San Fernando

Safe and Active Streets Implementation Plan



THE CITY OF SAN FERNANDO

Safe and Active STREETS IMPLEMENTATION PLAN

Final Plan
February 2022

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San Fernando City Council

Celeste Rodriguez, *Council member*

Cindy Montañez, *Council member*

Hector Pacheco, *Vice Mayor*

Mary Mendoza, *Mayor*

Sylvia Ballin, *Council member*

San Fernando Transportation & Safety Commission

Carlos Hernandez, *Chair*

Dee Akemon, *Commissioner*

Francisco Arrizon, *Vice Chair*

Nicole Mohr, *Commissioner*

Rudy Trujillo, *Commissioner*

San Fernando City Manager's Office

Nick Kimball, *City Manager*

San Fernando Department of Public Works

Kenneth Jones, *Management Analyst*

Manuel Fabian, *Civil Engineering Assistant II*

Maria Padilla, *Executive Assistant*

Matthew Baumgardner, *Public Works Director*

Patsy Orozco, *Civil Engineering Assistant II*

San Fernando Police Department

Anthony Vairo, *Chief of Police*

Los Angeles County Department of Public Health

Alexis Lantz, *Policy Analyst*

Chanda Singh*

Justin Robertson, *Senior Planner*

Mehmet Berker*

Advisory Committee Members

Adriana Gomez

Anthony Vairo

Audrey Simons

Christina Bernal

David Bernal

Flaviola Garcia

Freddy Ortiz

Gerardo Marquez

Lucia Alfaro

Marco Torres

Nicole Mohr

Tree People

Cindy Villegas

Daniel Berger

Plan Prepared By

Toole Design

Local Government Commission

Public Health Advocates

Funding Agency

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*may no longer be representing the agency

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Executive Summary

The City of San Fernando is in a prime position to continue building on the council adopted 2017 Safe and Active Streets Plan and has the right foundation to encourage walking and biking. The city is primarily made of small neighborhood streets on a well-connected grid with no freeway on/off ramps, which is unique in Southern California. San Fernando is also home to many small businesses, schools, parks, and civic destinations that make it an ideal walking environment. The only major identifiable connectivity barrier today is the railroad, which offers great opportunities with the forthcoming East San Fernando Valley Transit corridor and existing Metrolink station, particularly for commuters traveling to Downtown Los Angeles. Small, well-connected streets, a growing local business culture, and future transit infrastructure helps form the backbone of a low-stress pedestrian and bicycle network throughout San Fernando.

As the COVID-19 pandemic has impacted daily life for many residents, the need to access safe locations for physical activity are more important than ever, and improving streets and sidewalks for walking and biking creates a key opportunity for this Safe and Active Streets Implementation Plan (Implementation Plan). The pandemic also presented challenges for this project, specifically in how to keep the community engaged through a variety of online and in-person methods. Through virtual meetings with an establish advisory group, socially-distant walk audits, pop-up community charrettes at the San Fernando mall, and other efforts, the project team used a multi-pronged approach to create awareness and excitement for this Plan.

The results of the Implementation Plan will help prioritize and make recommendations to improve safety and physical activity at key locations in San Fernando. These projects are also developed to help secure grant funding for construction and implementation. Additionally, the Implementation Plan serves as a method to keep the San Fernando community engaged on proactive street safety efforts and build stewardship and support for many years to come.



Family on a Bike Ride near Brand Boulevard and Truman Street

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Chapter 1:
Why a Safe and Active Streets Implementation Plan?



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Why a Safe and Active Streets Implementation Plan?

This plan builds on the Safe and Active Streets Plan published in 2017, which included an Active Transportation Plan and a Safe Routes to School Plan for the 11 schools in the city. The intention of the 2017 plan was to guide the City in improving streets and implementing programs that make it safer and more comfortable to walk and bicycle. The Implementation Plan expands on the recommendations in the 2017 plan and provides the next steps for the City to begin implementation. The Implementation Plan identifies priority projects to make streets safer and more active, and that can be implemented in the short term through maintenance projects, capital improvements projects, and through receiving state and local grants.

Implementation Plan Goals

- Build on the 2017 Safe and Active Streets Plan
- Engage community members to identify priorities
- Prioritize transportation projects
- Develop conceptual plans and cost estimates
- Identify short-term and long-term projects

This Implementation Plan was developed in tandem with community stakeholders, City councilmembers, City staff, the consultant team, and resident input.



Community Members Participating in a Walk Audit

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Chapter 2:
What do we know?
(Existing Conditions)



What Do We Know? *(Existing Conditions)*

The 2017 Safe and Active Streets Plan includes many general recommendations for improving safety and physical activity through infrastructure and programmatic recommendations. The 2017 plan also includes a chapter on street segment prioritization and recommended projects based on a set of criteria including the ability to meet project goals, ease of implementation, and community support and priorities. The following list outlines the streets/segments that were identified as priorities under the 2017 plan.

Arroyo St

Brand Blvd

Carlisle St

Celis St

East Canyon Channel

Eighth St

Fifth St

First St

Fourth St

Fox St

Glenoaks Blvd

Griswold Ave

Harding Ave

Hollister St

Hubbard Ave

Kalisher St

Maclay Ave

Mission City Trail

Morningside Ct

Mott St

Orange Grove Ave

Pacoima Wash Greenway (Eastbank)

Pacoima Wash Greenway (Westbank), Eighth St Bridge

S Lazard St

San Fernando Mission Blvd

San Fernando Rd

Seventh St

Seventh Street Bridge over Pacoima Wash

Third St

Truman St

Wolfskill St / Jessie St

Workman St / Rinaldi St



Previous Crosswalk Improvements along Workman Street

Street Prioritization Methodology

Considering the 2017 Plan list is comprehensive and the City of San Fernando may be resource-constrained to improve safety and active transportation for all roadway segments, the Implementation Plan applies similar prioritization criteria using recent datasets and a thorough understanding of recent City transportation trends.

The prioritization criteria applied to the 2017 street segments include the following:

Safety – Using the latest five years of pedestrian collision data, we assessed the number of collisions along each street segment and weighted collisions by severity, assigning collisions resulting in fatalities or severely injuries a numeric value of 3, and all other injuries (minor injury, complaint of pain) a numeric value of 1. The crash data used for this analysis was from the California Highway Patrol's (CHP) Statewide Integrated Traffic Records System (SWITRS), accessed via the Transportation Injury Mapping System (TIMS)[1]. Some of the streets with the highest fatal and severe injuries include San Fernando Road and Truman Street.

Connectivity – creating access and connections to destinations like parks, schools, libraries, and shopping centers, can improve the number of walking trips and overall physical activity. A street connecting to such destinations indicates a higher priority compared to the rest of San Fernando's streets.

Equity – It is important to invest in areas of the City that have more environmental and socioeconomic burdens when compared to the rest of San Fernando or to Los Angeles County as a whole. Our team applied the California Communities Environmental Screening Tool (CalEnviroScreen 3.0) developed by the California Office of Environmental Health Hazard Assessment, to assess environmental burden at the census tract level for San Fernando. The factors associated with the CalEnviroScreen 3.0 index includes environmental indices like pollution exposure, traffic exposure, residents with asthma and cardiovascular disease, and socioeconomic indices like poverty, unemployment, educational attainment, and linguistic isolation. San Fernando streets located within census tracts with a higher environmental and socioeconomic burden are shown as higher priority for project investigation and development.

The output of the three combined prioritization factors is illustrated in the *Prioritization Network Output* map, **Figure 1**. Streets that are shown as highest priority for encouraging active transportation include Fifth Street, Fourth Street, San Fernando Road, Hollister Street, Workman Street, Kalisher Street, Maclay Street, and Brand Boulevard.

Safe and Active Streets Network

The prioritization framework was used to develop the *Safe and Active Streets Network*- a network of streets suitable for further investigation through the project's many engagement efforts (see **Figure 2**). These streets are labeled as *focus streets*. The *focus intersections* were also included based off concentrations of collision patterns with pedestrians. This network was also used to establish walking and biking audit routes for the project team to better understand suitable project types throughout San Fernando.



