to school and community destinations
- Complete sidewalks throughout the community
- Keep the streets and sidewalks clean
- Improve pavement conditions throughout the City

REFINING THE DRAFT PLAN

After the preliminary recommendations had been developed, the project team released the draft Plan for public comment from the end of September though October 2020. In addition to uploading the draft Plan to the project website, the team also utilized a suite of tools to capture the community's feedback on the draft Plan and preliminary recommendations.

Curbside Display

The project team created "Curbside Display" highlighting the draft Plan and recommendations. The "curbside display" for the plan was a large banner that was on Base Line in the middle of the business district. The displays were posted during December, providing residents,workers, business owners and other stakeholders with notice about the Plan.

Recommendations Survey

To capture feedback on elements of the draft Plan and key projects, the project team also developed a survey that was distributed via the project website and digital ads through Facebook. 69 residents completed the recommendations survey. This feedback was used to help refine the draft Plan and preliminary recommendations.

Virtual Town Hall + Office Hours

Finally, the project team hosted a virtual town hall on October 13, 2020. There were 4 residents tuned in to the live town hall meeting, during which the project team discussed the draft Plan, listened to feedback, answered questions about the preliminary recommendations, and presented the recommendations survey using interactive polling. A recording of the virtual town hall was posted to the project website. To augment these web-based efforts, the project team also hosted "Office Hours" on October 15, 2020. The Office Hours allowed residents to call into dedicated phone lines to learn about the draft Plan and provide input.

What did we hear?

Community members shared a variety of feedback during the public comment period. Key themes include:

"More sidewalks in western Highland would be a great addition". – Survey Respondent

- We need more pedestrian facilities in western – especially sidewalks.
- Residents mentioned speeding was an issue, especially for those riding bikes.
- More walking paths for recreation and exercise but they need to be clean and safe..
- Fix existing streets – walking and riding on them is dangerous especially in places that don't have existing sidewalks.

The project team revised the Plan to address these concerns and reflect community suggestions as best as possible.

MEDIA

For all community outreach opportunities, including the online survey and interactive mapping tool, the City leveraged existing website, social media accounts, and newsletter mailing list to share information about the Plan and to encourage our residents to engage with the project.

Website

The City created a section on the website for this Active Transportation Plan. All online communications and project flyers pointed to this website, where community members were able to learn about the

planning process, see upcoming outreach events, and download draft maps and other deliverables at key milestones.

Social Media

The City has nearly 16,000 followers on Facebook and over 34,500 subscribers on Nextdoor. Throughout the planning process, posts on these platforms notified residents of upcoming events, draft documents available for review, online engagement tools, and other project milestones.

Newsletter

In addition to a strong social media presence, the City sent email newsletters to more than 11,000 subscribers. These newsletters were used to announce open houses and other events, encourage participation, and share updates about the project.

Promotional Material

An information card was also created in both English and Spanish with the project website and Community Open Houses listed. The cards were available at all outreach events and placed at various businesses, community centers, and libraries throughout the City of Highland.



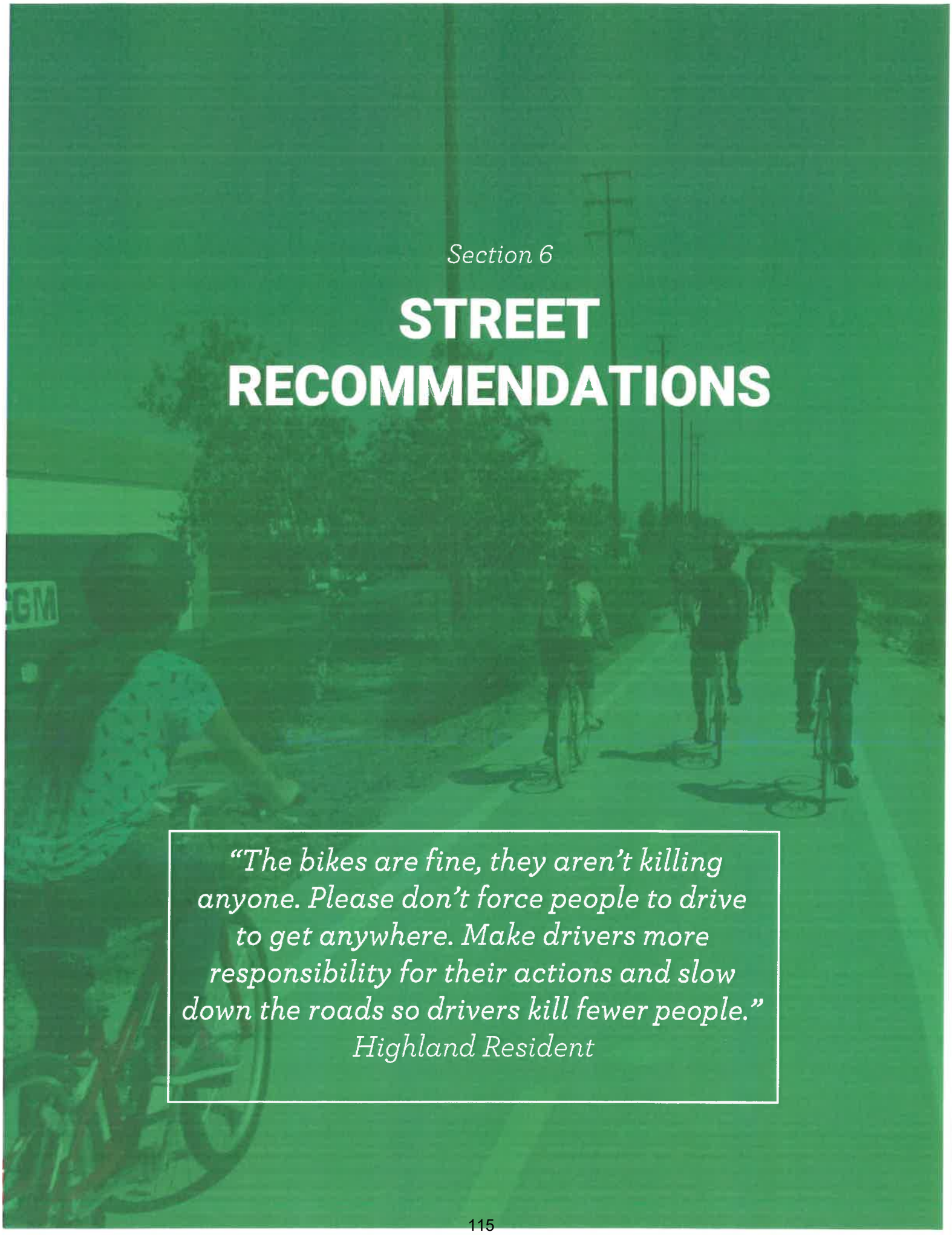
The City of Highland used bilingual printed and digital materials to share information about the Plan, events, and opportunities for input.

KEY NEEDS IN OUR COMMUNITY

This Plan identifies many opportunities to improve mobility and support the goals established in Chapter 2: The Vision. Assessing current conditions is a key step to developing recommendations for where and how to invest in infrastructure and programs that promote walking and biking as common and

convenient modes of transportation. The following key findings from our review of existing conditions data and public input will help guide the recommendations process:

- Highland's existing pedestrian and bicycle networks are fragmented and incomplete. Much of our existing facilities are concentrated on the eastern portion of our city, where median household incomes are higher; access to automobiles is higher; concentration of youth is lower; and fewer people identify as non-white compared to the rest of the city.
- A network of relatively low-stress streets is interrupted by several high-stress corridors which inhibit walking and biking, and make connecting to key destinations such as transit, schools, jobs, and parks difficult.
- Collisions involving pedestrians and bicycles are frequent and tend to occur in the western part of the city, where there are few bike lanes, gaps in sidewalks, and many unmarked or low-visibility crosswalks.
- Providing safe access to walkable and bikeable routes near schools will be an important aspect of the Plan and one that will help expand mobility options for residents and commuters.
- In part due to adjacent industrial activity and proximity to regional highways, community members are overburdened with poor air quality. Coupled with high rates of asthma, poor air quality, and high concentrations of ozone makes active transportation safer and more appealing as a means to help reduce transportation-related emissions is imperative.
- Much of Highland qualifies as "disadvantaged" according to CalEnviroScreen 3.0, and supported by the findings of the health and built environment assessments. The Equity Framework outlined in Chapter 2 will continue to be a guiding principle as we move forward in this planning process and begin to develop recommendations that serve our most vulnerable populations.



Section 6

STREET RECOMMENDATIONS

"The bikes are fine, they aren't killing anyone. Please don't force people to drive to get anywhere. Make drivers more responsibility for their actions and slow down the roads so drivers kill fewer people."
Highland Resident

6. Street Recommendations

This chapter introduces the bicycle and pedestrian infrastructure and supporting amenities that the City of Highland intends to implement in the coming years, and the overall strategy employed in evaluating which type of facilities should be recommended at specific locations.

The following recommendations are considered planning-level meaning they will be used as a guide when implementing projects. In some cases, traffic impact analysis and more detailed design analysis will be required to evaluate specific site conditions and develop designs that reflect conditions and constraints.

HOW WE DEVELOPED RECOMMENDED PROJECTS

Developing recommendations is a multi-step process that requires understanding community feedback, existing conditions, and project feasibility, among many other factors (see Figure 20). Key themes from the public input guided our overall recommendations (see Table 4). Various outlets allowed for public desire for new and improved bicycle and pedestrian facilities to be voiced and recorded throughout the development of the Plan: community meetings and events, the online public input map, and the community survey. Roadways and areas that were mentioned multiple times across different outreach methods were examined as high priority for inclusion in the recommended projects.



The City listened to community members throughout this planning process, and used their input to develop the recommended active transportation network.

Figure 20. Network Development Process

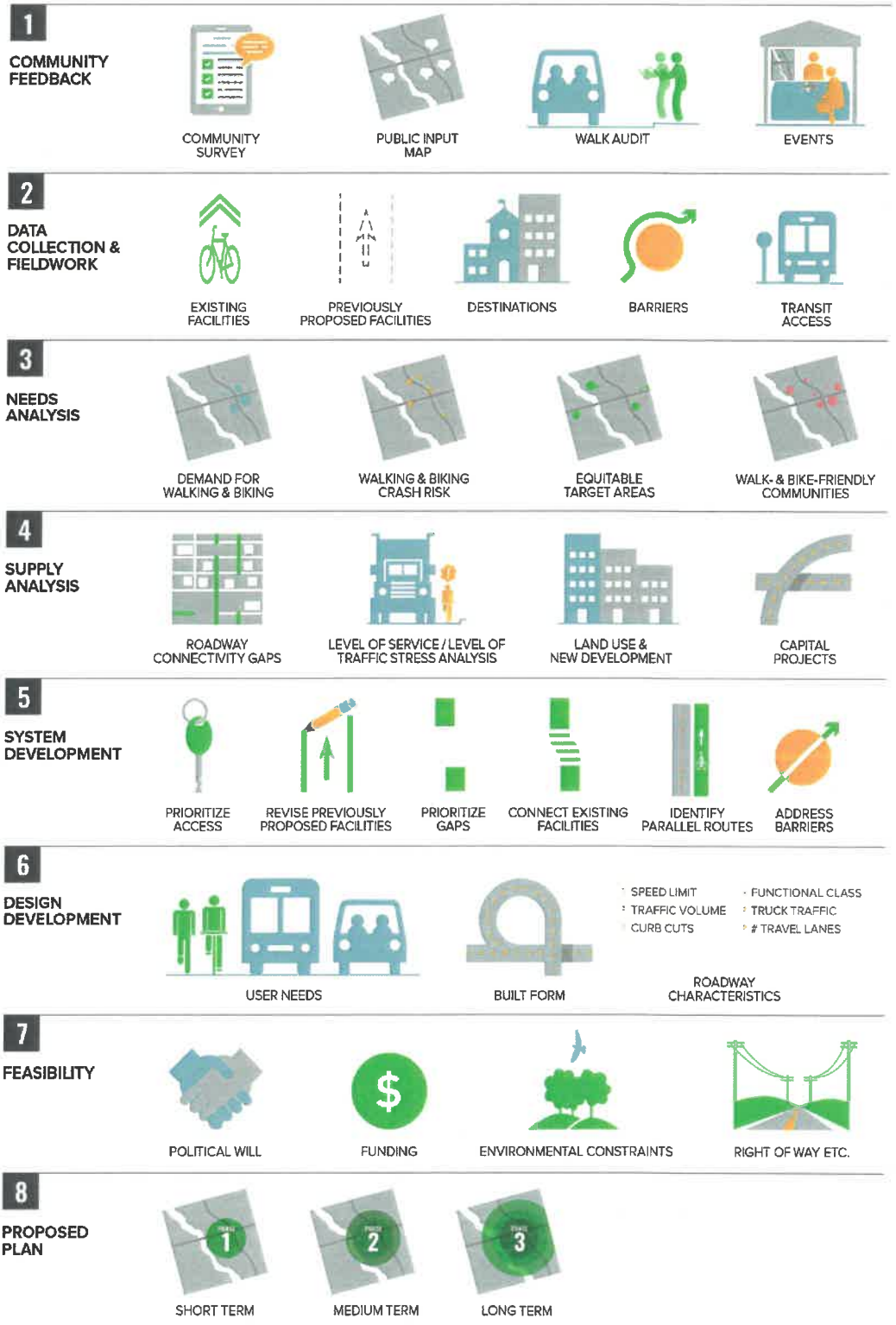


Table 4. Public Input Guiding Network Recommendations

What We Heard	What We Propose
Access is limited	**Make it Accessible** Multiple cross-town corridors that help people bicycle and walk safely to schools, parks, commercial centers, the library, and other key destinations from as many parts of Highland as possible.
Conditions do not support safe walking and biking	**Make it Safe** New bikeways and pedestrian interventions in high-collision corridors help improve safety. A complete network of active transportation facilities provides safer options for all roadway users throughout the community.
Car speed and lack of amentities for comfortable walking and biking	**Make it Calm** Install marked crossings, roundabouts, stop signs, and other traffic calming measures to deter speeding. Consider installing additional amentities such as benches.

HOW RECOMMENDED PROJECTS ADVANCE OUR GOALS



Safety & Health

Network recommendations address the most critical safety issues and prioritize improvements along high-injury corridors and at intersections.



Access & Comfort

Network recommendations create continuous walking and cycling routes throughout the community, connecting neighborhoods to major destinations and to one another.



Affordability

Network recommendations increase the availability of affordable mobility options, particularly for low-income neighborhoods.



Enhance the Network

The Plan provides a roadmap for achieving a complete and comfortable active transportation network.

Bicycle Facility Types



CLASS I
Shared-Use Path

- Paths completely separated from motor vehicle traffic used by people walking and biking.
- Comfortable for people of all ages and abilities.
- Typically located immediately adjacent and parallel to a roadway or in its own independent right-of-way, such as within a park or along a body of water.



CLASS II
Bicycle Lane

- A dedicated lane for bicycle travel adjacent to traffic.
- A painted white line separates the bicycle lane from motor vehicle traffic.



CLASS IIB
Buffered Bicycle Lane

- A dedicated lane for bicycle travel separated from vehicle traffic by a painted buffer.
- The buffer provides additional comfort for users by providing space from motor vehicles or parked cars.



CLASS III
Bicycle Route

- A signed bike routes that people biking share with motor vehicles.
- Can include pavement markings.
- Comfortable facility for more confident bicyclists.
- Recommended when space for a bike lane may not be feasible.



CLASS IIIB
Bicycle Boulevard

- Calm, local streets where bicyclists have priority but share roadway space with motor vehicles.
- Shared roadway bicycle markings on the pavement as well as traffic calming features such as speed humps and traffic diverters to keep these streets more comfortable for bicyclists.
- Comfortable facility for bicyclists with wider range of abilities.

RECOMMENDED BICYCLE PROJECTS

Prior to embarking on this planning process, the City of Highland had approximately 21.67 miles of existing bikeways. An additional 54.9 miles are proposed in this Plan, including over 26.2 miles of off-street Class I paths and over 12 miles of Class IIB buffered bike lanes. The majority of recommended bikeways are new projects where bikeways do not exist today, while a portion include recommendations to upgrade an existing or previously planned bikeway. Recommended bicycle projects are shown in Figure 22, with mileage highlighted in Table 5 and Figure 21. In addition to the recommendations below, there is an existing network of low-stress neighborhood streets that provide local access to destinations. The low-stress network of neighborhoods streets, illustrated in Figure 16, connects to the recommend projects to complete the overall network for the City of Highland.

Table 5. Miles of Recommended Bikeways by Type

Bikeway Class	Name	Proposed (miles)
Class I	Shared Use Path	11.9
Class II	Bike Lane	7.8
Class IIB	Buffered Bike Lane	12.8
Class III	Bicycle Route	2.4
Class IIIB	Bicycle Boulevard	4.6
	TOTAL	**39.5**

Figure 21. Length of Recommended Bicycle Network

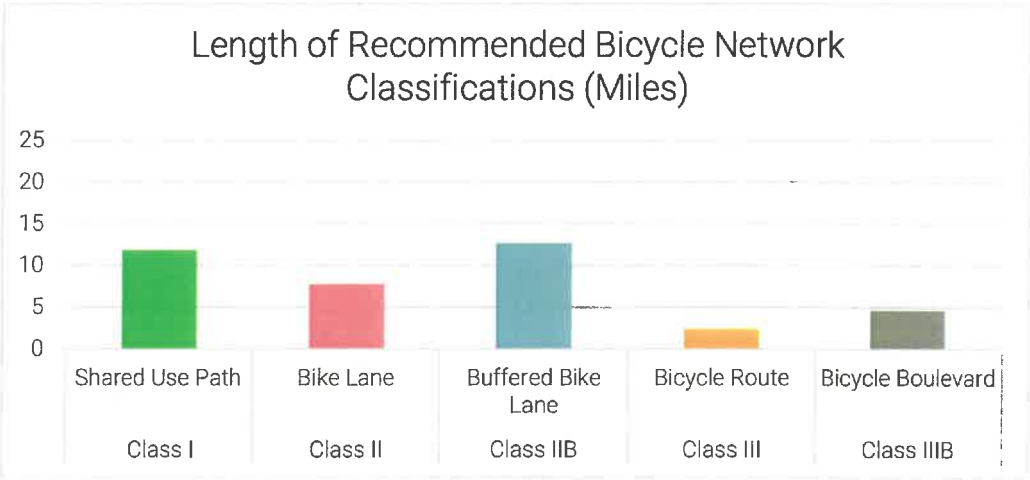


Figure 22. Recommended Bicycle Projects

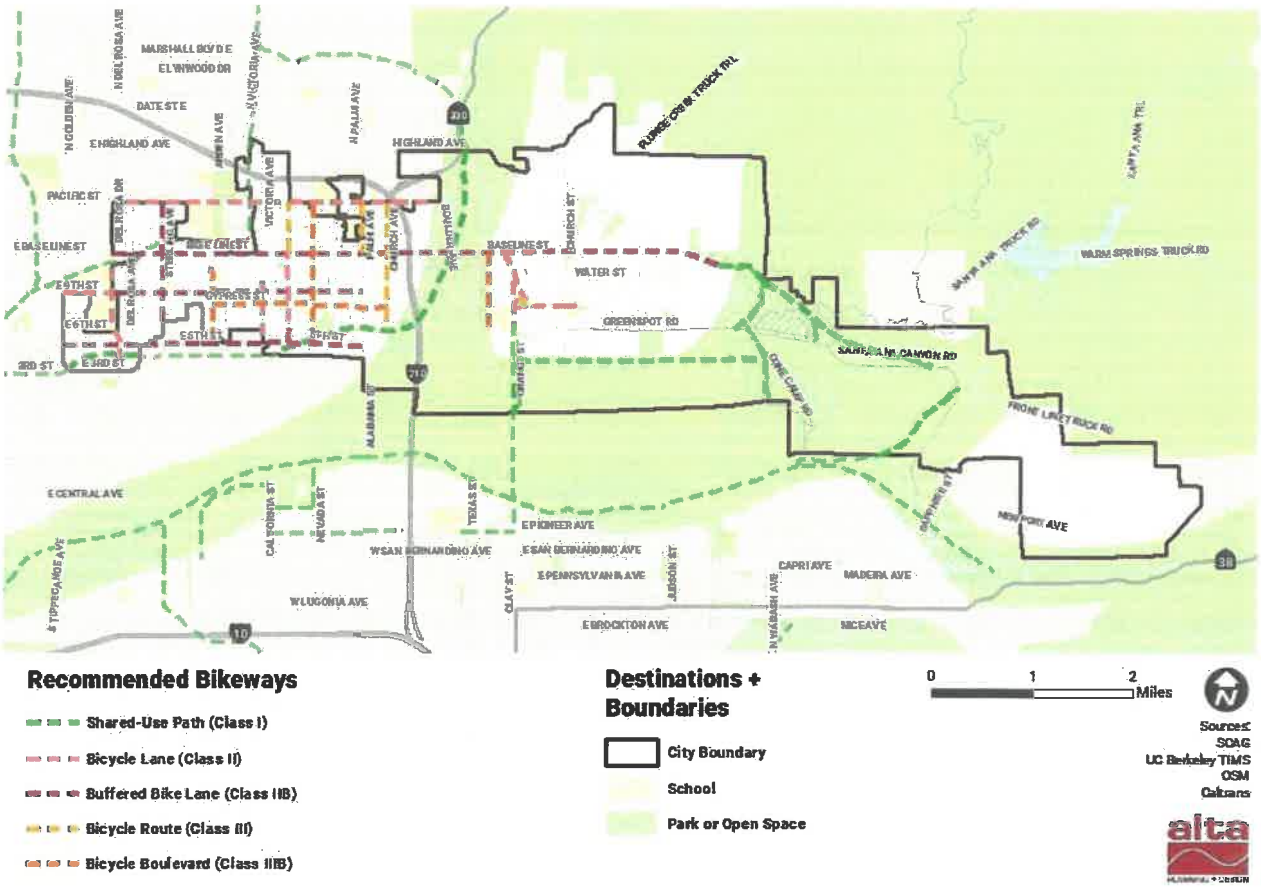


Figure 23. Recommended Bicycle Projects-West

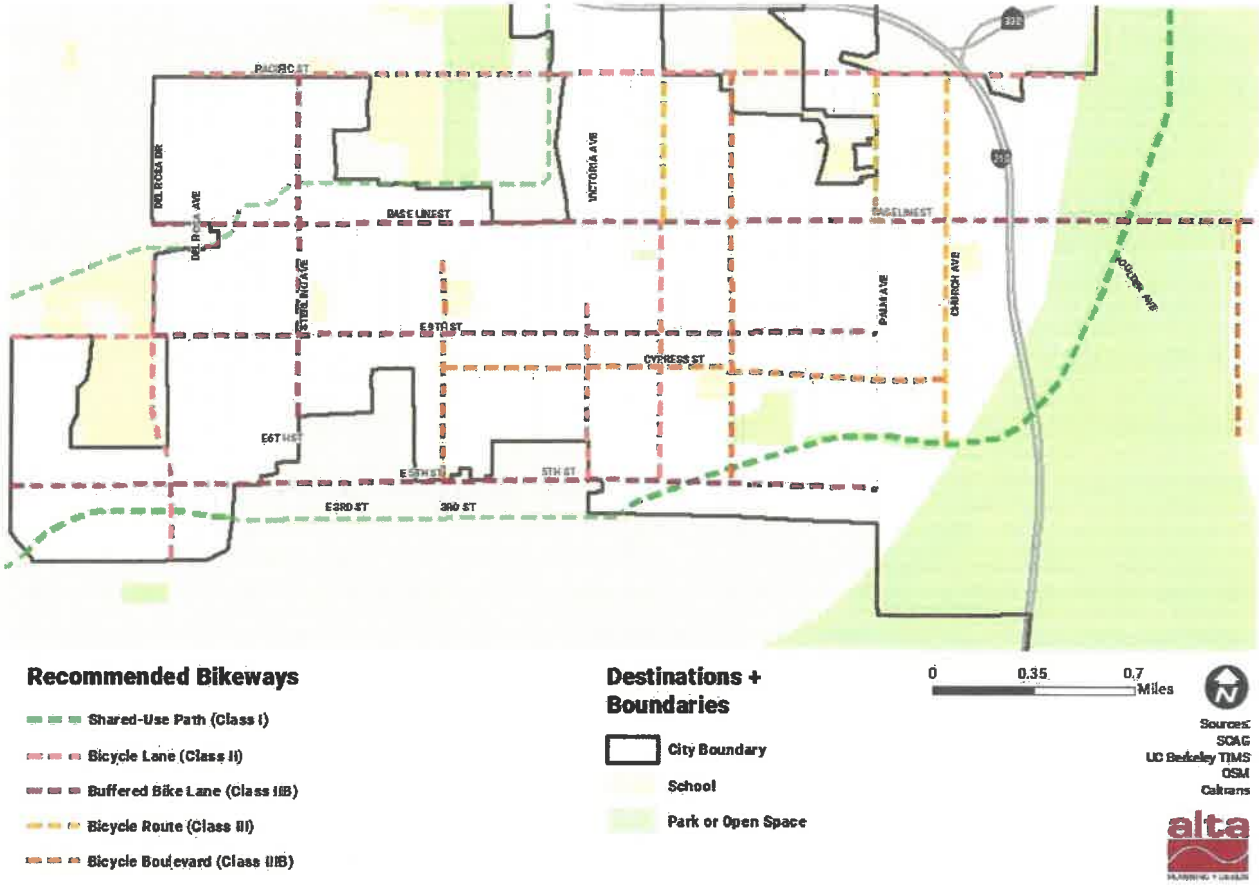


Figure 24. Recommended Bicycle Projects-East

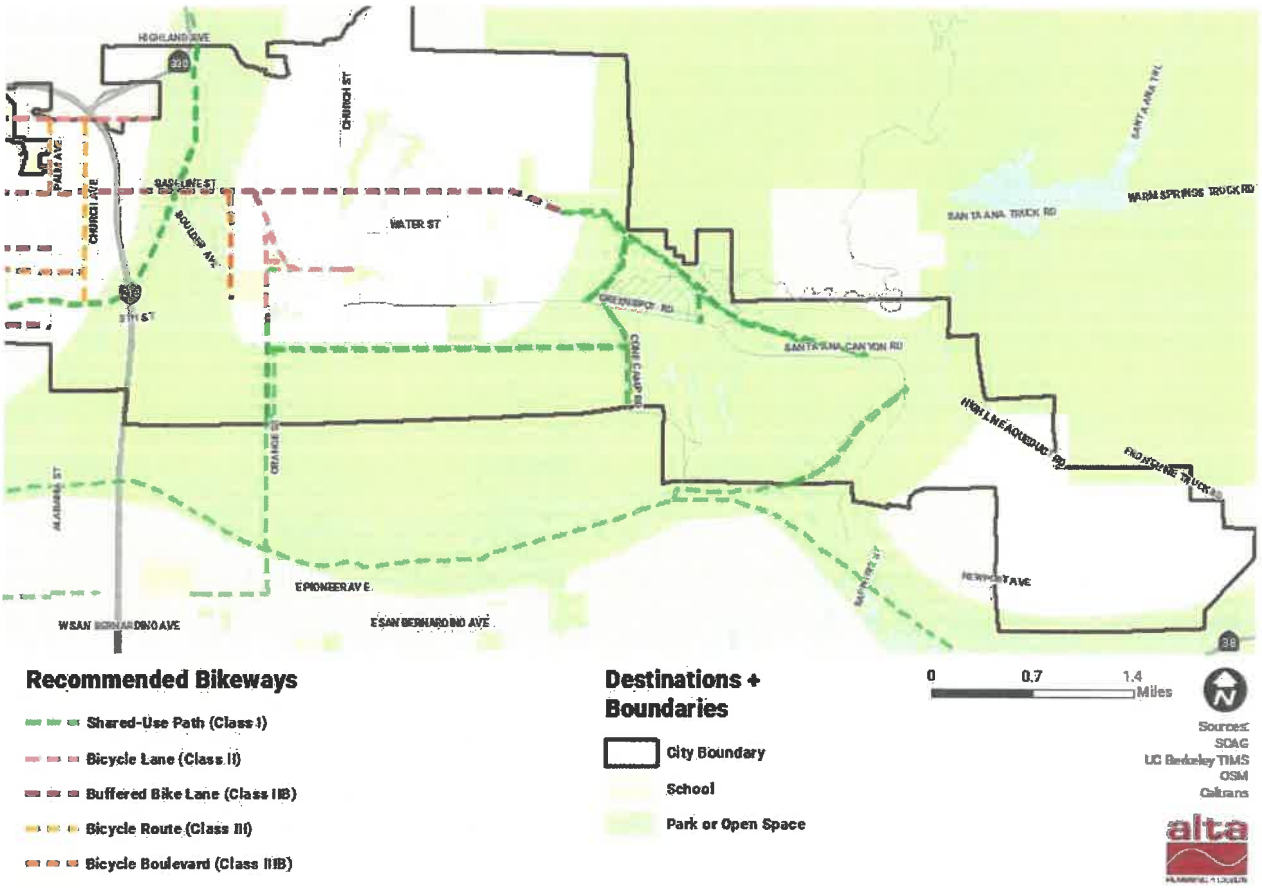


Table 6. Recommended Bicycle Projects

Corridor	From	To	Facility Type	Length (Miles)
5th St	Tippecanoe Ave	Palm Ave	2B	2.99
9th St	Tippecanoe Ave	Del Rosa Dr	2	0.49
9th St	Del Rosa Dr	Palm Ave	2B	2.50
Base Line	Del Rosa Ave	Tuolumne Ln	2B	6.09
Central Ave	Pacific St	5th St	3B	1.39
Church Ave	Pacific St	5th	3	1.25
City Creek Trail	3rd St	Highland Ave	1	3.27
City Creek Trail	Tippecanoe Ave	Sterling Ave	1	0.73
Cone Camp Rd	Greenspot Rd	South City Limit	1	0.38
Cunningham St	Base Line	5th	2	0.88
Cypress St	Lankershim Ave	Church Ave	3B	1.76
Del Rosa Dr	Paloma St	3rd St	2	1.04
Lankershim Ave	Olive St	5th St	3B	0.75
Love St	Church St	Elder Gulch Paseo	2	0.12
North Fork Trail	Cone Camp Rd	Tuolumne Ln	1	1.38
North Fork Trail	Base Line	Greenspot Rd	1	1.87
Olive Street	Pacific St	Base Line	3	0.50
Orange St	Greenspot Rd	South City Limit	1	0.72
Orange Street	Tonner Dr	Greenspot Rd	2	0.61
Pacific St	Del Rosa Dr	210 Freeway	2	2.71
Pacific St	210 Freeway	Grove Ave	2	0.41
Palm Ave	Pacific St	Base Line	3	0.50
Santa Ana River Trail		Greenspot Rd	1	1.05
Sterling Ave	Pacific St	7th St	2B	1.17
Streater Avenue	Base Line	Church St	2	0.92

Corridor	From	To	Facility Type	Length (Miles)
Tonner Dr	Orange St	Streater Ave	3	0.16
Orange to Cone Camp Trail	Orange St	Cone Camp Rd	1	2.48
Victoria Ave	Sparks St	5th St	2	0.60
Webster St	Base Line	Boulder Ave	3B	0.74
TOTAL				39.47

Pedestrian Facility Types



Sidewalks & Paths

- Completely separated from motor vehicle traffic.
- Used by people walking or using mobility devices such as wheelchairs.
- Sidewalks are typically located immediately adjacent and parallel to a roadway. Shared-use paths can be located in their own independent right-of-way, such as within a park or along a body of water.



Crossing Facilities

- Make crossing the street at intersections and midblock safer and more comfortable.
- High-visibility crosswalk markings are more visible to approaching vehicles and have been shown to improve yielding behavior.
- Advance yield markings, or "shark teeth," warn drivers they are approaching a crosswalk.



Curb Treatments

- Curb ramps allow users of all abilities to make the transition from the street to the sidewalk. They are required by the Americans with Disabilities Act (ADA) at all crosswalks, including those that are unmarked.
- Curb extensions create safer and shorter crossings for pedestrians. They can help slow vehicle traffic by visually narrowing the roadway. They also increase the available space for street furniture, plantings, and street trees.



Beacons & Signals

- Beacons and signals both indicate to drivers that someone may be crossing the street.
- Make crossing the street safer and more comfortable.
- Pedestrian countdown signals create a more predictable crossing environment and give adequate warning to pedestrians attempting to cross a roadway.
- Leading pedestrian intervals allow a pedestrian to begin crossing the street before the traffic signal turns green.



Traffic Calming

- Encourage drivers to travel at slower speeds.
- Some treatments alter the configuration of a roadway, while others change how drivers perceive and respond to a street.
- Can be used at targeted locations such as a dangerous intersection, or along corridors.



Pedestrian-scale Lighting

- Improves visibility for people walking, as opposed to street lights intended to light the roadway.
- Additional care and emphasis on pedestrian lighting should be taken at and near crosswalks.



RECOMMENDED PEDESTRIAN PROJECTS

During outreach, almost all participants indicated that they feel 'unsafe' walking in Highland. The proposed pedestrian projects provide a variety of options for people walking at locations throughout the city for people of varying abilities and ages. When making recommendations, projects that connect key community destinations like schools, parks, and commercial centers were prioritized.

In general, recommended pedestrian projects aim to improve safety and comfort throughout Highland. The pedestrian projects recommended in this Plan fall into one of seven categories:

- **Sidewalks & Paths:**
  - **New sidewalks/paths** that make walking along the street safer, more comfortable, and accessible for people using mobility devices
  - **Sidewalk gap closures** to ensure people have comfortable and continuous routes to their destinations
  - **Sidewalk resurfacing and widening** improve our existing network and ensure access for people of all ages and abilities
- **Crossing Facilities:**
  - **Crossing facilities** that make crossing the street at intersections and midblock easier, including pedestrian refuge islands, high-visibility continental crosswalks and advance yield markings
  - **Additional treatments to enhance accessibility** including audio devices and pedestrian wayfinding
- **Curb Treatments:**
  - **Curb treatments** such as curb extensions and curb ramps that increase accessibility for people crossing the street, help calm traffic, and reduce crossing distances
- **Beacons & Signals:**
  - **Beacons and pedestrian activated warning devices** to help people safely cross the street at midblock or uncontrolled locations, particularly where high traffic volumes or speeds are prevalent
  - **Modifications to existing traffic signals** to include pedestrian countdown timers, automatic pedestrian phases and a leading pedestrian interval to allow a pedestrian to begin crossing before traffic signals change to green

- **Traffic Calming:**
    - **Traffic calming facilities** such as Traffic Circles, chicanes and speed tables and/or humps that encourage drivers to travel at a speed appropriate for the surrounding land uses and users
- **Pedestrian-Scale Lighting:**
    - **New pedestrian-scale lighting** to improve visibility for people walking, as opposed to street lights at heights and directions intended to light the roadway for motorists
- **Green Infrastructure:**
    - **Trees, landscaping, stormwater capture and other efforts** to provide shade, increase habitat, enhance the overall sense-of-place, and improve comfort for people walking and biking

Improving school routes was a priority based on community feedback during outreach. Improved crossings near parks and commercial centers along Base Line will offer better access for people shopping and dining and strengthen the local economy. At various intersections and midblock locations, new or updated crosswalks would improve conditions for people crossing the street. At midblock and uncontrolled intersections, advance yield markings and pedestrian signals would increase the visibility of people crossing the street. Curb extensions would also increase the visibility of pedestrians, shorten crossing distances, and reduce vehicle speeds. Further, at select major intersections in areas with high volumes of foot traffic, leading pedestrian intervals are recommended to give people crossing the street priority and to reduce conflicts with turning vehicles.

Class IIIB bicycle boulevards are made more comfortable with additional pedestrian improvements. For example, along Central Ave facilities such as curb extensions, traffic circles, and bus benches would help reduce speeding and cut-through traffic, increasing comfort and safety for people walking and biking.

Recommended pedestrian facilities are shown in Figure 25. Also, Figure 26 provides a closer look at the western portion of the City's pedestrian recommendations.