Trolley Stop near the San Fernando Swap Meet

1 Tims.berkeley.edu

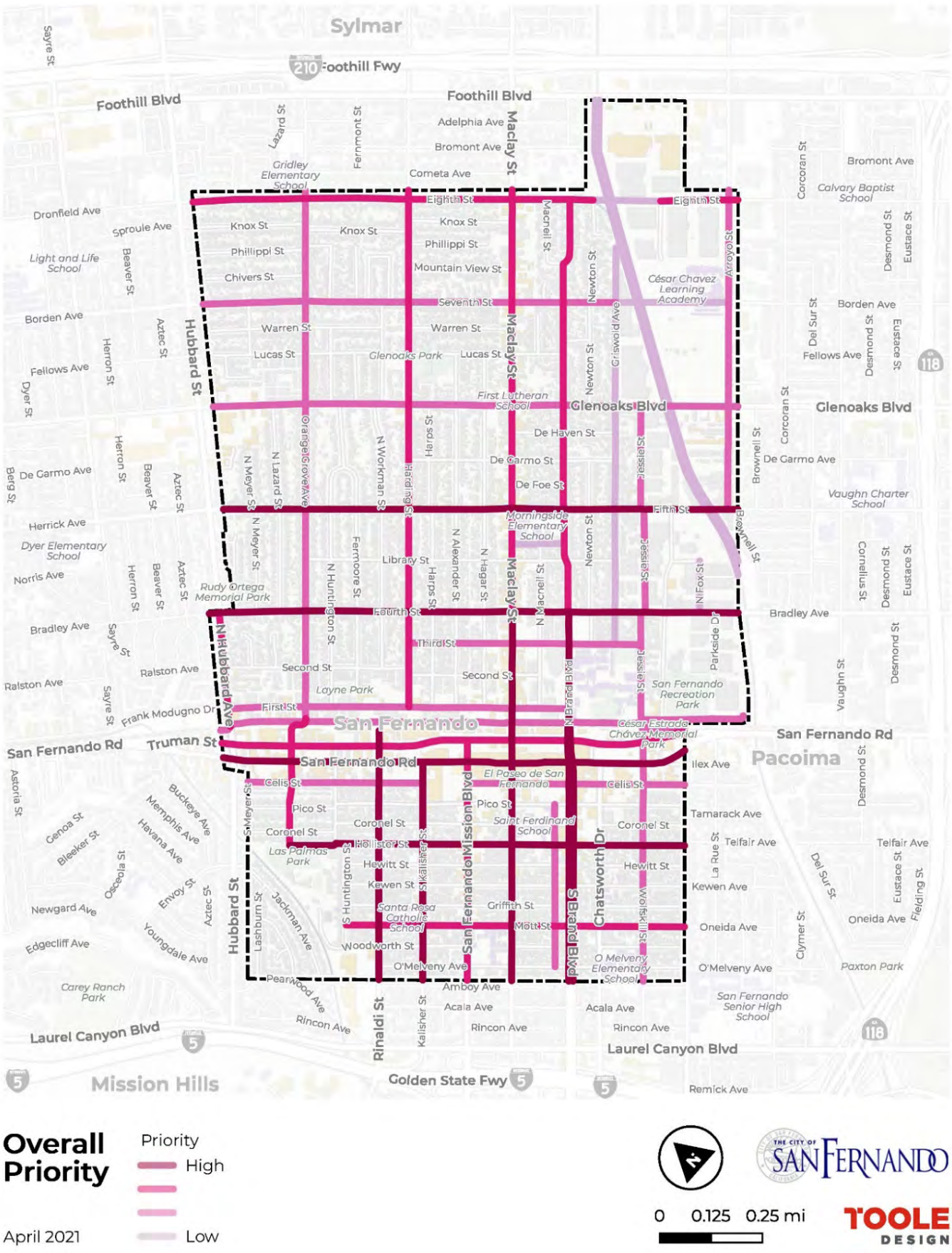


Figure 1: Prioritization Network Output

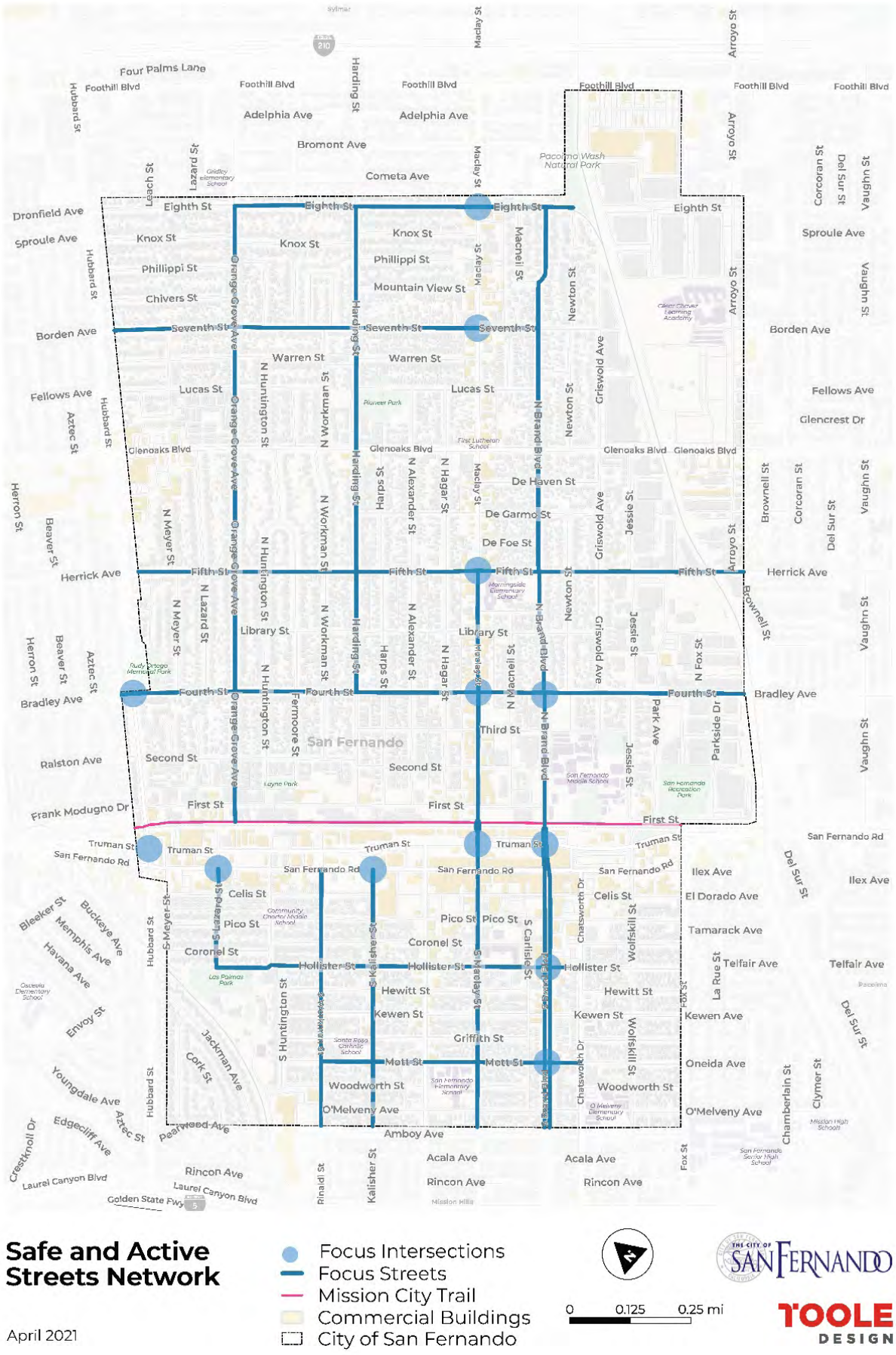


Figure 2: Safe and Active Streets Network

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Chapter 3:
What Did the Community Say?

What did the Community Say?