Figure 25. Recommended Pedestrian Projects

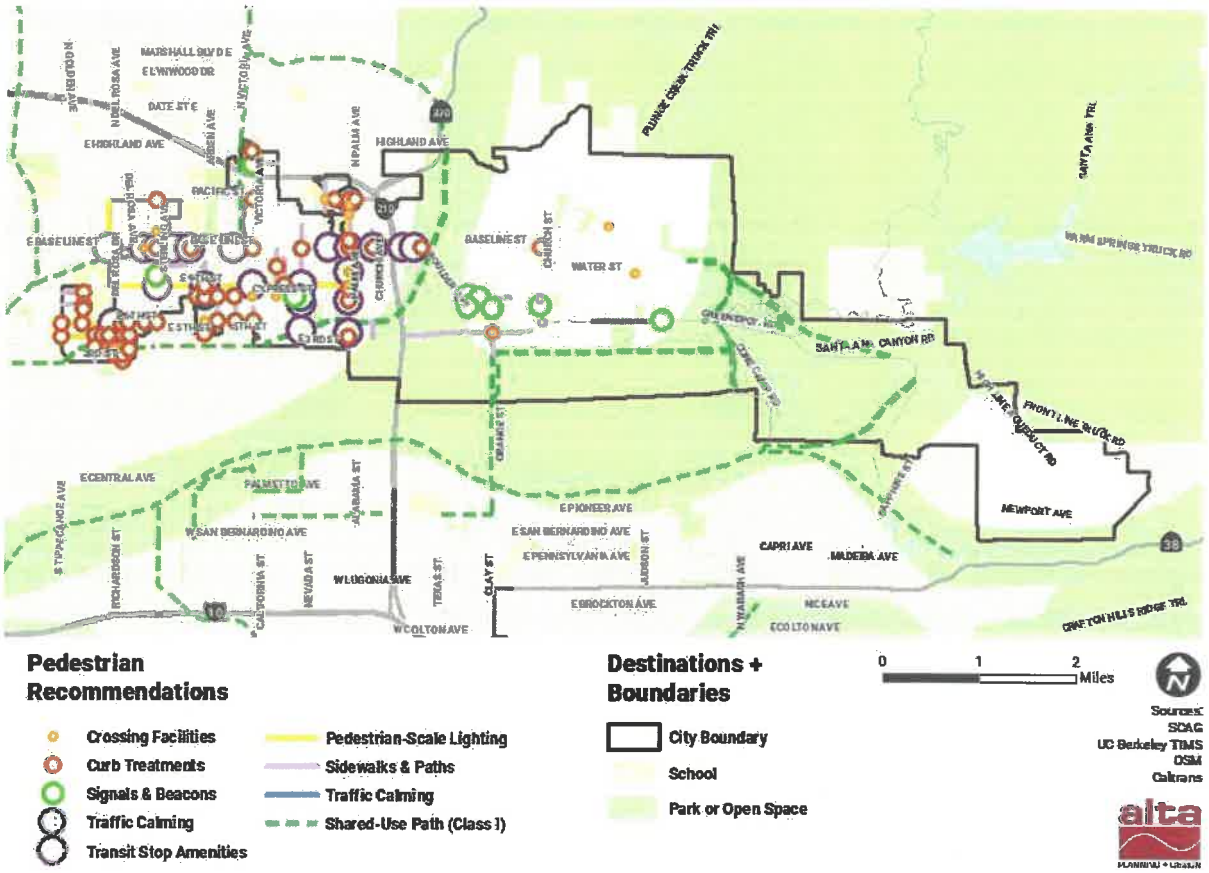


Figure 26. Recommended Pedestrian Projects – West

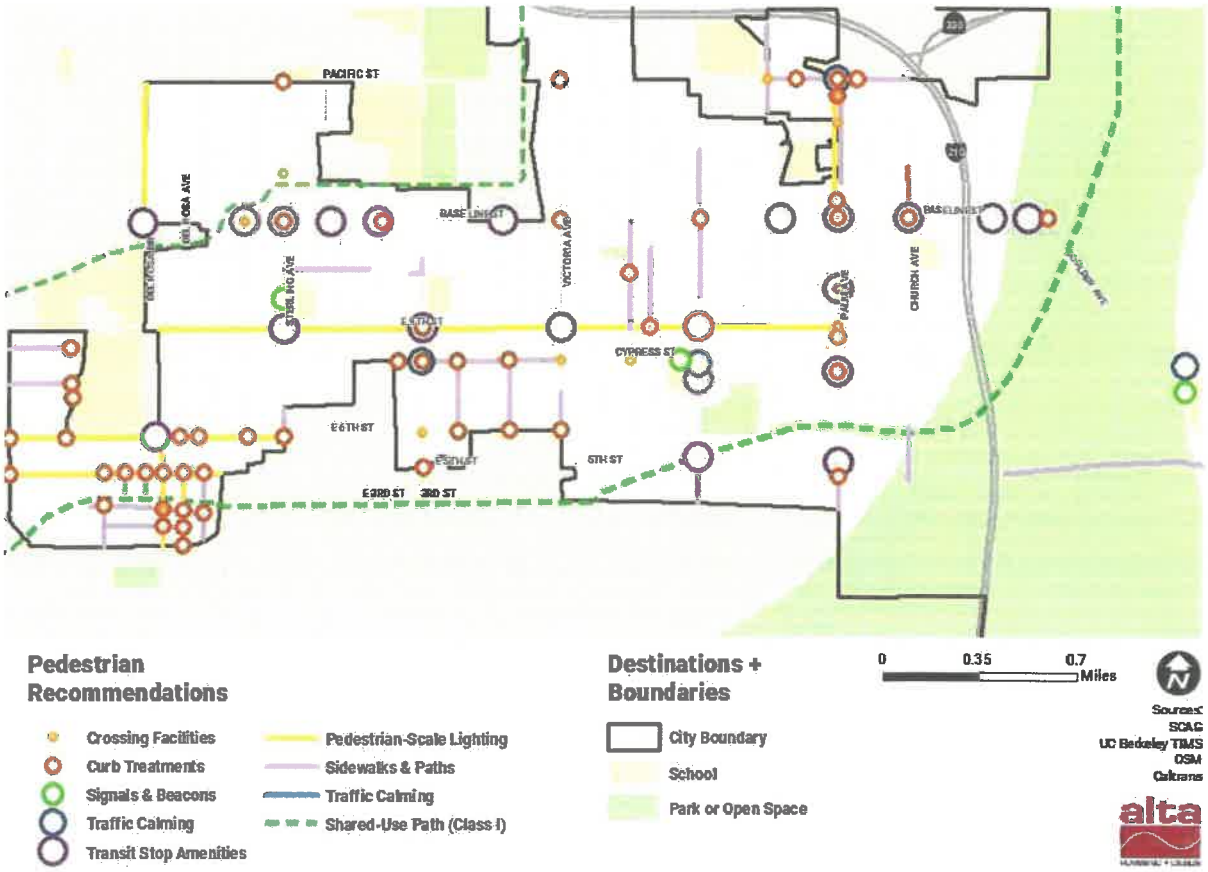


Figure 27. Recommended Pedestrian Projects – East

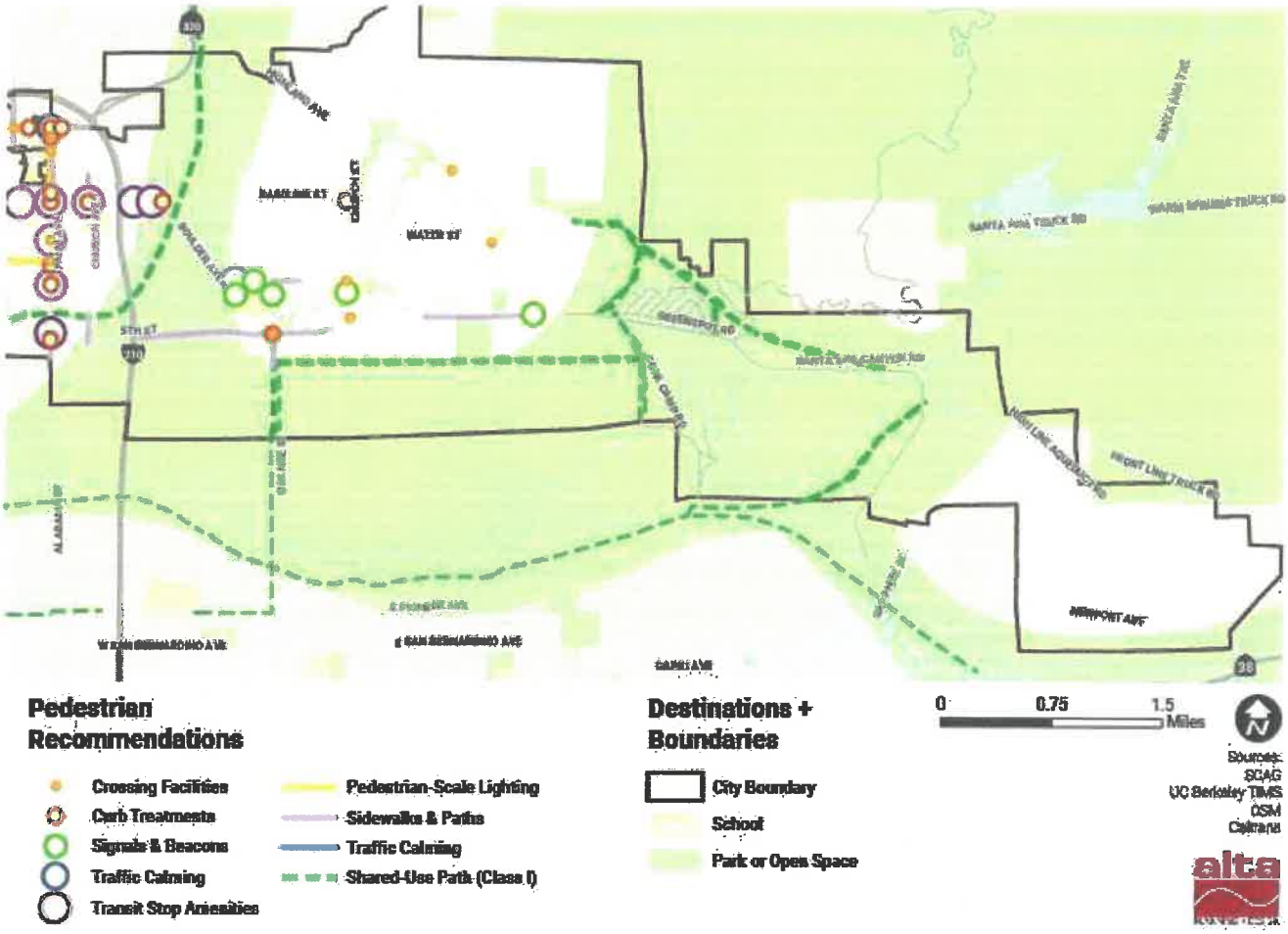


Table 7. Recommended Pedestrian Projects Including Quantity and Length

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
11th St	Sterling Ave	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.31	2
3rd St	Del Rosa Ave		Curb Treatments	Curb Ramps		2
4th St	Marilyn Ave		Curb Treatments	Curb Ramps		2
4th St	Shirley Ave		Curb Treatments	Curb Ramps		2
4th St	Marilyn Ave	Shirley Ave	Sidewalks & Paths	Sidewalk Gap	0.42	2
5th St	Marilyn Ave		Curb Treatments	Curb Ramps		2
5th St	Fairfax Ln		Curb Treatments	Curb Ramps		2
5th St	Elm St		Curb Treatments	Curb Ramps		2
5th St	Michael Dr		Curb Treatments	Curb Ramps		2
5th St	Del Rose Ave		Curb Treatments	Curb Ramps		2
5th St	Shirley Ave		Curb Treatments	Curb Ramps		2
5th St	Del Rosa Ave		Curb Treatments	Curb Ramps		2

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
5th St	Tippecanoe Ave	Sterling Ave	Sidewalks & Paths	Sidewalk Gap	0.76	2
5th St	Bonnie St		Curb Treatments	Curb Ramps		2
5th St	Tippecanoe Ave	Sterling Ave	Pedestrian-Scale Lighting	Lighting	0.77	1
5th St	Donna Dr		Curb Treatments	Curb Ramps		2
6th St	Tippecanoe Ave	Sterling Ave	Sidewalks & Paths	Sidewalk Gap	0.99	2
6th St	Tippecanoe Ave	Sterling Ave	Pedestrian-Scale Lighting	Lighting	0.99	1
6th St	Victoria Ave		Curb Treatments	Curb Ramps		2
6th St	Grape St		Curb Treatments	Curb Ramps		2
6th St	Eucalyptus Dr		Curb Treatments	Curb Ramps		2
9th St	Victoria Ave		Transit Stop Amenities	Bus Shelter and shade		2
9th St	Elmwood Rd	Palm Ave	Pedestrian-Scale Lighting	Lighting	2.46	1
9th St	Sterling Ave		Transit Stop Amenities	Bus Shelters		2
9th St	Valaria Dr	Victoria Ave	Sidewalks & Paths	Sidewalk Gap	0.20	1
9th St	Lankershim Ave		Transit Stop Amenities	Bus Shelter and shade		2

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
9th St	Hillview St		Curb Treatments	Curb Ramps		2
9th St	Central Ave		Transit Stop Amenities	Bus Shelter		2
9th St	Cunningham St	Hillview St	Sidewalks & Paths	Sidewalk Gap	0.07	1
9th St	Central Ave	Cole Ave	Sidewalks & Paths	Sidewalk Gap	0.25	1
9th St	Lankershim Ave		Curb Treatments	Curb Ramps		4
Alpin St	Water St		Crossing Facilities	High-Visibility Crosswalks		4
Base Line	Elm St		Crossing Facilities	High-Visibility Crosswalk		1
Base Line	Sterling Ave		Transit Stop Amenities	Bus Shelter		1
Base Line	McKinley St		Transit Stop Amenities	Bus Shelter		1
Base Line	Elm St		Transit Stop Amenities	Bus Shelter		1
Base Line	Sterling Ave		Curb Treatments	Curb Ramps		4
Base Line	McKinley St		Curb Treatments	Curb Ramps		2
Base Line	Church Ave		Transit Stop Amenities	Bus Shelter		1
Base Line	Seine Ave		Transit Stop Amenities	Bus Shelter		1

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Base Line	Stoney Creek Dr		Transit Stop Amenities	Bus Shelter		1
Base Line	Valaria Dr		Transit Stop Amenities	Bus Shelters		2
Base Line	Cole Ave		Transit Stop Amenities	Bus Shelter		1
Base Line	Church St		Curb Treatments	Curb Extensions		4
Base Line	Guthrie St		Transit Stop Amenities	Bus Shelter		1
Base Line	Palm Ave		Transit Stop Amenities	Bus Shelters		2
Base Line	Church Ave		Curb Treatments	Curb Extensions		4
Base Line	Victoria Ave		Curb Treatments	Curb Extensions		4
Base Line	Central Ave		Curb Treatments	Curb Extensions		4
Base Line	Boulder Ave		Curb Treatments	Curb Extensions		4
Base Line	Palm Ave		Curb Treatments	Curb Extensions		4
Central Ave	Meines St		Transit Stop Amenities	Bus Shelter		2
Central Ave	Hibiscus St		Transit Stop Amenities	Bus Shelter		1
Central Ave	Base Line	10th St	Sidewalks & Paths	Sidewalk Gap	0.27	1

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Central Ave	14th St	Messina St	Sidewalks & Paths	Sidewalk Gap	0.18	1
Central Ave	Cypress St		Traffic Calming	Traffic Circle		1
Central St	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.13	2
Church Ave	Powell Dr	5th St	Sidewalks & Paths	Sidewalk Gap	0.20	2
Church Ave	14th St	Base Line	Sidewalks & Paths	Sidewalk Gap	0.19	1
Church St	Greenspot Rd		Crossing Facilities	High-Visibility Crosswalk		4
Church St	Glenheather Dr		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1
Court St	Del Rosa Ave		Curb Treatments	Curb Ramps		2
Court St	Marilyn Ave	Del Rosa Ave	Sidewalks & Paths	Sidewalk Gap	0.29	2
Cunningham St	Base Line	9th St	Sidewalks & Paths	Sidewalk Gap	0.38	1
Cunningham St	Crest St		Curb Treatments	Curb Ramps		2
Cypress St	Cunningham St		Crossing Facilities	High-Visibility Crosswalks		2
Cypress St	Cunningham St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1
Cypress St	McKinley Ave		Curb Treatments	Curb Ramps		2

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Cypress St	Lankershim Ave		Curb Treatments	Curb Ramp		1
Cypress St	McKinley St	Victoria Ave	Sidewalks & Paths	Sidewalk Gap	0.59	2
Cypress St	Eucalyptus Dr		Curb Treatments	Curb Ramps		2
Cypress St	Grape St		Curb Treatments	Curb Ramps		2
Del Rosa Ave	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.26	2
Del Rosa Ave	5th St	3rd St	Pedestrian-Scale Lighting	Lighting	0.26	1
Del Rosa Ave	4th St		Curb Treatments	Curb Ramps		4
Del Rosa Dr	Court St		Curb Treatments	Curb Ramps		4
Del Rosa Dr	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.25	2
Del Rosa Dr	4th St		Crossing Facilities	High-Visibility Crosswalks		2
Del Rosa Dr	5th St	3rd St	Pedestrian-Scale Lighting	Lighting	0.39	1
Del Rosa Dr	Base Line		Transit Stop Amenities	Bus Shelter		2
Del Rosa Dr	Pacific St	Base Line	Sidewalks & Paths	Sidewalk Gap	0.50	1
Del Rosa Dr	6th St		Transit Stop Amenities	Bus Shelter		2

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Del Rosa Dr	4th St		Curb Treatments	Curb Ramps		4
Del Rosa Dr	5th St		Curb Treatments	Curb Ramps		4
Del Rosa Dr	Pacific St	Base Line	Pedestrian-Scale Lighting	Lighting	0.50	1
Del Rosa Dr	6th St	5th St	Sidewalks & Paths	Sidewalk Gap	0.13	2
Donna Dr	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.07	2
Eucaluptus Dr	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.25	2
Eucalyptus Ave	Orange St	Streater Ave	Sidewalks & Paths	Sidewalk Gap	0.19	1
Eucalyptus Ave	Webster St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1
Fairfax Ln	Union St		Curb Treatments	Curb Ramps		2
Fairfax Ln	Vine St		Curb Treatments	Curb Ramps		2
Fairfax Ln	7th St		Curb Treatments	Curb Ramps		2
Glenheather Dr	Church St		Crossing Facilities	High-Visibility Crosswalks		2
Grape St	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.25	2
Greenspot Rd	Orange St		Crossing Facilities	High-Visibility Crosswalks		4

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Greenspot Rd	210 FWY	Valencia Ct	Sidewalks & Paths	Sidewalk Gap	1.31	2
Greenspot Rd	Orange St		Curb Treatments	Curb Extension		1
Greenspot Rd	Gold Buckle Rd	Alta Vista	Sidewalks & Paths	Sidewalk Gap	0.74	1
Highland Ave	Pleasant View Ln		Crossing Facilities	High-Visibility Crosswalk		1
Highland Ave	Victoria Ave		Curb Treatments	Curb Extensions		4
Hillview St	Bruce St	9th St	Sidewalks & Paths	Sidewalk Gap	0.29	2
Lankershim Ave	6th St		Crossing Facilities	High-Visibility Crosswalk		2
Lankershim Ave	5th St		Curb Treatments	Curb Ramps		4
Lankershim Ave	cul de sac	Olive St	Sidewalks & Paths	Sidewalk Gap	0.05	2
Lankershim Ave	Cypress St		Traffic Calming	Traffic Circle		1
Marilyn Ave	4th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.14	2
Michael Dr	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.07	2
Olive St	cul de sac	Lankershim Ave	Sidewalks & Paths	Sidewalk Gap	0.04	2
Orange St	Windham Dr		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Orange St	Greenspot Rd	Boulder Ave	Sidewalks & Paths	Sidewalk Gap	0.22	2
Orange St	Millar St	Clifton Ave	Sidewalks & Paths	Widen Sidewalk	0.31	2
Pacific St	Orange St		Crossing Facilities	High-Visibility Crosswalk		4
Pacific St	Orange St	Palm Ave	Sidewalks & Paths	Sidewalk Gap	0.25	2
Pacific St	Cole Ave		Curb Treatments	Curb Ramps		2
Pacific St	Center St		Curb Treatments	Curb Ramps		2
Pacific St	Palm Ave		Traffic Calming	Traffic Circle		1
Pacific St	Sterling Ave		Curb Treatments	Curb Extensions		4
Pacific St	Palm Ave	Church Ave	Sidewalks & Paths	Sidewalk Gap	0.25	2
Pacific St	Victoria Ave		Curb Treatments	Curb Extensions		4
Palm Ave	Fisher St		Crossing Facilities	High-Visibility Crosswalk		1
Palm Ave	Main St		Crossing Facilities	High-Visibility Crosswalk		3
Palm Ave	9th St		Crossing Facilities	High-Visibility Crosswalk		1
Palm Ave	Norwood St		Crossing Facilities	High-Visibility Crosswalk		1
Palm Ave	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.12	2

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Palm Ave	Pacific St	Villa St	Sidewalks & Paths	Sidewalk gap	0.37	1
Palm Ave	Main St		Curb Treatments	Curb Ramps		4
Palm Ave	Pacific St		Curb Treatments	Curb Ramps		4
Palm Ave	Foster Ave		Curb Treatments	Curb Ramps		1
Palm Ave	Meines St		Transit Stop Amenities	Bus Shelter		1
Palm Ave	Cypress St		Curb Treatments	Curb Extensions		4
Palm Ave	Norwood St		Transit Stop Amenities	Bus Shelter		1
Palm Ave	Pacific St	Base Line	Pedestrian-Scale Lighting	Lighting	0.50	1
Palm Ave	5th St		Curb Treatments	Curb Extensions		4
Palm Ave	Cypress St		Transit Stop Amenities	Bus Shelter		2
Shirley Ave	4th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.09	2
Shirley Ave	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.09	2
Sterling Ave	Jane St		Crossing Facilities	High-Visibility Crosswalk		1
Sterling Ave	5th St		Curb Treatments	Curb Ramps		1

Corridor	From (or Cross Street)	To	Facility Category	Description	Length	Quantity
Sterling Ave	7th St	6th St	Sidewalks & Paths	Sidewalk Gap	0.10	1
Sterling Ave	11th St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1
Tippecanoe Ave	5th St		Curb Treatments	Curb Ramps		3
Tippecanoe Ave	6th St		Curb Treatments	Curb Ramps		4
Union St	Tippecanoe Ave	Faifax Ln	Sidewalks & Paths	Sidewalk Gap	0.22	2
Victoria Ave	Cypress St		Crossing Facilities	High-Visibility Crosswalk		1
Victoria Ave	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.14	2
Vine St	Tippecanoe Ave	Fairfax Ln	Sidewalks & Paths	Sidewalk Gap	0.23	2
Webster St	Eucalyptus Ave		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		1
Webster St	Eucalyptus Ave		Traffic Calming	Traffic Circle		1
				TOTAL	**18.33**	**304**

BENEFITS OF IMPLEMENTATION

Expanding the network of pedestrian facilities and bikeways brings Highland closer to achieving the goals described in Chapter 2 of this Plan. Implementing the recommended projects could have the following impacts:

- **Collision Reduction:** Reduce the number of severe and fatal collisions to zero by 2040
- **Environmental:** Reduce air pollution from cars due to more people biking and walking
- **Equity:** Reduce household transportation costs and improve mobility options for vulnerable populations
- **Mode Shift:** Increase the share of people walking and biking to work by 5% by 2025 and 10% by 2040
- **Public Health:** Increase the proportion of the population meeting recommended levels of physical activity and reduce the risk for and prevalence of obesity and chronic diseases (e.g., cardiovascular disease, type 2 diabetes, cancer)

SUPPORT FACILITIES

Bicycle Parking

Using data and recommendations highlighted in this Plan, the City of Highland will work to review (and update if necessary) our bicycle parking requirements regularly. The City will also work with partner agencies, large employers, and businesses to ensure bicycle parking is implemented throughout the community. While public entities may lack the authority to install bicycle parking on private rights-of-way, Highland will partner with school districts, transit providers, and private property owners to install and retrofit bicycle parking at existing and new destinations as needed. Table 8 presents an overview of the Association of Pedestrian and Bicycle Professionals' (APBP) recommendations for bicycle parking locations and quantities. These guidelines and recommendations are based on industry best practices as well as APBP's Essentials of Bicycle Parking Recommendations.

Table 8. Recommendations for Bicycle Parking Locations and Quantities

Land Use or Location	Physical Location	Quantity (Minimum)
Parks	Adjacent to restrooms, picnic areas, fields, and other attractions	8 bicycle parking spaces per acre
Schools	Near office and main entrance with good visibility	8 bicycle parking spaces per 40 students

Land Use or Location	Physical Location	Quantity (Minimum)
Public Facilities (e.g., libraries, community centers)	Near main entrance with good visibility	8 bicycle parking spaces per location
Commercial, Retail, and Industrial Developments (over 10,000 square feet)	Near main entrance with good visibility	1 bicycle parking space per 15 employees or 8 bicycles per 10,000 square feet
Shopping Centers (over 10,000 square feet)	Near main entrance with good visibility	8 bicycle parking spaces per 10,000 square feet
Transit Stations	Near platform, security or ticket booth	1 bicycle parking space or locker per 30 automobile parking spaces
Multi-Family Residential	Near main entrance with good visibility	1 short-term bicycle parking space per 10 residential units and 1 long-term bicycle parking space per 2 residential units

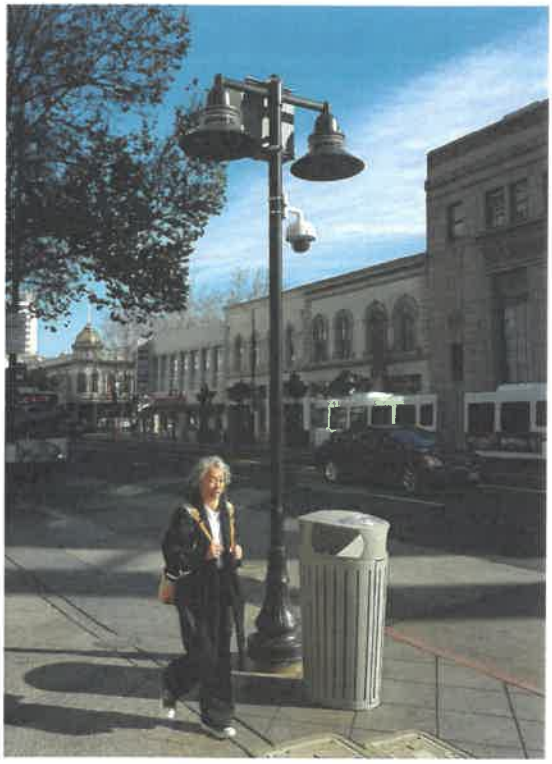


Bike corrals provide ideal short-term parking near businesses.

Pedestrian-Scale Lighting

Although many streets include lighting for vehicle traffic, few include lighting with frequent lampposts at low height that illuminate the walking area. Pedestrian-scale lighting not only increases visibility of pedestrians for drivers at night, it contributes to a more comfortable and inviting streetscape for people walking. Pedestrian-scale lighting is typically designed to illuminate only the areas needed and to be no brighter than necessary.

Following adoption of this Plan, the City will work to implement pedestrian-scale lighting at locations identified in the Plan to improve pedestrian comfort and encourage walking, including near schools and major intersections such as Palm Avenue.



In addition to standalone pedestrian-scale lighting, street lights can be fitted to include pedestrian-scale fixtures that illuminate the walking area, while higher, vehicle-scale street lights illuminate the roadway.

Amenities

Street trees and sidewalk/trail furnishings (such as benches, shade structures, restrooms, water fountains, and trash receptacles) contribute to a cleaner, more comfortable, and more pedestrian-oriented public realm. These elements not only encourage the activation of our sidewalk and trail networks, they contribute to a more accessible pedestrian network for all residents. Older people and those with mobility impairments will benefit from frequent places to stop and rest, and this was a priority identified by the community during outreach for this Plan.



Shade, benches, and lighting increase comfort on trails.

Following adoption of this Plan, the City will identify and pursue opportunities to provide amenities in the downtown, near transit stops, and along trails in the community.



Trees, landscaping, and benches enhance the pedestrian experience.

Green Infrastructure

Green infrastructure is an approach to water management that protects, restores, and simulates the natural water cycle by capturing, filtering, and slowing stormwater. This improves water quality, recharges groundwater resources, provides opportunity for water storage and reuse, and decreases the burden on traditional gray infrastructure systems.

Green infrastructure is effective, economical, and provides a multitude of benefits to people and wildlife. Green Infrastructure strategies incorporate both the natural environment (forests, wetlands, and other open spaces) and engineered systems (bioswales, rain gardens, tree root vault systems, and pervious paving). Bioswales, for example, manage water runoff from a paved surface and reduce the risks of erosion or flooding of local streams and creeks. Plants in the swale trap pollutants and silt from entering a river system.

Plant material provides a wide array of co-benefits beyond water management. Trees, for example, help reduce greenhouse gases, aid in carbon sequestration, increase urban habitat, and provide shade. In fact, trees are estimated to cool surface temperatures by as much as 45 degrees Fahrenheit, a differential that help keep walking and biking on our trails a pleasant experience even in the summer.

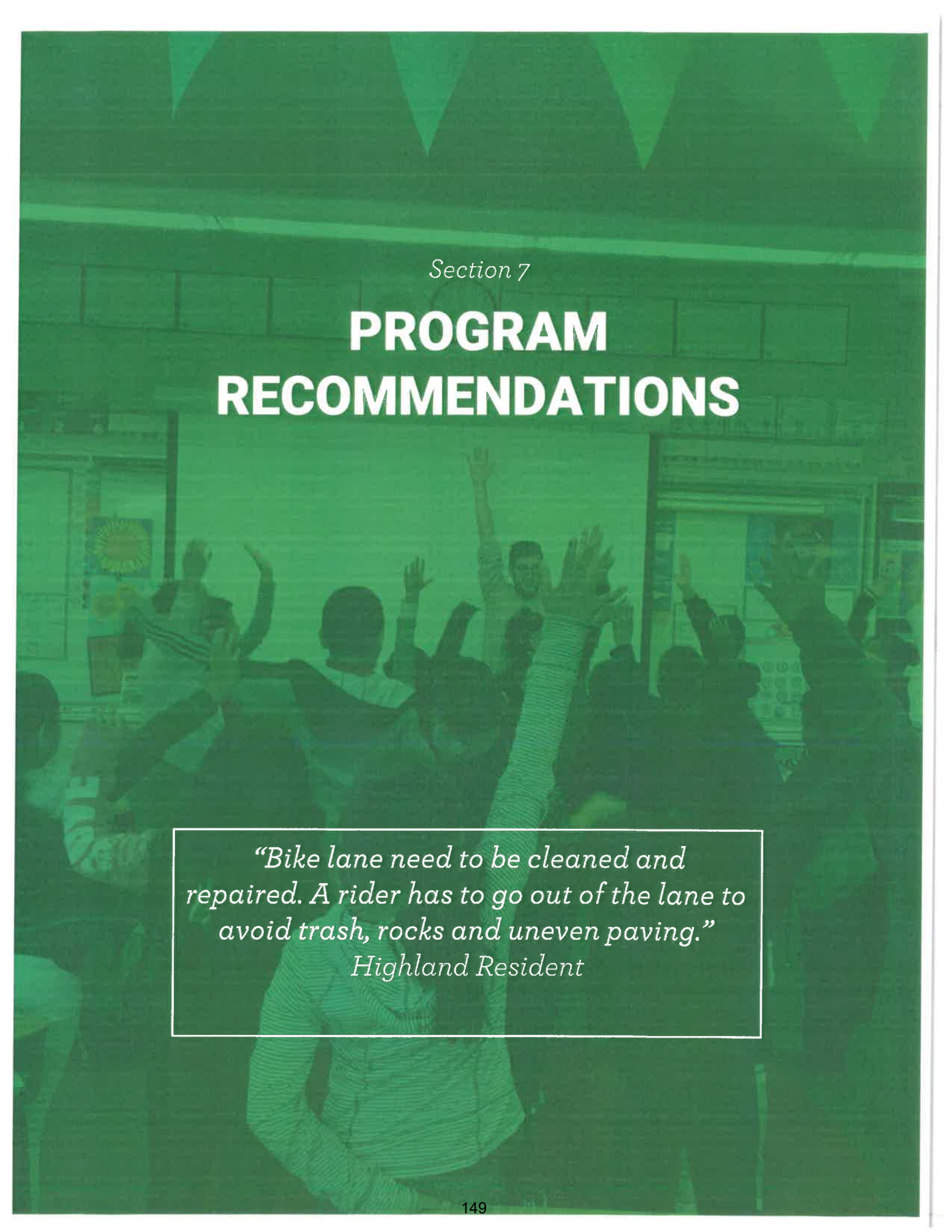


Rain gardens and bioswales help capture and filter stormwater, recharging our aquifers and improving the quality of our waterways.



Since 1991, the City of Highland has been recognized as a "Tree City USA" by the National Arbor Day Foundation for its efforts to preserve and plant new trees throughout the City.

The City of Highland will take advantage of green infrastructure outlined above when feasible and when a long-term maintenance mechanism can be established. The City will also consider utilizing permeable paving for new facilties or facilities requiring re-paving when a long-term maintenance mechanism can be established, especially where facilities are adjacent to flood control facilities, rivers and natural open spaces.



Section 7

PROGRAM RECOMMENDATIONS

"Bike lane need to be cleaned and repaired. A rider has to go out of the lane to avoid trash, rocks and uneven paving."
Highland Resident

7. Program Recommendations

Education, encouragement, and promotional programs will help people of all ages and abilities realize the full potential of Highland's new and recommended active transportation network. These types of programs help people learn how to use our roads safely, whether traveling as a pedestrian, in a vehicle, or on a bicycle.

The programmatic recommendations in the plan aim to improve safety, strengthen wayfinding, increase access to bicycling and walking, and encourage community and economic development. Together these efforts can help make riding or walking in our community a safer, easier, and more enjoyable experience for more people. The programs will help to increase the visibility of people who ride or walk, communicate that all road users are expected to look out for each other no matter how they travel, create safer streets, and develop a common understanding of traffic safety. The programs will also reach out to new audiences to help people understand the rules of the road and share a vision of biking and walking as a fun, healthy, community-building activity.



Programs complement engineering improvements, helping to ensure that people of all ages and abilities feel comfortable and confident when walking or biking.

Research shows that adopting and maintaining new behaviors related to walking and bicycling is a process that involves changing the way we relate to each other on our streets and how we choose to travel. This process depends on policies that support comfortable and safe active transportation, provide access to basic information about riding and walking opportunities, and teach people about new travel options.

Altogether, the programs recommended here complement engineering investments by encouraging more people to walk and bike more often, educating all roadway users to enhance pedestrian safety, and addressing both perceived and real personal safety issues. During the development of this Plan, stakeholders provided input on how programs can support active transportation in their communities (see Table 9). The City used community feedback alongside data to develop the following programmatic recommendations.

Table 9. Public Input Guiding Programmatic Recommendations

What We Heard	What We Propose
People do not know how to ride or walk safely	**Make Education a Priority** Programs will include safety courses for all roadway users (including motorists, cyclists, and pedestrians), and all ages and abilities (including children, older adults, novice cyclists and walkers).
Safety is a top concern throughout the city	**Make Safety Campaign** Programs will include safety campaigns which will encourage all road users to be respectful of one another. Campaign materials can include banners, Bus Shelter ads, and yard signs concentrated near businesses and schools as well as areas with high rates of collisions.
Safety walking and biking to school is a top priority	**Make Routes to Schools Safer** Programs will include updating safe routes to school maps and implement safety program initiatives at all of Highland's schools.

CONTINUE EXISTING PROGRAMS

The City of Highland will continue to develop and support the following existing programs in our community, helping us achieve our safety and equity goals by educating the public about the new and recommended network and encouraging people of all ages and abilities to bike or walk for any trip purpose.

Highland's Safe Routes to School

Safe Routes to School (SRTS) programs have many goals including:

- Teaching students the rules of the road, so they are more prepared to navigate their community via active transportation and eventually become safe drivers;
- Encouraging active modes of getting to school, which will help students arrive at school more alert and ready to learn;
- Decreasing the prevalence of childhood obesity through increased physical activity; and
- Reducing traffic congestion around schools and cut-through traffic on residential streets due to school drop-off and pick-up.

Highland's existing Safe Routes to School program includes safe route to school maps for every elementary school. Additionally, school participated in a regional wide initiative through the San Bernardino Safe Routes to School program that included a robust set of educational activities customized for the County. Lankershim Elementary was part of the County's SRTS Phase III Program. The SRTS Program included an updated school route map, encouragement materials which provided as an ongoing reminder about the SRTS Program, and encouragement activities. Although the County is continuing its program efforts, the City of Highland should work with its school districts to develop a city wide safe routes to school program to guarantee all schools throughout Highland are participating.

San Bernardino County Safe Routes to School

The San Bernardino County Safe Routes to School provides the region with the opportunity to increase walking and biking to school, increase physical activity, improve health outcomes, reduce injuries, and reduce vehicle miles traveled. SRTS initiatives such as safety education and campaigns are part of a comprehensive and effective strategy that can help create a healthier community and are conducted throughout the County.

PROGRAM TOOLKIT

To further advance the goals of this Plan, the City of Highland will work towards implementing the following new programs to help encourage active transportation in our community. While the City is responsible for the implementation of this Plan, several of the programs are an opportunity to work with external stakeholders such as community members and community-based organizations, school districts, neighboring jurisdictions, and transit providers to develop and implement programs.

The City of Highland is committed to continuing and expanding upon the efforts of the existing SRTS program and can do so by:

- Seeking additional funding in the future to expand the program efforts and supporting overall program growth
- Updating existing Suggested Routes to School maps and redistributing to district schools as new infrastructure improvements are implemented
- Evaluating participation in programs, such as Walk to School Day, using national best practices for SRTS program evaluation
- Continuing to implement local SRTS plans and to update regularly



Walking and biking curriculum frequently covers proper helmet usage.

Education Classes

Bicycling education for adults can build confidence and improve safety by incorporating both presentations and on-bike practice covering rules of the road and safe bicycling skills. The League of American Bicyclists offers multiple curricula that can be taught by League Certified Instructors in the area.[26] The City of Highland can support these efforts by funding classes or providing meeting space or other in-kind donations to support education opportunities.

While the aforementioned classes tend to be better for adults or teenagers, younger children can benefit from in-classroom education related to safe walking and bicycling. As part of school curriculum in Highland, students learn basic traffic laws and safety rules in addition to incorporating lessons across biology, earth science, math, and art that focus on the benefits of active transportation.



Education programs for safe walking and biking should include people of all ages.

[26] More information on the League of American Bicyclists courses is available at bikeleague.org/ridesmart.



Safe Routes for Seniors programming could include safety courses, transit trainings, and fitness challenges.

Safe Routes for Seniors

A program providing active opportunities for older adults in Highland could foster healthy aging and longer years of independent living. A Safe Routes for Seniors program develops tools and services to help seniors find ways to meet their transportation needs through trips that primarily include walking and transit, both by bus or light rail. Developing programs that include group walks geared towards seniors will also encourage social bonding. The program can include key awareness topics such as education for drivers to pay particular attention to senior pedestrians and specific improvements such as increasing crossing time in areas that experience a high number of seniors walking. Feedback received from the program can inform future infrastructure improvements that further address needs of older adults.

Bicycle and Pedestrian Safety Campaign

Bicycle and pedestrian safety campaigns encourage all road users to abide by local laws and to be courteous to other users. They can be targeted at just one user type (e.g., motorists) or at multiple users. Local resources for conducting a public awareness campaign can be maximized by assembling a group of local experts, business owners, civic leaders, and dedicated community volunteers. These stakeholders can assist with successful safety campaign goals based on



As part of the Take the Friendly Road campaign, Santa Monica residents were given yard signs to encourage motorists to drive slowly and safely throughout the city.

the local concerns and issues. It may be necessary to develop creative strategies for successful media placement in order to achieve campaign goals.