A variety of outreach and engagement strategies were used to minimize barriers to participation and obtain the broadest possible community input. The global COVID-19 pandemic's impact on many people's lives, resources, and ability to stay safe and healthy brought challenges to traditional engagement approaches and to participation. Nevertheless, engagement for this Implementation Plan utilized close relationships with the local community, formed in part during the previous Safe and Active Streets Plan, to ensure robust participation in both a virtual and in-person, socially-distant format. Engagement activities as part of this Implementation Plan are outlined below and described in more detail under the *Who was Involved?* section:

- Advisory Committee Meetings (3)
- Ad Hoc Committee Meetings (2)
- Walk Audits (6)
- Bike Audits (2)
- Pop-up Charrettes (2)
- Regular updates to the Transportation and Safety Commission
- Draft Plan review meeting

Who was Involved?

The public and stakeholder engagement process invited residents from diverse communities and backgrounds to participate in the Plan's development and to remain informed as the Plan progressed. Residents, business owners, bicycle interest groups, and city commissioners participated in engagement events, such as the walk and bike audits. City representatives and key stakeholders were invited to be part of the Safe and Active Street Implementation Plan Advisory Group, which played a pivotal role in the Plan's community engagement process and progression. Overall, the public and stakeholder engagement efforts saw a robust turnout from San Fernando's community members, ensuring that the Plan reflects the community's priorities and preferences.



Group Photo of Walk Audit Participants

Advisory Group Meetings

The Advisory Group was made up of representatives from a variety of City representatives and stakeholders. The goal of the Advisory Group was to provide local knowledge of the study area, gather feedback for direction of the plan, and to help ensure robust community participation in the development of the Plan. The committee met three times over the course of the project.

- **Advisory Group Meeting 1 (February 2021):** The Project team introduced the project and shared information on the scope and timeline, as well as upcoming public engagement opportunities. Advisory Group members discussed issues and challenges for walking and biking in the study area using an interactive poll called Mentimeter to ask members about general priorities and issues (see **Figure 4**).
- **Advisory Group Meeting 2 (May 2021):** The second Advisory Group and the Project team reviewed community engagement and planning efforts in preparation for the community pop-up charrette. The Advisory Group and the project team also discussed preliminary locations for prioritization and project features most applicable to challenges facing residents on streets and sidewalks.
- **Advisory Group Meeting 3 (August 2021):** The last Advisory Group meeting included reviewing concept plans and recommendations after considering community feedback at the end of the public engagement period. The meeting was also used to discuss and review the draft outline for the Implementation Plan.

Ad Hoc Group Meetings

The Ad Hoc group was made of city staff and council members Cindy Montañez and Celeste Rodriguez. They provided additional support for the development of the plan and assuring this project was coordinated with other ongoing efforts.

- **Ad Hoc Group Meeting 1 (March 2021):** The first meeting covered the initial prioritization methodology and factors for assessing city streets that could be prime for active transportation improvements.
- **Ad Hoc Group Meeting 2 (April 2021):** The second meeting focused on feedback for the Safe and Active Streets network and brainstorming on outreach for the summer walk and bike audits.
- **Ad Hoc Group Meeting 3 (July 2021):** The third meeting focused on other issues that the Implementation Plan should consider, such as lighting, illegal dumping, and brainstorming on how a proposed street improvement project can incorporate other elements such as beautification and green infrastructure.

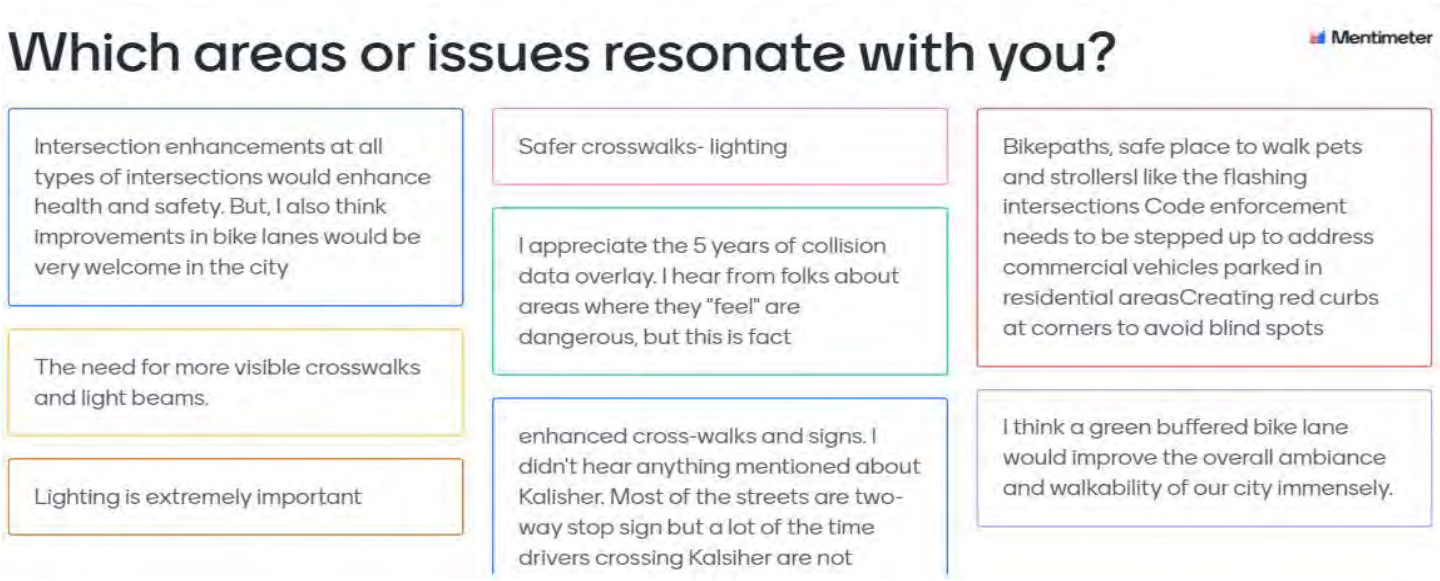
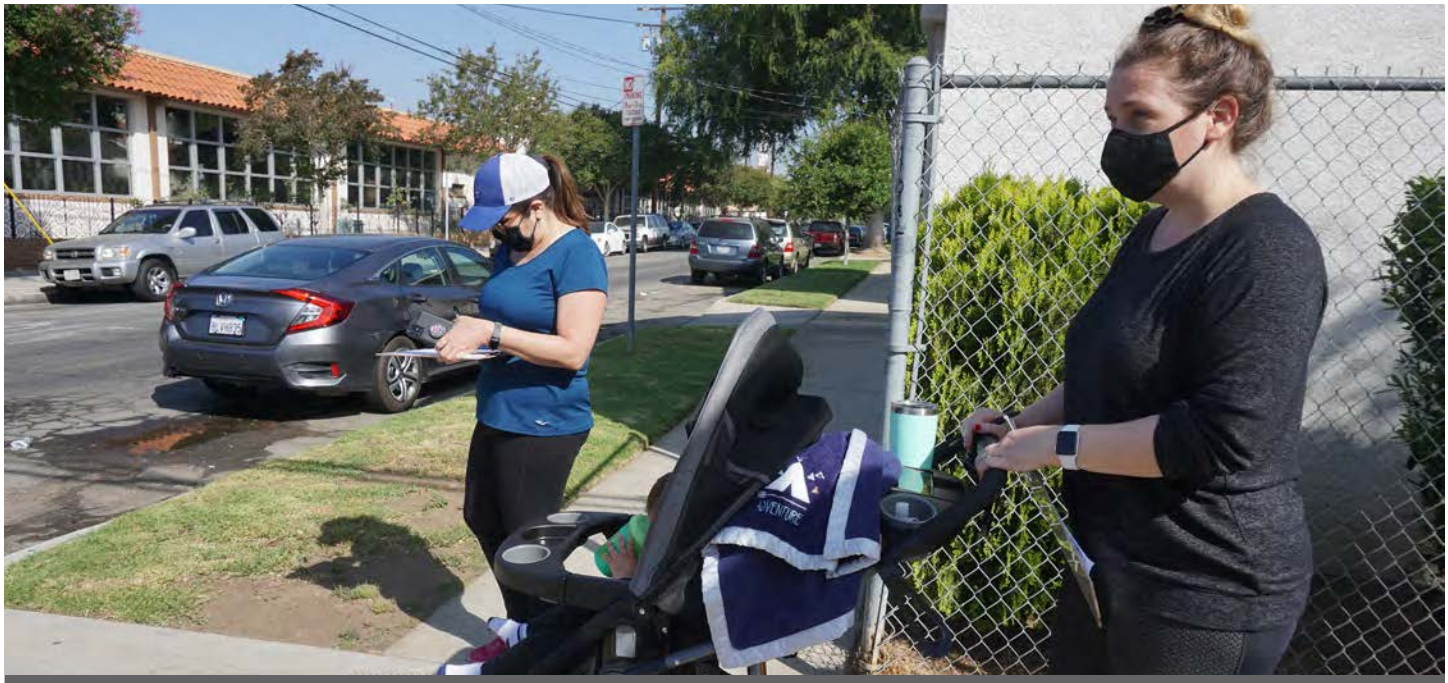