Outreach campaigns should be concentrated in central business districts like Highland Village Plaza, near schools, and at areas along the high injury network or with high rates of collisions. Campaign materials can include posters, bus shelter ads, banners, yard signs, spoke cards, and more. These campaigns should be deployed regularly to promote an attitude of roadway safety and awareness. Highland could also consider coordinating these efforts with the Southern California Association of Governments (SCAG) *Go Human* campaign, which provides existing materials to member agencies.



The Pasadena Safe School Zones campaign targeted motorists and encouraged them to drive slowly and cautiously near schools.

Bicycle and Pedestrian Wayfinding

Wayfinding systems help people biking and walking navigate to community destinations such as transit stations, parks, libraries, schools, and business districts. They can also serve as an encouragement program by providing walking or biking time to destination information, helping people orient themselves, and encouraging the discovery of new places or services. Wayfinding can also be used to highlight the local identity of a community.



Quick-build wayfinding can take the form of these temporary signs to encourage residents and visitors to walk more to key destinations.

The City of Highland can engage communities in a collaborative design process to develop wayfinding that has unifying characteristics citywide but allows neighborhood customization along specific routes. To do so, the City can work with community members and local organizations to develop wayfinding signage that incorporates community identity.

To provide a low-stress experience, sometimes bike facilities are shifted off of high stress roads onto parallel routes. When bikeways change designations, it is not always clear how to navigate to the nearest route. Highland can evaluate wayfinding needs where low-stress bikeways end and install wayfinding to nearby or parallel routes.

Neighborhood Bike Stops

Limited locations throughout Highland currently provide bike parking, but there is a lack of other amenities like bike self-repair/fix-it stations. Being able to fix bikes and have access to water in a secure and welcoming place would allow residents and visitors to engage in outdoor physical activity more frequently and more comfortably. The City of Highland can add bicycle fix-it stations and hydration stations to various key destinations in the city. For example, Highland City Administration building would be an ideal location for a neighborhood bike stop due to its proximity to Base Line and Palm Avenue and its secure and welcoming presence in the community.

Open Streets and Demonstration Projects

Open streets events temporarily close streets to car traffic, allowing people to use the streets for activities like walking, bicycling, skating, and other social and physical activities. These events are great for bringing the community together and promoting transportation options and public health. Open streets events are also excellent at building community; they bring together neighborhoods, businesses, and visitors alike.



An ongoing open streets event, CicLAvia allows people to enjoy car-free streets throughout Los Angeles.

Open streets events can also serve as a tool to engage with the public about how their roadways can better serve their needs. For example, the City of Highland can use open streets events as an opportunity to demonstrate new infrastructure ideas such as traffic circles or separated bicycle lanes. They provide an opportunity for the City to directly engage with residents and local businesses and receive feedback on new ideas at the moment people are experiencing their streets and community in a new way.

Demonstration projects can also be done as standalone events (i.e., without an open streets event). Unlike open streets events, demonstration projects typically maintain vehicle access so community members are able to experience how an existing roadway could function with projects such as new crossings, bike lanes, and more. Demonstrating potential future projects enables the City to work with local stakeholders to test out infrastructure ideas for a day or a few weeks to inform permanent projects.

The City of Highland can partner with neighboring jurisdictions, local stakeholders, and regional agencies like SCAG to plan and implement open streets events and demonstration projects.



SCAG's Go Human *demonstration kit allows cities to test out design ideas, such as bike lanes, curb extensions and wayfinging..*



Community cleanups remove litter from our streets and help foster connections. (Capt. Kristen Newsom)

Adopt-a-Road and Adopt-a-Trail Programs

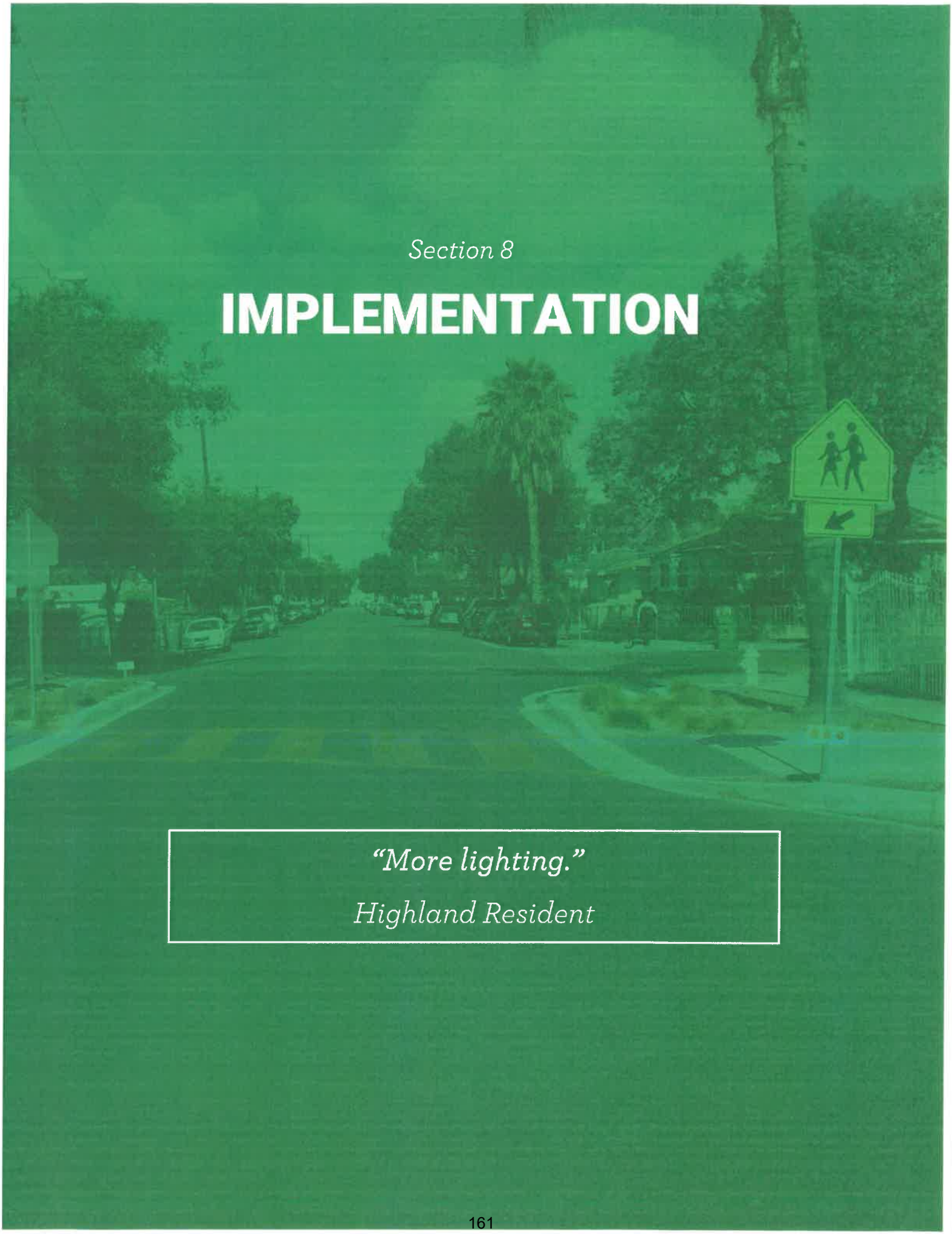
Adopt-a-Road and Adopt-a-Trail programs provide an opportunity for groups, businesses, or clubs to adopt a section of a road or trail. They then support their section of the road/trail with financial contributions and volunteer work. This augments City resources and offers residents a chance to keep roadways and trails near their neighborhood in good condition, and provides businesses the opportunity to enhance the streetscape near their place of business.



Tree planting efforts can coincide with national celebrations such as Earth Day or Arbor Day. (Jonathan Su)

Community Cleanups and Tree Plantings

To augment the City's limited resources and accomplish community goals of clean, shaded streets, the City can leverage volunteer groups and community support with community cleanups, plantings, and other beautification efforts. Such programs could involve a partnership between the City and community-based organizations or corporate sponsors, especially to provide ongoing care for new trees and other plantings.



Section 8

IMPLEMENTATION

"More lighting."

Highland Resident

8. Implementation

This chapter provides a roadmap for achieving the vision and goals established at the beginning of the Plan by outlining a prioritization strategy, cost estimates, maintenance, and funding sources. The City of Highland is responsible for the implementation of active transportation infrastructure projects within the city boundaries. Programs to encourage walking, bicycling, and using other active modes or to provide safety education are the responsibility of City of Highland departments and of regional agencies such as Public Works. Additionally, a safer and more active Highland is not possible without the involvement of community members as our residents have invaluable local knowledge about the streets in our community. As the City moves forward with the implementation of active transportation projects, additional community engagement and outreach will be essential.

The City of Highland commits to regularly evaluating how well performance measures set forth in this Plan are met, and whether the many recommendations established in this Plan still meet the needs of our residents and visitors. The City aims to track progress on implementation every year.

In addition, the recommendations in this Plan should be re-evaluated at least every five years to ensure that these still constitute best practices and reflect Highland's long-term vision for a safer and more active community.

ADMINISTRATION

CEQA

The California Environmental Quality Act (CEQA) provides a process for evaluating the environmental effects of plans or applicable projects undertaken or approved by public agencies. Active Transportation Plans, such as this one, are generally exempt from the CEQA process and do not require an Environmental Impact Report (EIR). Additionally, when implementing this Plan, specific projects that do not significantly alter land, water, or vegetation (e.g., striping bikeways or crosswalks) are also exempt from the environmental review process. For pedestrian and bicycle facilities that are not exempt from CEQA review but are initially shown to not have a significant impact on the environment, the City of Highland can file either a Categorical Exemption or a Mitigated Negative Declaration in lieu of completing an EIR. When implementing specific infrastructure projects, jurisdictions should consult CEQA guidelines and Senate Bill 1380 for further information.

Active Transportation Plan Compliance

The Active Transportation Program (ATP) is a Caltrans program with specific requirements for bicycle and/or pedestrian plans. Although Plans are no longer required to comply with the ATP guidelines in order to receive Caltrans funding, it is strongly recommended that communities have an approved Plan prior to applying for implementation funds. This Highland Active Transportation Plan is in compliance with ATP guidelines as shown in Appendix A.

PRIORITIZATION FRAMEWORK

To guide implementation, a prioritization framework was developed to evaluate proposed bicycle and pedestrian projects using the criteria outlined in Table 10. These criteria include safety, addressing barriers, ensuring facilities serve areas of high need, improving access to schools and other key destinations, and findings from public input. For each criterion, projects received an individual score; a composite score was developed based on the sum of all six factors evaluated. Total scores falling within the top third are considered high priority projects; total scores falling in the middle third are considered medium priority; and scores falling in the lower third are considered lower priority projects.

This methodology enables the City of Highland to identify priority projects and phase the implementation of projects over the years. Some projects can also be implemented as part of routine roadway maintenance programs. Furthermore, this prioritization plan is aligned with the State's Active Transportation Program grant criteria, which is the primary source of state funding the City pursues for pedestrian and bicycle infrastructure.

Table 10. Prioritization Criteria

Criteria	Measure	Points
Safety	Within 500 feet of 4+ pedestrian-/bicyclist-involved collisions or 1 pedestrian/bicyclist fatality = 15 points	0, 5, 10, 15
	Within 500 feet of 2-3 pedestrian-/bicyclist-involved collisions = 10 points	
	Within 500 feet of 1 pedestrian-/bicyclist-involved collision = 5 points	
Equity	Projects that are located within a disadvantaged community, as defined by CalEnviroScreen 3.0. Points are based on the CES Percentile (0-100%): 0-9% = 1 point; 10-19% = 2 points, etc.	1 - 10

Criteria	Measure	Points
Destination Accessibility	Within 500 feet of a park or school, Points are based on number of destinations within 500 feet, up to 10 destinations.	0 - 10
Community-Identified Need	Projects that were identified through multiple engagement efforts with unique stakeholders.	0 , 10
Cost	Projects that are lower cost will generally present fewer barriers to implementation, and thus receive more points based on this threshold: Low = 10 points, Medium = 5 points, High = 0 points	0, 5, 10
Ease of Implementation	Projects that require minimal infrastructure present fewer barriers to implementation, and thus receive more points based on this threshold: Easy = 10 points, Somewhat Easy = 5 points, Not Easy = 0 points	0, 5, 10
	Maximum Possible Points	**65**

The prioritization list acts as a guide to implementation for the City of Highland. When funding sources become available, the City will take all available opportunities to propose the most competitive projects. Should opportunities arise to complete projects on lower tiers of the prioritization list, they will be taken. For example, if a new development is required to provide a public benefit along these corridors, proposed bikeways or sidewalks can be considered as an option. If the City plans to repave a corridor that has a recommended bikeway or pedestrian project in this Plan, the City will explore ways to install facilities as the street is repaved.

Projects were given one of three priorities:

- **Tier 1: High Priority Projects.** These are projects that the City of Highland will actively seek funding for and dedicate resources to planning and implementation in the immediate years. Timelines for outreach, and identification of funding sources will be a high priority and immediate next step. The Tier 1 projects that are lower-scale and cost will be considered for immediate implementation in the coming fiscal years.
- **Tier 2: Priority Projects.** These are projects that the City of Highland will maintain as potential projects, in the event that funding sources (such as developer impact fees) become available. The City's repaving plan will also take these projects into account as street repaving plans are implemented. These projects may be combined with Tier 1 projects to strengthen the network and gap closure portions of grant applications, and to complement other projects.

- **Tier 3: Other Projects.** These are projects that the City of Highland will pursue longer-term. However, should the City have the opportunity to implement projects from any of the three tiers, we will work to develop these projects in order to close network gaps and improve walking, biking, and connecting to transit.

Figure 28. Recommended Bicycle Projects by Prioritization Score

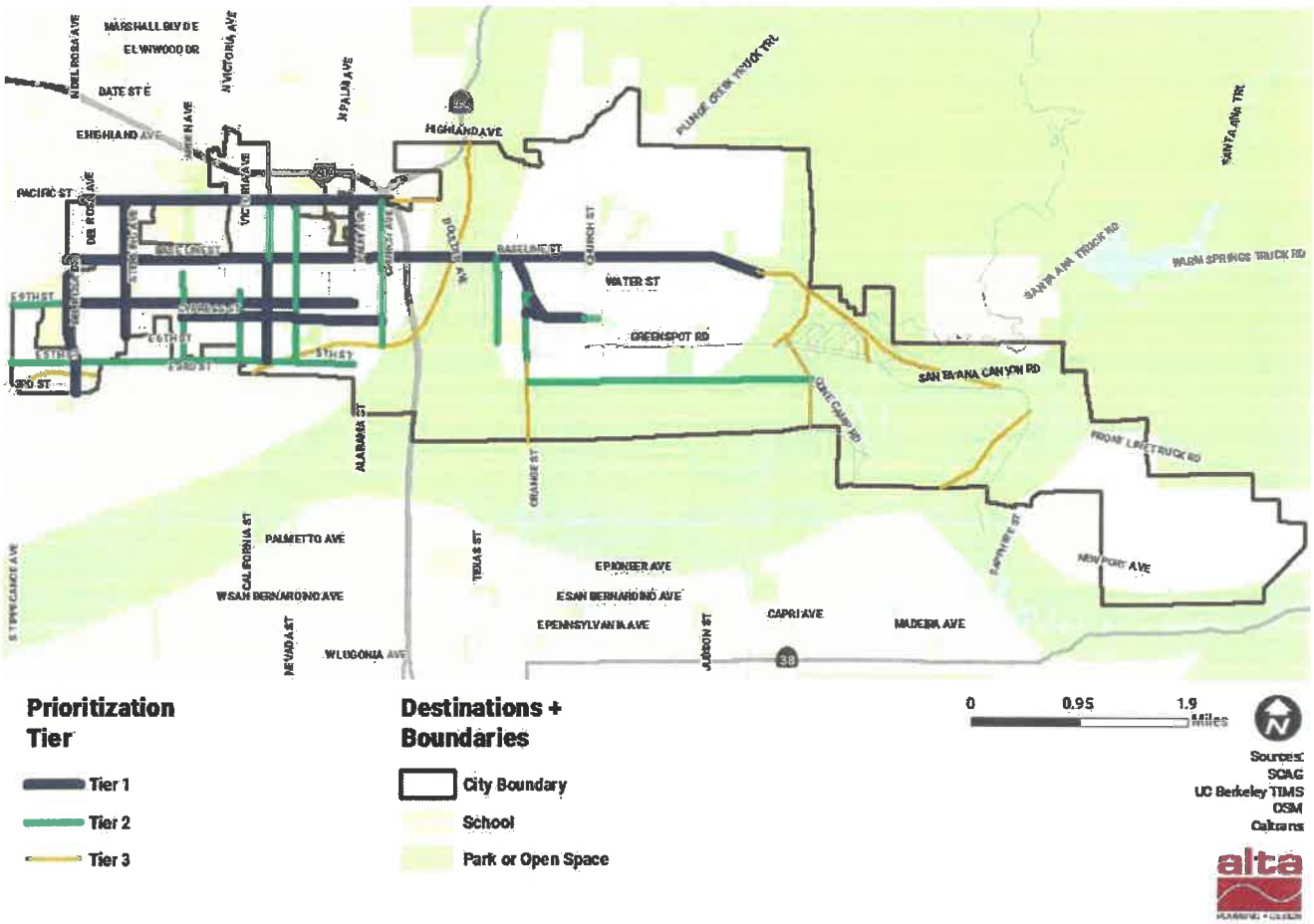


Figure 29. Recommended Bicycle Projects by Prioritization Score-West

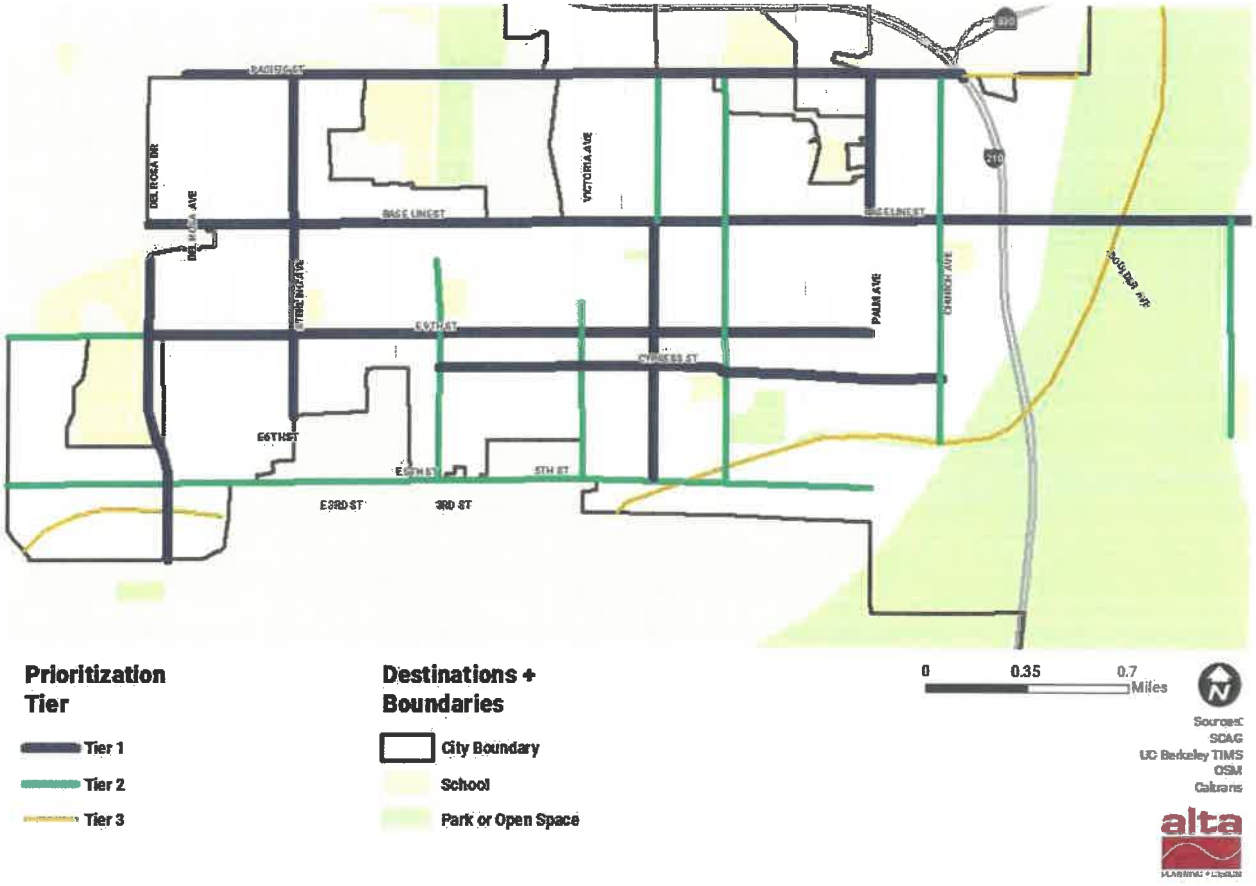
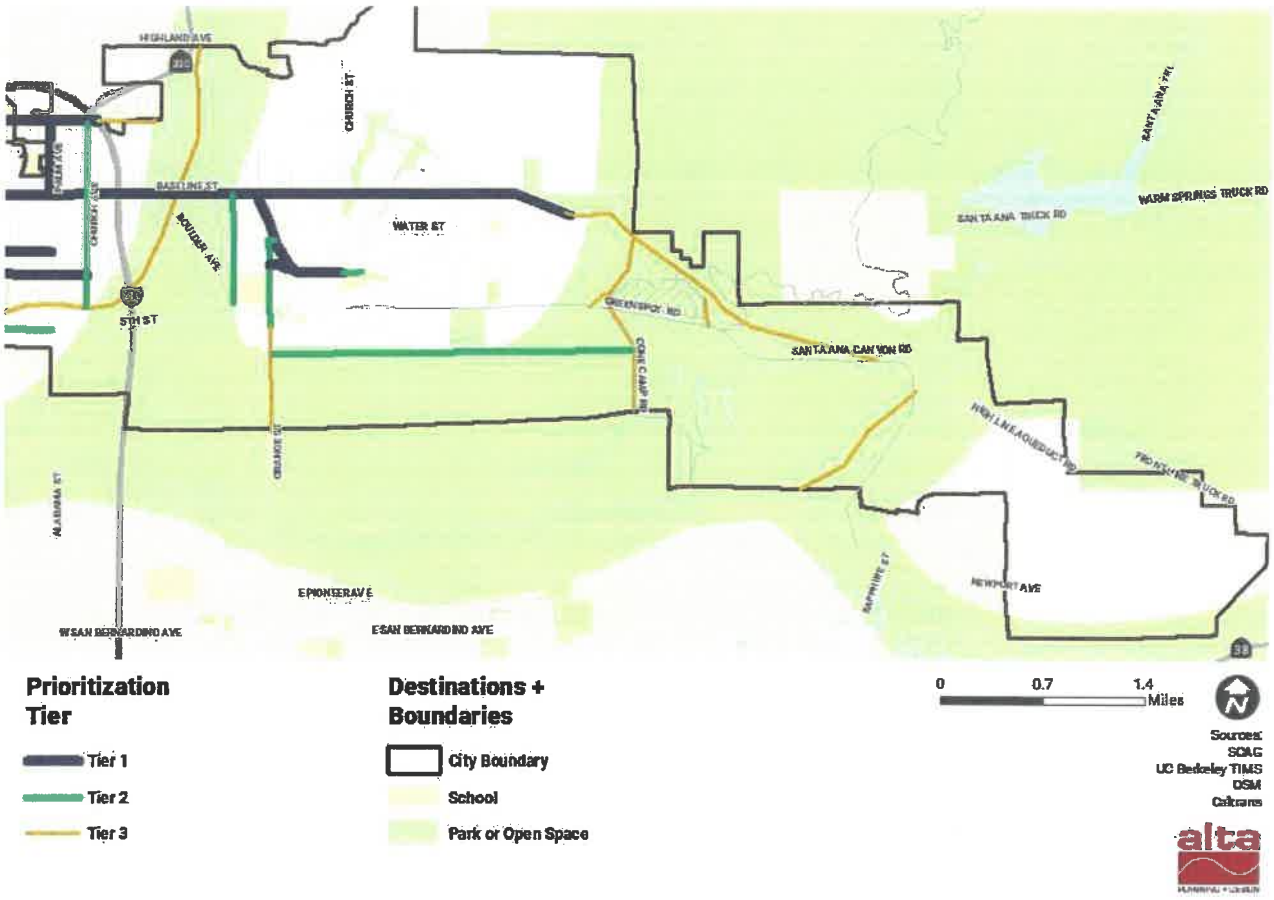


Figure 30. Recommended Bicycle Projects by Prioritization Score-East



Prioritized Bicycle Projects

Figure 28 shows the recommended bicycle projects throughout the city based on prioritization score. The following tables list Tier 1, 2, and 3 projects among the recommended bikeways, including planning-level cost estimates.

Table 11. Recommended Bicycle Projects Including Length and Estimated Costs: Tier 1

Corridor	From	To	Facility Type	Length (Miles)	Cost Estimate	Priority Score
*Palm Ave	Pacific St	Base Line	3	0.50	Low	49
Base Line	Del Rosa Ave	Tuolumne Ln	2B	6.09	Low	49
*9th St	Del Rosa Dr	Palm Ave	2B	2.50	Low	44
Cypress St	Lankershim Ave	Church Ave	3B	1.76	Medium	42
*Del Rosa Dr	Paloma St	3rd St	2	1.04	Low	42
*Cunningham St	Base Line	5th	2	0.88	Low	41
*Sterling Ave	Pacific St	7th St	2B	1.17	Low	39
*Streater Avenue	Base Line	Church St	2	0.92	Low	38
*Pacific St	Del Rosa Dr	210 Freeway	2	2.71	Low	38
*Tonner Dr	Orange St	Streater Ave	3	0.16	Low	38
TOTAL				17.73		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Table 12. Recommended Bicycle Projects Including Length and Estimated Costs: Tier 2

Corridor	From	To	Facility Type	Length (Miles)	Cost Estimate	Priority Score
Webster St	Base Line	Boulder Ave	3B	0.74	Medium	35
*Orange Street	Tonner Dr	Greenspot Rd	2	0.61	Low	35
Olive Street	Pacific St	Base Line	3	0.50	Low	35
5th St	Tippecanoe Ave	Palm Ave	2B	2.99	Low	35
*Central Ave	Pacific St	5th St	3B	1.39	Medium	33
9th St	Tippecanoe Ave	Del Rosa Dr	2	0.49	Low	32
Lankershim Ave	Olive St	5th St	3B	0.75	Medium	30
*Victoria Ave	Sparks St	5th St	2	0.60	Low	30
Church Ave	Pacific St	5th	3	1.25	Low	30
Orange to Cone Camp Trail	Orange St	Cone Camp Rd	1	2.48	Medium	26
Love St	Church St	Elder Gulch Paseo	2	0.12	Low	24
TOTAL				11.93		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Table 13. Recommended Bicycle Projects Including Length and Cost Estimates: Tier 3

Corridor	From	To	Facility Type	Length (Miles)	Cost Estimate	Priority Score
Pacific St	210 Freeway	Grove Ave	2	0.41	Low	23
Cone Camp Rd	Greenspot Rd	South City Limit	1	0.38	Medium	22
North Fork Trail	Cone Camp Rd	Tuolumne Ln	1	1.38	Medium	21
City Creek Trail	3rd St	Highland Ave	1	3.27	High	20
North Fork Trail	Base Line	Greenspot Rd	1	1.87	Medium	19
Santa Ana River Trail		Greenspot Rd	1	1.05	Medium	19
*Orange St	Greenspot Rd	South City Limit	1	0.72	Medium	18
City Creek Trail	Tippecanoe Ave	Sterling Ave	1	0.73	High	17
TOTAL				9.81		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Figure 31. Prioritized Pedestrian Projects

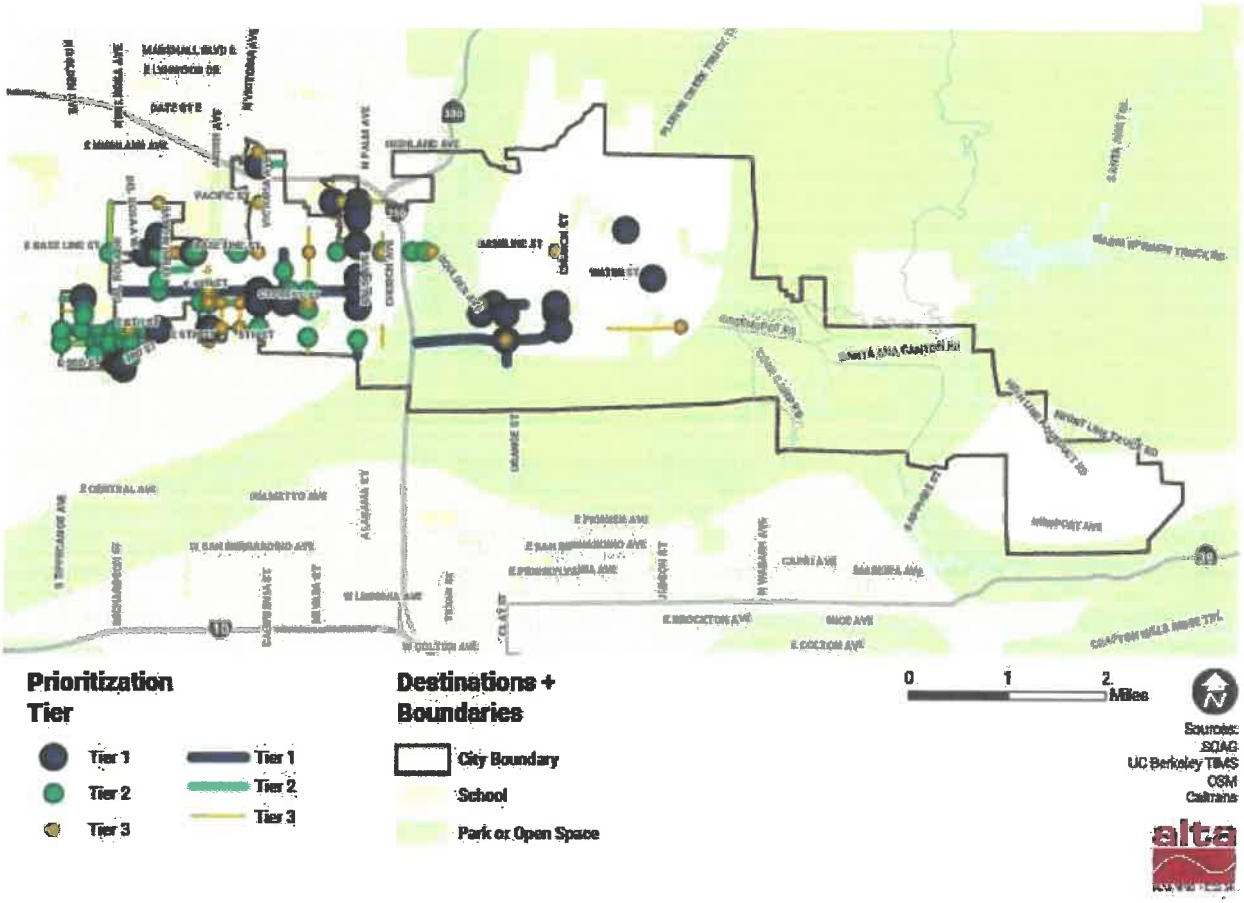


Figure 32. Prioritized Pedestrian Projects – West

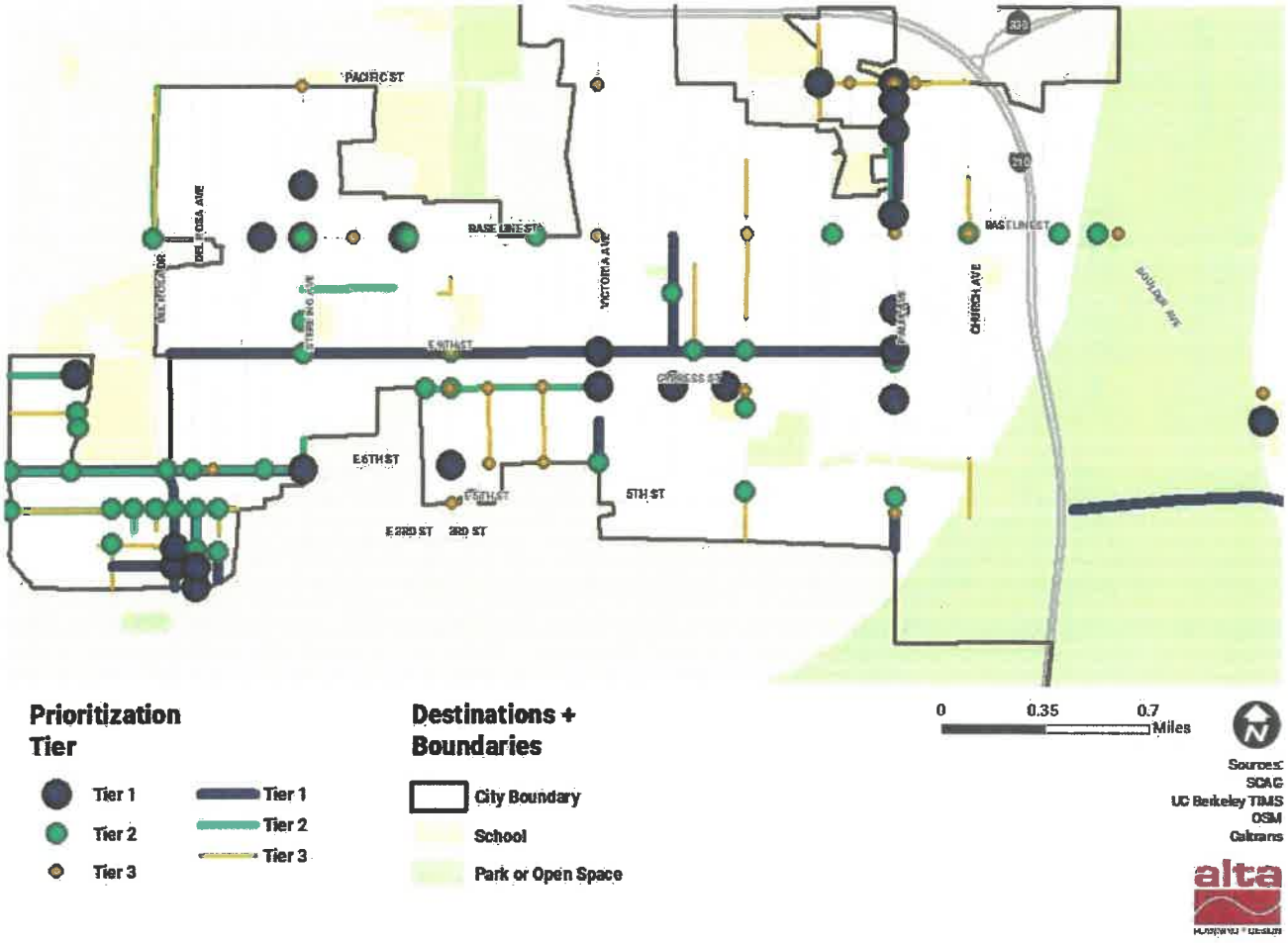
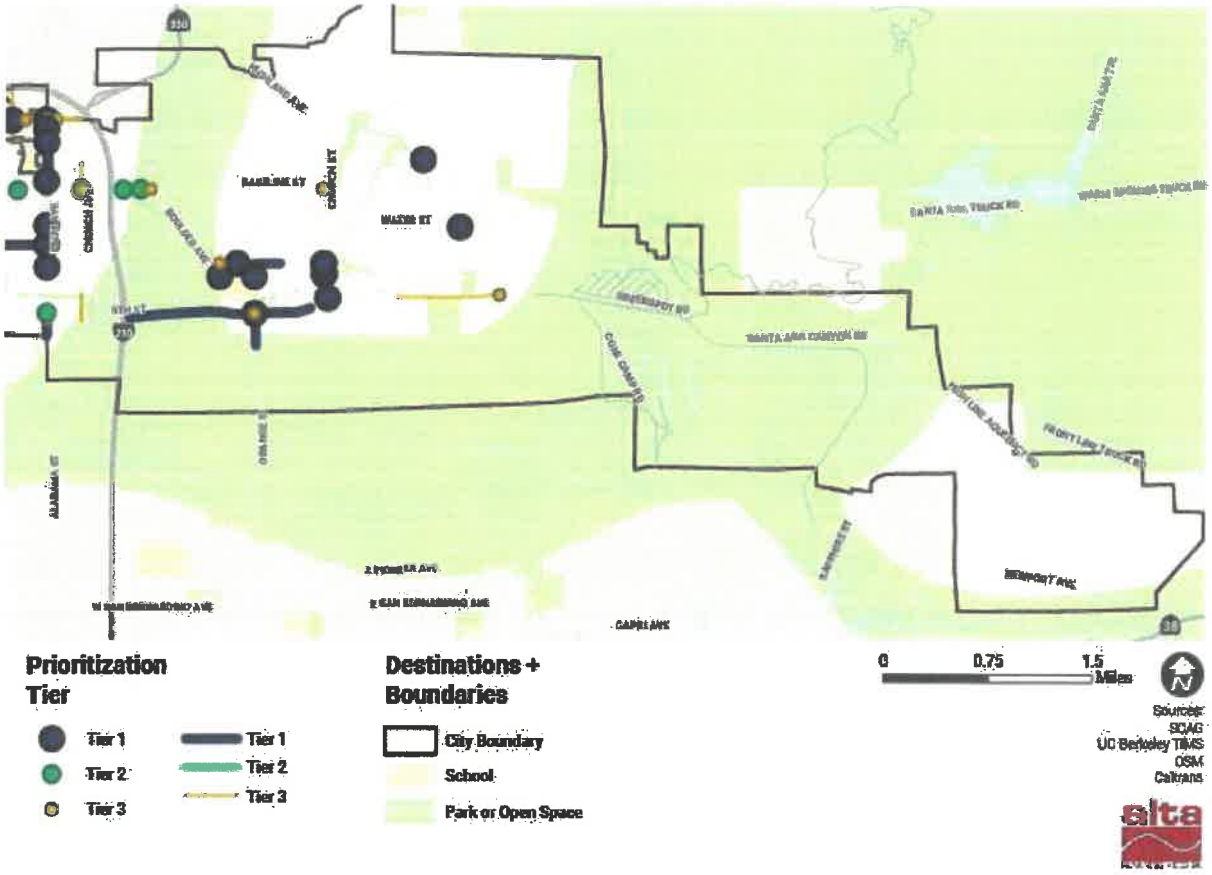


Figure 33. Prioritized Pedestrian Projects – East



Prioritized Pedestrian Projects

Figure 31 and Figure 32 shows the recommended pedestrian projects throughout the city based on prioritization score. The following tables highlight Tier 1, 2, and 3 projects among the recommended pedestrian projects, including planning-level cost estimates.

Table 14. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 1

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
Cypress St	Cunningham St		Crossing Facilities	High-Visibility Crosswalk		Low	45
*Palm Ave	Fisher St		Crossing Facilities	High-Visibility Crosswalk		Low	42
Base Line	Elm St		Crossing Facilities	High-Visibility Crosswalk		Low	39
*Greenspot Rd	Orange St		Crossing Facilities	High-Visibility Crosswalks		Low	38
*Palm Ave	Main St		Crossing Facilities	High-Visibility Crosswalk		Low	38
*Church St	Greenspot Rd		Crossing Facilities	High-Visibility Crosswalk		Low	38
Sterling Ave	Jane St		Crossing Facilities	High-Visibility Crosswalk		Low	37
Del Rosa Dr	Court St		Curb Treatments	Curb Ramps		Medium	35
3rd St	Del Rosa Ave		Curb Treatments	Curb Ramps		Medium	35
Court St	Del Rosa Ave		Curb Treatments	Curb Ramps		Medium	35
Palm Ave	Cypress St		Transit Stop Amenities	Bus Shelter		Medium	35
Palm Ave	9th St		Crossing Facilities	High-Visibility Crosswalk		Low	35

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
Palm Ave	Norwood St		Crossing Facilities	High-Visibility Crosswalk		Low	35
*Del Rosa Ave	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.26	Medium	35
Base Line	Sterling Ave		Transit Stop Amenities	Bus Shelter		Medium	34
Base Line	McKinley St		Transit Stop Amenities	Bus Shelter		Medium	34
Eucalyptus Ave	Orange St	Streater Ave	Sidewalks & Paths	Sidewalk Gap	0.19	Low	33
Cypress St	Cunningham St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		Medium	31
Del Rosa Dr	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.25	Medium	31
Palm Ave	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.12	Low	31
Del Rosa Dr	4th St		Crossing Facilities	High-Visibility Crosswalks		Low	30
9th St	Victoria Ave		Transit Stop Amenities	bus shelter and shade		Medium	30
Victoria Ave	Cypress St		Crossing Facilities	High-Visibility Crosswalk		Low	30
Highland Ave	Pleasant View Ln		Crossing Facilities	High-Visibility Crosswalk		Low	30
Court St	Marilyn Ave	Del Rosa Ave	Sidewalks & Paths	Sidewalk Gap	0.29	Medium	30
Shirley Ave	4th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.09	Medium	30
*Victoria Ave	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.14	Low	30

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
Webster St	Eucalyptus Ave		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		Medium	29
Sterling Ave	5th St		Curb Treatments	Curb Ramp		Medium	29
Base Line	Elm St		Transit Stop Amenities	Bus Shelter		Medium	29
Lankershim Ave	6th St		Crossing Facilities	High-Visibility Crosswalk		Low	29
9th St	Elmwood Rd	Palm Ave	Pedestrian-Scale Lighting	Lighting	2.46	High	29
*Palm Ave	Pacific St	Villa St	Sidewalks & Paths	Sidewalk Gap	0.37	High	29
Eucalyptus Ave	Webster St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		Medium	28
Orange St	Windham Dr		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		Medium	28
Church St	Glenheather Dr		Signals & Beacons	Mid-block crossing (possibly		Medium	28

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
				raised) with flashing beacons			
*Palm Ave	Main St		Curb Treatments	Curb Ramps		Medium	28
*Palm Ave	Pacific St		Curb Treatments	Curb Ramps		Medium	28
*Pacific St	Orange St		Crossing Facilities	High-Visibility Crosswalk		Low	28
Greenspot Rd	210 FWY	Valencia Ct	Sidewalks & Paths	Sidewalk Gap,	1.31	Medium	28
Palm Ave	Foster Ave		Curb Treatments	Curb Ramps		Medium	27
Glenheather Dr	Church St		Crossing Facilities	High-Visibility Crosswalks		Low	27
Alpin St	Water St		Crossing Facilities	High-Visibility Crosswalks		Low	27
Del Rosa Dr	5th St	3rd St	Pedestrian-Scale Lighting	Lighting	0.39	High	27
Fairfax Ln	Union St		Curb Treatments	Curb Ramps		Medium	26
*Orange St	Greenspot Rd	Boulder Ave	Sidewalks & Paths	Sidewalk Gap	0.22	Medium	26
6th St	Tippecanoe Ave	Sterling Ave	Sidewalks & Paths	Sidewalk Gap	0.99	Medium	26
*Cunningham St	Base Line	9th St	Sidewalks & Paths	Sidewalk Gap	0.38	Low	26
				TOTAL	**7.46**		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Table 15. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 2

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
5th St	Marilyn Ave		Curb Treatments	Curb Ramps		Medium	25
5th St	Donna Dr		Curb Treatments	Curb Ramps		Medium	25
5th St	Fairfax Ln		Curb Treatments	Curb Ramps		Medium	25
9th St	Sterling Ave		Transit Stop Amenities	Bus Shelter		Medium	25
Palm Ave	Meines St		Transit Stop Amenities	Bus Shelter		Medium	25
Palm Ave	Cypress St		Curb Treatments	Curb Extensions		High	25
Palm Ave	Norwood St		Transit Stop Amenities	Bus Shelter		Medium	25
Del Rosa Ave	5th St	3rd St	Pedestrian-Scale Lighting	Lighting	0.26	High	25
*9th St	Valaria Dr	Victoria Ave	Sidewalks & Paths	Sidewalk Gap	0.20	Medium	25
Del Rosa Dr	Base Line		Transit Stop Amenities	Bus Shelter		Medium	24
5th St	Elm St		Curb Treatments	Curb Ramps		Medium	24
Cypress St	McKinley Ave		Curb Treatments	Curb Ramps		Medium	24
Cypress St	Lankershim Ave		Curb Treatments	Curb Ramps		Medium	24

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
Base Line	Sterling Ave		Curb Treatments	Curb Extensions		High	24
Base Line	McKinley St		Curb Treatments	Curb Extensions		High	24
Del Rosa Dr	Pacific St	Base Line	Sidewalks & Paths	Sidewalk Gap	0.50	Medium	24
Sterling Ave	7th St	6th St	Sidewalks & Paths	Sidewalk Gap	0.10	Medium	24
Palm Ave	Pacific St	Base Line	Pedestrian-Scale Lighting	Lighting	0.50	High	24
*Del Rosa Dr	6th St		Transit Stop Amenities	Bus Shelter		Medium	21
Base Line	Church Ave		Transit Stop Amenities	Bus Shelter		Medium	21
Base Line	Seine Ave		Transit Stop Amenities	Bus Shelter		Medium	21
Base Line	Stoney Creek Dr		Transit Stop Amenities	Bus Shelter		Medium	21
Cunningham St	Crest St	3rd St	Curb Treatments	Curb Ramps		Medium	21
Central Ave	Meines St	Victoria Ave	Transit Stop Amenities	Bus Shelter		Medium	21
Central Ave	Hibiscus St		Transit Stop Amenities	Bus Shelter		Medium	21
6th St	Tippecanoe Ave	Sterling Ave	Pedestrian-Scale Lighting	Lighting	0.99	High	21
Union St	Tippecanoe Ave	Faifax Ln	Sidewalks & Paths	Sidewalk Gap	0.22	Medium	21

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
Del Rosa Dr	4th St		Curb Treatments	Curb Ramps		Medium	20
Del Rosa Dr	5th St		Curb Treatments	Curb Ramps		Medium	20
Tippecanoe Ave	5th St	Base Line	Curb Treatments	Curb Ramps		Medium	20
5th St	Michael Dr	6th St	Curb Treatments	Curb Ramps		Medium	20
5th St	Del Rose Ave	Base Line	Curb Treatments	Curb Ramps		Medium	20
5th St	Shirley Ave		Curb Treatments	Curb Ramps		Medium	20
Tippecanoe Ave	6th St		Curb Treatments	Curb Ramps		Medium	20
5th St	Del Rosa Ave		Curb Treatments	Curb Ramps		Medium	20
Del Rosa Ave	4th St		Curb Treatments	Curb Ramps		Medium	20
4th St	Marilyn Ave		Curb Treatments	Curb Ramps		Medium	20
4th St	Shirley Ave		Curb Treatments	Curb Ramps		Medium	20
Fairfax Ln	Vine St		Curb Treatments	Curb Ramps		Medium	20
Fairfax Ln	7th St	Schools	Curb Treatments	Curb Ramps		Medium	20
9th St	Lankershim Ave	Sterling Ave	Transit Stop Amenities	Bus Shelter		Medium	20

Corridor	Cross Street	To	Facility Category	Description	Length	Cost Estimate	Priority Score
9th St	Hillview St	Faifax Ln	Curb Treatments	Curb Ramps		Medium	20
9th St	Central Ave		Transit Stop Amenities	Bus Shelter		Medium	20
Base Line	Valaria Dr		Transit Stop Amenities	Bus Shelter		Medium	20
Base Line	Cole Ave		Transit Stop Amenities	Bus Shelter		Medium	20
Sterling Ave	11th St		Signals & Beacons	Mid-block crossing (possibly raised) with flashing beacons		Medium	20
*6th St	Victoria Ave		Curb Treatments	Curb Ramps		Medium	20
5th St	Tippecanoe Ave	Sterling Ave	Sidewalks & Paths	Sidewalk Gap	0.76	Medium	20
Donna Dr	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.07	Medium	20
Cypress St	McKinley St	Victoria Ave	Sidewalks & Paths	Sidewalk Gap	0.59	Medium	20
11th St	Sterling Ave	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.31	Medium	20
				TOTAL	**4.76**		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Table 16. Recommended Pedestrian Projects Including Quantity, Length, and Cost Estimate: Tier 3

Corridor	Cross Street	To	Facility Category	Description	Length	Quantity	Cost Estimate	Priority Score
5th St	Bonnie St		Curb Treatments	Curb Ramps		2	Medium	19
Cypress St	Eucalyptus Dr		Curb Treatments	Curb Ramps		2	Medium	19
Cypress St	Grape St		Curb Treatments	Curb Ramps		2	Medium	19
Lankershim Ave	5th St		Curb Treatments	Curb Ramps		4	Medium	19
6th St	Eucalyptus Dr		Curb Treatments	Curb Ramps		2	Medium	19
6th St	Grape St		Curb Treatments	Curb Ramps		2	Medium	19
Del Rosa Dr	Pacific St	Base Line	Pedestrian-Scale Lighting	Lighting	0.50	1	High	19
*Pacific St	Orange St	Palm Ave	Sidewalks & Paths	Sidewalk Gap,	0.25	2	Medium	19
Greenspot Rd	Orange St		Curb Treatments	Curb Extensions		1	High	18
Base Line	Church St		Curb Treatments	Curb Extensions		4	High	18
*Pacific St	Cole Ave		Curb Treatments	Curb Ramps		2	Medium	18
*Pacific St	Center St		Curb Treatments	Curb Ramps		2	Medium	18
*Pacific St	Palm Ave		Traffic Calming	Traffic Circle		1	High	18

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Quantity	Cost Estimate	Priority Score
Church Ave	Powell Dr	5th St	Sidewalks & Paths	Sidewalk Gap	0.20	2	Medium	18
Greenspot Rd	Gold Buckle Rd	Alta Vista	Sidewalks & Paths	Sidewalk Gap	0.74	1	Medium	18
Base Line	Guthrie St		Transit Stop Amenities	Bus Shelter		1	Medium	17
Base Line	Palm Ave		Transit Stop Amenities	two bus shelters		2	Medium	17
Highland Ave	Victoria Ave		Curb Treatments	Curb Extensions		4	High	17
Del Rosa Dr	6th St	5th St	Sidewalks & Paths	Sidewalk Gap	0.13	2	Medium	16
Marilyn Ave	4th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.14	2	Medium	16
*Hillview St	Bruce St	9th St	Sidewalks & Paths	Sidewalk Gap	0.29	2	Medium	16
Palm Ave	5th St		Curb Treatments	Curb Extensions		4	High	15
5th St	Tippecanoe Ave	Sterling Ave	Pedestrian-Scale Lighting	Lighting	0.77	1	High	15
4th St	Marilyn Ave	Shirley Ave	Sidewalks & Paths	Sidewalk Gap	0.42	2	Medium	15
Michael Dr	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.07	2	Medium	15
Shirley Ave	5th St	cul de sac	Sidewalks & Paths	Sidewalk Gap	0.09	2	Medium	15
Vine St	Tippecanoe Ave	Fairfax Ln	Sidewalks & Paths	Sidewalk Gap	0.23	2	Medium	15

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Quantity	Cost Estimate	Priority Score
*9th St	Cunningham St	Hillview St	Sidewalks & Paths	Sidewalk Gap	0.07	1	Medium	15
*9th St	Central Ave	Cole Ave	Sidewalks & Paths	Sidewalk Gap	0.25	1	Medium	15
Olive St	cul de sac	Lankershim Ave	Sidewalks & Paths	Sidewalk Gap	0.04	2	Medium	15
Lankershim Ave	cul de sac	Olive St	Sidewalks & Paths	Sidewalk Gap	0.05	2	Medium	15
*Central St	5th St	3rd St	Sidewalks & Paths	Sidewalk Gap	0.13	2	Medium	15
Central Ave	Base Line	10th St	Sidewalks & Paths	Sidewalk Gap	0.27	1	Medium	15
Lankershim Ave	Cypress St		Traffic Calming	Traffic Circle		1	High	14
Eucaluptus Dr	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.25	2	Medium	14
Grape St	Cypress St	6th St	Sidewalks & Paths	Sidewalk Gap	0.25	2	Medium	14
*Pacific St	Sterling Ave		Curb Treatments	Curb Extensions		4	High	13
Orange St	Millar St	Clifton Ave	Sidewalks & Paths	Widen Sidewalk	0.31	2	Medium	13
*Pacific St	Palm Ave	Church Ave	Sidewalks & Paths	Sidewalk Gap	0.25	2	Medium	13
Church Ave	14th St	Base Line	Sidewalks & Paths	Sidewalk Gap	0.19	1	Medium	13
*Pacific St	Victoria Ave		Curb Treatments	Curb Extensions		4	High	12

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

Corridor	Cross Street	To	Facility Category	Description	Length	Quantity	Cost Estimate	Priority Score
Central Ave	14th St	Messina St	Sidewalks & Paths	Sidewalk Gap	0.18	1	Medium	12
Base Line	Church Ave		Curb Treatments	Curb Extensions		4	High	11
Central Ave	Cypress St		Traffic Calming	Traffic Circle		1	High	11
Base Line	Victoria Ave		Curb Treatments	Curb Extensions		4	High	10
Base Line	Central Ave		Curb Treatments	Curb Extensions		4	High	10
9th St	Lankershim Ave		Curb Treatments	Curb Extensions		4	High	10
Webster St	Eucalyptus Ave		Traffic Calming	Traffic Circle		1	High	9
Base Line	Boulder Ave		Curb Treatments	Curb Extensions		4	High	8
Base Line	Palm Ave		Curb Treatments	Curb Extensions		4	High	7
				TOTAL	**6.10**	**111**		

"" – Denotes Projects identified in the City's Capital Improvements Project List (CIP) and/or ATP funding cycle*

MAINTENANCE AND OPERATIONS

Maintaining active transportation networks is equally as important as building out the system. Keeping infrastructure in good working order enables communities to derive an ongoing return on their investment, while demonstrating cities' ongoing commitment to providing a safe and functional system for their residents and visitors.

Regular active transportation facility maintenance includes sweeping, maintaining a smooth pavement and street surface, ensuring that the gutter-to-pavement transition remains relatively flush, trash collection, and restriping.

Maintenance costs almost exclusively rely on local funding. Typical costs for maintenance activities are listed in the table below (see Table 17).

Additional information regarding maintenance and operations of active transportation facilities can be found in Appendix C: Maintenance and Operations.

Table 17. Average Maintenance Activity Costs

Maintenance Activity	Average Replacement Value
Sidewalk Repair	$12 per square foot
Asphalt Path	$8 per square foot

FUNDING

Coordination with Other Agencies & Departments

Highland neighbors other jurisdictions, including the City of San Bernardino and the City of Redlands. The City of Highland will continue to work with adjacent cities to align priorities for projects where facilities abut boundaries. The City also commits to continue integrating active transportation projects with the regional network of walkways and bikeways in partnership with county agencies and regional bodies such as San Bernardino County Public Works. Lastly, as Caltrans is a large funding source for active transportation projects within the state, and further maintains freeways inside the Highland boundaries, additional coordination with this agency is important.

Funding Sources

As with many jurisdictions in the region, Highland relies heavily on regional, state, and federal funding sources to implement bicycle and pedestrian infrastructure projects and programs. Typically, these dollars are distributed to jurisdictions throughout California through a competitive grant process.

Transportation funding can change drastically when there are modifications to policies and new taxes and fees are adopted. In 2017, state-level funding for transportation grew through increases in the statewide gas tax and vehicle registration fee (SB 1). The California State Legislature passed these increases to address the growing backlog of roadway maintenance issues statewide, coupled with the adoption of several climate initiatives, such as cap-and-trade, which brings new revenue to the state from the sale and transfer of emission credits.

Federal transportation funding is primarily secured through grant programs run by state and regional agencies such as SCAG and Caltrans. Federal funding is perhaps the most uncertain, as the primary federal source of funding—the gas tax—has not been raised since 1993. Federal revenue for transportation is allocated through the federal surface transportation bill, which is developed and authorized by Congress infrequently.

A list of potential funding sources and the types of projects eligible for these sources is provided in Table 18; additional details about each funding source are available in Appendix B. Sources that the City of Highland will prioritize are highlighted with a gold star. As the funding environment is constantly changing, many of the sources identified may be discontinued or new funding opportunities may become available. City staff will remain vigilant and maintain focus on adapting to secure funding from sources of revenue as opportunities arise.

Table 18. Funding Sources

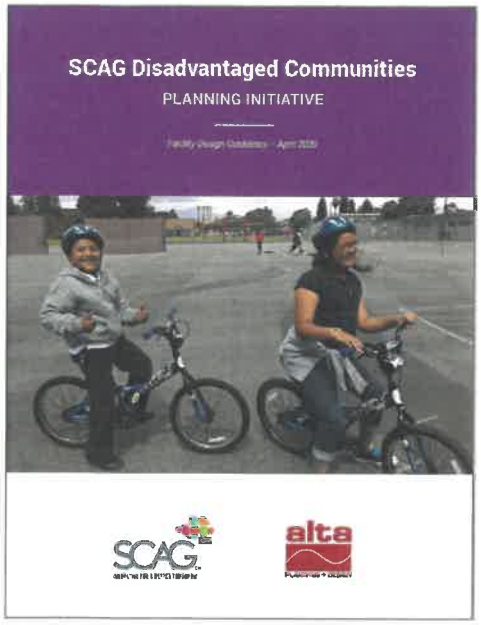
FUNDING SOURCE	On-Street Bikeways	Pedestrian Infrastructure	Trails	Safe Routes to School	Safe Routes to Transit	Crossings/ Intersections	Bicycle Parking Facilities	Programs	Studies
Federal Sources									
Fixing America's Surface Transportation Act (FHWA)	✓	✓	✓	✓		✓		✓	
Congestion Mitigation and Air Quality Improvement Program (FHWA)	✓	✓	✓	✓					
Bus and Bus Facilities Grant Program (FTA)	✓				✓		✓		
☆ **Highway Safety Improvement Program** (HSIP)	✓	✓		✓	✓	✓			
Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grants (USDOT)	✓	✓	✓			✓	✓	✓	
Community Development Block Grant (CDBG) Program (US HUD)	✓	✓	✓			✓			
National Priority Safety Program (NHTSA)								✓	
Our Town (National Endowment for the Arts)		✓						✓	✓
Urbanized Area Formula Program (FTA)					✓		✓		
Pilot Program for Transit-Oriented Development (TOD) Planning (FTA)					✓				✓
State Sources									
☆ **Active Transportation Program** (CTC)	✓	✓	✓	✓	✓	✓		✓	
☆ **Sustainable Transportation Planning Grants** (Caltrans)									✓
Transportation Development Act Article III (SB 821, Caltrans)	✓	✓	✓	✓	✓	✓			

	FUNDING SOURCE	On-Street Bikeways	Pedestrian Infrastructure	Trails	Safe Routes to School	Safe Routes to Transit	Crossings/ Intersections	Bicycle Parking Facilities	Programs	Studies
	State Transportation Improvement Program (CTC)	✓	✓	✓			✓			
	Local Partnership Program (CTC)	✓	✓		✓	✓	✓		✓	
	Solutions for Congested Corridors (CTC)	✓	✓	✓			✓			
☆	**Office of Traffic Safety** (CA OTS)								✓	
	Environmental Enhancement and Mitigation Funds (CA NRA)			✓						
	Recreational Trails Program (CA DPR)			✓						
☆	**Affordable Housing & Sustainable Communities** (CA HCD)	✓	✓			✓	✓	✓	✓	
	Urban Greening Grants (CA NRA)	✓	✓	✓	✓	✓	✓			
	Land and Water Conservation Fund (CA DPR)			✓						
	Habitat Conservation Fund			✓						
	Road Maintenance and Rehabilitation Program (Controller's Office)	✓	✓		✓	✓				✓
	Coastal Conservancy Proposition 1 Grants (SCC)	✓	✓	✓			✓			
	Regional + Local Sources									
☆	**Sustainability Planning Grant** (SCAG)				✓	✓				✓
	Benefit Assessment Districts	✓	✓	✓			✓	✓		

FUNDING SOURCE	On-Street Bikeways	Pedestrian Infrastructure	Trails	Safe Routes to School	Safe Routes to Transit	Crossings/ Intersections	Bicycle Parking Facilities	Programs	Studies
Community Facilities Districts or Mello-Roos	✓	✓	✓			✓			
Enhanced Infrastructure Financing District (EIFD)	✓	✓	✓			✓			
Private Sources									
Community Grant Program (PeopleForBikes)	✓		✓				✓		
Plan4Health Coalitions (APA & APHA)									✓
Doppelt Family Trail Development Fund (Rails-to-Trails Conservancy)			✓						
10-Minute Walk Campaign (National Recreation and Park Association)									✓
American Greenways Eastman Kodak Awards (Getches-Wilkinson Center)			✓						✓

DESIGN GUIDELINES

As part of the Disadvantaged Communities Planning Initiative, SCAG and the project team prepared a set of **Facility Design Guidelines** that participating communities may use to create a pedestrian- and bicycle-friendly, safe, and accessible community. These guidelines are not a substitute for a more thorough evaluation by a professional upon implementation of facility improvements, but instead offer an overview of best practices established across the nation. The guidelines build off of national and state guidance, and are not intended to replace existing state or national mandatory or advisory standards nor the exercise of engineering judgment by licensed professionals, but will instead help inform the City's decisions when evaluating new projects. National and state design guidance and details can be found in the following documents.

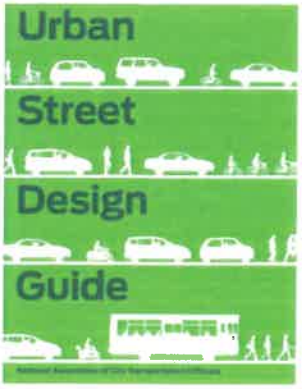


National Guidance

The **American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design, and Operation of Pedestrian Facilities (2004)** provides comprehensive guidance on planning and designing for people on foot and using other mobility devices such as wheelchairs.

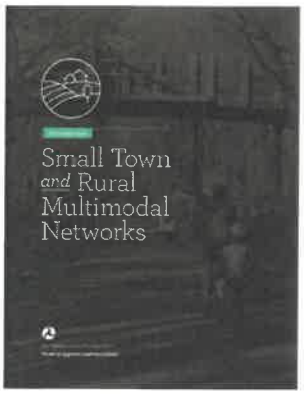
Offering similar guidance for bicycle facility design, the **AASHTO Guide for the Development of Bicycle Facilities (2012)** provides guidance on dimensions, use, and layout of specific bicycle facilities.

The **National Association of City Transportation Officials' (NACTO) Urban Street Design Guide (2013)** is the newest publication of nationally recognized urban street design standards, and offers guidance on the current state of the practice designs.



AASHTO's **A Policy on Geometric Design of Highways and Streets (2011),** commonly referred to as the "Green Book," contains current design research and practices for highway and street geometric design.

Separated Bike Lane Planning and Design Guide (2015) is the latest national guidance on the planning and design of separated bike lane facilities released by the Federal Highway Administration (FHWA). The resource documents best practices as demonstrated around the U.S., and offers ideas on future areas of research, evaluation and design flexibility.



The FHWA's **Small Town and Rural Multimodal Networks Report (2016)** is a resource to help small towns and rural communities support safe, accessible, comfortable, and active travel for people of all ages and abilities. It provides an overview of bicycle and pedestrian designs for these communities, as well as examples of peer communities.

State Guidance



The **California Manual on Uniform Traffic Control Devices (CA MUTCD) (2014)** is an amended version of the FHWA MUTCD 2009 edition modified for use in California. While standards presented in the CA MUTCD substantially conform to the FHWA MUTCD, the state of California follows local practices, laws, and requirements with regards to signing, striping, and other traffic control devices. As of publication, the document has been published as Revision 4 in March 2019.

The **California Highway Design Manual (HDM) (Updated 2015)** establishes uniform policies and procedures to carry out highway design functions for the California Department of Transportation.

Complete Intersections: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians (2010) is a reference guide presenting information and concepts related to improving conditions for pedestrians and bicycle riders at major intersections and interchanges. The guide can be used to inform minor signage and striping changes to intersections, as well as major changes and designs for new intersections.

Main Street, California: A Guide for Improving Community and Transportation Vitality (2013) reflects California's current manuals and policies that improve multimodal access, livability, and sustainability

within the transportation system. The guide recognizes the overlapping and sometimes competing needs of main streets, especially those that are operated as part of the State's highway system.

Caltrans produced a memorandum entitled **Design Flexibility in Multimodal Design (2014)** that encourages flexibility in highway design. The memo stated that "Publications such as NACTO's Urban Street Design Guide and Urban Bikeway Design Guide... are resources that Caltrans and local entities can reference when making planning and design decisions on the State highway system and local streets and roads."

Section 9

APPENDIX

9. Appendix

APPENDIX A: ATP COMPLIANCE CHECKLIST

Subject	Requirement	Section(s)
Mode Share	The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.	Chapters 3 & 6
Description of Land Use/Destinations	A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, major transit hubs, and other destinations. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	Chapter 3
Pedestrian Facilities	A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools.	Chapters 4 & 6
Bicycle Facilities	A map and description of existing and proposed bicycle transportation facilities including those at major transit hubs and those that serve public and private schools.	Chapters 4 & 6
Bicycle Parking	A map and description of existing and proposed end-of-trip bicycle parking facilities. Include a description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments. Also include a map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.	Chapters 4 & 6

Subject	Requirement	Section(s)
Wayfinding	A description of existing and proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.	Chapters 4 & 6
Non-Infrastructure	A description of existing and proposed bicycle and pedestrian education, encouragement, enforcement, and evaluation programs conducted in the area included within the plan. Include efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.	Chapters 4 & 7
Collision Analysis	The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.	Chapters 4 & 6
Equity Analysis	Identify census tracts that are considered to be disadvantaged or low-income and identify bicycle and pedestrian needs of those disadvantaged or low-income residents.	Chapter 3
Community Engagement	A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.	Chapter 5
Coordination	A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.	Chapter 3
Prioritization	A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	Chapter 8
Funding	A description of future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated cost, revenue	Chapter 8 & Appendix B

Subject	Requirement	Section(s)
	sources and potential grant funding for bicycle and pedestrian uses.	
Implementation	A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	Chapter 8
Maintenance	A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting	Chapter 8 & Appendix C
Resolution	A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.	Appendix E

APPENDIX B: FUNDING SOURCES

Federal Sources

FIXING AMERICA'S SURFACE TRANSPORTATION ACT (FAST ACT)

The FAST Act, which replaced Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2015, provides long-term funding certainty for surface transportation projects. This means states and local governments can move forward with critical transportation projects with the confidence that they will have a Federal partner over the long term (i.e. for at least five years).

The law makes changes and reforms to many Federal transportation programs. For example, it allows local entities that are direct recipients of Federal dollars to use a design publication that is different than one used by their State DOT, such as the Urban Bikeway Design Guide by the National Association of City Transportation Officials.

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

CMAQ provides funding to state and local agencies for transportation projects that help meet Clean Air Act objectives. Funded projects must work to reduce congestion and improve area quality in nonattainment or maintenance zones for ozone, carbon monoxide or particulate matter. CMAQ funds can be used for bicycle and pedestrian projects that are included in the metropolitan planning organization's (MPO) current transportation plan and transportation improvement program (TIP). Projects can include bicycle and pedestrian facilities that are not exclusively recreational and for outreach related to safe bicycle use. Studies that are part of the project development pipeline (e.g., preliminary engineering) are also eligible for funding.

CMAQ funding is administered at the local level through the Southern California Association of Governments (SCAG). These funds are eligible for transportation projects that contribute to the attainment or maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas. Examples of eligible projects include enhancements to existing transit services, rideshare and vanpool programs, projects that encourage bicycle transportation options, traffic light synchronization projects that improve air quality, grade separation projects, and construction of high-occupancy vehicle (HOV) lanes. Projects that are proven to reduce direct PM2.5 emissions are to be given priority

BUS AND BUS FACILITIES GRANT PROGRAM

The Federal Transit Administration (FTA) offers formula allocations and grants to a variety of organizations, including local governments, to pay for buses and related facilities. Agencies can use these funds to pay for bicycle routes to transit, bike racks, bike shelters, and bicycle equipment for public transportation vehicles.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

This federal program provides funding to states for projects that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Eligible projects include pedestrian safety improvements, traffic calming projects, and crossing treatments in school zones. Non-infrastructure projects are not eligible. All HSIP projects must be consistent with the state's Strategic Highway Safety Plan. Funding is available up to $10 million and requires a 10% match. Learn more about how the HSIP funding is awarded in California.

BETTER UTILIZATION INVESTMENTS TO LEVERAGE DEVELOPMENT DISCRETIONARY GRANT (BUILD)

The BUILD (formerly TIGER) reimbursement grant, available through the U.S. Department of Transportation, allows sponsors at the State and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional funding initiatives. Eligible projects include: recreational trails, road diets, separated bike lanes, shared use paths, sidewalks, signal improvements, signed pedestrian or bicycle routes, traffic calming, trailside and trailhead facilities, bicycle parking, racks, repair stations, storage, and bike share programs. A program of projects can be assembled and should demonstrate significant regional impacts and be construction-ready. The minimum grant request in rural areas is $1 million and in urban areas it is $5 million.

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

This program funds local development activities, such as affordable housing and anti-poverty programs, in low-to-moderate-income communities, as well as supporting infrastructure. Funds can be used to acquire property and build public facilities such as streets, sidewalks, and recreational facilities. This federal program is administered by the State who makes funds available to eligible agencies (cities and counties).

NATIONAL PRIORITY SAFETY PROGRAM

This program encourages States to address national priorities for reducing highway deaths and injuries through a variety of programs including non-motorized safety. Grants are awarded to State Highway Safety agencies for implementation or disbursement.

OUR TOWN

The Our Town grant program supports creative placemaking projects that help to transform communities into lively, beautiful, and resilient places – achieving these community goals through strategies that incorporate arts, culture, and/or design. Creative placemaking is when art is deliberately integrated into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. Grant applicants require partnerships between arts organizations and government, other nonprofit organizations, and private entities. Funding ranges between $25,000 to $200,000 per project.

URBANIZED AREA FORMULA PROGRAM

This program makes federal resources available to urbanized areas for transit capital and transit-related planning. An urbanized area is an incorporated area with a population of 50,000 or more. A 20% match is required; however, bicycle facilities, including routes to transit, bike racks, shelters and equipment and can receive a 95% federal share for the first 1% of program funds.

PILOT PROGRAM FOR TRANSIT-ORIENTED DEVELOPMENT PLANNING

This program supports public transportation by providing funding to local communities to integrate land use and transit connections. Projects must improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.

State Sources

☆ ACTIVE TRANSPORTATION PROGRAM (ATP)

California's Active Transportation Program (ATP) funds infrastructure and program projects that support the program goals of shifting trips to walking and bicycling, reducing greenhouse gas emissions, and improving public health. Competitive application cycles occur every one to two years. Eligible projects include bicycling and walking facilities, new or expanded programmatic activities, or

projects that include a combination of infrastructure and non-infrastructure components. Funding for DACs is prioritized. The minimum request for projects is $250,000. Learn more about ATP.

SUSTAINABLE TRANSPORTATION PLANNING GRANT PROGRAM

The Sustainable Transportation Planning Grant Program supports transportation planning processes which address local and regional transportation needs and issues. The program offers two types of grants: Strategic Partnerships and Sustainable Communities, to all levels of government. The Strategic Partnership Grants fund regional agencies to address state highway system deficiencies, strengthen government relationships, and result in programmed system improvements. The Sustainable Communities Grants fund a variety of projects at all levels of government, including concept design. Projects are expected to "identify and address mobility deficiencies in the multimodal transportation system, encourage stakeholder collaboration, involve active public engagement, integrate Smart Mobility 2010 concepts, and ultimately result in programmed system improvements." Learn more about this Caltrans funding opportunity.

TRANSPORTATION DEVELOPMENT ACT (TDA) / ARTICLE III (SB 821)

The Transportation Development Act (TDA) Article III (SB 821) uses monies collected from the state gasoline tax to provide grants through Regional Transportation Planning agencies to fund transportation improvements. The San Bernardino County Metropolitan Transportation Authority (SBCTA) is responsible for allocating this money on a per capita basis to cities within San Bernardino County with a focus on active transportation and public transit development. These cities have the option to either draw down the funds or to place them on reserve.

STATE TRANSPORTATION IMPROVEMENT PROGRAM

STIP funds are available for new construction projects that add capacity to the transportation network. Funding is a mix of state, federal, and local taxes and fees; and consists of two components: Caltrans' Interregional Transportation Improvement Program (ITIP) and regional transportation planning agencies' Regional Transportation Improvement Program (RTIP). Pedestrian and bicycle projects may be programmed under ITIP and RTIP.

LOCAL PARTNERSHIP PROGRAM

This program provides local and regional transportation agencies that have passed sales tax measures, developer fees, or other imposed transportation fees with a continuous appropriation of $200 million

annually to fund transportation improvement projects including biking, walking, safety and health-related projects.

SOLUTIONS FOR CONGESTED CORRIDORS PROGRAM

The program provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. This statewide, competitive program makes $250 million available annually for projects that implement specific transportation performance improvements and are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement. All projects nominated must be identified in a currently adopted regional transportation plan and an existing comprehensive corridor plan.

OFFICE OF TRAFFIC SAFETY GRANTS

These grants can be used to fund existing or new traffic safety programs. Proposals should include the seriousness of the problem, crash statistics, and potential traffic safety impacts. Grants for bicycle and pedestrian safety programs have included bicycle rodeos education programs in schools, free helmets, education for older adults, and Vision Zero outreach, among others. Learn more about the California Office of Traffic Safety (OTS) grants here.

ENVIRONMENTAL ENHANCEMENT AND MITIGATION FUNDS

The California Natural Resources Agency provides grants to projects that indirectly mitigate the environmental impacts of new transportation facilities. Funds are available for land acquisition and construction and should fall into one of the following three categories: urban forestry projects, resource lands projects, or mitigation projects beyond the scope of the lead agency. The local Caltrans district must support the project. The average award amount is $250,000.

RECREATIONAL TRAILS PROGRAM

This program provides funding to develop and maintain recreational trails and facilities. Funding can be used for: maintenance and restoration of existing trails; purchase and lease of trail construction and maintenance equipment; construction of new trails, including unpaved trails; acquisition of easements or property; or operation of educational programs to promote safety and environmental protection. The State Department of Parks and Recreation administers the funds and requires a 12% local match.

AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES PROGRAM

This program provides grants and affordable housing loans for transit-oriented development and related infrastructure and programs that reduce greenhouse gas emissions. Bikeway, walkway, and trail projects are key elements of successful affordable housing grant applications and must connect the housing site to transit or other key destinations (school, health care, etc.). At least 50% of AHSC Program funds must be for affordable housing (which includes affordable housing developments or housing-related infrastructure). Funding amounts for sustainable transportation infrastructure vary depending on project type. Visit the California Department of Housing and Community Development to learn more.

URBAN GREENING GRANTS

Urban Greening Grants support the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits. Projects must include one of three criteria: sequester and store carbon by planting trees; reduce building energy use through shade trees; or reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes or pedestrian facilities that provide safe routes for travel between residences, workplaces, commercial centers, and schools. Eligible projects include green streets and alleyways, parks, urban heat island mitigation, and non-motorized urban trails that integrate or mimic natural systems. Projects must be able to demonstrate a reduction in GHG emissions using CARB's approved methodology.

Funds are programmed by the California Natural Resources Agency. Approximately $28.5 million of funding is available; no minimum or maximum amount of funding must be requested. Funding for DACs and low-income communities is prioritized. Learn more about the Urban Greening Grant here.

LAND AND WATER CONSERVATION FUND

The Land and Water Conservation Fund is a federal program that provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. In California, the fund is administered by the California State Parks Department. Cities, counties, and districts authorized to acquire and develop park and recreation space are eligible for grant funding. While nonprofits are ineligible, they are allowed to apply in partnerships with eligible agencies. Applicants must fund the project entirely and will be reimbursed for half of the cost.