Figure 4: Mentimeter Poll Sample

Walk Audits and Bike Audits

A walk or bike audit is a short group walk or bike ride on a predetermined route to observe and make note of safety concerns and other issues that create barriers to walking, biking, rolling, and other forms of active transportation. The project team developed six walk audit routes and two bike audit routes. Audits took place during morning and evening commute times to capture peak travel periods as well as observe behavior for people driving, walking, and biking in what was likely the most congested times of day. In response to the COVID-19 pandemic and to ensure appropriate physical distancing, each audit was limited to a maximum of 14 participants. Around 50 unique people in total participated in the eight audits (some participating in more than one). **Figure 3** shows a map of the walk and bike audit routes.



Walk Audit Participants

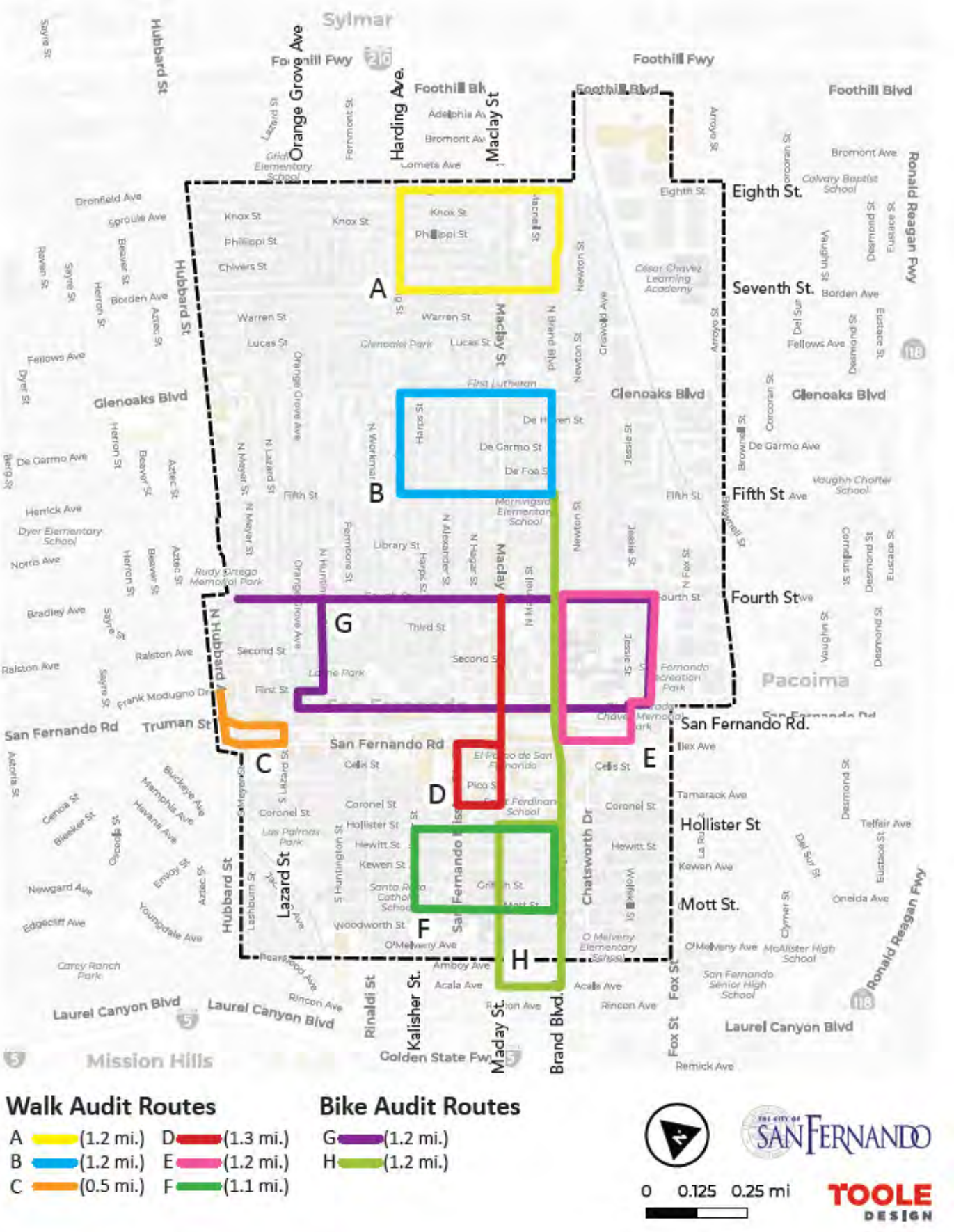


Figure 3: Walk and Bike Audit Routes

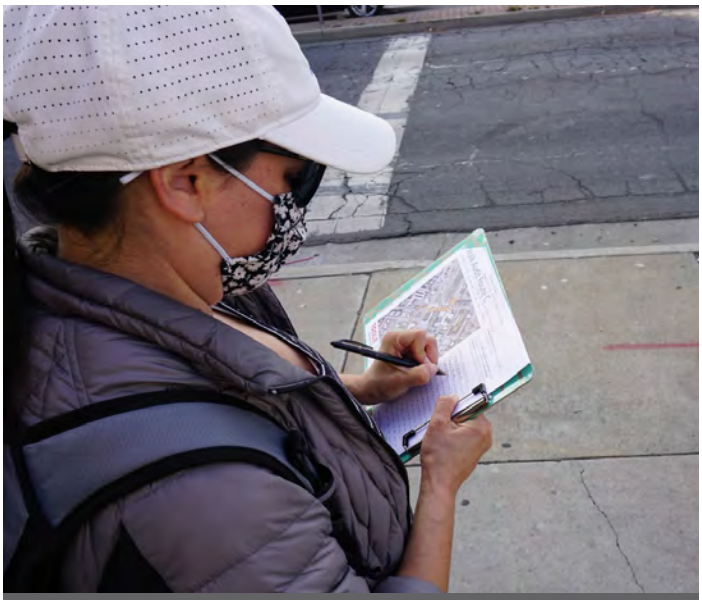
Walk and Bike Audits, Key Takeaways

The walk and bike audits provided the project team with on-the-ground data collection and critical community feedback to inform project prioritization and recommendations.

Walk audit participants noted infrastructure and behavioral issues along each of the six routes, and the top three most commonly observed issues observed for each route are included in Table 1 below. Across all routes, participants noted a need to upgrade/improve crosswalks. Other common issues included missing curb ramps, general maintenance needs, and speeding. Participants also noted opportunities for creating a more welcoming pedestrian environment through landscaping, such as planting shade trees to mitigate hot conditions during summer months.