HABITAT CONSERVATION FUND

This fund allocates approximately $2 million each year to cities, counties, and districts for nature interpretation programs to bring urban residents into park and wildlife areas, protection of various plant

and animal species, and the acquisition and development of wildlife corridors and trails. Funds are available for trail maintenance, interpretive signage, lighting, and waysides. The program requires a 50% match.

ROAD MAINTENANCE AND REHABILITATION PROGRAM (SB 1)

Senate Bill 1 (SB1) created the Road Maintenance and Rehabilitation Program (RMRP) to address deferred maintenance on state highways and local road systems. Program funds can be spent on both design and construction efforts. On-street active transportation related maintenance projects are eligible if program maintenance and other thresholds are met. Funds are allocated to eligible jurisdictions. Funds are programmed by the State Controller's Office with guidance from the CTC.

COASTAL CONSERVANCY PROPOSITION 1 GRANTS

These grants fund ecosystem and watershed protection and restoration projects focused on water sustainability, wetland restoration and urban greening. These grants can be used for the urban greening or water sustainability elements incorporated in bikeway, walkway and trail projects and funding can be used for planning, land acquisition, and construction though there is a focus on supporting projects that will be quickly built.

Regional & Local Sources

SUSTAINABILITY PLANNING GRANT

The program provides technical assistance and a variety of grants to SCAG member jurisdictions. Grants are available in three categories: Integrated Land Use (Sustainable Land Use Planning, Transit Oriented Development (TOD) and Land Use & Transportation Integration); Active Transportation (Bicycle, Pedestrian and Safe Routes to School Plans); and Green Region (Natural Resource Plans, Climate Action Plans (CAPs) and Greenhouse Gas (GHG) Reduction programs). The program also funds quick-build projects. Learn more about SCAG's Sustainability Planning Grant.

BENEFIT ASSESSMENT DISTRICTS

Benefit Assessment Districts are used by local governments in California to pay for the cost of providing services to a community. Charges to the community are based on the concept of assessing only those properties that directly benefit from the service. Bikeways, walkways, trails, and related facilities can be funded; however, care must be taken when defining the community boundary as active transportation projects have regional benefits.

COMMUNITY FACILITIES DISTRICTS OR MELLO-ROOS

The Mello-Roos Community Facilities Act allows any county, city, special district, school district, or joint powers of authority to establish a Community Facility Districts (CFD) for the purpose of selling tax-exempt bonds to fund public improvements within that district. Through the process of creating the local goals for a CFD, there is flexibility in how the funds are used. For example, the City of Sacramento included bicycle services in their CDF that included bicycle racks and lockers at public civic uses, bicycle racks on transit vehicles, bikeshare programs, electrified bicycle promotion, and bicycle fairs.

ENHANCED INFRASTRUCTURE FINANCING DISTRICTS (EIFD)

EIFDs were approved by the California Legislature in 2015 to allow communities to establish specific districts in which they can collect local property tax revenues to fund local infrastructure projects.

Private Sources

PEOPLEFORBIKES COMMUNITY GRANT PROGRAM

This grant program is funded by members of the bicycle industry who want to make it easier and safer for people of all ages and abilities to ride. This program supports bicycle infrastructure projects including bike paths, lanes, trails, and bridges, as well as bike parks and pump tracks. Also included are end-of-trip facilities such as bike racks, bike parking, bike repair stations and bike storage. Funding can be used for engineering and design work, construction costs including materials, labor, and equipment rental, and reasonable volunteer support costs. The grant provides up to $10,000, and while it does not require a match, the grant should be no more than 50% of the projects overall budget.

PLAN4HEALTH COALITIONS

The American Planning Association (APA) and the American Public Health Association (APHA) work to build local capacity in addressing population health goals and promoting the inclusion of health in non-traditional sectors such as transportation. Each proposal must address inactivity, unhealthy diets and/or health equity. Awards average $150,000, and no more than two awards will be granted in a single state.

DOPPELT FAMILY TRAIL DEVELOPMENT FUND

This fund, overseen by the Rails-to-Trails Conservancy, offers two types of grants. The first, Community Support Grants, help nonprofit organizations or "Friends of the Trail" groups that need funding to get trail development or trail improvement efforts off the ground. Awards range from $5,000 - $10,000. The second, Project Transformation Grants, enables organizations to complete a significant trail

development or improvement project. Projects on rail-trails and rails-with-trails are given preference, but not required. Awards range from $15,000 - $50,000.

10-MINUTE WALK CAMPAIGN

The 10-Minute Walk Campaign offers grants and technical assistance to help cities increase access to high-quality parks within a 10-minute walk.

AMERICAN GREENWAYS EASTMAN KODAK AWARDS

This national program provides small grants ($500-$2,500) to local, regional, or statewide non-profit organizations to support the planning and design of greenways. Funds may be used for the planning and design of pathways. Grants are awarded based on the importance of the project to local greenway development efforts, demonstrated community support, extent to which the grant will result in matching funds, likelihood of tangible results, and the capacity of the organization to complete the project.

APPENDIX C: MAINTENANCE AND OPERATIONS

Recommended Maintenance Procedures

Sweeping

- Establish a seasonal sweeping schedule that prioritizes roadways with Long-Term Tier 1 projects.
  Sweep walkways and bikeways whenever there is an accumulation of debris.
- In sections with curbs, sweepers should pick up debris; on open shoulders, debris can be swept onto gravel shoulders.

Signage

- Check regulatory and wayfinding signage along bikeways for signs of vandalism, graffiti, or normal wear.
- Replace signage along the bikeway network as-needed.
- Perform a regularly-scheduled check on the status of signage with follow-up as necessary.
- Create a Maintenance Management Plan.

Roadway Surface

- Maintain a smooth pothole-free surface.
- Ensure that on new roadway construction, the finished surface on bikeways does not vary more than 1/4-inch.
- Maintain pavement so that ridge buildup does not occur at the gutter-to-pavement transition or adjacent to railway crossings.
- Inspect the pavement two to four months after trenching construction activities are completed to ensure that excessive settlement has not occurred.

Pavement Overlays

- Extend the overlay over the entire roadway surface to avoid leaving an abrupt edge.
- If the shoulder or bike lane pavement is of good quality, it may be appropriate to end the overlay at the shoulder or bike lane stripe provided no abrupt ridge remains.
- Ensure that inlet grates, manhole and valve covers are within 1/4-inch of the finished pavement surface and are made or treated with slip resistant materials.

Drainage Grates

- Require all new drainage grates to be bicycle-friendly, including grates that have horizontal slats on them so that bicycle tires and assistive devices do not fall through the vertical slats.
- Create a program to inventory all existing drainage grates, and replace hazardous grates as necessary – temporary modifications such as installing rebar horizontally across the grate should not be an acceptable alternative to replacement.

Gutter to Pavement Transition

- Ensure that gutter-to-pavement transitions have no more than a 1/4" vertical transition.
- Examine pavement transitions during every roadway project for new construction, maintenance activities, and construction project activities that occur in streets.

Landscaping

- Ensure that shoulder plants do not hang into or impede passage along bikeways.
- After major damage incidents, remove fallen trees or other debris from bikeways as quickly as possible.

Maintenance Management Plan

- Provide fire and police departments with a map of the system, along with access points to gates/bollards.
- Develop an online tool for riders to report hazards, potholes, and other bicycle-related issues for the County and local jurisdictions to address. Ensure these requests are addressed in a timely manner.
- Provide bicycle detour routes and signs during roadway construction.

Operations

Engagement

- Regularly and consistently engage community members to gain feedback on how existing facilities are operating and areas for improvement.
- Engage community members before, during, and after projects are implemented. Work to ensure projects reflect community needs and serve vulnerable populations.

Implementation and Design

- Implement on-street bicycle and pedestrian facilities proposed in this Plan when completing road rehabilitation and reconstruction projects.
- Design and maintain all streets so that they incorporate Complete Streets standards.
- Adopt an accelerated pavement maintenance schedule for all designated existing and planned bikeways.
- Apply pavement stenciling to indicate detention areas at all traffic signals.
- Identify opportunities to remove travel lanes from roads where there is excess capacity in order to provide new or improved bicycle facilities.
- Install context-sensitive bikeways that consider both the volume, speed, and complement surrounding land uses.

Evaluation

- Work to improve the reporting and analysis of pedestrian and bicyclist involved collisions.
- Measure air quality and reductions in greenhouse gas emissions that may result from a decrease in vehicular use as bicycle use increases.
- Create an annual bicycle and pedestrian count program.
- Regularly monitor implementation of the Active Transportation Plan, and review and update the recommended bicycle and pedestrian facilities every five years.

APPENDIX D: PLANS AND POLICIES

To ensure this Plan is consistent with and builds upon the efforts of various planning, policy, and regulatory documents, the project team conducted a comprehensive review of relevant items. These include the Highland's own documents, such as the General Plan, Municipal Codes, and the General Plan, Municipal Codes, and GreenSpot Specific Plans. Highland also intends to design a bicycle and pedestrian network that complements existing and planned bikeways and pedestrian projects in surrounding jurisdictions. Therefore, the planning context also includes bicycle and pedestrian plans, policies, and projects of neighboring jurisdictions, San Bernardino County, and the State of California.

This Plan will help Highland continue to meet the following goals.

Local

General Plan

Highland's General Plan is a long-range planning document that provides the City a framework for action and the direction in which to focus that action. It serves as the city's primary reference when making development and conservation decisions that involve or impact Highland for both public and privately-owned land. It also serves as a foundation document for City initiatives and resource allocations.

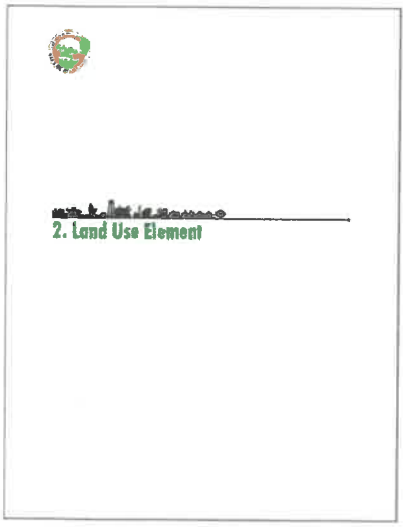
The following elements of the General Plan address issues pertaining to active transportation.

LAND USE ELEMENT

Goal 2.1: Create opportunities for a diverse population to interact, exchange ideas, and establish and realize common goals as a unified community.

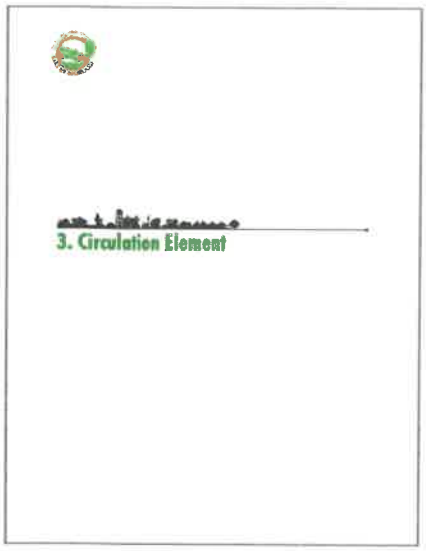
- Policy 2 Ensure that the Town Center and Golden Triangle promote safe and convenient pedestrian environments for residents, employees and visitors through the implementation of Land Use and Community Design Element policies and guidelines and Development Code standards.

Goal 2.10: Create a new Town Center where Highland residents, employees and visitors can live, shop, work, recreate and socialize in a vibrant, safe and pedestrian-friendly environment.



- Policy 3 Provide access to multiple modes of travel, including pedestrian, bicycle, transit and automobile.
- Policy 7 Connect the Town Center physically and visually with the Historic Village District with pedestrian connections, historically compatible architecture, signage, landscaping and other streetscape elements.

CIRCULATION ELEMENT



Goal 3.1 Provide a comprehensive transportation system that facilitates current and long-term circulation in and through the City.

- Policy 10 Encourage major employers to reduce vehicular trips by offering incentive concepts discussed in the General Plan Circulation Element, including but not limited to reduced transit passes and preferential parking for ridesharing.

Goal 3.2 Provide a well-maintained roadway system.

- Policy 1 Maintain and rehabilitate all components of the circulation system, including roadways, sidewalks, bicycle facilities, pedestrian facilities and traffic signals.
- Policy 4 Coordinate maintenance or enhancement of transportation facilities with related infrastructure improvements.

Goal 3.4 Provide a safe circulation system.

- Policy 1 Establish the local street system within developing neighborhoods through a cooperative public/private planning process.
- Policy 3 Promote the principle that streets have multiple uses and users, and protect the safety of all users.
- Policy 4 Require new development to provide pedestrian paths and linkages through projects, locating linkages to avoid conflicts with motorized traffic.
- Policy 5 Discourage high-speed, through traffic on local streets with appropriate traffic-calming measures (e.g., traffic enforcement, bulb-outs, lane striping, chokers, etc.).
- Policy 7 Utilize shared driveways in common areas to minimize disruptions to traffic and pedestrian/bicycle flow.

- Policy 11 Encourage and improve pedestrian connections from residential neighborhoods to retail activity centers, employment centers, schools, parks, open space areas and community centers.
- Policy 12 Encourage barrier-free accessibility for all handicapped residents, employees and visitors throughout the City's circulation system.
- Policy 13 Support the planning of sidewalks of appropriate width to allow the provision of buffers to shield nonmotorized traffic from vehicles.
- Policy 14 Add raised, landscaped medians and bulb-outs, where appropriate, to reduce exposure to cross traffic at street crossings.
- Policy 15 When feasible, walkways should include pedestrian amenities such as shade trees and/or plantings, trash bins, benches and shelters.

Goal 3.7 Protect and encourage bicycle travel.

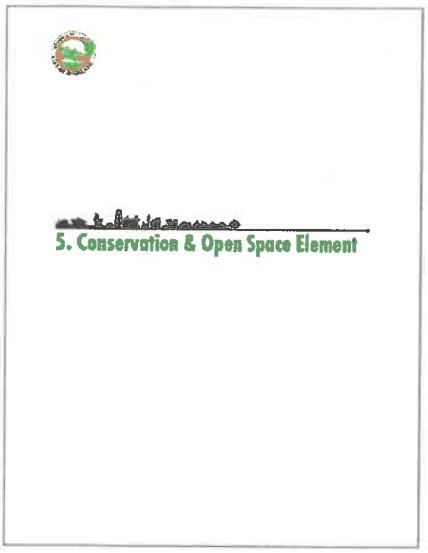
- Policy 1 Develop a system of continuous and convenient bicycle routes to places of employment, shopping centers, schools, and other high activity areas with potential for increased bicycle use.
- Policy 2 Encourage new development to provide reasonable and secure space for bicycle storage.
- Policy 3 Provide bicycle racks at all public facilities and along major public streets.
- Policy 4 Assure that local bicycle routes will complement regional systems and be compatible with routes of neighboring municipalities.
- Policy 5 Provide linkages between bicycle routes and other trails, such as the Santa Ana River Trail, within the City as appropriate.

Goal 3.8 Incorporate consideration of regional transportation implications into decisions made by the City of Highland and, conversely, incorporate consideration of the local transportation implications on the City of Highland into decisions made by other local agencies, as well as into decisions made by state and federal agencies.

Goal 3.9 Ensure adequate parking is made available to City residents, visitors, and businesses.

- Policy 5 Develop strategies for the control of parking demand such as improved transit service, amenities for bicyclists and rideshare vehicles.

CONSERVATION & OPEN SPACE ELEMENT



Goal 5.10 Maintain a high-quality system of parks that meet the needs of all segments of the community.

- Policy 30 Develop Integrate park and recreation facilities with existing and future trail and bikeways, wherever practical.

Goal 5.12 Develop and maintain trail and bikeway connections to recreational facilities, schools, existing transportation routes, natural features and regional trail systems.

- Policy 1 Provide trail connections between and/or along the major city and surrounding regional facilities, sites and features indicated on the Multi-Use Trails Master Plan.
- Policy 2 Provide bicycle and pedestrian trails along major home-to-work, home-to-school and other travel routes, where appropriate.
- Policy 3 Seek to construct or assist in the construction of those portions of the San Bernardino County Regional Trail system that are located within Highland.
- Policy 4 Require the dedication of trail easements, where appropriate, for establishing a planned trails system alignment, or where an established trail is jeopardized by impending development or subdivision activity.
- Policy 5 Where possible, designate and design new trail development near transit routes or heavily traveled areas.

Goal 5.13 Ensure the maximum safety and enjoyment of all trail system users.

- Policy 3 Adopt the following hierarchy of users on the City's trail system:
  - Bicyclists must yield right-of-way to all other users.
  - Runners must yield to hikers and equestrians (note: horses should not be on trails predominantly intended for bikes and pedestrians).
  - Hikers must yield to equestrians.
- Policy 5 Require that cyclists adhere to the following requirements:
  - Alert hikers and equestrians of their presence.

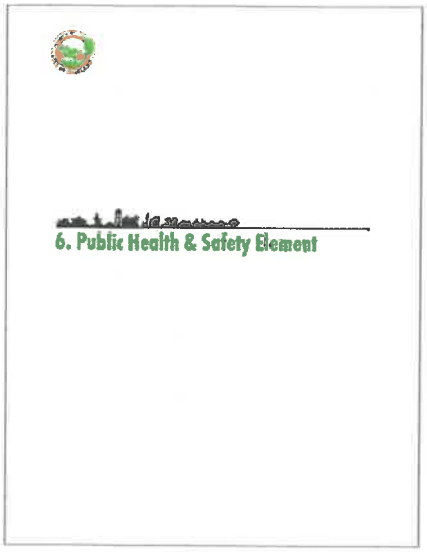
  - Travel no faster than 15 mph, unless conditions warrant reduced speed.
  - Slow to 5 mph when passing and dismount when necessary.
- Policy 6 Promote adherence to the following code of off-road bicycling responsibility, as developed by the International Mountain Bicycling Association:
  - Ride on open trails only.
  - Control your bicycle.
  - Always yield trail.
  - Never spook animals.
  - Leave no trace.
  - Plan Ahead.
- Policy 8 Incorporate, where feasible and without compromising safety, all compatible multiple uses on a single trail.
- Policy 9 Where a single trail is not feasible or there is heavy use, provide alternate or parallel routes and/or design separate, dual trails.
- Policy 10 Allow ample space in right-of-way for safe passage of users, for signing, fencing, separation of trails, trailheads and where appropriate, landscaping.

Goal 5.14 Maintain and enhance the trail system's clear and informative signage.

Goal 5.19 Continue to support air quality planning through land use policies, outreach efforts and coordination with regional air quality agencies.

- Policy 3 Encourage land use planning and urban design that reduces vehicle trips through mixed and multi-use development, consolidation of commercial development along major arterials, provision of pedestrian connections from residential to retail areas, and development of a multi-use Town Center.
- Policy 7 Encourage employers to develop trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.

PUBLIC HEALTH & SAFETY ELEMENT



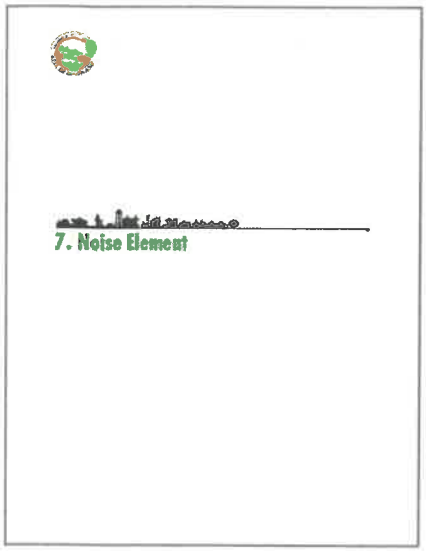
Goal 6.8 Reduce mobile and stationary source air pollutant emissions through cooperation and endorsement of the San Bernardino Regional Air Quality Plan and support of feasible techniques, incentives, and regulatory measures to achieve significant air quality improvements and any necessary air quality related lifestyle and economic changes while sustaining continued economic growth.

- Policy 8 Develop transportation demand management programs and incentives to reduce home to work vehicle trips.
- Policy 10 Reduce vehicle emissions by supporting the design and implementation of the Citywide system of bikeways and pedestrian trails as a non-polluting circulation alternative by requiring as part of the development review process the installation of planned bicycle routes, paths, and lanes where designated; and the construction of necessary bicycle parking and storage areas within convenient commercial, employment and recreation activity areas.
- Policy 12 Continue to encourage the integration of air quality planning with land use and transportation planning in the design, review, and development processes by:
    - Ensuring that site designs facilitate rather than discourage pedestrian movement between commercial development and residential or office uses (e.g., locate buildings adjacent to the street with parking behind such that pedestrians need not walk through parking lots to reach their destination; provide clear pedestrian paths and connections, etc.).
    - Supporting the mixed use overlay in the zoning ordinance as a means to enhance pedestrian movement throughout the City.
    - Integrating, where appropriate and feasible, traffic improvements (e.g., dedicated turn lanes and pockets, bus turnouts and shelters, restripe traffic lanes for optimal traffic flow) into capital improvement projects that improve the efficiency of transportation systems.

NOISE ELEMENT

Goal 7.2 Encourage the reduction of noise from transportation-related noise sources such as automobile and truck traffic.

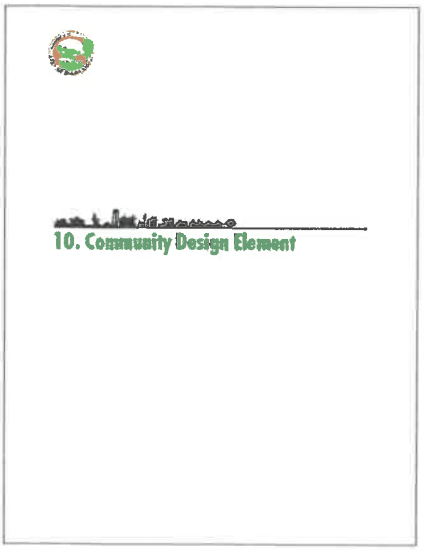
- Policy 5 Encourage the development of alternative transportation modes such as bicycle paths and pedestrian walkways to minimize the number of automobile trips and noise.



COMMUNITY DESIGN ELEMENT

Goal 10.3 Create a Town Center that is visually distinctive and vibrant and combines retail, residential, civic, cultural and recreational uses.

- Policy 3 Encourage compactness. Successful town centers stimulate energy and pedestrian activity by concentrating uses.
- Policy 5 Provide comfortable pedestrian amenities—quality sitting areas, wide paths and shade—along with specialized and engaging design features, such as interesting fountains or public art, which draw and maintain people's attention.



Goal 10.5 Encourage the development of attractive, vibrant and convenient commercial centers through careful application of design policies and development standards.

- Policy 5 Clearly delineate pedestrian routes from parking areas to retail uses to allow easy and safe pedestrian movement.
- Policy 6 Encourage pedestrian-scale features such as shaded sitting areas, fountains, arcades, canopies and/or awnings, customized signage and strategically located secondary entrances.
- Policy 8 Link newly developed retail activity centers, where practical, to surrounding residential or office uses through clear and safe pedestrian and bicycle connections.

- Policy 10 Provide walls when necessary for security and/or privacy from adjoining residential uses. When walls are necessary, pedestrian breaks should be provided for access to commercial uses.
- Policy 11 Encourage creative wall design to avoid a blank appearance and utilize landscape buffers as an alternative to walls to facilitate pedestrian linkages to commercial areas.

Goal 10.6 Maintain and enhance single-family neighborhoods with attractive streetscapes, compatible architecture and a high quality of life.

- Policy 1 Incorporate landscaped parkways, consistently spaced street trees, continuous sidewalks and pedestrian-scale streetlights, wherever possible.
- Policy 12 In areas of small lot development, incorporate design features that connect it with adjoining areas such as consistent setbacks, building height and pedestrian connections.

Goal 10.7 Improve the visual quality of Base Line with mid-block corridor residential developments that are compatible with adjoining residential uses.

- Policy 10 Provide pedestrian access and connections to nearby retail, transportation, recreation and educational centers, where practical.

Goal 10.9 Support and strengthen public and private efforts to preserve historic structures and neighborhoods.

- Policy 3 Develop a clear pedestrian and vehicular connection between the City's emerging Town Center and the existing Historic District.

Goal 10.10 Guide the development of a variety of attractive, engaging and convenient public spaces, including plazas, pedestrian areas and recreational open space.

- Policy 3 In areas of heavy pedestrian use, provide wide sidewalks that allow room for window shopping, pedestrian passage, outdoor dining and landscape buffers.
- Policy 5 Incorporate pedestrian scaled, distinctive lighting fixtures in community facilities and other public places with occasional or frequent evening use.

Code of Ordinances

The following sections of Highland's municipal code govern rules related to active transportation in the city.

CHAPTER 10.24 LOCAL TRANSPORTATION CONTROL MEASURES FOR NEW DEVELOPMENTS

§ 10.24.010 BICYCLE RACKS – REQUIRED

All new nonresidential and multiple-family (of 10 or more units) developments subject to discretionary review shall provide secured bicycle parking racks at a ratio of one per 30 automotive parking spaces with a minimum of a three-bike rack. (Ord. 168 § 1, 1994)

§ 10.24.020 ON-SITE PEDESTRIAN WALKWAYS/BICYCLE PATHWAYS – REQUIRED

All new nonresidential and multiple-family (of 10 or more units) developments shall provide on-site walkways/bicycle pathways connecting each building to adjacent public streets. (Ord. 168 § 2, 1994)

§ 10.24.030 SHOWER FACILITIES – REQUIRED

All new nonresidential developments shall provide a minimum of one shower facility for men and women for employees walking or bicycling to work which exceed the following thresholds:

A. Retail – 250,000 gross square feet (GSF);
B. Industrial – 325,000 GSF;
C. Office – 125,000 GSF. (Ord. 168 § 3, 1994)

§ 10.24.060 TRANSIT IMPROVEMENTS – REQUIRED

All new nonresidential and multiple-family developments along existing or planned transit routes shall provide transit improvements such as bus pullouts, bus pads, and bus shelter if determined to be necessary in consultation with Omnitrans or other locally operated transit system. (Ord. 168 § 6, 1994)

§ 10.24.090 REDUCED PARKING REQUIREMENTS

Provisions shall be made by the planning commission or design review committee (board) for reduction of on-site parking space requirements for all new nonresidential developments on a case by case basis when such developments are linked to other actions which reduce vehicle trips. (Ord. 168 § 9, 1994)

§ 10.24.100 COUNTYWIDE BICYCLE PLAN – CITY TO PARTICIPATE

The city shall participate in implementation of the countywide bicycle plan upon its adoption. (Ord. 168 § 10, 1994)

CHAPTER 16.44 SPECIFIC USE DEVELOPMENT STANDARDS

§ 16.44.250 SMALL LOT SINGLE-FAMILY DETACHED DESIGN GUIDELINES

C. Relationship with Adjacent Uses.

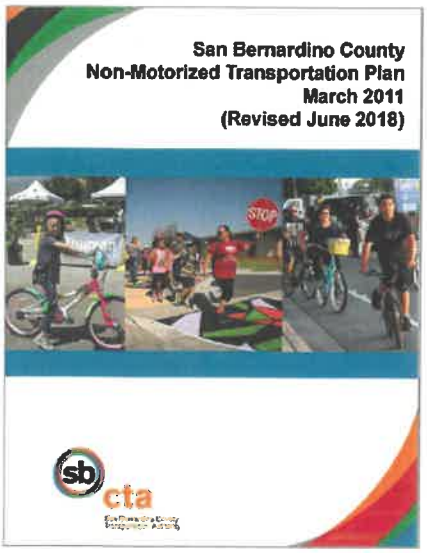
1. Project designs should connect into the adjacent neighborhoods and provide for future connections to currently undeveloped properties via streets or pedestrian and bike paths.
2. Projects adjacent to existing or future retail properties should provide auto, pedestrian and bicycle access to adjacent developments, coordinating with walkways and plaza locations.
4. Pedestrian, bike and visual connections should be made wherever auto connections are infeasible due to traffic, physical constraints or other considerations.

D. Internal Circulation.

5. Where loop street connections are not feasible, pedestrian and bike paths may be used as shortcuts to make walking and biking more convenient.
6. Internal street and path layouts should connect to landmarks or amenity features such as parks or community buildings.
8. Traffic calming measures, such as neckdown curbs and use of medians, should be used to increase pedestrian safety, especially at primary intersections, parks and common spaces, and tot lots.
9. Residentially scaled streetlights, separated sidewalks with street trees within planting strips or in tree wells and accent paving at neighborhood entries are strongly encouraged.
11. Where on-street parking is limited to a single side of the street, a sidewalk should be provided on that side.
12. Separated sidewalks with street trees or decorative tree grates are strongly encouraged for primary circulation and collector streets.

Regional

San Bernardino County Transportation Authority (SBCTA) Non-Motorized Transportation Plan (2018)

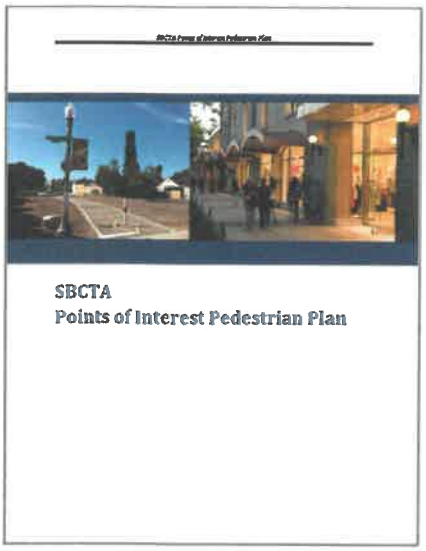


With the revised Non-Motorized Transportation Plan, SBCTA seeks to develop a cohesive and integrated plan for the region and identify sources of funds to implement that plan. A response to California Senate Bill 375 initiative to reduce Vehicle Miles Traveled (VMT) and Green House Gas (GHG) emissions, the plan aims to expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.

COMPLETE STREETS STRATEGY (2015, ADDENDUM TO NMTP)

While this strategy document does not identify any particular projects, it establishes the County's commitment to Complete Streets policy, helps jurisdictions comply with Assembly Bill (AB) 1358 (also known as the Complete Streets Act of 2008), and qualifies them for particular state funds. The strategy also gives guidance for incorporating Complete Streets policy into more general transportation/land-use policy.

SBCTA Points of Interest Pedestrian Plan (PIPP) (2016)



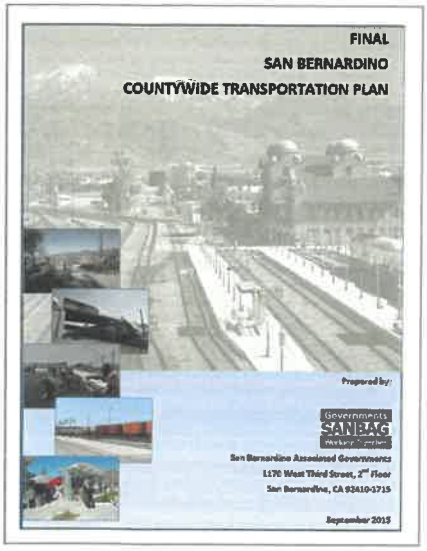
The Points of Interest Pedestrian Plan (PIPP) aims to capture important locations in need of active transportation improvements that were not adequately captured in the original bicycle-centric Non- Motorized Transportation Plan (NMTP), the broad SBCTA Complete Streets Strategy, or the school site focused Safe Routes to School Plan (SRTSP). The PIPP provides a sample pedestrian plan for each of the 25 member jurisdictions, a list of additional pedestrian sites in need of pedestrian focused improvements.

Priority locations identified in Highland include:

- Highland City Administration
- Base Line Retail
- The Village at East Highlands Shopping
- Recreational Facilities
- Arroyo Verde Elementary
- Highland Library
- YMCA
- Ball Fields
- Cypress Elementary
- Highland California Historic District
- Highland Grove Elementary
- Beattie Middle School
- Cunningham Neighborhood Park
- Aurantia Park
- Cram Elementary School

The PPP provides pedestrian and bicycle recommendations for the Historic District which are considered in this Plan.

San Bernardino Countywide Transportation Plan (2015)

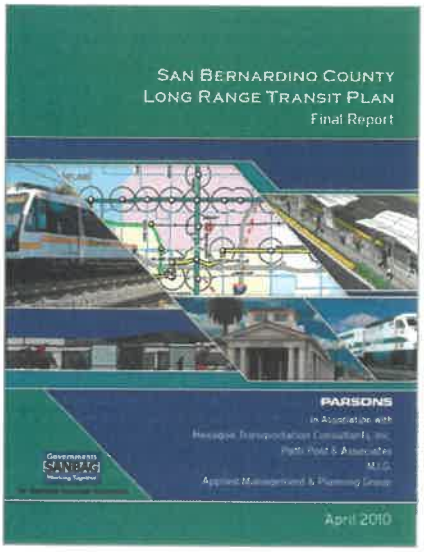


The Countywide Transportation Plan (CTP) lays out a strategy for long term investment in and management of San Bernardino County's transportation assets. Rooted in six goals, the corresponding objectives are:

- Reduce travel times for both highway and transit travel
- Maximize the efficiency and reliability of the transportation system
- Reduce vehicle hours traveled
- Reduce vehicle emissions, both criteria pollutants and GHG emissions
- Increase the share of people carpooling, bicycling, walking and taking transit
- Reduce collision rates
- Preserve existing infrastructure in a cost-effective manner
- Encourage development around existing and planned transit stations and hubs

The CTP affirms active transportation's role in advancing these goals, and commits SANBAG (now SBCTA) to continuing to incorporate strategies identified in the NMTP to enhance active transportation mobility. This Plan advances these objectives and SBCTA's initiatives surrounding biking and walking.

San Bernardino County Long Range Transportation Plan (2010)

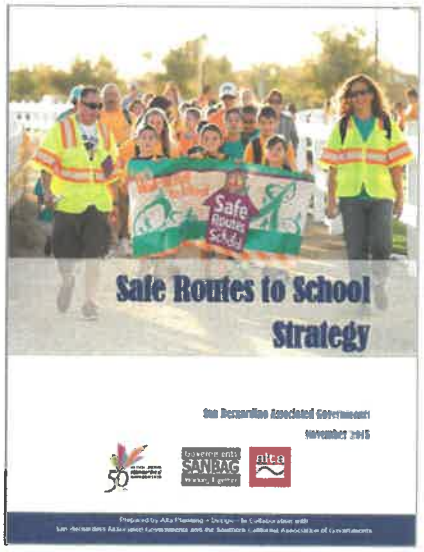


The Long Range Transit Plan (LRTP) addresses the county's current and future travel challenges and provides a system of transit facilities and services that can increase transit's role in the future. The LRTP outlines a strategy for providing transit to the growing population in San Bernardino County, focuses on expanding "high quality" transit and transit-oriented development, and establishes urban design policies that enhance pedestrian facilities, safety, and accessibility to transit, including:

- Pedestrian connections from adjoining neighborhoods
- Street design that includes all modes
- Traffic calming features

The LRTP details existing and planned active transportation facilities in the city, and reports on estimated costs of previous and future investments.

San Bernardino County Regional SRTS Plan Phase I (2015)

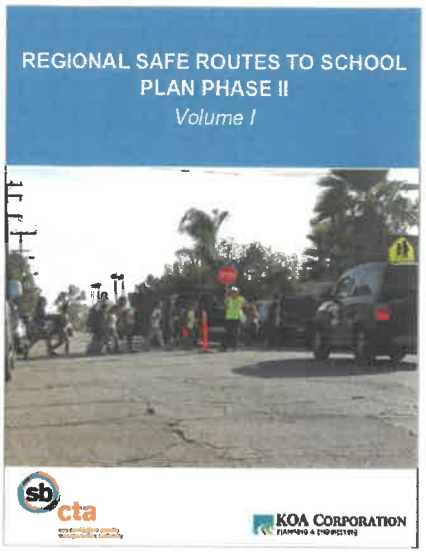


The San Bernardino Associated Governments (SANBAG) SRTS Strategy is Phase I of a comprehensive effort by SANBAG and local jurisdictions to identify existing resources, prioritize allocation of resources, and develop implementable SRTS strategies. These strategies will help SANBAG and local jurisdictions promote active transportation options and shift travel from single-occupancy vehicles.

During Phase I, the project team identified focus areas within San Bernardino County that could most benefit from SRTS investments relative to other areas within the region. The analysis has two parts: The first considers the areas of the San Bernardino region that have the most need for SRTS interventions and areas that have the most potential for students walking and biking. The

second part of this analysis identifies an initial School Commute Network based on the proposed bicycle routes identified in the Non-Motorized Transportation Plan (NMTP) that could be appropriate for youth bicyclists.

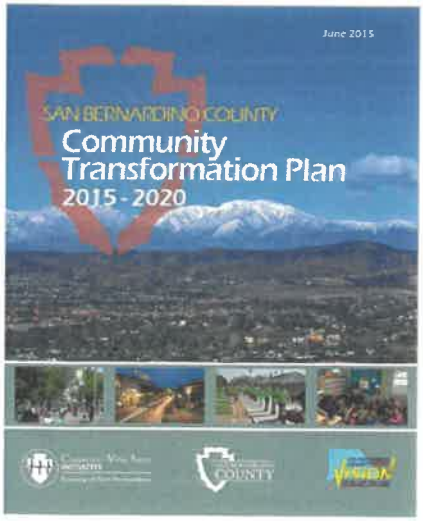
SBCTA Safe Routes to School Phase II (2017)



This phase of the Regional Safe Routes to School (SRTS) Plan was created with the purpose of guiding strategic improvements to the safety and accessibility of non-motorized transportation networks around San Bernardino County schools. For this phase, 55 schools (or roughly 10% of public schools in the County) were selected for data collection and initial implementation, including two schools in Highland:

- Lankershim Elementary School
- Warm Springs Elementary School

San Bernardino Community Transformation Plan (2011)



The Community Transformation Plan is intended to drive discussion at the community level and future alignment of strategies and resources in order to achieve wellness in San Bernardino County. The information contained in this document is intended for use by residents, all sectors, networks, and partnerships committed to taking action to address the priority health related issues together, including:

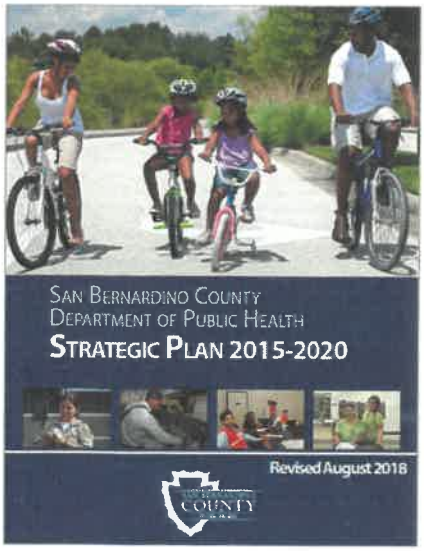
- Increase the number of residents participating in daily physical activity
- Increase options for active transportation planning such as walking and biking

Overall, fewer adults in San Bernardino County walked for transportation, fun, or exercise than in California and less than 20% of teens (ages 12-17) in the county

met the CDC recommendation of 60 minutes of physical activity every day, greater than compared to California at 15% in 2009.

People living in unsafe neighborhoods also tend to have fewer options for public transportation or open spaces to be active, factors which further diminish their ability to engage in healthy behaviors.

San Bernardino County Department of Public Health Strategic Plan 2015-2020 (2018)



Created by the Department of Health (DPH) in the context of several other critical countywide efforts—the Countywide Vision and the Community Vital Signs Initiative—the Strategic Plan lays out the goals and objectives for the department over the next five years. The plan reviews health indicators for the region, and establishes goals around five priority areas:

11. Community and Environment
12. Empowerment
13. Health Equity
14. Health Services and Protection
15. DPH Infrastructure

While not in itself a policy document, this plan provides strategies, resources, and examples for policy makers. It also outlines the connections between policy, built environment, and public health.

Customer-Focused, Technology-Enabled Multi-Modalism for the San Bernardino Valley: An Action Plan (2018)



The Customer-Based Ridesharing and Transit Interconnectivity Study was initiated by the San Bernardino County Transportation Authority (SBCTA) with its partners, the Southern California Association of Governments (SCAG) and Omintrans. This Action Plan provides a road map of strategies by which to operationalize Mobility-as-a-Service – strategies that communicate choice, invite people to consider alternatives to driving alone and help them develop sufficient confidence to try new modes.

While this plan helps advance many goals outlined in the study, it most directly supports Implementation Action 2.6: Bike/Pedestrian Infrastructure:

> *"This strategy's objective is to ensure continued attention to street safety by ensuring high priority to street and sidewalk improvements that support the safety and accessibility of the bicycle network and pedestrians, with a focus on multimodal nodes and furthering Vision Zero goals."*

Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016)



The SCAG Regional Transportation Plan includes a commitment to reduce transportation related emissions to comply with California Senate Bill 375. This Plan will help Highland contribute to this goal.

State

California State Bicycle & Pedestrian Plan (2017)

The California State Bicycle and Pedestrian Plan is a visionary and comprehensive policy plan to promote a multi-modal transportation system that supports active modes of transportation and creates a framework to increase safe bicycling and walking. The plan contains:

- Strategies to achieve the goals and objectives outlined in the plan
- Performance measures and data needs to evaluate success
- Recommendations for improved Caltrans processes
- Safety statistics and a safety awareness brochure
- Investment strategies

This plan will help Highland to work with the local Caltrans office to implement projects on Caltrans rights-of-way.

Complete Streets Implementation Action Plan 2.0 (2017)

The intent of the Complete Streets Implementation Action Plan 2.0 is to describe the current California Department of Transportation (Caltrans) complete streets policy framework and to provide an overview of Caltrans' complete streets efforts. This policy directs Caltrans to provide for the needs of all travelers of all ages and ability in all planning, programming, design, construction, operations, and maintenance activities, and products on the State highway system. This update of the plan lays out the structure for monitoring, reporting, and overcoming barriers to further integrate complete streets into all Caltrans functions and processes.

Senate Bill 99 - Active Transportation Program Act (2013)

SB 99 establishes the Active Transportation Program for the state, in accordance with the federal Moving Ahead for Progress in the 21st Century (MAP-21) legislation, to encourage increased use of active modes of transportation and create a mechanism for distributing federal funds to local and regional efforts. The bill includes the following goals for the Active Transportation Program:

- Increase the proportion of trips accomplished by bicycling and walking
- Increase safety and mobility for non-motorized users
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction

- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding
- Ensure that disadvantaged communities fully share in the benefits of the program
- Provide a broad spectrum of projects to benefit many types of active transportation users

Caltrans Deputy Directive 64 – Complete Streets (2008)

In 2001, the California Department of Transportation (Caltrans) adopted Deputy Directive 64, "Accommodating Non-Motorized Travel," which contained a routine accommodation policy. The directive was updated in 2008 as "Complete Streets – Integrating the Transportation System." The new policy includes the following language:

> *The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.*
>
> *The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance operations.*

The directive establishes Caltrans' own responsibilities under this policy. The responsibilities Caltrans assigns to various staff positions under the policy include the following:

- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Department transportation plans and studies.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Research, develop, and implement multimodal performance measures.

Assembly Bill 1358 - Complete Streets Act (2008)

In September 2008, California adopted a new law that requires cities and counties to include complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, older adults, and people with mobility impairments, as well as motorists.

Senate Bill 375 - California Sustainable Communities Strategy (2008)

SB 375 is the first law in the nation that attempts to control greenhouse gas emissions by curbing sprawl. The law requires the California Air Resources Board (CARB) to develop regional targets for reductions in greenhouse gas emissions from passenger vehicles for 2020 and 2035. Each of the 18 metropolitan planning organizations in California will need to prepare a "sustainable communities strategy" for meeting the emissions reductions target in its region through transportation and land use actions that reduce the number of vehicle miles traveled. SB 375 establishes per-capita greenhouse gas emission reduction targets of 7% by the year 2020 and 15% by the year 2035, using 2005 levels as the base year.

Assembly Bill 32 - California Global Warming Solutions Act (2006)

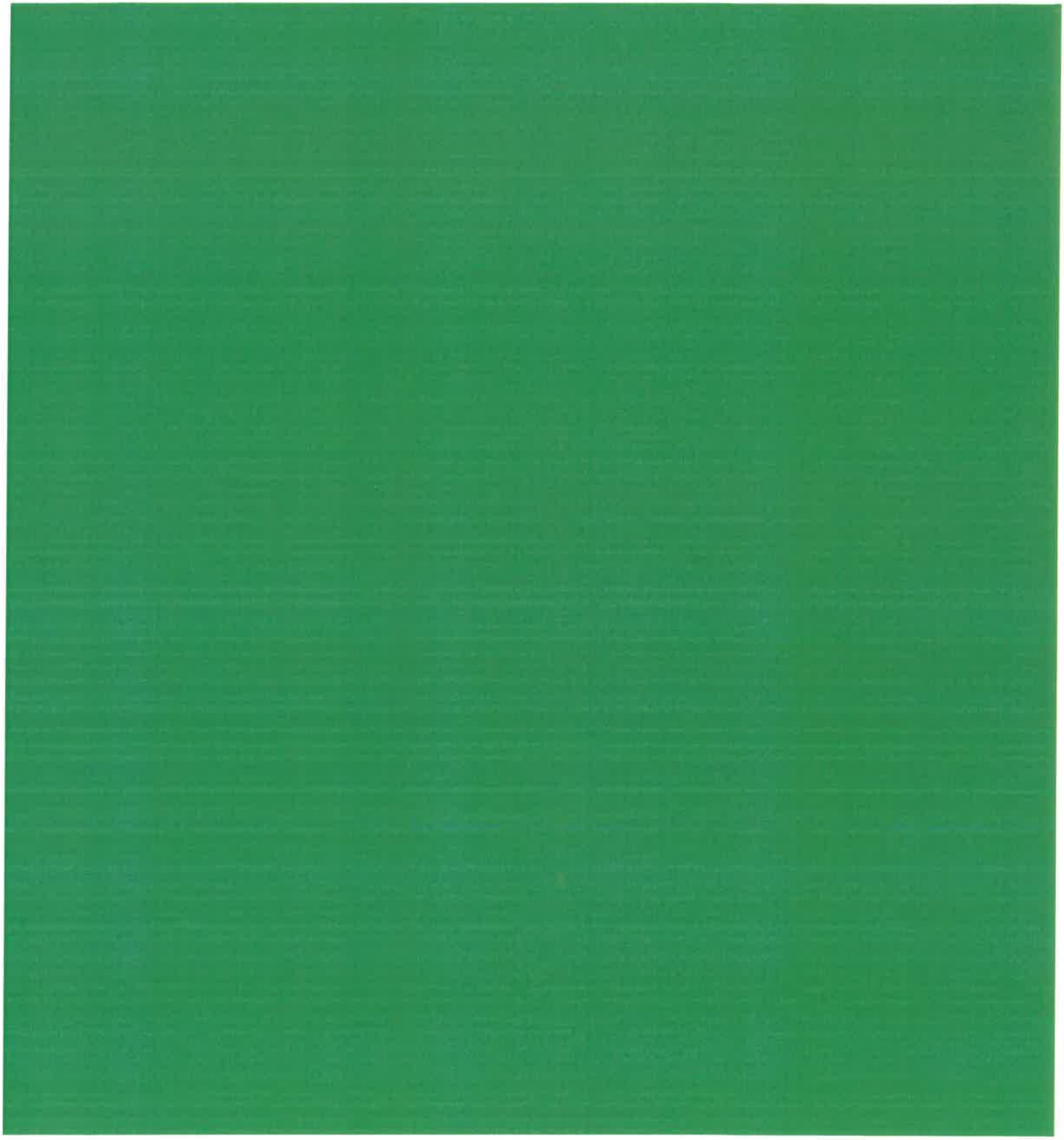
The California Global Warming Solutions Act aims to reduce the state's emissions of greenhouse gases to 1990 levels by 2020 and to 80% below 1990 levels by 2050. The law requires the California Air Resources Board (CARB) to adopt a "scoping plan" indicating how the 2020 target for emission reductions may be achieved from significant greenhouse gas sources through regulations, market mechanisms, and other actions. One of the recommended actions in the CARB scoping plan is to "develop regional greenhouse gas emissions reduction targets for passenger vehicles." The mechanism for developing these targets was established by separate legislation, Senate Bill 375.

Federal Plans and Policies

US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (2010)

The United States Department of Transportation (US DOT) issued this Policy Statement to support and encourage transportation agencies at all levels to establish well-connected walking and bicycling networks. The DOT encourages States, local governments, professional associations, community organizations, public transportation agencies, and other government agencies, to adopt similar policy statements on bicycle and pedestrian accommodation as an indication of their commitment to accommodating bicyclists and pedestrians as an integral element of the transportation system.

APPENDIX E: RESOLUTION



CITY of HIGHLAND
ACTIVE TRANSPORTATION PLAN

Attachment 2

RESOLUTION NO. 2021-___

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HIGHLAND, RECOMMENDING THE CITY COUNCIL ADOPT THE ACTIVE TRANSPORTATION PLAN OF THE CITY OF HIGHLAND AND MAKING FINDINGS IN SUPPORT THEREOF.

A. RECITALS

1. The City of Highland was selected to participate in the Southern California Association of Government's (SCAG) Disadvantaged Communities Active Transportation Planning Initiative, and initiated drafting the Active Transportation Plan to provide a comprehensive plan for a network of trails, bike lanes, sidewalks, and other elements aimed at supporting safe walking and bicycling throughout the City and providing connections to nearby destinations.
2. The Active Transportation Plan is exempt from the California Environmental Quality Act (CEQA) as it meets the definition of a Feasibility or Planning Study under CEQA Guidelines, Section 15262.
3. The proposed Active Transportation Plan meets the **General Plan Land Use Element Goal 2.1, Policy 2**; Ensure that the Town Center and Golden Triangle promote safe and convenient pedestrian environments for residents, employees and visitors through the implementation of Land Use and Community Design Element policies and guidelines and Development Code standards.
4. The proposed Active Transportation Plan meets the **General Plan Land Use Element Goal 2.10, Policy 3**; Provide access to multiple modes of travel, including pedestrian, bicycle, transit, and automobile.
5. The proposed Active Transportation Plan meets the **General Plan Land Use Element Goal 2.10, Policy 7**; Connect the Town Center physically and visually with the Historic Village District with pedestrian connections, historically compatible architecture, signage, landscaping, and other streetscape elements.
6. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.1, Policy 10**; Encourage major employers to reduce vehicular trips by offering incentive concepts discussed in the General Plan Circulation Element, including but not limited to reduced transit passes and preferential parking for ridesharing.
7. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.2, Policy 1**; Maintain and rehabilitate all components of the circulation system, including roadways, sidewalks, bicycle facilities, pedestrian facilities, and traffic signals.
8. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.2, Policy 4**; Coordinate maintenance or enhancement of transportation facilities with related infrastructure improvements.
9. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 1**; Establish the local street system within developing neighborhoods through a cooperative public/private planning process.

10. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 3**; Promote the principle that streets have multiple uses and users and protect the safety of all users.
11. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 4**; Require new development to provide pedestrian paths and linkages through projects, locating linkages to avoid conflicts with motorized traffic.
12. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 5**; Discourage high-speed, through traffic on local streets with appropriate traffic-calming measures (e.g., traffic enforcement, bulb-outs, lane striping, chokers, etc.).
13. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 7**; Utilize shared driveways in common areas to minimize disruptions to traffic and pedestrian/bicycle flow.
14. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 11**; Encourage and improve pedestrian connections from residential neighborhoods to retail activity centers, employment centers, schools, parks, open space areas and community centers.
15. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 12**; Encourage barrier-free accessibility for all handicapped residents, employees, and visitors throughout the City's circulation system.
16. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 13**; Support the planning of sidewalks of appropriate width to allow the provision of buffers to shield nonmotorized traffic from vehicles.
17. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 14**; Add raised, landscaped medians and bulb-outs, where appropriate, to reduce exposure to cross traffic at street crossings.
18. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.4, Policy 15**; When feasible, walkways should include pedestrian amenities such as shade trees and/or plantings, trash bins, benches, and shelters.
19. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.7**, Policy 1; Develop a system of continuous and convenient bicycle routes to places of employment, shopping centers, schools, and other high activity areas with potential for increased bicycle use.
20. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.7, Policy 2**; Encourage new development to provide reasonable and secure space for bicycle storage.
21. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.7, Policy 3**; Provide bicycle racks at all public facilities and along major public streets.
22. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.7, Policy 4**; Assure that local bicycle routes will complement regional systems and be compatible with routes of neighboring municipalities.
23. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.7, Policy 5**; Provide linkages between bicycle routes and other

trails, such as the Santa Ana River Trail, within the City as appropriate.

24. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.8**; Incorporate consideration of regional transportation implications into decisions made by the City of Highland and, conversely, incorporate consideration of the local transportation implications on the City of Highland into decisions made by other local agencies, as well as into decisions made by state and federal agencies.

25. The proposed Active Transportation Plan meets the **General Plan Circulation Element Goal 3.9, Policy 5**; Develop strategies for the control of parking demand such as improved transit service, amenities for bicyclists and rideshare vehicles.

26. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.10, Policy 30**; Develop Integrate park and recreation facilities with existing and future trail and bikeways, wherever practical.

27. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.12, Policy 1**; Policy 1 Provide trail connections between and/or along the major city and surrounding regional facilities, sites and features indicated on the Multi-Use Trails Master Plan.

28. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element, Goal 5.12, Policy 2**; Provide bicycle and pedestrian trails along major home-to-work, home-to-school and other travel routes, where appropriate.

29. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element, Goal 5.12, Policy 3**; Seek to construct or assist in the construction of those portions of the San Bernardino County Regional Trail system that are located within Highland.

30. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element, Goal 5.12, Policy 4**; Require the dedication of trail easements, where appropriate, for establishing a planned trails system alignment, or where an established trail is jeopardized by impending development or subdivision activity.

31. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element, Goal 5.12, Policy 5**; Where possible, designate and design new trail development near transit routes or heavily traveled areas.

32. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 3**; Adopt the following hierarchy of users on the City's trail system:

- Bicyclists must yield right-of-way to all other users.
- Runners must yield to hikers and equestrians (note: horses should not be on trails predominantly intended for bikes and pedestrians).
- Hikers must yield to equestrians.

33. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 5**; Require that cyclists adhere to the following requirements:

- Alert hikers and equestrians of their presence.
- Travel no faster than 15 mph unless conditions warrant reduced speed.
- Slow to 5 mph when passing and dismount when necessary.

34. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 6**; Promote adherence to the following code of off-road bicycling responsibility, as developed by the International Mountain Bicycling Association:
    - Ride on open trails only.
    - Control your bicycle.
    - Always yield trail.
    - Never spook animals.
    - Leave no trace.
    - Plan ahead.
35. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 8**; Incorporate, where feasible and without compromising safety, all compatible multiple uses on a single trail.
36. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 9**; Where a single trail is not feasible or there is heavy use, provide alternate or parallel routes and/or design separate, dual trails.
37. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.13, Policy 10**; Allow ample space in right-of-way for safe passage of users, for signing, fencing, separation of trails, trailheads and where appropriate, landscaping.
38. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.14**; Maintain and enhance the trail system's clear and informative signage.
39. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.19, Policy 3**; Encourage land use planning and urban design that reduces vehicle trips through mixed and multi-use development, consolidation of commercial development along major arterials, provision of pedestrian connections from residential to retail areas, and development of a multi-use Town Center.
40. The proposed Active Transportation Plan meets the **General Plan Conservation and Open Space Element Goal 5.19, Policy 7**; Encourage employers to develop trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.
41. The proposed Active Transportation Plan meets the **General Plan Public Health and Safety Element Goal 6.8, Policy 8**; Develop transportation demand management programs and incentives to reduce home to work vehicle trips.
42. The proposed Active Transportation Plan meets the **General Plan Public Health and Safety Element Goal 6.8, Policy 10**; Reduce vehicle emissions by supporting the design and implementation of the Citywide system of bikeways and pedestrian trails as a nonpolluting circulation alternative by requiring as part of the development review process the installation of planned bicycle routes, paths, and lanes where designated; and the construction of necessary bicycle parking and storage areas within convenient commercial, employment and recreation activity areas.

43. The proposed Active Transportation Plan meets the **General Plan Public Health and Safety Element Goal 6.8, Policy 12**; Continue to encourage the integration of air quality planning with land use and transportation planning in the design, review, and development processes by:

- Ensuring that site designs facilitate rather than discourage pedestrian movement between commercial development and residential or office uses (e.g., locate buildings adjacent to the street with parking behind such that pedestrians need not walk through parking lots to reach their destination; provide clear pedestrian paths and connections, etc.).
- Supporting the mixed use overlay in the zoning ordinance as a means to enhance pedestrian movement throughout the City.
- Integrating, where appropriate and feasible, traffic improvements (e.g., dedicated turn lanes and pockets, bus turnouts and shelters, restripe traffic lanes for optimal traffic flow) into capital improvement projects that improve the efficiency of transportation systems.

44. The proposed Active Transportation Plan meets the **General Plan Noise Element Goal 7.2, Policy 5**; Encourage the development of alternative transportation modes such as bicycle paths and pedestrian walkways to minimize the number of automobile trips and noise.

45. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.3, Policy 3** Encourage compactness. Successful town centers stimulate energy and pedestrian activity by concentrating uses.

46. The proposed Active Transportation Plan meets the **General Plan Community Design Plan Element Goal 10.3, Policy 5**; Provide comfortable pedestrian amenities—quality sitting areas, wide paths and shade—along with specialized and engaging design features, such as interesting fountains or public art, which draw and maintain people's attention.

47. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.5, Policy 5**; Clearly delineate pedestrian routes from parking areas to retail uses to allow easy and safe pedestrian movement.

48. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.5, Policy 6**; Encourage pedestrian-scale features such as shaded sitting areas, fountains, arcades, canopies and/or awnings, customized signage and strategically located secondary entrances.

49. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.5, Policy 8**; Link newly developed retail activity centers, where practical, to surrounding residential or office uses through clear and safe pedestrian and bicycle connections.

50. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.5, Policy 10**; Provide walls when necessary for security and/or privacy from adjoining residential uses. When walls are necessary, pedestrian breaks should be provided for access to commercial uses.

51. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.5, Policy 11**; Encourage creative wall design to avoid a blank appearance and utilize landscape buffers as an alternative to walls to facilitate pedestrian linkages to commercial areas.

52. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.6, Policy 1**; Incorporate landscaped parkways, consistently spaced street trees, continuous sidewalks, and pedestrian-scale streetlights, wherever possible.

53. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.6, Policy 12**; In areas of small lot development, incorporate design features that connect it with adjoining areas such as consistent setbacks, building height and pedestrian connections.

54. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.7, Policy 10**; Provide pedestrian access and connections to nearby retail, transportation, recreation, and educational centers, where practical.

55. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.9, Policy 3**; Develop a clear pedestrian and vehicular connection between the City's emerging Town Center and the existing Historic District.

56. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.10, Policy 3**; In areas of heavy pedestrian use, provide wide sidewalks that allow room for window shopping, pedestrian passage, outdoor dining, and landscape buffers.

57. The proposed Active Transportation Plan meets the **General Plan Community Design Element Goal 10.10, Policy 5**; Incorporate pedestrian scaled, distinctive lighting fixtures in community facilities and other public places with occasional or frequent evening use.

58. In the process of drafting the Active Transportation Plan, community participation events were scheduled to gather input from public agency stakeholders, residents, and recreational participants.

59. Notice was duly provided to the public, stake holders of government agencies and all other interested parties.

60. A duly noticed public hearing has occurred concerning the Active Transportation Plan.

61. A public hearing was held on December 15, 2020, at which time all interested persons were given full opportunity to be heard and to present comments.

62. Prior to taking actions, the Planning Commission has heard, been presented with, and/or reviewed all of the information and data which constitutes the administrative record for the above-mentioned plan, including all oral and written comments presented to the City during all project meetings and hearings.

63. All other legal prerequisites to the adoption of this Resolution have occurred.

B. RESOLUTION

NOW, THEREFORE, it is hereby found, determined, and resolved by the Planning Commission of the City of Highland as follows:

Section 1. The above recitals are all true and correct.

Section 2. The Planning Commission hereby determines that the Active Transportation Plan meets the definition of a 'Feasibility or Planning Study' under CEQA Guidelines, Article 18, Statutory Exemptions, Section 15262, and is therefore exempt from the California Environmental Quality Act (CEQA), and recommends the City Council direct staff to file a Notice of Exemption with the County Clerk of the Board.

Section 3. Based on the information contained in the staff report and supporting exhibits and plans, the Planning Commission hereby finds:

a) The proposed plan will not result in a significant adverse effect on the environment and will not negatively affect public health, safety, and welfare as the plan provides a comprehensive network of bike lanes, sidewalks, and other elements aimed at supporting safe walking and bicycling through the City and providing connections to nearby destinations to encourage a more active lifestyle instead of automobile use.

b) The Active Transportation Plan is consistent with and will contribute to achieving the goals and objectives established by the Highland General Plan to minimize automobile congestion and to provide a well-planned network bike lanes, sidewalks, and other elements aimed at supporting safe walking and bicycling throughout the City.

c) The Active Transportation Plan will preserve and enhance existing residential neighborhoods by providing greater connectivity throughout the City by improving safety standards and minimizing potential conflicts with pedestrians and bicycles with motor vehicles.

Section 4. Based on the foregoing findings, the Commission recommends that the City Council adopt the Highland Active Transportation Plan to implement the City of Highland General Plan, as funding becomes available for projects recommended within the Plan.

Section 5. The Planning Commission declares that should any provision, section, paragraph, sentence, or word of this Resolution be rendered or declared invalid by any court of competent jurisdiction, or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences, and words of this Resolution shall remain in full force and effect.

C. ADOPTION OF RESOLUTION

The City Clerk shall certify to the adoption of this Resolution and shall cause the same to be published or posted in the manner prescribed by law.

ADOPTED, SIGNED*, AND *APPROVED this 19th day of January 2021.

ATTEST:

Randall Hamerly, Chairman Planning Commission	Lawrence A. Mainez Community Development Director

Attachment 3

MINUTES
PLANNING COMMISSION REGULAR MEETING
December 15, 2020 – 6:00 P.M.

This meeting was conducted as a video conference meeting in a remote location. All votes during the meeting were conducted by roll call.

CALL TO ORDER

The regular meeting of the Planning Commission of the City of Highland was called to order at 6:00 p.m. by Community Development Director Mainez through video conference.

Present:	Chair	Randall Hamerly
	Vice Chair	Chandra Thomas
	Commissioner	Edward Amaya
	Commissioner	Jarrod Miller
	Commissioner	Jessica Sutorus

Staff Present: Lawrence Mainez, Community Development Director
Kim Stater, Assistant Community Development Director
Salvador Quintanilla, Associate Planner
Carlos Zamano, City Engineer
Matt Bennett, Assistant Public Works Director
Camille Goritz, Administrative Assistant III

The Pledge of Allegiance was led by Chair Hamerly.

COMMUNITY INPUT (ITEMS NOT ON THE AGENDA)

None.

CONSENT CALENDAR

1. Minutes from the November 17, 2020 Regular Meeting.

A MOTION was made by Commissioner Miller, seconded by Commissioner Sutorus, to approve the minutes as amended. Motion carried on a roll call vote, 5-0.

PUBLIC HEARING

2. Accessory Sign Review Application (ASR 20-006) is a request to amend the 7-Eleven Sign Program to increase the height and the overall sign area of two future monument signs which identify the gas station and future tenants along Greenspot Road and Boulder Avenue. **(Continued from the November 3, 2020, Planning Commission Meeting)**

Chair Hamerly opened the public hearing.

Associate Planner Quintanilla presented the staff report.

Warner LeMenager, Applicant stated I think the height of the sign is adequate for capturing what we need.

Chair Hamerly asked what is the exact positioning of the proposed staff recommended location of that sign? Is it outside of the 25-foot line of sight triangle?

Associate Planner Quintanilla replied yes, it is the proposed location will be out of the line-of-sight location and it has been verified with the Engineering Department.

Chair Hamerly stated both the modified conditions three and four those two signs will essentially be identical; wouldn't that revert to the original definition of monument sign A that was in the previously approved sign program?

Associate Planner Quintanilla stated the previously approved sign program was 10 foot 6 with 96 square feet over the sign area. The modified sign is 11 foot with a sign area of 106 square foot. It is going 6 inches taller and 10 square feet larger in the sign area.

Chair Hamerly stated the previously approved sign program there was only one destination both the letter A's, two monument signs, and they were identical. If the new destination sign B would be redundant since both signs are now identical, again?

Associate Planner Quintanilla replied yes, we will modify and call them as A.

Chair Hamerly closed the public hearing.

A MOTION was made by Commissioner Suterus, seconded by Vice Chair Thomas, to approve:

1) Adopt Resolution No. 2020-012, to approve Accessory Sign Application (ASR 20-006) to amend the previously approved 7-Eleven Sign Program to increase the height and sign area of two (2) monument signs, subject to the Conditions of Approval, and Findings of Fact; and
2) Direct Staff to file a Notice of Exemption with the County Clerk of the Board.

Motion carried on a roll call vote, 5-0.

RESOLUTION NO. 2020-012

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HIGHLAND, CALIFORNIA, APPROVING ACCESSORY SIGN REVIEW NO. 20-006, AN AMENDMENT TO THE 7-ELEVEN SIGN PROGRAM PREVIOUSLY APPROVED BY THE HIGHLAND PLANNING COMMISSION ON AUGUST 21, 2018 BY RESOLUTION NO. 2018-012. TO INCREASE THE HEIGHT AND THE OVERALL SIGN AREA OF TWO MONUMENT SIGNS. THE SITE IS LOCATED AT 28359 GREENSPOT ROAD (APN: 1201-361-28, -29, & -30).

DRAFT

3. City of Highland Active Transportation Plan (ATP); a comprehensive plan for the network of trails, bike lanes, sidewalks, and other elements to support safe walking and bicycling in the City.

Chair Hamerly opened the public hearing.

Community Development Director Mainez presented the staff report.

Samuel Zneimer, Applicant presented the Active Transportation Plan (ATP) presentation.

Commissioner Miller stated when we look at the regional state and federal grants the criteria to acquire those grants are very specific. Did we look at the criteria and take it into account when developing the prioritization framework?

Samuel Zneimer stated we did not use what the state criteria was for some of the grants. We made sure that what we are proposing could be supported by a grant of some sort. One of the big grants you will see is the Active Transportation Plan (ATP).

Chair Hamerly asked what the monitoring process involved to gage success in reducing trips per day? How do these goals reflect our inability to control some of the macro issues?

Samuel Zneimer replied that will always be an issue of how much you can affect for air quality and those goals can be modified. Unfortunately, some of these are at the state regional level and in that section, it is state metrics that are utilized on a consistent basis for measuring process for Active Transportation Air Quality. City of Highland cannot affect all of those, but they are usually within Active Transportation Plans. These plans are unique to a community, so we are removing those ones due to your specific issues with them is understandable.

Chair Hamerly stated the compromise on that might be is if we are identified as a community of need, because of poor air quality that might help us qualify for the grant. If the grant is not tied to a metric of monitoring where it shows we have reduced our bad air quality to a certain threshold, because of these programs. I do not think that would be achievable, so I would not include those in the goal statements for what we are trying to achieve.

Samuel Zneimer stated when implementing goal settings for each of these plans a lot of the times the goals that are set are the ways you will receive a grant. I have not seen a grant program where you not meeting that goal works against the future in terms of air quality especially at this regional level, however it will be essential how we will receive these grants. We like to do goal setting that is ambitious, that would help the City in the long run.

Commissioner Amaya stated I am glad that there is an emphasis on equity in the plan and using CalEnviroScreen. The 210 freeway intersects our city and especially on the western portion that is where there is a big need. Regarding safety on page 112, is that specifically make it safe towards walking and biking because there is a lot of traffic and cars speed. Did people give input that they did not feel safe walking, because there might be vagrancy theft or crime?

Samuel Zneimer replied it took into account though it was more focused on the actual collision history. We had community input about safety issues regarding code enforcement or not feeling safe which we factored in. In terms of the recommendation, I did factor in crime, loose dogs, and code enforcement in my idea of making it safe.

Commissioner Amaya asked is there any survey as far as getting these projects up and running, do we think there will be enough people wanting to bike or enough bike parking?

Samuel Zneimer replied I did not take account if there is going to be enough bike parking at one specific location if these projects are up and running. In general, I recommend placing them at locations and destinations of interest.

Commissioner Amaya stated regarding existing barriers and one of big main barriers on the western side some of the infrastructure needs to improve.

Samuel Zneimer stated it is a very common thing to see infrastructure improvements as a barrier and a lot of communities especially in the disadvantage section is probably the most sighted barrier that I have seen.

Community Development Director Mainez clarified the page numbers that were called out by Commissioner Amaya were referenced to the page numbers from the agenda packet and not from the Active Transportation Plan (ATP) packet. Please refer to the page numbering on the ATP packet.

Commissioner Sutorus stated that she has worked on an Active Transportation Plan in the past. What was helpful with writing the grants to be funded was a budget attached with estimates for prioritization. I did not see that on the plan, were you going to have an opportunity to come up with estimates or leave as is?

Samuel Zneimer stated for this practice we are going to base it as our prioritization scale, unfortunately for this grant opportunity there was not enough funds to go into detailed as cost estimations of each of these projects.

City Engineer Zamano stated doing cost estimates at this level is very difficult and expensive. Working on numerous amounts of grant applications for the city can be expensive, although I see in this report when I reviewed it Samuel included range for cost estimates. He gave it a rating of low, medium, and high, which there is some information, but this document is meant to serve as a planning guide to help the city identity what the needs are. In regard to the Capital Improvement Program you will be pleased to hear there is quite a few project already in the works that are going to help boost and complete the projects that are listed in the packet.

Chair Hamerly asked Community Development Director Mainez if this would be an element that would be added to the City's general plan document or is this a stand-alone document?

Community Development Director Mainez replied this is a stand-alone document. This document is consistent with the general plan.

Chair Hamerly stated I noticed the city had an interactive site plan. There is an application called Strava which is for running and cycling and the real power of these things is the

interactivity. For example, if you are riding and see a pothole a lot of the time those applications will show an interactive feature to report an issue. If there was an interactive feature hosted by the City's Maintenance Department would not have to be on 24-hour call. They would have community input essentially virtually with unlimited watch from the community constantly on these improvements. The City would benefit putting together an app that people could load onto their phones and it will show the best route. It will map out the new path that has created. It would show how far it is going to be, how long it would take to arrive at the destination, and while in route the person could report a maintenance issue to the application.

Community Development Director Mainez recognized Associate Planner Quintanilla working with other team members to acquire a grant, which to tie into the Planning and Building and Safety permitting and entitlement software. If anyone that has an application in house could track it in real time. Also, the new software will allow the public to submit complaints related to Code Enforcement, Public Works, and Engineering Departments.

Chair Hamerly stated there are two different standards that I have come across for pedestrian activities. One is a quarter mile radius from every location is considered an easily walkable community and others will use a half mile standard to arrive to your destination. What was the figure that we were using to determine a reasonable walking distance when creating a connected series of paths within the City?

Samuel Zneimer stated we use our standard half mile for bicycle facilities and a quarter mile for pedestrian facilities in terms of rating of accessibility.

Chair Hamerly replied most of the corridors within Highland are the major east/west arterials. I am wondering how we met the goals of creating viable pedestrian opportunities if the distance to key destinations within the city is not within those convenient walking distances?

Samuel Zneimer stated that is the toughest elements of active transportation is that it is best utilized by something that is nearby. A lot of the time is distance, effort, and time as the three big reasons why they do not utilize active transportation for all their trips. Unfortunately, it does limit some accessibility. The best is to provide them with the best infrastructure and the opportunity to make those trips comfortable and safe as much as possible is the only way I have seen people overcome those barriers.

Chair Hamerly stated within the distance constraints that we have since we have a linear city that is very long east and west it seems making the trip as pleasant as possible is one of the most valuable tools we must encourage. More frequent rest stops, increasing the amount of shade and access to water might be high priority items to make those routes attractive. On the exhibits I noticed that the street names did not correspond with their proper location on the maps and the quality of the copy was poor. One of the issues with walking through the city is that certain areas of the ATP referenced not only pedestrian safe routes, but also universal designs and accessibility. In certain neighborhoods there are four-foot walkway standards, frequently there will either have a transformer or meter that reduces the sidewalk down that it is not an accessible clear path of travel. The different strategies to consider for creating safe pedestrian routes is to think seriously about increasing the right-of-way or the sidewalk width if we are going to incorporating utilities and public infrastructure that is encroaching those walkways. It is preferred that the walkway is completely unobstructed, however that is not always achievable.

City Engineer Zamano stated we do that at the project level. The City identities that the utility needs to be relocated we will reach out to the utility company to coordinate as part of the effort with the project.

Chair Hamerly stated I know the bike lane widths are usually calculated from face of curb which is not always safe. Sometimes those gutters are steep slopes and gutters to get greater water flow capacity and that does not lend itself to a safe cycling condition. My recommendation is the bike lane be measured on the pavement and not face of curb becauseit is not usable if you are including the gutters. Church Street has very high velocity traffic and a lot of storm drains.

City Engineer Zamano stated the way we approach things now is much better whenever we implement or move forward with a pavement rehabilitation project. A new practice is to look at the striping very closely and we make sure we give the maximum width to the bike lanes.

Chair Hamerly asked are there programs for educating the public to be aware that they are driving a route to school and need to slow down?

Samuel Zneimer stated that is a huge concern. On page 142 it has a picture of the slow down sign, and there are different public awareness campaigns to maximize peoples understanding of safety concerns of the user. It does not specially target motorist; the signage is supposed help.

Chair Hamerly stated the Shelton Trail between Bacon and Cloverhill the trail cuts off and you have to hike down around the canyon and back up the canyon to get back to Cloverhill. There is a trail that cuts across between those two streets and was wondering when that was going to reopen.

Community Development Director Mainez stated it is private property and the city does not have jurisdiction. The Trails Committee would be the one to review that issue.

Commissioner Miller stated on page 139 green infrastructure is mentioned and says the City of Highland will include green infrastructure when feasible. What is the city's vision for incorporating green infrastructure within these projects? Will green infrastructure be used as a tool and inquire additional funding and grants for these projects?

Community Development Director Mainez stated every project that is built in our city both private and public is required under state and federal law to implement green standards. We call it low impact development.

Commissioner Miller replied I am on board with that. I am very familiar with those requirements for LID. A lot of these different bike projects and smaller permit projects as it relates to transportation are exempt. Is it going to be only incorporated when its required or will there be additional consideration to include green infrastructure to maybe expand the funding options?

Community Development Mainez stated since we are an agency in California, we need to start thinking from that perspective. Even though we are exempt and not required, we need to explore how to make this green.

City Engineer Zamano stated the purpose of this is bringing our attention to the possibility of introducing this to more projects. It is giving us flexibility to optimize the projects and do it in a manner that is the best interest of the city.

Commissioner Miller stated I would love to see a little bit more aggressive language in there. We have these different requirements, but it sounds like you are willing to consider this maybe even when it is not required. There is a lot of grants out there available for green infrastructure.

Community Development Director Mainez replied we can add that language.

City Engineer Zamano stated as we construct some of these green belts, we do need to consider maintenance and it is one thing to build them, but who is going to maintain them. If we do not have a funding mechanism for that sometimes it makes it difficult to go and construct these types of beautiful improvements. We will consider that wherever it is possible and practicable.

Commissioner Sutorus stated working on a grant for ATP in the past they wanted that specific language. They would not consider us if we did not have attributes such as bioswales and permeable pavements in the grant document request. It sounds like it is a multi-million dollar project that is going take several years and if you can receive grant funding to help support pieces of it along the way those environmental attributes will be important to be competitive.

Commissioner Miller stated maintenance costs would be one of the items to consider in any feasibility study.