Table 1: Infrastructure Issues Observed during Walk Audits

Route	Top 3 Issues Observed
Route A: Eighth St and S Brand Blvd	Crosswalk improvements needed Missing curb ramps / maintenance Landscape / parkways
Route B: Pioneer Park (Glenoaks Blvd, N Brand Blvd, Fifth St, and Harding Ave)	General maintenance needed Speeding Crosswalk improvements needed
Route C: Hubbard St, First St, Truman St, S Lazard St, and San Fernando Rd	General maintenance needed Sidewalk in need of repair Crosswalk improvements needed
Route D: Maclay Ave, Coronel St, and San Fernando Mission Rd	Crosswalk improvements needed General maintenance needed Landscaping/parkways
Route E: Fourth St, Park Ave, San Fernando Rd, and N Brand Blvd	Crosswalk improvements needed Sidewalk in need of repair Speeding
Route F: Hollister St, S Brand Blvd, Mott St, and S Kalisher St	Crosswalk improvements needed Missing curb ramps / maintenance needed General maintenance needed



Walk Audit Participant Noting Observations

Bike audit participants included a mix of recreational riders who are comfortable riding with traffic, and casual or less-confident bicyclists who do not typically bike on San Fernando streets. On Route G (Fourth St / Mission City Trail) participants noted that drivers do not always stop for bicyclists and that there was a potential to add bike crossing improvements like signals or flashing beacons at certain intersections. Participants on bike audit Route H (southbound on Brand Blvd) found that there were opportunities for adding bike facilities, like separated bike lanes, near San Fernando Middle School, as well as along the length of Brand Blvd. to connect with bike lanes in the City of Los Angeles.



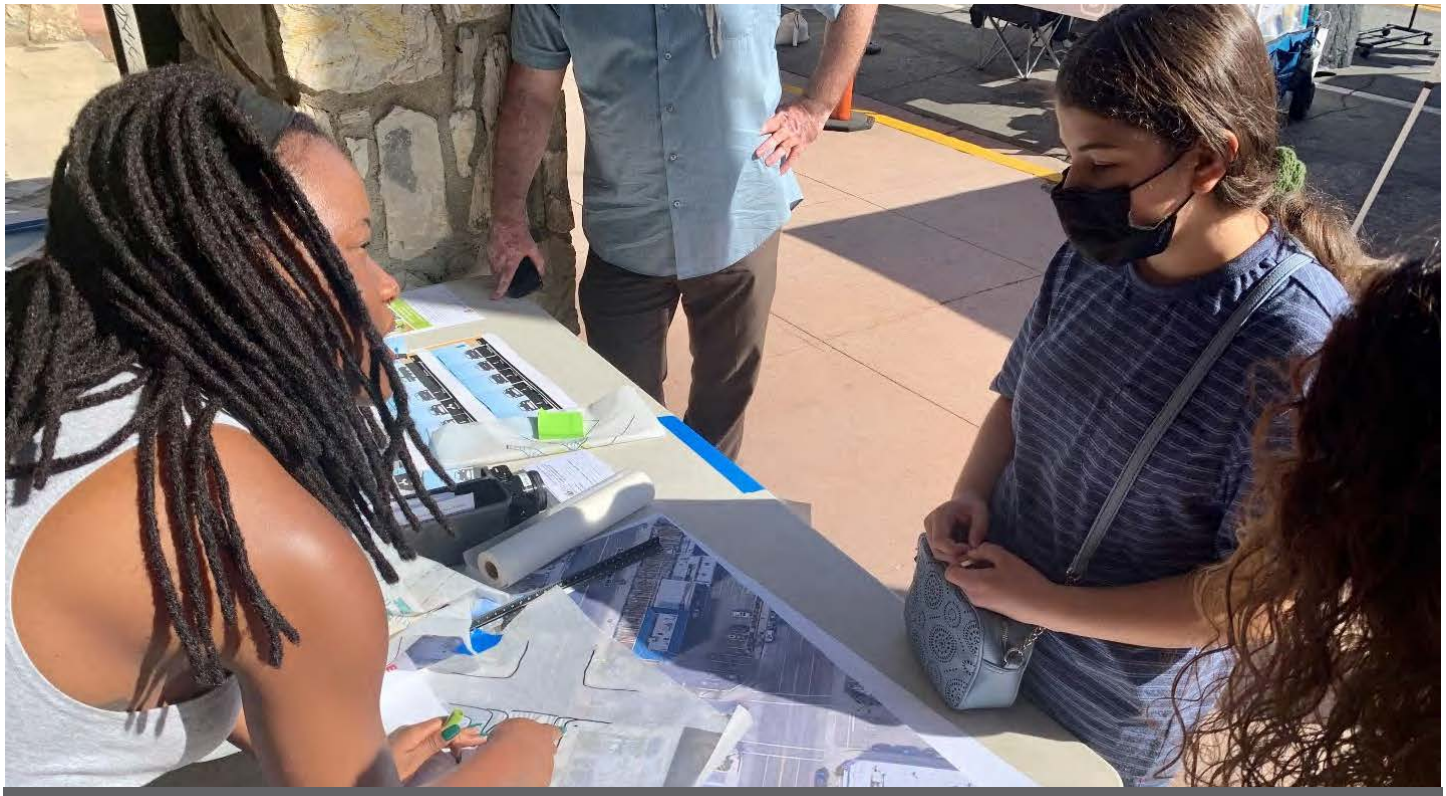
Bike Audit Participants Biking Down Maclay Ave

Pop-up Charrettes

Pop-up Charrette #1, June 26th, 2021

San Fernando Safe and Active Streets team held its first Charrette on June 26th, 2021 from 12pm-6pm. The project team set up in front of Throwback Junction at the San Fernando Mall as part of the monthly open street event hosted by the San Fernando Mall Association. In preparation for this event, Public Health Advocates took lead on outreach activities that included contacting the San Fernando Advisory Group; local residents (some of whom had previously participated in the Walk & Bike audits), San Fernando Business Watch Group, and producing and distributing event flyers in person (Recreation Park and Las Palmas Park) and through City of San Fernando as well as Public Health Advocates' social media outlets. Media outreach was accomplished by producing a local radio broadcast through Ollin Radio station; this broadcast was provided by Council member Cindy Montanez a week prior to the event. All broadcasts promoted the San Fernando Charrette as a "pop-up" rather than a traditional, indoor type of charrette to ensure the public could easily participate.

The purpose of the first pop-up was for community members to learn about the project, and provide feedback on the initial safe and active streets network. The Safe and Active Streets Pop-up booth had concept boards that presented the Walk & Bike Audit results, a data analysis and street prioritization approach board, a street improvement board with a dot sticker exercise for determining preferred countermeasures (project types), and guidance on next steps. The project team also facilitated a concept plan and *streetmix* section exercise that allowed residents to visualize how new designs can be implemented, and held discussions about trade-offs on city streets. In addition to the concept boards, Public Health Advocates provided comment cards for residents to provide feedback, a total of 19 residents provided feedback. The Pop-Up event saw combined participation of approximately 100 San Fernando residents. One consideration was made to host the next pop-up opportunity during the evening hours as the first pop-up event occurred at noon during the peak summer heat, impacting participation from the broader public.



Stakeholders and Staff Go over Geometric Designs at the First Pop-up Charrette

Pop-up Charrette #2, September 25th, 2021

San Fernando Safe and Active Streets team held its second Charrette on September 25th, 2021 from 5pm-9pm in front of Throwback Junction at the San Fernando Mall during another open street market event. Outreach for the second charrette encompassed all of the same activities from the first charrette. Media outreach was accomplished by producing two local radio broadcasts through *Radio Ollin* and San Fernando *Voz del Valle* radio stations. Like the first charrette, the San Fernando Safe and Active Streets team chose to promote the event as a "Pop-Up" for public accessibility purposes.

The purpose of the second Pop-Up was for community members to review the draft design plans developed based on resident feedback from both the walk and bike audits and the first pop-up on June 26th. The Safe and Active Streets pop-up booth had concept boards presenting preferred countermeasures (project types) identified by San Fernando residents and how they apply to the chosen key areas of improvement. Participants were able to walk through the pop-up booth and review draft concept designs for resident feedback (see **Figure 5**). Residents were also given the opportunity to join the Safe and Active Streets team on a site visit (design walk) that took place from 5:30pm-6:30pm.

Once again, Public Health Advocates provided comment cards for residents and encouraged participants to provide feedback on the concept boards using post-it notes. A total of 72 comment cards were collected for this event. It is important to note that 100 cards were originally brought to the event and distributed, yet many comment cards were not returned. Considering this, our team estimates that over 100 San Fernando residents were able to review the Safe and Active Streets project, draft concept plans, and understand the intention of the project, even if not everyone commented.