Chair Hamerly replied one of the biggest elements of maintenance has to do with plant materials and ground cover materials that are selected. Choosing things that do not have natural spreading capabilities that can thrive into the climate in which they are planted makes it that we do not have significant supplemental irrigation. That goes along ways to make it an attractive natural environment.

Community Development Director Mainez stated I will work with City Engineer Zamano to come up with language that will appease both Planning Commissioners and balance the future cost.

Chair Hamerly stated traffic calming and a lot of the tier one projects are on the major east/west arterials and that is walking a tight rope because the more traffic calming you put on Base Line or Highland Avenue the more congestion you are going to have. I am a firm advocate of traffic calming which there might be certain corridors that might not be advisable because of the volume of traffic and we want to people to get from their house to the freeway as quickly as possible. The split between what we are developing for recreational use versus what we are viewing as alternative transportation and trying to reduce trips per day. I did not see any loops in the proposed system and loops are much less monotonous. Is there any consideration given to creating loops of varying distances that have mileage markers and directional signs similar to developed bike and trail markings?

Samuel Zneimer stated I did not focus on recreational loops. This one was a very much focused on shifting trips and while it did have share used trails as part of the recreational

aspect of the plan overall. As far as wayfinding signage we did not put specific locations for those elements. We do make the recommendation to include an update wayfinding signage.

City Engineer Zamano stated one of the locations where you will find wayfinding signage is along Base Line. You will find the signage throughout the city already, and we are looking to add more wherever we can.

Chair Hamerly stated for the safe routes for school, I recommend somehow make a game out of it and make incentives for adopting the program.

Community Development Director Mainez stated prior to COVID-19, I used to meet with the principals from both Redlands and San Bernardino Unified School Districts. That was one of things that they talked about and promoted where they would incentivize kids walking safely to school and a couple schools would have pizza parties in honor of the students who met their goals.

Chair Hamerly stated making it fun is the best ways to facilitate adoption. In the future, the 210 freeway improvements are going to be completed. When they initially opened the freeway years ago, on a Saturday they shut down the whole strip from I think San Bernardino Ave and Rancho Cucamonga and it was bikes and pedestrians only. I would like to throw that idea out to promote safe cycling and active lifestyle that we entertain on a weekend before they open the 210 freeway.

City Engineer Zamano stated I attended that event. It was from San Bernardino and Rialto. I remember how neat it was and very well published. This is something we can follow up with Assistant Public Works Director Matt Bennett.

Chair Hamerly stated on page 151 regarding prioritization given the primary objectives of the entire plan is to serve under served communities where the needs are the greatest. Where can we do low scale cost and get it done quickly, whereas the whole purpose of the program is to try to connect different parts of the city specifically focusing on the most under served areas. Why wouldn't the tier one projects be including the areas of the greatest need even though that might be logistically difficult to achieve?

Samuel Zneimer stated we did consider it to be apart of it, that is why we used the CalEnviroScreen shown on page 150. It was not the only metric we used, but it was one of our main metrics. We can change some of the prioritization and if you want it to have more points, we will have the equity score to be higher.

Chair Hamerly stated it just seems like if we are trying to sell this as connecting disadvantage, communities that probably choose one of the main arterials being Base Line east of the 210 freeway already has bike lines and is a fairly wide street.

Commissioner Amaya stated shown on page 153 the tier one projects table 11, those corridors that majority are west of the 210 freeway, correct?

Samuel Zneimer replied yes. Majority of the projects are west of the 210 freeway.

Chair Hamerly closed the public hearing.

A MOTION was made by Chair Hamerly, seconded by Vice Chair Thomas, to incorporate the feedback from the Planning Commission and the Community and will continue the Planning Commission regular meeting scheduled January 19, 2021.

Motion carried on a roll call vote, 5-0.

ANNOUNCEMENTS

Assistant Community Development Director Stater announced the Planning Commission regular meeting scheduled on January 5, 2021 will be canceled.

Community Development Director Mainez announced that he is working with the City Attorney to provide training workshops for the Planning Commissioners. Also, in the future provide the Commissioners an overview of the General Plan.

ADJOURN

There being no further business, Chair Hamerly declared the meeting adjourned at 8:27 p.m.

Submitted by: Approved by:

Camille Goritz, Administrative Assistant III
Community Development Department

Randall Hamerly, Chair
Planning Commission

DRAFT

STAFF REPORT

TO THE PLANNING COMMISSION

DATE: January 19, 2021

FROM: Lawrence A. Mainez, Community Development Director

REVIEWED BY: Kim Stater, Assistant Community Development Director

PREPARED BY: Ash Syed, Associate Planner

SUBJECT: Conditional Use Permit (CUP 20-003) to redevelop an existing 5,800 square foot commercial building into a convenience store and the addition of a covered fueling station facility with eight (8) fuel pumps on a 0.48 acre parcel.

LOCATION: 8020 Palm Ave Highland, CA 92346
Southwest corner of Palm Avenue and 5th Street
Assessor's Parcel Number: 1192-641-01

OWNER / APPLICANT: Ghulam Sarwar

RECOMMENDATION: Staff recommends the Planning Commission:

1. Adopt Resolution No. 2021 – ____, approving Conditional Use Permit (CUP 20-003) to redevelop an existing commercial building to a convenience store with a covered fueling station area and eight (8) fuel pumps, subject to the Conditions of Approval and Findings of Fact; and

2. Direct staff to file a Notice of Exemption with the County Clerk of the Board of Supervisors.

FISCAL IMPACT: The Applicant submitted the required deposit fee of $11,100 for processing a Conditional Use Permit Application. Staff time spent working on the Application will be charged to this fee.

Approved _____	Motion _____	Second _____	Agenda Item No. 3
Denied _____	Ayes _____		
	Noes _____		File No. _____
Continue _____	Abstain _____		
	Absent _____		

Recording Secretary

Community Development Director

The existing building on the property was constructed in 1991 and the original builder paid the appropriate Development Impact Fees to the City at the time of approval. None of the local City Services such as the Law Enforcement, Fire Department, or regional circulation system will endure fiscal detriments as a result of this proposed project.

PUBLIC NOTICE: As required by the City Council, notice of the public hearing was posted at the City's three designated posting locations. In addition, the notice was posted on the City's website, mailed to property owners within three-hundred (300) feet of the project site, and published in the Highland Community News on January 8, 2021 No further notice is required.

PUBLIC COMMENT: At the time of preparing this report, staff had not received any written comments.

DESCRIPTION OF SITE: The project site is located at the southwest corner of Palm Avenue and 5th Street, a signalized intersection defined by the General Plan as a "major highway" (Exhibit 1 – Location Map). The property is composed of a single parcel approximately 0.48 acres in size. Currently, the property features a vacant, single-story, 5,800 square foot commercial building, constructed in 1991, and approved for a convenience store and restaurant. More recently, the building was occupied as an insurance office, a health drink distribution center, and a Mexican restaurant.

The building features a warm earth tone stucco exterior and a flat roof with a parapet around the perimeter. The building can be accessed through four (4) separate single-door entrances all located along the east side. The site features twenty-six (26) onsite parking spaces that are arranged in two double loaded aisles as well as along the building frontage. Concrete driveways are located along both the Palm Avenue and 5th Street frontage with a trash enclosure at the southeast corner of the property. The two monument signs affiliated with the prior building uses both meet the size requirements per the Municipal Code, but are partially located within the public right-of-way. The site adequately maintained and the applicant has also removed the billboard located at the southeast corner of the project, next to the existing trash enclosure.

Surrounding Land Uses

North: Farmer Boys Fast Food Restaurant
South: Vacant Commercial Building
East: Arco Gas Station / Convenience Store / Restaurant Building
West: Vacant Parcel / Parking Lot

Location	General Plan	Zoning
Site:	Business Park (BP)	Business Park (BP)
North:	Business Park (BP)	Business Park (BP)
South:	Business Park (BP)	Business Park (BP)

East:	Business Park (BP)	Business Park (BP)
West:	Business Park (BP)	Business Park (BP)

The developed site is relatively flat with a slope of approximately zero to five percent (0% - 5%). On-site drainage flows to the east toward Palm Avenue. The location is also approximately two (2) miles southwest of the San Andreas Earthquake Fault and does not fall within the Alquist-Priolo Earthquake Fault Zone. Additionally, the project site is not located within a FEMA flood zone.

PROJECT REVIEW/ANALYSIS: The Applicant is proposing the reuse of the existing commercial strip center building into a convenience store and gas station (Exhibit 2 – Site Plan). The existing commercial building features a 5,800 square foot retail space that is divided into two suites. The northern suite, at 3,200 square feet, is the proposed convenience store affiliated with the gas station. The southern portion of the existing building, at 2,600 square feet, is proposed as a future storage facility and may be rented to a potential retail tenant at a future date.

The convenience store will offer consumers typical retail/convenience goods like food and drinks. Since the applicant does not plan to sell alcoholic beverages, there will be no separate Conditional Use Permit for an Alcohol Beverage Control (ABC) entitlement required. The proposed hours of operation for the convenience store will be twenty-four (24) hours, and the gasoline trucks will be refueling the station between the hours of 9:00pm to 5:00am. The existing building had been recently painted and remodeled in 2018 and the Applicant is requesting the exterior be left as-is. The interior of the building will be remodeled with typical convenience store features (snack racks, refrigerators, etc.)

Parking

There are currently twenty-six (26) parking spaces located on the property. The proposal for eight (8) fueling stations with a canopy will eliminate seventeen (17) existing spaces and preserve those located along the storefront. After restriping the spaces along the storefront and accommodating both a compact space and handicap space with the supplementary 5-foot crosshatch pathway, there are ten (10) storefront parking spaces proposed. Additionally, there are eight (8) parking spaces proposed under the gas canopy, one (1) by each fuel pump, for a total of eighteen (18) spaces proposed on the site.

The convenience store features 1,450 square feet of storage space and 1,750 square feet of commercial space. With a requirement of 1 space per 250 square feet of total commercial use area, the five (5) proposed 9-foot wide parking spaces in addition to the 7.5-foot wide compact space and 12-foot wide handicap space will bring the total available parking spaces for the convenience store to seven (7), satisfying the parking requirement. The adjacent 2,600 square foot warehouse area on the southern portion of

the building has a requirement of 1 parking space per 1,000 square feet of storage facility. Thus, the three (3) available parking spaces remaining on the site satisfies the three (3) space parking requirement for the use. Again, including the onsite and fueling station parking, the proposed project will meet or exceed the City's parking requirement.

While no landscape islands have been proposed within the new parking arrangement, the handicap crosshatch pathway splits the parking spaces into groups of 3 and 7. Accent landscaping however has been proposed within a 17' x 16' planter at the southwest corner of the property. Additionally, the existing trash enclosure at the southeast corner of the property will be relocated to the northwest corner of the property, in front of the 12-foot wide loading space.

Access

The site will consist of both vehicular and pedestrian accessibility. Currently, both vehicles and pedestrians can access the property from 5th Street on the north side, and Palm Avenue on the east side. The Applicant is proposing to keep the vehicle access and ramps as-is. Sidewalks, curbs, and gutters have already been constructed and no modifications are being proposed by the Applicant.

Elevations

The Applicant is proposing to leave the current building onsite as-is (Exhibit C – Site Photos). The building's exterior features a clean design with stucco of various warm tones. The primary color of the stucco from the mid to upper section of the building is a desert-sand tone. Between the windows and arranged in a square/cube-like stack formation are pillar accents that are a light brown shade. The exterior awnings at the entrance to the convenience store and storage facility are a bold mahogany. Lastly, along the upper portion of the building and along the middle section is a dark brown accent border. The design elements for the fuel pumps and canopy will be submitted by the Applicant and brought back to the Planning Commission as a Design Review Application at a later date.

Landscape

According to the City of Highland Municipal Code, new developments within the Business Park zone must include a 20-foot landscaped front setback area. This landscaping must consist predominantly of plant materials except for necessary walkways and drives. Where off-street parking is located within building setback areas, as the case with this site, a minimum landscaped area of 10 feet in depth must be provided between the property line and parking area, with an additional minimum landscaped area of 10 feet in depth provided between the parking area and the building.

The site is considered legal non-conforming and due to the size of the lot and placement of the existing building, there is not adequate space for 10 feet of landscaping from the property lines to the parking/fueling area and an additional 10 feet between the parking/fueling area and the convenience store building. The proposal includes roughly 5 feet of landscape area from the property line to the parking/fueling area and an additional 6 feet on the outer side of the property line to the public right of way. Given the circumstances related to redeveloping a legal non-conforming property, the Applicant has proposed a prominent corner statement at the Palm Avenue & 5th Street intersection, embellished with stones, wrought iron accents, and a City of Highland entry statement that provides the required three feet for screening of vehicles from the public right-of-way (Exhibit D – Corner Statement).

The landscaping that is proposed on the site comprises of various trees, shrubs, groundcovers and vines. Located along Palm Avenue and around the intersection is a proposed mix of "Rosa Carpet" and "Nandina Compacta" plants with "Washingtonia Robusta" palm trees scattered in between. Located along the northside of the property on 5th Street is a mix of "Orange Lantana" and "Hemerocallis Hybrid" trees surrounded by a variety of "Violet Silverleaf" and "Purple Muhly Grass" ground cover. At the south end of the property, existing trees and landscaping will be utilized as much as possible and will be further accentuated by additional "Hemerocallis Hybrid", "Rosa Carpet", and various other floras scattered in between to further enhance the aesthetic appeal (Exhibit E – Landscape Plan). The conceptual landscape plan has been reviewed by the City's Landscape Architect to examine the placement of the proposed trees and if the proposed corner statement and embellishments with wrought iron and stone cladding are an appropriate measure to offset the shortage of street side and corner landscaping. Specified conditions have been provided by the Landscape Architect and included within the Planning Conditions of Approval for the proposed project.

Gas Station Development Standards

According to the City of Highland Municipal Code, proposed fueling stations and fuel canopies must satisfy additional design criteria in regard to setbacks, screening, and onsite paving. The subject site features 135 feet of street frontage along Palm Avenue approximately 160 feet of street frontage along 5th Street, satisfying the minimum requirement of 100 feet along each abutting street. The existing building onsite that will be converted to a convenience store and the proposed fuel pumps are both respectively a minimum of 30 feet from the right of way lines along Palm Avenue and 5th Street, satisfying the minimum requirement of 30 feet. Each of the eight (8) fuel pumps are also approximately thirty-five (35) feet from the nearest property line, along Palm Avenue, satisfying the minimum distance of 20 feet. Further development standards regarding driveway lengths, distances to the nearest intersection, paving improvements, and onsite amenities have also been addressed and satisfied by the Applicant.

WQMP

The Conceptual Water Quality Management Plan (WQMP) has been reviewed and approved which addresses the topography, stormwater collection basins, and proposed water drainage paths for the site. The Site Aerial photo shows the current state of the property as well as the surrounding parcels and boundary walls. The East Valley Water District sewer and water plans provide a map of the sewer and water pipelines for the overall area and the location the lines will feed into the project location.

Signs

Two monument signs have been proposed on the property, one along Palm Avenue and one along 5th Street, catering to the passing traffic on each respective roadway. Two building mounted signs will also be installed atop the storefront at the roofline fronting Palm Avenue for the convenience store and a potential future tenant where the warehouse will initially be located. The Applicant will submit elevations for the signs and apply for a Sign Program with a proposal for development at a later date.

ENVIRONMENTAL REVIEW: This project is Categorically Exempt from environmental proceedings pursuant to Section 15301, Class 32, In-Fill Developments, of the California Environmental Quality Act (CEQA) Guidelines, since:

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

SUMMARY: The City of Highland General Plan designates the project site as Business Park (BP). The Applicant's proposal for a fueling station and convenience store is consistent with the land use designation via the approval of a Conditional Use Permit with appropriate and reasonable conditions and findings. The project also features proposed design elements that provide a bold aesthetic appeal to one of the major intersections within the city. Staff recommends the Planning Commission adopt Resolution No. 2021 – ____, approving Conditional Use Permit (CUP 20-003).

Exhibits:
A – Location Map
B – Site Plan
C – Site Photos
D – Corner Statement
E – Landscape Plan

Attachments:
1. Resolution No. 2021 – ____ for Conditional Use Permit (CUP 20-003)
Exhibit 1: Conditions of Approval

Exhibit A:

Location Map


N
5th @ Palm Wb Fs
5th St
Palm Ave

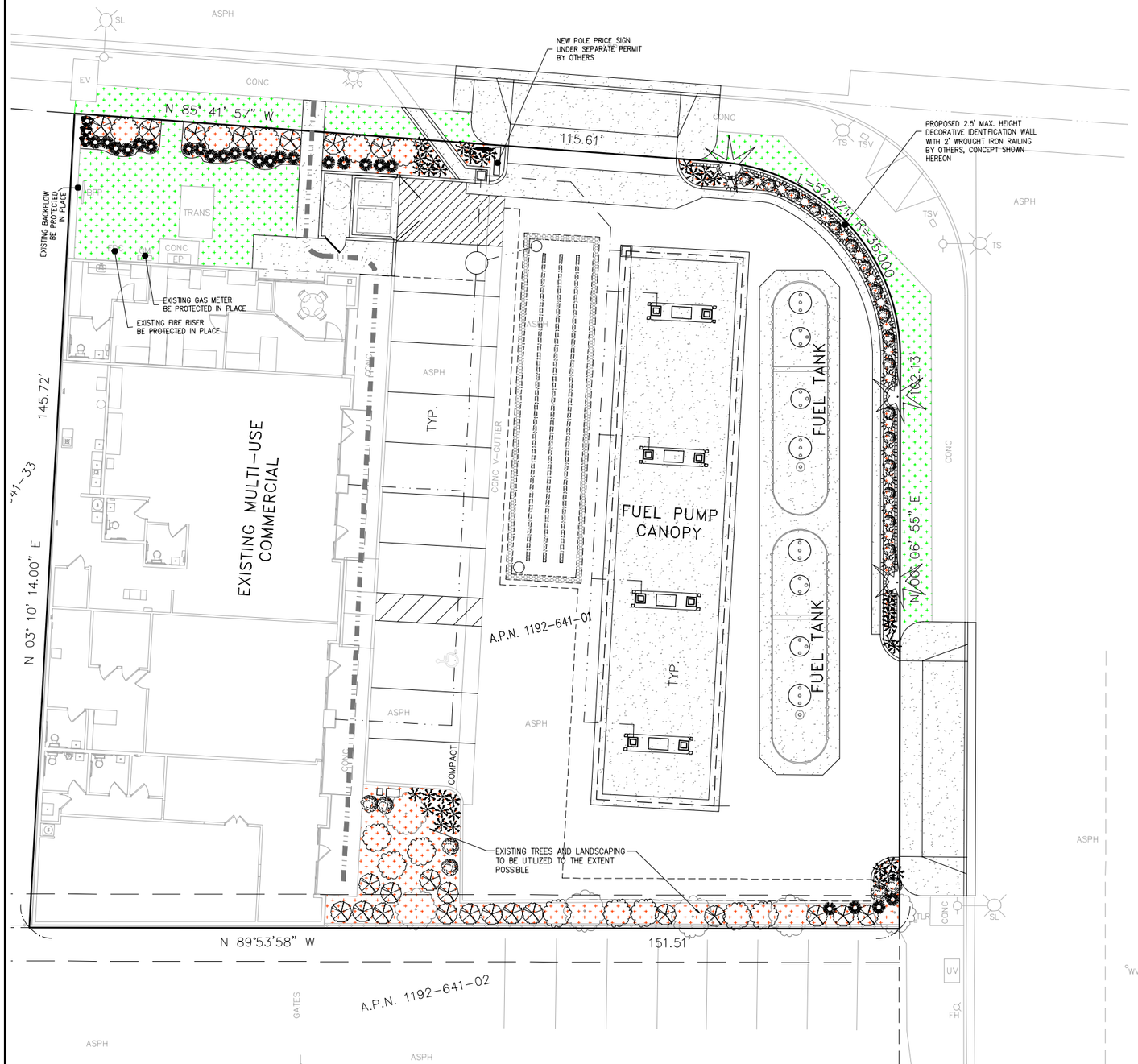
CITY OF HIGHLAND, CALIFORNIA

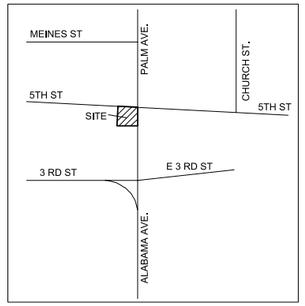
LANDSCAPE PLAN

8020 PALM AVENUE
A.P.N. 1192-641-01

A PORTION OF THE SOUTH 1/2 OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF HIGHLAND, COUNTY OF SAN BERNARDINO, CALIFORNIA.

SITETECH, INC. *SEPTEMBER 2020*





VICINITY MAP
NO SCALE

OWNER/APPLICANT:

GHULAM SARWAR
5052 WESTMONT STREET
RIVERSIDE, CA 92507
PH: (951) 536-0786

ENGINEER/MAP PREPARER:

SITETECH, INC.
8061 CHURCH STREET
P.O. BOX 592
HIGHLAND, CA. 92346
PH: (909) 864-3180

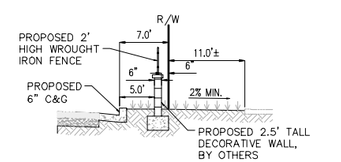
N

10' 0 10' 20'

SCALE: 1"=10'

PLANTING LEGEND

SYMBOL	QUAN.	SIZE	BOTANICAL/COMMON NAMES	NOTES
			TREES	
	5		EXISTING TREE TO BE UTILIZED	
	3	12' BTH	WASHINGTONIA ROBUSTA / MEXICAN FAN PALM	BTH=BROWN TRUNK HEIGHT
			SHRUBS	
	38	1 GAL	HEMEROCALLIS HYBRIDS / DAYLILLY-EVERGREEN	RED AND YELLOW 50% EACH-MIXED
	13	5 GAL	LANTANA H. 'SPREADING SUNSET' / S.S. ORANGE LANTANA	PROVIDE NURSERY TAGS
	24	5 GAL	LEUCOPHYLLUM C. 'THUNDER CLOUD' / T. C. VIOLET SILVERLEAF	PROVIDE NURSERY TAGS
	25	1 GAL	MUHLENBERGIA R. 'NASHVILLE' / PURPLE MUHLY GRASS	PROVIDE NURSERY TAGS
	18	5 GAL	NANDINA D. 'COMPACATA' / HEAVENLY BAMBOO	PROVIDE NURSERY TAGS
	23	5 GAL	ROSA 'CARPET' / CARPET ROSE-YELLOW COLORED	PROVIDE NURSERY TAGS
			SHRUBS	
	0	1 GAL	MACFADYNENA UNGIS-CATI / CAT'S CLAW VINE	TRAIN ON TRASH ENCLOSURE WALLS
			GROUND COVERS	
	1,513 SF	FLAT	GAZANIA H. 'AZTEC QUEEEN' / AZTEC CLUMPING GAZANIA	PLANT AT 6" O.C.
	1,393 SF	2" DEPTH	MULCH-GORILLA HAIR REDWOOD MULCH IN ALL SHRUB AREAS	AVAILABLE FROM EARTHWORKS
	3		BOULDER-DESERT MARBLE-SIZES 1- 3'x3', 1 3'x2.5', 1-2'x2'	FROM SWB-BURY 1/3 DEPTH



DECORATIVE WALL CONCEPT
SCALE: 1"=10'

WATER CONSERVATION STATEMENT:

STB LANDSCAPE ARCHITECT'S, Inc. HAS FOLLOWED AND MET ALL WATER CONSERVATION REQUIREMENTS SET FORTH IN BOTH THE CITY AND STATE ORDINANCES. STB HAS ACHIEVED THESE GOALS THROUGH THE USE OF HIGHLY EFFICIENT MICRO-SPRAY IRRIGATION NOZZLES TO ALL PLANTED AREAS, COMBINED WITH SUPPLEMENTAL BUBBLERS TO ALL TREES AND A "SMART" E.T. BASED CONTROLLER AND RAIN SHUT-OFF DEVICE. THE CONTROLLER WILL RECEIVE E.T. INFORMATION THAT WILL ALLOW THE CONTROLLER TO UP-DATE R.C.V. RUN TIMES ON A DAILY BASES THERE BY ELIMINATING THE NEED FOR MANUALLY ADJUSTING THE CONTROLLER FOR WEEKLY OR SEASONAL WEATHER CHANGES

MAINTENANCE RESPONSIBILITY NOTE:

THE OWNER OF THE HAVE A SNACK FUELS WILL BE RESPONSIBLE FOR ALL MAINTENANCE AND WATER MANAGEMENT WITHIN THEIR PROPERTY.

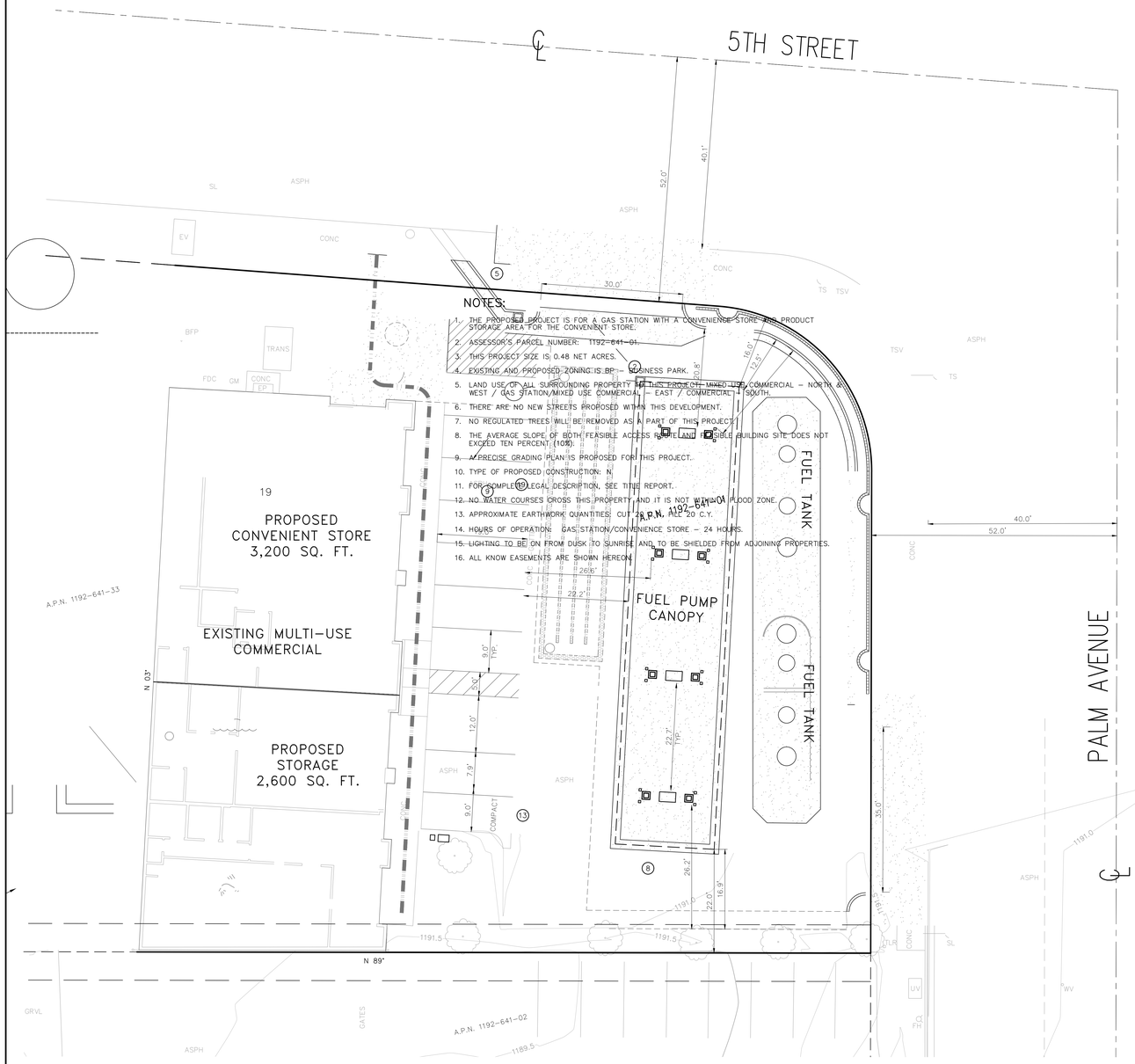
REGISTERED PROFESSIONAL ENGINEER BERNHARD K. MAYER NO. 36866 Exp. 6-30-22 CIVIL STATE OF CALIFORNIA

SITETECH INC.
8061 CHURCH ST. HIGHLAND CA 92346 PO BOX 592
PH: (909) 864-3180, FAX: (909) 864-0850

09/14/2020
BERNHARD K. MAYER R.C.E. 36866 DATE

Exhibit B:

Site Plan

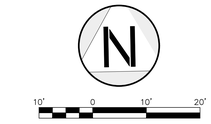


CONSTRUCTION NOTES:

1.

2.

3.



SCALE: 1"=10'

LEGEND:

- INDICATES STREET CENTERLINE
- INDICATES ADJACENT PROPERTY LINE
- INDICATES PARCEL BOUNDARY
- INDICATES DRAIN LINE
- INDICATES FLOWLINE SWALE
- INDICATES EXISTING CHAIN-LINK FENCE

FF=1190.95 - INDICATES FINISH FLOOR ELEVATION

CITY OF HIGHLAND, CALIFORNIA

SITE PLAN

8020 PALM AVENUE

A.P.N. 1192-641-01

A PORTION OF THE SOUTH 1/2 OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF HIGHLAND, COUNTY OF SAN BERNARDINO, CALIFORNIA.

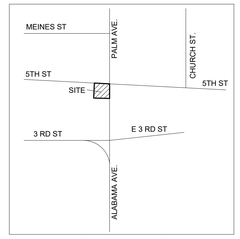
SITETECH, INC. JANUARY, 2021

OWNER/APPLICANT:

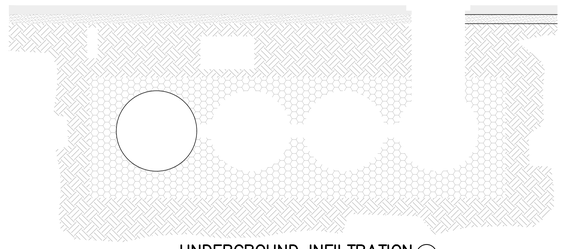
GHULAM SARWAR
5052 WESTMONT STREET
RIVERSIDE, CA 92507
PH: (951) 536-0786

ENGINEER/MAP PREPARER:

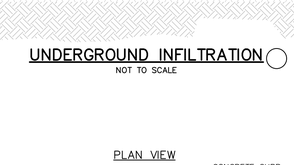
SITETECH, INC.
8061 CHURCH STREET
P.O. BOX 592
HIGHLAND, CA. 92346
PH: (909) 864-3180



VICINITY MAP
NO SCALE



UNDERGROUND INFILTRATION
NOT TO SCALE



STORM DRAIN MESSAGE DETAIL (16)
NO SCALE

COMPANIES AND AGENCIES SERVICING THIS PROJECT ARE AS FOLLOWS:

WATER/SEWER:
EAST VALLEY WATER DISTRICT
31111 GREENSPOT ROAD
HIGHLAND, CA. 92346
PH: (909) 889-9501

TELEPHONE:
PACIFIC BELL
2828 E. CORONADO ST., 2ND FLOOR
ANAHEIM, CA. 92807
PH: (714) 666-5415

SCHOOL DISTRICT:
SAN BERNARDINO UNIFIED
777 NORTH F STREET
SAN BERNARDINO, CA. 92410
PH: (909) 793-2301

POWER:
SOUTHERN CALIFORNIA EDISON CO.
287 TENNESSEE STREET
REDLANDS, CA. 92373
PH: (909) 307-6767

CABLE:
TIME WARNER CABLE
1722 ORANGETREE LANE
REDLANDS, CA. 92374
PH: (909) 798-3588

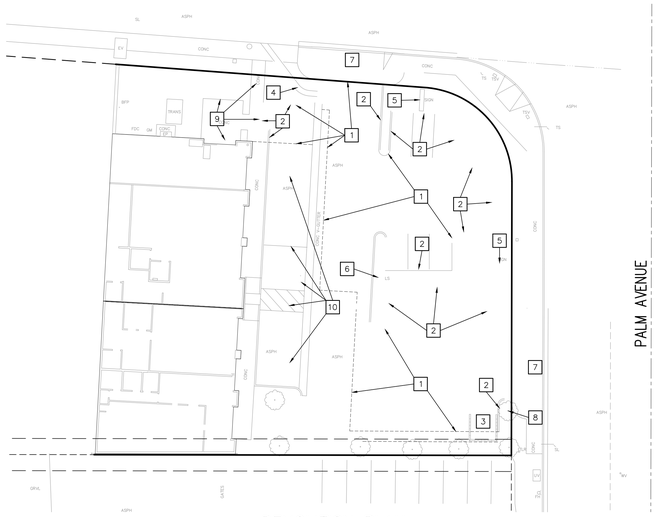
GAS:
SOUTHERN CALIFORNIA GAS CO.
155 SOUTH "G" STREET
SAN BERNARDINO, CA. 92401
PH: (909) 335-7928

LOT COVERAGE:

TOTAL SITE	21,040 S.F.	
CONVENIENCE STORE AREA	3,200 S.F.	= 15.2%
WAREHOUSE AREA	2,600 S.F.	= 12.4%
PUMP STATION CANOPY AREA	2,062 S.F.	= 9.8%
PARKING/DRIVEWAY/WALKWAYS	11,028 S.F.	= 52.4%
LANDSCAPING/OPEN SPACE	2,150 S.F.	= 10.2%

PARKING SPACE ANALYSIS:

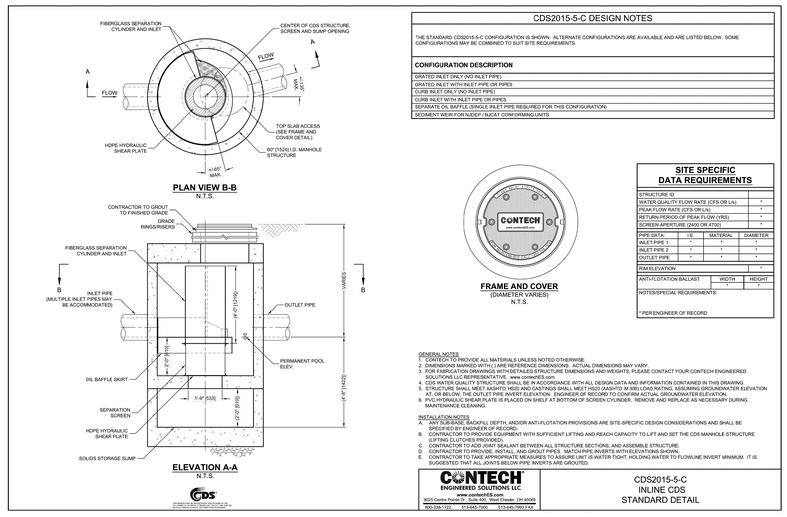
Land Use/Req'mt.	Parking Rate	Bldg. Size/Rate	# of Stall Reqd:
CONVENIENCE STORE	1 Stall/ 250 S.F.	3,200 SQ.FT. STORE AREA	13
WAREHOUSE	1 Stall/ 1000 S.F.	2,600 SQ.FT. STORE AREA	3
Handicap Stalls (HC)	1-25 REGULAR STALL BRACKET (REQ.D')		1
TOTAL PARKING STALLS REQUIRED: 18 SPACES (2 MUST BE HANDICAP)			
PARKING STALLS PROVIDED:		(8 = STD. 9'x18')	
		(1 = STD. 7.5'x18')	
		(8 = Gas Pumps)	
		(1 = Van Handicap 12'X18')	
		(1 = Loading Zone)	
		19	
TOTAL PARKING STALLS PROVIDED:			



DEMOLITION PLAN
SCALE: 1"=20'

DEMOLITION NOTES:

1. REMOVE EXISTING ASPHALT PAVING
2. REMOVE EXISTING CURB
3. REMOVE EXISTING TRASH ENCLOSURE
4. REMOVE EXISTING PARKWAY DRAIN
5. REMOVE EXISTING SIGN
6. REMOVE EXISTING LIGHT STANDARD
7. REMOVE EXISTING DRIVE APPROACH
8. REMOVE EXISTING TREE
9. REMOVE EXISTING CONCRETE SIDEWALK
10. REMOVE EXISTING STRIPING



CDS2015-5-C DESIGN NOTES

THE STANDARD CDS2015-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			
ANTI-FLOTATION BALLAST	WIDTH *	HEIGHT *	
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS ARRIVED WITH (+) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. THIS CONSTRUCTION DRAWING IS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS. PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contech-cpi.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO H20 AND CASTINGS SHALL MEET H20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. A STEEL SEPARATION SCREEN PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE VERIFIED BY THE ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contech-cpi.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2015-5-C
INLINE CDS
STANDARD DETAIL

HYDRODYNAMIC SEPARATOR UNIT (CDS)
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER BERNHARD K. MAYER No. 36866 Exp. 6-30-22 CIVIL STATE OF CALIFORNIA

SITETECH INC.
8061 CHURCH ST., HIGHLAND CA 92346 PO BOX 592
PH: (909) 864-3180, FAX: (909) 864-0850

BERNHARD K. MAYER R.C.E. 36866 — 01/05/2021 DATE

Exhibit C:

Site Photos


East Face



East Face



North Face



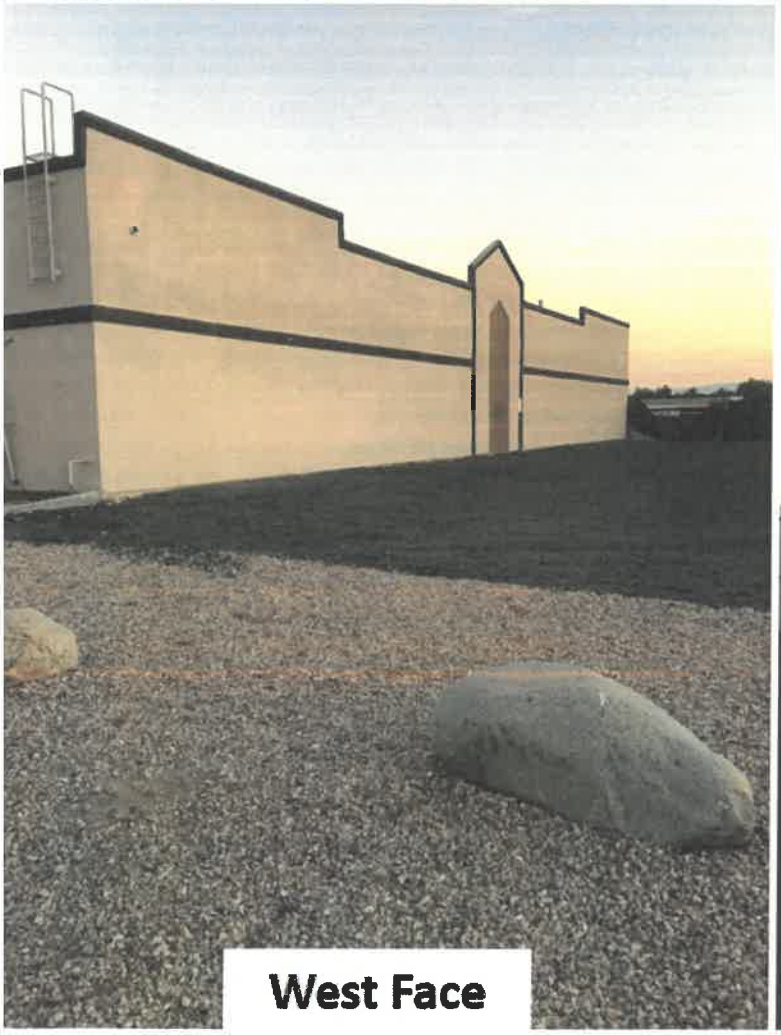
North Face



East Face



East Face



West Face



South Face

Exhibit D:

Corner Statement



CITY OF HIGHLAND, CA
12/18/2020

VIEW FROM INTERSECTION

MATLOCK
DESIGN BUILD
LIONSBERG AEC



CITY OF HIGHLAND, CA
12/18/2020

VIEW FROM PALM AVE.