Draft Concept Design Locations

- Jessie Street and Robert F Kennedy Drive
- Harding Avenue and Fourth Street
- Kalisher Street and Hewitt Street
- San Fernando Road and Kittridge Street/Chatsworth Street
- San Fernando Road and Lazard Street
- San Fernando Road and Huntington Street

See **Chatper 4 - Recommendations**, for a breakdown of the concept location selection process.



Design Walk Participants



Pop-up Event Participants

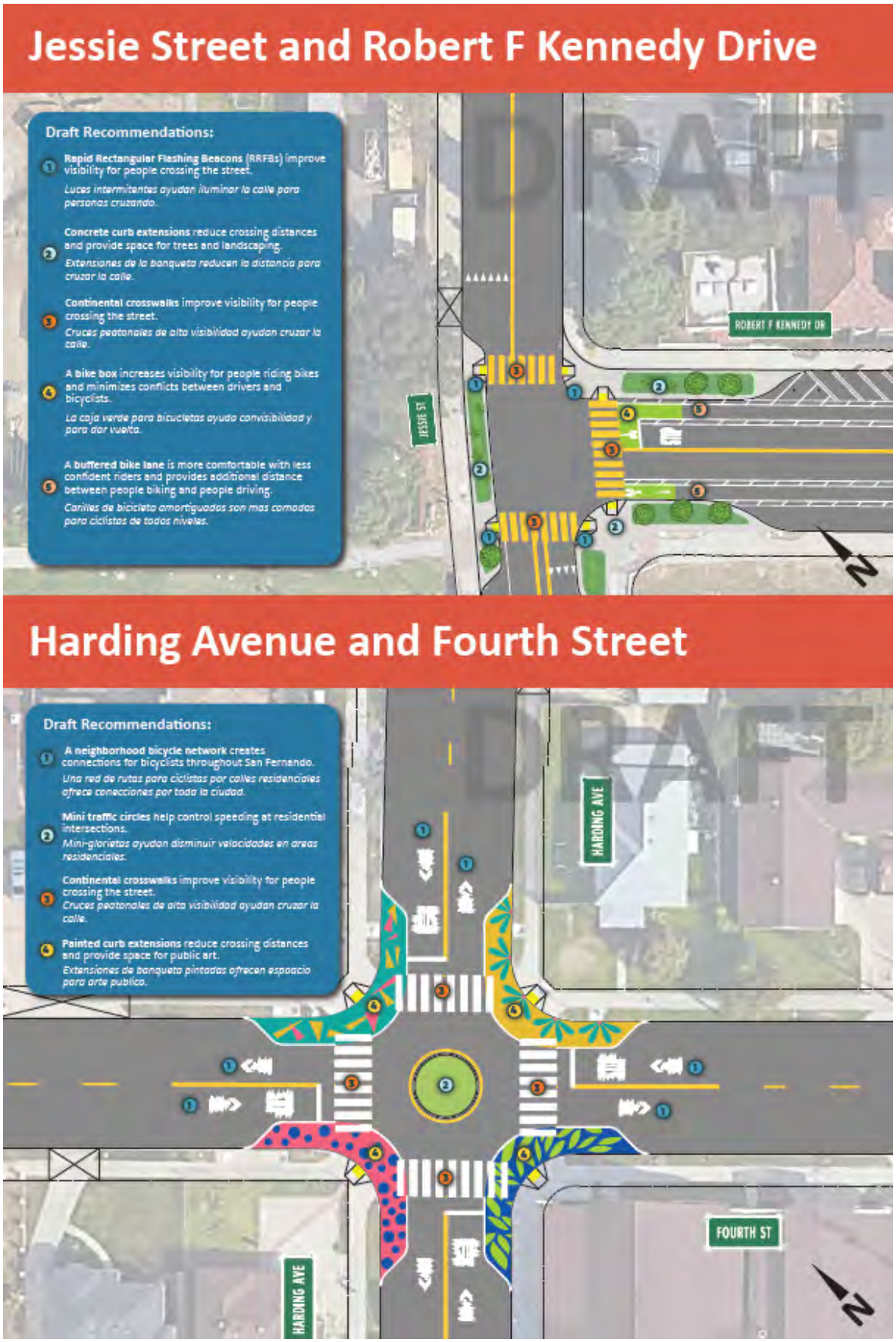


Figure 5: Concept Plan Board for Two Locations

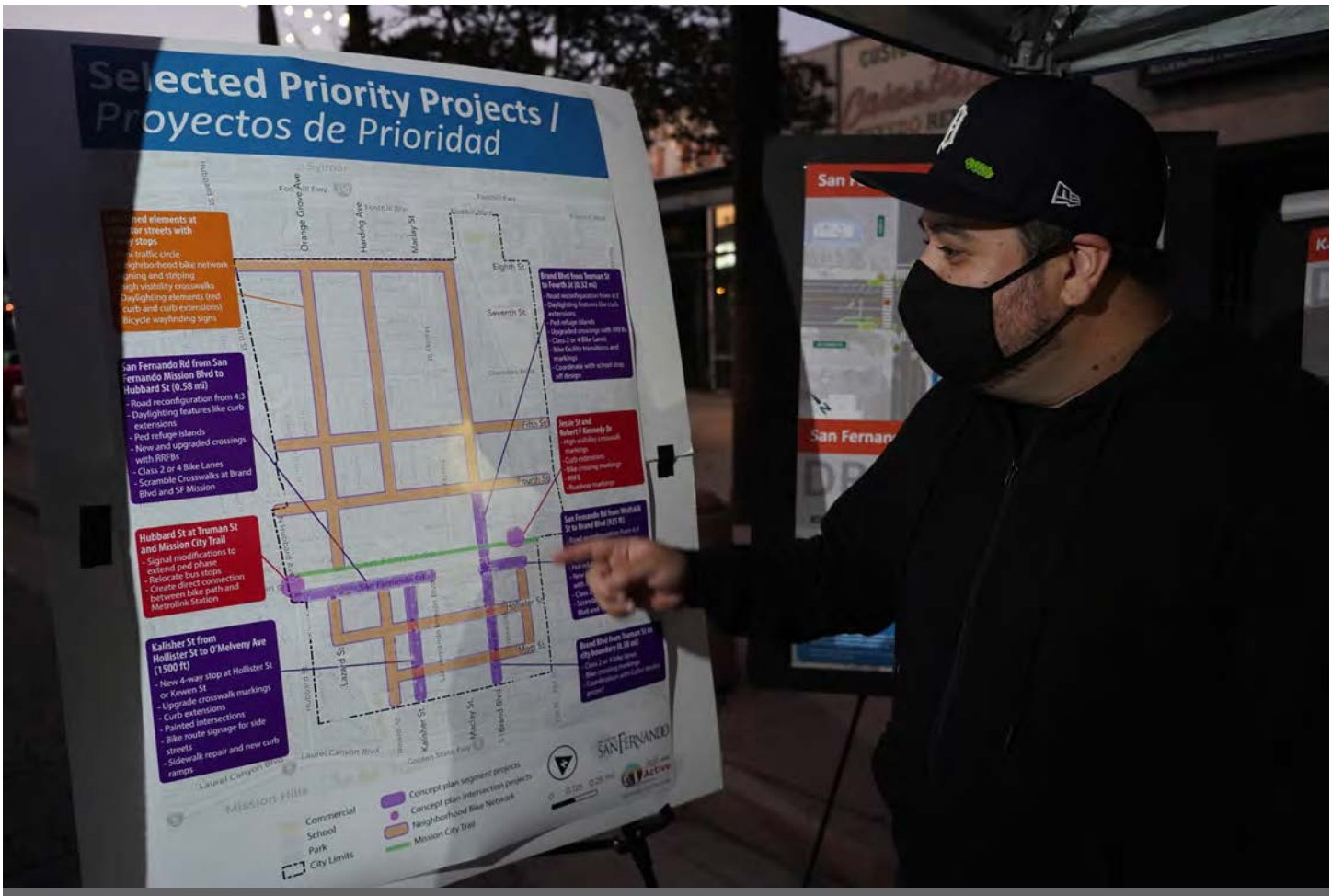
Community Engagement Key Takeaways

The community engagement and public participation process provided the project team with invaluable feedback for project locations, design features, and it provided the project team the opportunity to communicate the Plan's vision and goals to community members.