MATLOCK
DESIGN BUILD
LIONSBERG AEC

Exhibit E:

Landscape Plan

Attachment 1:

Resolution No. 2021 – ____ for

Conditional Use Permit (CUP 20-003)

RESOLUTION NO. 2021 - ____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HIGHLAND, CALIFORNIA, APPROVING A CONDITIONAL USE PERMIT (CUP 20-003), TO REDEVELOP AN EXISTING 5,800 SQUARE FOOT COMMERCIAL BUILDING INTO A CONVENIENCE STORE AND THE ADDITION OF A COVERED FUELING STATION FACILITY WITH EIGHT (8) FUEL PUMPS ON A 0.48 ACRE PARCEL LOCATED AT 8020 PALM AVENUE. ASSESSOR'S PARCEL NUMBER: 1192-641-01.

OWNER / APPLICANT: GHULAM SARWAR

A. RECITALS

1. The Applicant filed an application with the City of Highland to for a Conditional Use Permit (CUP 20-003) to redevelop an existing 5,800 square foot commercial building into a convenience store and the addition of a covered fueling station facility with eight (8) fuel pumps on a 0.48 acre parcel located at 8020 Palm Avenue.

2. On January 19, 2021, the Planning Commission of the City of Highland conducted an on-line public hearing on the subject Application and concluded the hearing on that date.

3. All legal prerequisites to the adoption of this Resolution have occurred.

4. Pursuant to CEQA, project is Categorically Exempt from environmental proceedings pursuant to Section 15301, Class 32, In-Fill Developments, of the California Environmental Quality Act (CEQA) Guidelines, since:

   (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

   (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

   (c) The project site has no value as habitat for endangered, rare or threatened species.

   (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

   (e) The site can be adequately served by all required utilities and public services.

B. RESOLUTION

NOW THEREFORE, it is hereby found, determined and resolved by the Planning Commission of the City of Highland as follows:

1. The Planning Commission finds that all of the facts set forth in the Recitals, Part "A" of this Resolution, are true and correct.

2. The City of Highland Planning Commission after due consideration, inspection, investigation and study made by itself and on its behalf, and after due consideration of all evidence and reports offered at said hearing, including the staff report to the Planning Commission dated January 19, 2021, which is incorporated herein by this reference, does find and determine the following facts:

   a. All necessary public meetings and opportunities for public testimony and comment have been conducted in compliance with State Law and the Municipal Code of the City of Highland.

3. Findings of Fact (Conditional Use Permit (CUP 20-003):

   a. The proposed use is permitted within the subject district pursuant to the provisions of this section, and complies with all of the applicable provisions of this title; and is consistent with the goals, policies, and objectives of the Highland General Plan, and the applicable development policies and standards of the city.

      Response: The project is located within the Business Park (BP) land use designation, and proposes to establish a convenience store and fueling station at a primary intersection within the City of Highland. There is appropriate street frontage, setbacks from the right-of-way lines for each of the adjacent roadways, and onsite amenities that satisfy the site development standards for Service Stations per Section 16.44.200 of the Highland Municipal Code. The use of this property as a convenience store and fueling station is permitted in the Business Park (BP) zone, subject to the approval of a Conditional Use Permit.

   b. The proposed use would not impair the integrity and character of the district in which it is to be established or located.

      Response: The establishment of a convenience store and fueling station in this portion of the city will not impair the integrity and/or character of the district or its surroundings. The proposed use is appropriate in nature and in keeping with the development standards of the Business Park (BP) zoning classification. Reestablishing a convenience store and installing a new fueling station on a property is not anticipated to negatively affect

surrounding businesses, as there is an existing fueling station across Palm Avenue, and it is not uncommon for fueling stations to be across the street from one another. Therefore, no significant impacts to the existing quality of the site or its surroundings would occur as a result of the project.

c. The site is suitable for the type and intensity of use or development which is proposed.

Response: The project is suitable and permitted within the Business Park (BP) zone, and proposes to reestablish a convenience store utilizing the existing building of a prior restaurant. The fueling station proposes eight (8) fuel pumps with a re-fueling of the station tanks between the hours of 9:00pm and 5:00am when the station will likely experience low usage. With a requirement of 1 space per 250 square feet of total commercial use area, the five (5) proposed 9-foot wide parking spaces in addition to the 7.5-foot wide compact space and 12-foot wide handicap space will bring the total available parking spaces for the convenience store to seven (7). Additionally, the requirement for 1 space per 1,000 square feet of "storage use" area is met by the three (3) other parking spaces available onsite. The ten (10) total parking spaces provided along the storefront in addition to the eight (8) parking spaces at the fuel pumps will exceed the parking requirement for the proposed use.

d. There are adequate provisions for water, sanitation, and public utilities and services to ensure public health and safety.

Response: The project site is already being served by water, sewer, public utilities, as well as served by the City of Highland Fire and Police Departments. There are adequate provisions for water, sanitation, and public utilities and services to ensure public health and safety.

e. The proposed use will not be detrimental to the public health, safety, or welfare, or materially injurious to properties and improvements in the vicinity.

Response: The establishment of a convenience store and fueling station in this portion of the city will not be detrimental to the public health, safety, or welfare, or materially injurious to properties and improvements in the vicinity. Adequate measures have been proposed to offset the reduction of onsite landscaping and parking availability has been exhibited on the proposed site plans. The conditions of approval have been provided to ensure compliance with applicable development policies and standards within the city.

f. The proposed use would not result in a significant effect on the environment.

Response: The proposed convenience store and fueling station is not expected to have a significant impact on the environment. Per CEQA Guidelines, this project is Categorically Exempt from environmental proceedings pursuant to Section 15301, Class 32, In-Fill Developments, of the California Environmental Quality Act (CEQA) Guidelines, since:

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

4. Based on the Findings of Fact set forth above, the Planning Commission approves Conditional Use Permit (CUP 20-003) to redevelop an existing 5,800 square foot commercial building into a convenience store and the addition of a covered fueling station facility with eight (8) fuel pumps on a 0.48 acre parcel located at 8020 Palm Avenue.

C. ADOPTION OF RESOLUTION.

The City Clerk shall certify to the adoption of this Resolution and shall cause the same to be published or posted in the manner prescribed by law.

Exhibit 1 attached provides the Conditions of Approval for the project.

PASSED, **APPROVED,** and **ADOPTED** this 19th day of January, 2021.

ATTEST:

Randall Hamerly, Chairman
Planning Commission

Lawrence A. Mainez
Community Development Director

Exhibit 1:

Conditions of Approval

CITY OF HIGHLAND
PLANNING DIVISION CONDITIONS OF APPROVAL

Date:	January 19, 2021
Applicant:	Ghulam Sarwar
Project No:	Conditional Use Permit (CUP 20-003)
Proposal:	Conditional Use Permit (CUP 20-003) to redevelop an existing 5,800 square foot commercial building into a convenience store and the addition of a covered fueling station facility with eight (8) fuel pumps on a 0.48 acre parcel located at 8020 Palm Avenue.
Location:	8020 Palm Ave Highland, CA 92346 Southwest corner of Palm Avenue and 5th Street Assessor's Parcel Number: 1192-641-01

PLANNING CONDITIONS

These conditions of approval represent the Planning Division's conditions of approval and are meant to be one part of overall conditions of approval that may include, Engineering, Building and Safety, Fire Department, and other agency conditions of approval.

The conditions below are continuing conditions. Failure of the Applicant and/or operator to comply with any or all said conditions at any time shall result in the revocation of this permit granted to use the subject property.

1. This Conditional Use Permit shall become null and void:
   a. Unless all conditions have been complied with and the occupancy or use of the land or structures authorized by this conditional use permit have occurred within thirty-six (36) months from the approval date of this conditional use permit, this conditional use permit shall expire and be null and void without further action by the City of Highland.

   b. Where circumstances beyond the control of the Applicant cause delays which do not permit compliance within the time limitation established in this Section, the Planning Commission may grant an extension of time for a period of time not to exceed an additional thirty-six (36) months. An application for an extension of time must be set forth in writing, stating the reasons for the extension, and must be filed with the Planning Division a minimum of thirty (30) calendar days prior to the expiration of the conditional use permit. Such application shall be filed together with the City's processing fee, as established by the City Council.

2. This Conditional Use Permit is for the redevelopment of an existing 5,800 square foot commercial building into a 1,750 square foot convenience store, a covered fueling station facility with eight (8) fuel pumps, and a 1,450 square foot attached storage room and an adjacent 2,600 square foot storage facility.

   a. The approval of the Conditional Use Permit is only applicable to the proposed Site Plan design and attached Landscape Plan for the property.

   b. The approval of the fuel canopy in regard to the size and shape and other design features will be determined by the future tenant and will be approved by the Planning Commission upon submittal of a Design Review Application at a later date. Said Design Review Application shall be approved prior to the issuance of any building permits related to the subject Conditional Use Permit.

3. All "convenience store" business activity shall be conducted within the 1,750 square foot store area. No outside displays and/or vending shall be permitted on the property.

4. All permanent parking areas shall be paved and permanently maintained with asphalt or concrete and designated with clearly painted lines. The number of parking spaces, including disabled parking, shall comply with the requirements of the City's Municipal Code. A minimum of ten (10) parking stalls is required on-site (Parking Requirement = 1 space / 250 sf for commercial use. 1 space / 1,000 sf for storage facility use).

5. The applicant shall construct a prominent decorative corner statement at the Palm Avenue and 5th Street intersection. The corner statement shall incorporate design features such as stones, wrought iron accents, and a "City of Highland" logo/scripture. Final design shall be approved by the Planning Commission and be completed prior to the release of occupancy for the convenience store by the Building Official.

   a. The decorative corner statement shall have a minimum height of 3 feet and a maximum height of 5 feet.

   b. The decorative screening wall shall span the full length of the Palm Avenue frontage and the full length of the 5th Street frontage, excluding drive approaches and line of site setbacks as determined by the City Engineer.

   c. Wrought iron accent railing/fencing shall be placed atop the decorative screening wall along the Palm Avenue and 5th Street frontage.

   d. If the wall behind the intersection curb ramp is enhanced, then the landscape directly in front of the "City of Highland" logo/scripture should be low-growing and clear of trees / palms.

6. Landscape planting at frontage areas along Palm Avenue and 5th Street shall include plant massings in layers of at least three different shrub and groundcover species. Clumping Gazanias can remain as a uniform species massing in front of the intersection-facing "City of Highland" signage but shall be supplemented with additional plant species in all other planter areas along the frontage.

7. Fan Palms shall be installed with trunks skinned to a clear height of 8 feet minimum above finished grade.

8. Materials, textures, colors, and design of all walls shall be compatible with on-site development and adjacent properties. No wall higher than three feet in height shall be constructed within five feet of a driveway entrance or vehicle access way which opens onto a street or alley. Walls shall be constructed so as to ensure a clear cross view of pedestrians on the sidewalk, alley, or elsewhere by motorists entering or exiting the parcel. (Line of sight triangle as approved by City Engineer).

9. The site shall be entirely paved, as approved by the Planning Commission, except for buildings and landscaping.

10. Provide a public restroom which is accessible to the general public and physically disabled during all hours the service station is open to the public.

11. Trash enclosure shall be screened on at least three sides from public view by a solid wall not less than five feet in height. Permanent opaque panel gates shall be installed on all openings to the trash enclosure and meet the design criteria established by the public services division.

    a. All trash shall be deposited in the trash area and the gates leading thereto shall be maintained in working order and shall remain closed except when in use.

12. Obtain all required building/occupancy permits from the Highland Building and Safety Division.

13. The Applicant is responsible for implementing all conditions of approval to the satisfaction of the Community Development Director, City Engineer, Fire Department, and Police Department. No final inspection or clearances shall be given until all conditions are met. Each condition of approval is separately enforced, and if one of the conditions of approval is found to be invalid by a court of law, all the other conditions shall remain valid and enforceable.

14. Revisions, modifications, and/or deletions to the approved plans shall be submitted to the Planning Division for review and approval. Revisions, modifications and/or deletions may require additional review by the Planning Commission.

15. In compliance with the Highland Municipal Code, the Applicant/Owner shall agree, at his/her sole cost and expense, to defend, indemnify, and hold harmless, the City, its officers, employees, agents, and consultants, from any claim, action, or proceeding brought by a third-party against the City, its officers, agents, and employees, which seeks to attack, set aside, challenge, void, or annul an approval of the City Council, Planning Commission, or other decision-making body, including staff, concerning this project. The City may, at its sole discretion, participate at its own expense in the defense of any such action but such participation shall not relieve the Applicant/Owner of his/her obligations under this condition.

16. The Applicant and Owner of the property shall submit to the Planning Division written evidence of agreement with all conditions of this approval before the approval becomes effective.

17. Prior to issuance of a certificate of occupancy and/or final inspection for the fueling station facility by the City, all landscaping, irrigation or other construction shown on the approved landscaping and irrigation plans, shall be installed and approved by the City's Landscape Architect.

18. All parking spaces shall be provided with nighttime security lighting. Lighting must be shielded and directed to reflect away from neighboring properties. Lighting shall not exceed 0.5 foot candles of illumination beyond the property boundary, as approved by the Planning Commission.

19. The future sale of alcoholic beverages onsite shall require the approval of a separate Conditional Use Permit (Highland Municipal Code, Title 16, Chapter 16.24, Table 16.24.030.A (C.47)).

City of Highland

Engineering Department
Conditions of Approval
CUP 20-003
8020 Palm Avenue - SWC Palm Avenue and 5th Street

A –
B – Required Prior to Building Permit/Construction
C – Required Prior to Occupancy
D – Ongoing
E – Required Prior to Grading Permit
* – Non-Standard Conditions

E 1. Submit a preliminary soils report, prepared by a licensed Geotechnical Engineer, for review and approval by the City Engineer. Comply with the recommendations contained in the report and any amendments thereto as approved by the City Engineer.

E 2. Submit rough and/or precise grading plans to the City Engineer for review and approval. Comply with the City of Highland grading standards as shown on the Grading Plan Checklist.

E 3. Design grading and on-site improvements to drain the entire site to the proposed underground infiltration basins. Construct a curb outlet structure at the southwest corner of the site to convey storm flows in excess of the capacity of the underground infiltration basins to Fifth Street.

E 4. Submit structural design and location for any required retaining walls for review and approval by the City Engineer. Install concrete v-ditches at the back of retaining walls in accordance with the Grading Plan Checklist.

E 5. The grading and landscaping plans must comply with the City's clear sight triangle criteria at public street intersections and at private driveways. Walls, fencing, monument signs, slope, and landscaping, within the clear sight triangle, must not exceed thirty inches in height measured from the flowline of the street, unless a sight distance analysis that demonstrates sight distance is adequately maintained is submitted to and approved by the City Engineer.

E 6. Submit an erosion control plan to minimize potential increases in erosion and sediment transport during construction activity for City Engineer approval. Place erosion control measures during or after grading work as required by the City Engineer.

E 7. Design short term erosion control in accordance with Best Management Practices such as, silt fencing to control the site perimeter, and straw bale barriers, sand bag

barriers, rock filters or sediment basins to control internal erosion, or other methods to stabilize disturbed areas, as approved by the City Engineer.

D 8. Implement dust control measures during construction activities including, but not limited to, daily watering of construction area as frequently as necessary during active and inactive periods, utilizing soil emulsions, limiting construction vehicle speed to 15 miles per hour, stabilizing construction entrances to prevent trackout of sediments, and street sweeping.

B 9. Submit original wet signed and stamped rough grading certifications from the soils engineer and the grading engineer, along with compaction reports, to the City Engineer.

C 10. Submit original wet signed and stamped final grading certification from the grading engineer, to the City Engineer.

STREET IMPROVEMENTS

C* 11. Remove the existing sidewalk and curb and gutter on Palm Avenue and Fifth Street necessary to construct new driveway approaches at the project entrances. Remove the existing driveway approaches that will not be used and construct curb and gutter and a 6-foot curb adjacent sidewalk.

C 12. Install traffic control signs and pavement markings with locations and types as approved by the City Engineer.

C* 13. Make a cash payment, or submit an alternative financial commitment, to guarantee the design and construction of a raised landscaped median across the 5th Street project frontage, as approved by the City Engineer.

E 14. Design public improvements including sidewalk, drive approaches, and access ramps in accordance with all requirements of the State of California Accessibility Standards, Title 24 California Administrative Code. Truncated domes shall be dark gray Armor-Tile Cast in Place System manufactured by Engineered Plastics, Inc.

WATER QUALITY/DRAINAGE

E 15. Obtain approval by the City Engineer of a Final Water Quality Management Plan (F-WQMP), prepared in accordance with the City's National Pollutant Discharge Elimination System (NPDES) permit requirements in effect at the time the Preliminary Water Quality Management Plan was approved unless subsequent City NPDES permits require otherwise. The F-WQMP shall (1) be prepared, signed, and sealed by a licensed Civil Engineer, (2) include Site Design Low Impact Development and Source Control Best Management Practices (BMPs) appropriate for commercial development, (3) include a BMP implementation, operation, and funding mechanism, and (4) be certified by the property owner. The property owner shall also enter into a Stormwater BMP Transfer, Access, and Maintenance Agreement with the City on the City form. Include a copy of the recorded agreement in the F-WQMP. Construct BMPs in accordance with the approved F-WQMP.

E 16. Submit two (2) sets of WQMP BMP Exhibits with a "WQMP BMP As-Built Certificate" wet signed and sealed by the Engineer of Record. The Certificate shall state:

"I hereby certify that the Water Quality Management Plan Best Management Practices have been constructed under my supervision in accordance with the approved plans and are functional to the best of my knowledge."

E 17. Prepare and submit a hydrology study to determine storm runoff quantities generated by the site. Construct on-site features to drain the site, via gravity flow, discharging to 5th Street post water quality treatment via an undersidewalk drain. Include hydraulic calculations to determine the size, locations and type of all drainage pipes, inlets, and catch basins.

E* 18. The proposed pretreatment system (Contech CDS or approved equal) shall be sized with a treatment flow capacity equal to or greater than the 100-year, 1-hour peak flow rate.

E* 19. The existing roof drains shall be retrofitted to connect to the proposed on-site storm drain system. The proposed pump canopy roof drains shall be collected in a pipe that will direct flows through the proposed grated inlet and through the pretreatment system.

D* 20. Two infiltration tests using a double-ring infiltrometer shall be conducted during construction once the excavation for the underground infiltration system is complete to confirm the design infiltration rate. After obtaining the results fro the tw test, the Engineer and Geotechnical Engineer shall determine if additional testing is required.

MAP/DEDICATION/ANNEXATION

C* 21. Dedicate a landscape easement across the Palm Avenue and Fifth Street frontages as approved by the City Engineer.

C* 22. Apply to the City to annex the project into the City's Landscape Maintenance District for maintenance of the 5th Street future median landscaping across the project frontage. Submit a ballot to the City agreeing to the annexation and amount of assessment. Future landscaping in the median will be maintained by the City utilizing LMD revenue.

C* 23. Apply to the City to annex the project into the City's Consolidated Landscape and Lighting District (LMD) for potential City maintenance of parkway and frontage landscaping along Palm Avenue and Fifth Street. Sign a ballot prepared by the City agreeing to the annexation and amount of assessment, which will include a one-time assessment to install a water meter, an electric meter and pedestal, a backflow device and enclosure, a controller and pedestal, and an ongoing assessment for maintenance of parkway and frontage landscaping. Parkway and frontage landscaping shall be maintained by the property owner. The City will maintain the parkway and frontage landscaping utilizing LMD revenue only if the City determines that adequate maintenance is not being provided by the property owner.

FEES/PERMITS

D 24. Pay appropriate engineering fees for assessment district annexation, plan check, hydrology study review, water quality management plan review, retaining wall calculation review, on-site and off-site inspection, utility excavation permits, GIS map plan update, microfilming and storage of maps and plans, and other required fees.

E 25. Post a deposit for erosion control based on an estimate of the cost to perform the erosion control work prepared by the project engineer as approved by the City Engineer. The deposit shall not be released prior to completion of all on-site construction.

B 26. Obtain a permit from engineering prior to any on-site construction or construction within the City's right-of-way.

UTILITIES/CONSTRUCTION

C 27. Provide each building within the project with **necessary** underground wet and dry utility services including water, sanitary sewers, gas, electric, telephone, internet, and cable TV.

C 28. Install electric burd transformers, and telephone, cable television, and internet enclosures underground whenever the underground installation is an available option offered by the utility companies. If the underground installation is not an available option and utility enclosures must be installed above ground, install the above-ground utility enclosures and any flush mount utility enclosures at locations where construction of retaining walls will not be necessary for compliance with the setback requirements of the utility companies.

D 29. Install construction fencing and screening in accordance with Building and Safety Division Policy 335.

C 30. Reconstruct public improvements damaged or removed during construction and/or installation of underground utilities, as approved by the City Engineer. Construct pavement repair, which may include A.C. overlay, T-cut trench repair and/or slurry seal, across all or a portion of damaged pavement as determined by the City Engineer.

B 31. Destroy any abandoned wells on the property or similar structures that might result in contamination of underground waters in a manner approved by the City Engineer.

B 32. All underground structures, except those to be retained for use in the development, must be removed, broken in, or backfilled, as approved by the City Engineer.

C 33. Submit "Record Revisions" to construction plans which reflect the improvements as constructed, and any changes made during construction of public improvements such as streets, storm drains, parks, trails, public landscaping, etc. Provide original mylars and AutoCAD files.

D 34. Comply with the City's Public Works Policies, Procedures and Standards prevailing at the time of permit issuance.

Building and Safety Division Conditions of Approval

Date:	12/29/2020
Applicant:	Ghulam Sarwar
Applicant Address:	5052 Westmont St. Riverside, Ca 92507
Site Location:	8020 Palm Ave.
Phone:	951-536-0786
APN:	1192-641-01-0000

1. Please provide the following construction plans and documents listed below for review of the proposed project. The initial plan review time will take two weeks on most projects. The applicant will receive a plan review number at the time plans are submitted for Building & Safety's plan review. This plan review number is needed to obtain information regarding your project.

    (3) Architectural Plans
    (3) Structural Plans
    (3) Structural Calculations
    (3) Plot/Site Plans
    (3) Electrical Plans
    (3) Electrical Load Calculations
    (3) Plumbing Plans/Isometrics
    (3) Mechanical Plans
    (3) HVAC Duct Layout Plans
    (3) Roof and Floor Truss Plans
    (3) Title 24 Energy Calculations
    (3) Geology Report
    (3) Soils Report
    (3) Precise Grading Plans
    (3) Site Disabled Access Plan
    (3) Condition of Approval Packages - include in each plan set
    (3) Temporary Fence Plan
    (1) Approved Health Department Plans

2. All structures shall be designed in accordance with the current version of the California Building Codes, including the California Green Building Standards Code. Design all structures to comply with Seismic Design Category D, wind speed 96 MPH, at exposure "C", and Energy Climate Zone 10.

3. Building and Safety does not release all meters until final approvals are obtained from all agencies and departments. Policy 295.

4. It has come to the Cities attention that premature failures have occurred in copper piping when used within the City of Highland, particularly east of City Creek. Property Owners, Contractors and Developers are advised to analyze soil and water compositions when considering the type of pipe material to be utilized. City staff makes no recommendations on which Plumbing Code approved products or methods to utilize, this is the responsibility of the property owner or contractor. Alternate unapproved code materials may be submitted for City approval at the time of plan submittal.

5. The Developer/Owner is responsible for the coordination of releasing any Deferral of Development Impact Fees or Bonds after such fees have been paid. The Developer/Owner should be aware, once the deferral notice is sent to the San Bernardino County Recorder's Office; the release process takes two to three weeks. This process will delay final Certificates of Occupancy.

6. The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall request clearances from each department and/or agency at least two weeks prior to requesting a final building inspection from Building and Safety. Each agency shall sign the Building and Safety Job Card and provide a copy of the signatures to Building and Safety at the time a final inspection is requested.

7. Projects requiring County Health and/or San Bernardino Environmental Control, such as food services or interceptors, need to obtain those permits prior to building permit issuance.

8. Building and Safety inspection requests can be up until 4:00 pm in advance for the next day inspection. Calls that are received after 4pm will be scheduled two days from the request. Please contact (909) 864-2136, Ext 228.

9. A security fence with screening shall protect all construction sites. The fencing and screening shall be maintained at all times to protect pedestrians.

10. On site toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3 and on site per NPDES stormwater requirements.

11. All construction materials, which are not used, shall be recycled pursuant to the requirements set forth by Ordinance No. 269. Receipts from the recycle company responsible for picking up the materials shall be kept in the construction office. After the construction is complete and before final occupancy, the trash receipts shall be forwarded to the City Public Services division.

12. Construction projects, requiring temporary electrical power, shall obtain an electrical permit from Building and Safety. No temporary electrical power will be granted to a project unless the following item is in place and approved by Building and Safety and the Planning Division.

    a) Installation of a construction trailer through the "Temporary Occupancy Permit", alternatively, a security fenced area where the electrical power will be located. Installation of construction/sales trailers must be located on private property. No trailers can be located in the street unless a permit from the Engineering Department is obtained.

13. Prior to the issuance of Building Permits, on site water service shall be installed and approved by the responsible agency. On site fire hydrants shall be approved by the Fire Department. No flammable materials will be allowed on the site until the fire hydrants are established and approved. No flammable construction materials shall be placed on the site without approvals by the Fire Department. All street and access roadways around the project shall be paved for emergency response vehicles before flammable materials are placed on the project.

14. Construction projects requiring fire permits must apply and submit fire plans prior to the issuance of the building permit, including fire sprinkler submittals.

15. Prior to issuance of permits, site-grading certifications and compaction reports shall be submitted to Building and Safety or Public Works, as applicable.

16. Prior to issuance of building permits, provide a receipt from the appropriate Unified School District stating that all school fees have been paid. (Redlands or San Bernardino Unified School Districts)

17. All construction projects shall comply with the NPDES Stormwater Best Management Program. Prior to building permit issuance submit copy of the Water Quality Management Program Report. (WQMP)

18. Prior to final inspection, provide Building & Safety with a flash disk of the approved plans and documents.

19. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits and access to all paths of travel. All route(s) of travel shall comply as accessible route(s) of travel.

20. The City enforces the State of California provisions of the California Building Code disabled access requirements. The Federal Americans with Disabilities Act (ADA) standards may differ in some cases from the California State requirements, therefore it is the building owner's responsibility to be aware of those differences and comply accordingly.

City of Highland, **FIRE PREVENTION DIVISION,** Conditions of Approval.

DATE : May 13, 2020

DESCRIPTION : New Fueling Station

ADDRESS : 8020 Palm Avenue

SITE LOCATION : SouthWest corner of Palm Avenue and 5th Street

FILE / INDEX No.: CUP 20-003

A tiered level of mitigation options has been developed and listed below are the systems and/or modifications required for your project. Compliance of the following items are a condition of **FINAL OCCUPANCY APPROVAL**. These conditions are required as acceptable solutions to the adverse fire conditions impacting firefighting and emergency operations accompanying the site/area. They will either assist in detection and extinguishment of the fire and/or facilitate the anticipated emergency operations.

This project is protected by the City of Highland Fire Department / Cal-Fire / California Department of Forestry and Fire Protection. Prior to any construction occurring on any parcel, the applicant shall contact the city of highland fire marshal office for verification of current fire protection development requirements. All new construction shall comply with the currently adopted California Fire Code and all applicable statutes, appendices, codes, ordinances, standards and policies of the City of Highland Fire Department/ Fire Prevention Division / Cal-Fire / California Department of Forestry and Fire Protection.

Fire Department Review of all projects is required.

ALL CONSTRUCTION (New and renovations to existing) SHALL COMPLY WITH THE CALIFORNIA FIRE CODE Along with amendments as adopted within the Highland Municipal Code (Ord. #411).

Note: All weather access roads (CFC) and fire hydrant/water system installations shall be in place, inspected and approved, **PRIOR** to combustible material being brought on site.

GENERAL.

1. **HF31:** Approved fire hydrant pavement markers (blue dots) shall be installed at every hydrant.

2. **HF51:** The main electrical panel and all sub-panel(s) shall be labeled on inside cover for all circuits. **CEC**

3. **HF55:** Commercial exit requirements:
   A. Required exit doors shall be maintained in an operable condition at all times
   B. Required exit doors shall swing outward and away in the direction of exit travel.
   C. Obstructions shall not be placed in the required width of an exit. Exits shall not be blocked or locked shut or obstructed in any manner during business hours.
   D. Exit paths shall be illuminated when structure is occupied.
   E. Exit path illumination shall be supplied from two (2) sources of power when occupant load is one hundred (100) persons or more.
   F. When exit way/exit pathway and/or exit doorway is not easily identified, additional exit signs shall be installed.

4. Exit signs shall be internally or externally illuminated by two lamps or shall be of the self-luminous type. **CFC; CBC**

5. **HF60:** Additional plans for access, fire safety systems, fire lanes and signage, gates, storage, or other special conditions may be requested for review, conditioning and approval by the fire marshal.

6. **HF56:** All flammable and combustible liquid storage and dispensing shall be in accordance with applicable sections of the **CFC, T-19** and city codes and ordinances.

7. **HF48:** A class "A" roof covering structure with "bird stops" shall be installed.

ACCESS:

8. **HF7:** Fire department **access** roads shall meet the fire dept. minimum unobstructed width of twenty (20) feet. (twenty-six (26) feet within FR-1&2 zones). **This standard shall not lessen other agency requirements.** Access roads shall be paved (asphalt/concrete) and in place **prior** to delivery of combustible building materials on site. Roads shall be designed and constructed to meet adopted city standards. **CFC**

9. **HF8:** All access roads, public, private streets and residential driveways shall maintain a minimum vertical clearance of thirteen (13) feet-six (6) inches. **CFC**

10. **HF11:** Fire department access roadway(s) and/or public/private street(s) exceeding one hundred fifty (**150**) feet in length shall provide an approved turn-around at the terminus (**cul-de-sac**). Minimum radius shall be **not less than forty (40)** feet. Or as approved by the fire marshal. Cul-de-sacs providing access

to perimeter emergency access roads shall have a minimum radius of forty four **(44)** feet. **CFC / APPENDIX D, SBCO TRANSPORTATION STD**

11. **HF12:** Fire department access roadway(s); public/private street(s) and driveways shall not exceed 12% grade. **CBC / APPENDIX D, HMC**

12. **HF13:** Fire department access roadway(s); shall extend to within one hundred fifty (150) feet of and shall give reasonable access to all portions of the exterior walls of the first story of any building.
    An access road, approved by the fire dept., shall be provided to within fifty (50) feet of all structures when the natural grade between access road and structure is in excess of 30%.
    Where an approved access road cannot be provided, a fire protection system shall be required and approved by the fire department. **CFC**

13. **HF24:** "NO PARKING – FIRE LANE" signs shall be posted at locations designated by fire marshal. Fire lane curbs shall be painted red, with white letters stating, "NO PARKING – FIRE LANE" on top, not face. **CFC - APPENDIX D**

14. **HF54:** commercial and industrial structures-occupancies and gated complexes shall have a "**KNOX BOX**" system installed on the exterior of the building(s) or complex. location of device to be determined by the fire department. The box shall contain keys necessary to gain access and may contain pre-plans and MSDS information as required by the fire department. New and existing multi-tenant commercial buildings shall provide a 'KNOX' box large enough to contain keys to access each individual tenant space. Installation location(s) to be determined by the fire marshal. The box shall contain clearly marked keys to each tenant space or other areas as determined by the fire marshal. **CFC**

WATER:

15. **HF25:** Minimum required fire flow, as determined by i.s.o. formula, is as follows: **COMMERCIAL**; GPM = 3000; at 20 psi residual; for 3 hour duration.
    System shall be looped with minimum eight (8) inch mains; six (6) inch laterals, six (6) inch risers; six (6) inch dia. Hydrants with two 2 ½" outlet(s) and one 4" outlet. **CFC APPENDIX B AND C**

Note: Hydrants shall meet EVWD standards.

16. **HF29:** Fire hydrant spacing shall be:
    Commercial retail: 300 FEET
    CFC / APPENDIX B AND C.

Note: Existing fire hydrants (off-site) can be included if they meet spacing requirements. Hydrants shall not be located at the 'bulb' end of cul-de-sacs.

17. **HF27:** Applicant-developer shall provide a letter from the water company serving the project-development, verifying financial arrangements have been made and bonded for the required water improvements. **CFC**

18. **HF28:** Fire hydrants shall be installed, inspected and operational as per approved water system delivery plans **prior** to any framing, construction or delivery of combustible materials to project site. **CFC / CFC**

19. **HF30:** Private, on site fire hydrant(s) – yard hydrant(s)- capable of supplying required fire flow shall be installed at location(s) identified by the fire department. System shall be looped with minimum eight (8) inch mains; six (6) inch laterals, six (6) inch risers; six (6) inch dia. hydrants with one 2 ½" outlet and one 4" outlet. **CFC / APPENDIX B AND C**

20. **HF38:** Approved fire hydrant(s) capable of supplying required fire flow, shall be provided to all premises upon which facilities, buildings or portions of buildings are constructed or moved within the jurisdiction. When any portion of the facility or building protected is in excess of 150 feet from a fire hydrant on a public street, as measured by an approved route around the exterior of the facility or building, additional fire hydrants or on-site fire hydrants, meeting the required fire flow, shall be provided. **CFC APPENDIX B AND C**

ADDRESSING – IDENTIFICATION:

21. **HF21:** **Commercial** and **multi-family residential** address numbers shall be displayed on all **new and existing** structures in such a manner as to be plainly visible and legible from the access roadway or street. Numerals shall be of a contrasting color to the building and electrically illuminated.
Minimum size of the numerals shall be **8"** height, 3/4" stroke, or as approved by the fire marshal.
Industrial occupancies shall have address numbers of 12" height, 1" stroke and shall be electrically illuminated so as to be visible and legible from access roadway or street.
Note: Depending on height and setback of a building, larger numerals may be required and at additional locations on the building, as determined by a case-by-case review.
HMC

22. **HF22:** Commercial-retail structures with rear access shall display address numbers on rear entry doorways, **4"** in height, 1/2" stroke, on contrasting background. **CFC**

FIRE PROTECTION & ALARM SYSTEMS:

23. **HF36:** Automatic fire sprinklers shall be installed according to NFPA 13 and fire dept. requirements. Submit three (3) sets of shop plans with material cut sheets and hydraulic calculations, indicating the type of occupancy, type of materials to be stored (if any), for fire dept. review and approval prior to any installation. Submit copy of California C-16 license. CFC; CBC; HMC

24. **HF37:** Automatic fire sprinkler control devices (P.I.V & O.S.&Y.) Shall be visible from fire dept. access roadway, and identify system being controlled and address of structure.

25. Fire Dept. Connection (FDC) shall be located no closer than forty (40) feet and not to exceed one hundred fifty (150) from structure. Required public fire hydrant shall have a maximum distance from FDC of thirty (30) feet. FDC shall identify address and system of structure being protected. CFC

26. **HF39:** An automatic fixed fire extinguishing system (UL-300) shall be installed in the hood and duct system of commercial cooking equipment. Three (3) sets of shop plans with material cut sheets and calculations shall be submitted to fire department for review and approval prior to installation. CFC

27. **HF41:** A minimum of one 2A-10BC fire extinguisher shall be installed for each 3,000 sq.ft. of floor area. Travel distance to any one fire extinguisher shall not exceed 75 feet. Additional fire extinguishers, size and class to be determined by fire department, may be required. Fire extinguishers shall be serviced bi-annually and shall have a current State Fire Marshall service tag attached. Fire extinguishers are to be serviced every two years and inspected & tagged every year. **CFC**; **NFPA**

28. **HF60:** California Fire Code, **FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION**, shall apply to this project. it is the responsibility of the project manager to meet with the fire marshal to discuss requirements specific to this project.

29. **HF62**: Additional plans for access, fire safety systems, storage or other special condition may be requested for review, conditioning and approval by the fire marshal.

30. **HF63**: Submit to fire marshal's office: **one copy** of building and/or structure plans for fire department review.

Craig Sanchez, Fire Marshal
City of Highland Fire Prevention
(909) 864-8732 x 248