The walk and bike audits provided an opportunity for the community and project team to examine existing conditions and gain insights from residents who are aware of potential improvements through their lived experience-walking, biking, taking transit, and using wheeled devices (wheelchairs, strollers, scooters) on San Fernando Streets.

Meanwhile, the community pop-up charrette events provided the team with location-specific feedback to the safe and active streets network, as well as the proposed concept plans.

There is overwhelming community support for developing projects in San Fernando that may increase the safety and physical activity. While many residents expressed that they already regularly walk or bike, they also noted that specific improvements along busy streets will help create better connections to important destinations.



Pop-up Event Participants

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Chapter 4:
What Projects are Recommended, and Where? (Recommendations)





What Projects are Recommended, and Where? (Recommendations)

The analysis of the 2017 Safe and Active Streets Plan and multi-pronged engagement efforts for this plan resulted in recommendations that focus on improving safety and increasing physical activity. One of the intentions of the Implementation Plan was to identify the lowest cost, highest impact approach to improving safety, considering both design and constraints on implementation. The Plan identifies a comprehensive strategy for implementing targeted safety countermeasures, including location-specific and sample concept designs that can be applied to many residential and collector streets in San Fernando.

The Plan recommends a phased approach so that enhancements can be deployed quickly, with available funding, tested and evaluated, and modified as required before more permanent and capital-intensive measures are designed and constructed. The phasing strategy and funding sources are described in more detail in the *Next Steps* section of this report.

Map of Recommendations

The following projects outlined in **Figure 6** are recommended for implementation and have been vetted by the community through the aforementioned robust engagement process. These projects vary in cost and complexity, yet all projects are feasible in concept and can be advanced to final engineering design in accordance with the State, county, and City standards. Moreover, they may be used as part of grant applications to secure funding for implementation.

Concept Designs

The concept design plans (**Figure 7 through Figure 14**), referenced in the Selected Concept Design Projects Map, describe the design features associated with each location. Although there were many locations with high opportunity for improvements, the locations with concept designs focus on geometric changes to the roadway that require conceptual vetting. Examples include ensuring that a delivery vehicle can make a proper right turn where a curb extension is proposed. Concept design plans are typcially also included as part of grant applications for funding agencies to better understand the physical improvements or changes made to the roadway.

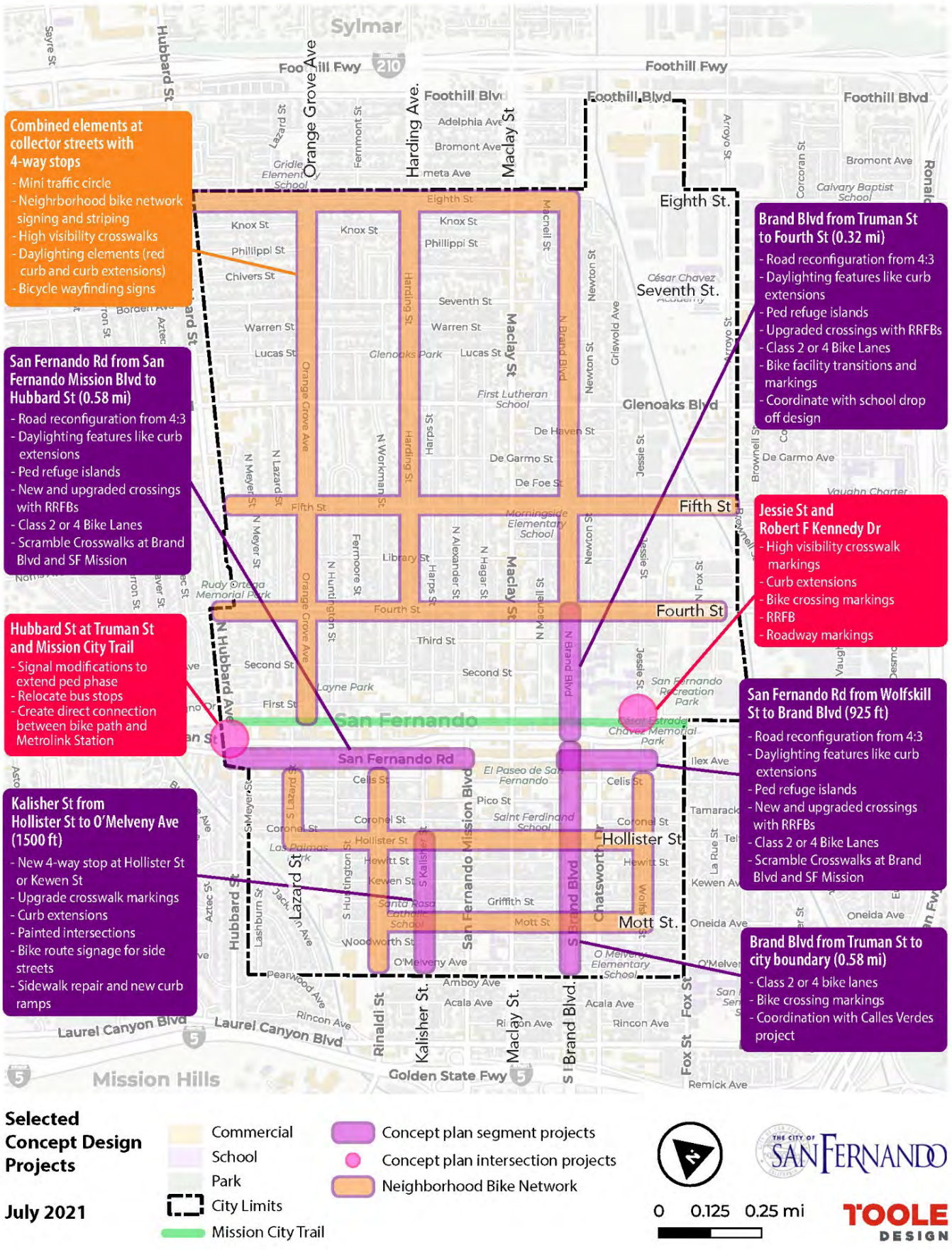


Figure 6: Selected Concept Design Projects Map

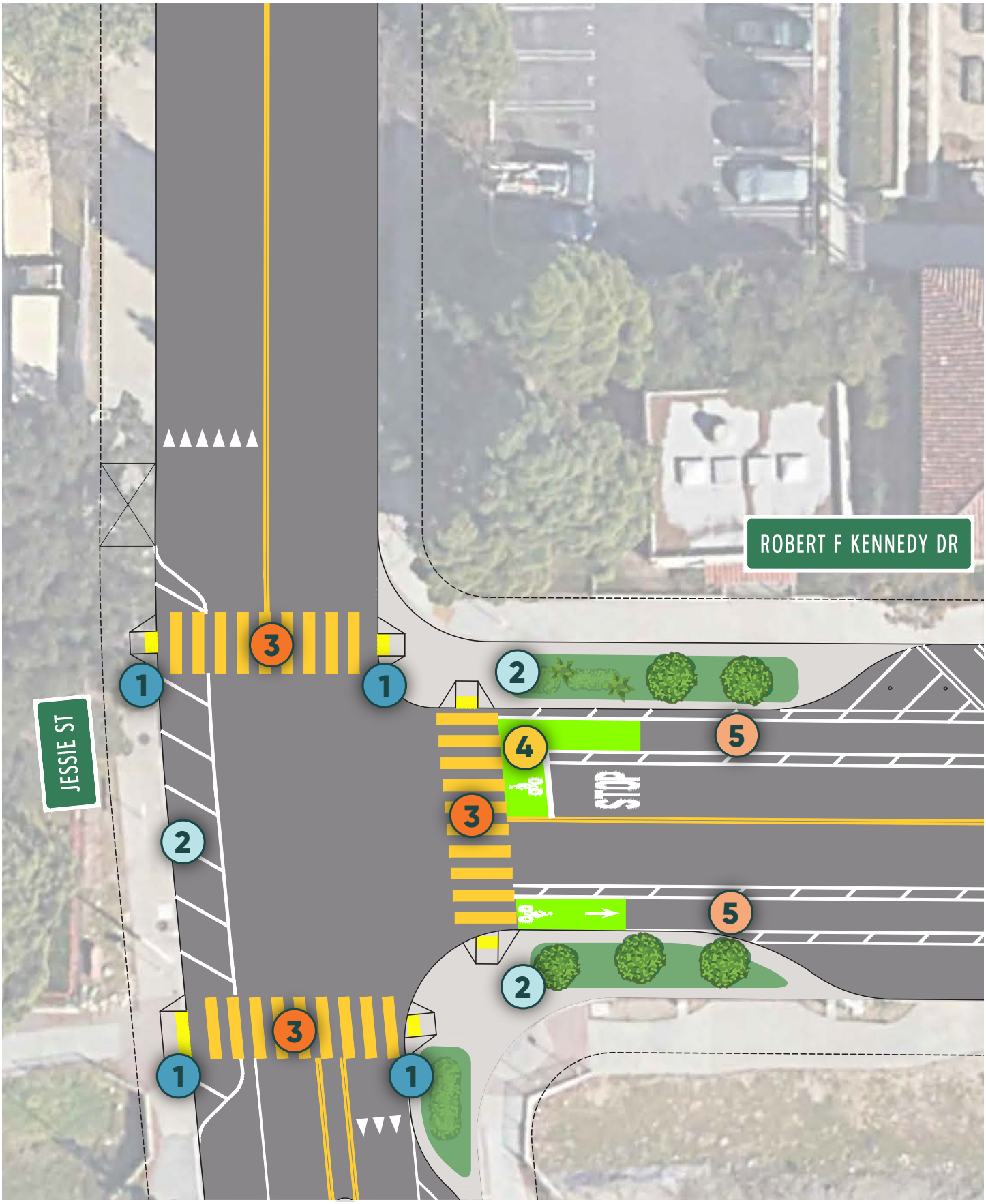


Figure 7: Jessie Street at Robert F. Kennedy Drive

Jessie Street at Robert F. Kennedy Drive

This location was flagged as a priority during a walk audit due to its proximity to San Fernando Middle School, San Fernando Recreation Park, the Cesar E. Chavez memorial, senior residential housing, and the Mission City Trail (multi-use path). The proximity to the rail tracks and the signalized intersection at Jessie Street and Truman Street creates barriers in this key area and encourages speeding in the southbound direction. Creating improvements and connections for pedestrians and bicyclists to destinations in this area is a priority for this plan.

Recommendations:

1. **Rectangular Rapid Flashing Beacons** (RRFBs) improve visibility for people crossing the street.
2. **Concrete and painted curb extensions** reduce crossing distances and provide space for trees and landscaping.
3. **Continental crosswalks** improve visibility for people crossing the street.
4. A **bike box** increases visibility for people riding bikes and minimizes conflicts between drivers and bicyclists.
5. A **buffered bike lane** is more comfortable for less confident riders and provides additional distance between people biking and people driving.

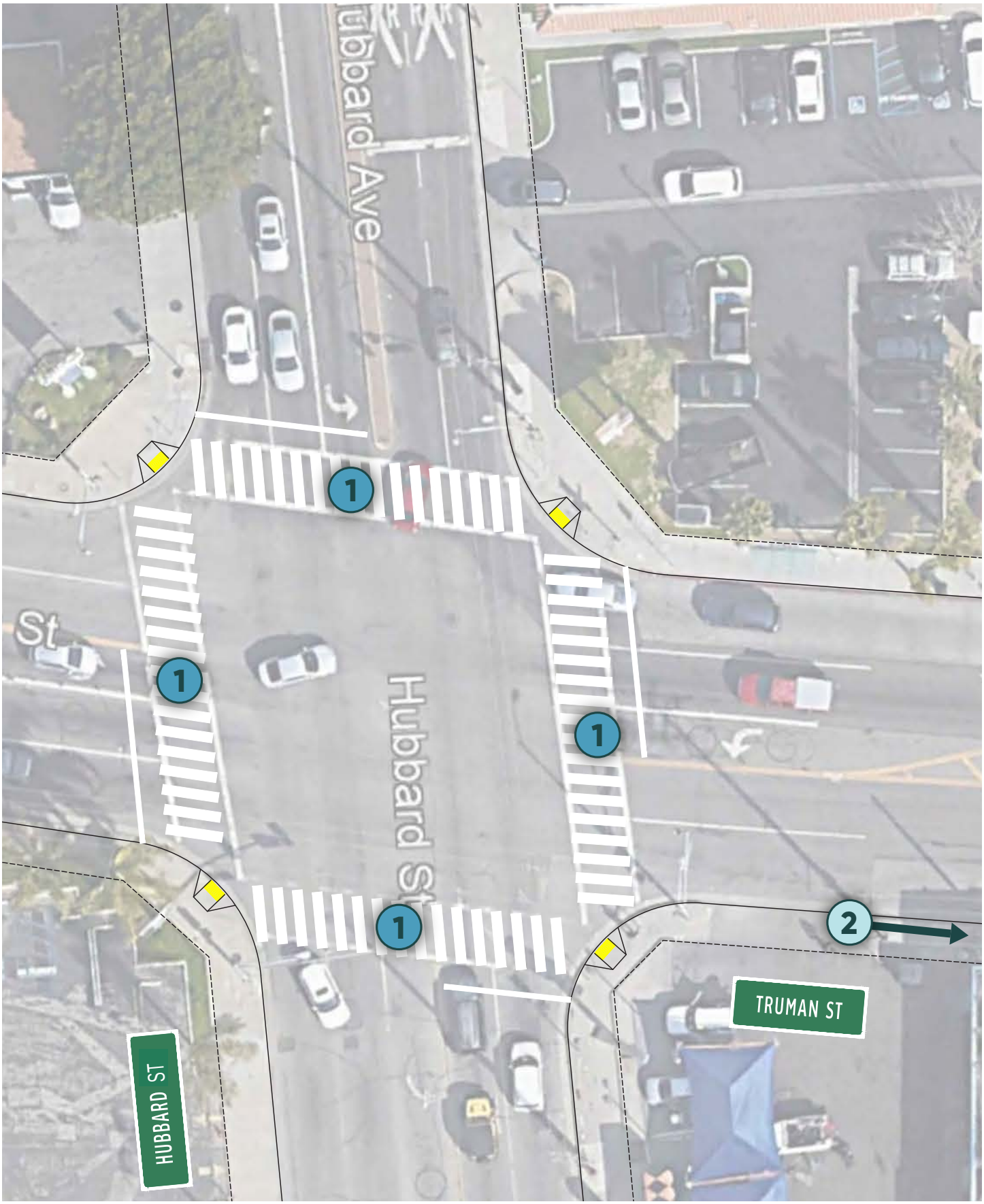


Figure 8: Hubbard Avenue at Truman Street

Hubbard Avenue at Truman Street

This intersection is one of the busiest in San Fernando and borders the City of Los Angeles; creating key regional transit connections through Metro local bus lines, Metro Rapid bus lines, the newly established LADOT DASH circulator bus route, the Sylmar / San Fernando Metrolink station, and the Mission City trail that connects to the neighborhood of Sylmar. The City of San Fernando has experienced 14 fatal and severe pedestrian and bicycle involved collisions from 2015 – 2019, three of which have occurred at this intersection[2]. Walk audit participants also noted the existing difficulties at this intersection, especially observing commuters cross Hubbard Street to access the Metrolink Station. Recommendations at this intersection include rapid implementation projects, as well as additional coordination with Metro for bus stop relocations.

Recommendations:

1. **Continental crosswalks** improve visibility for people crossing the street.
2. **Relocating the bus stop** reduces conflicts between buses, transit riders, and vehicles at the car wash driveway located at the corner of the intersection.

2 *Statewide Integrated Traffic Records System (via TIMS query), 2015-2019*

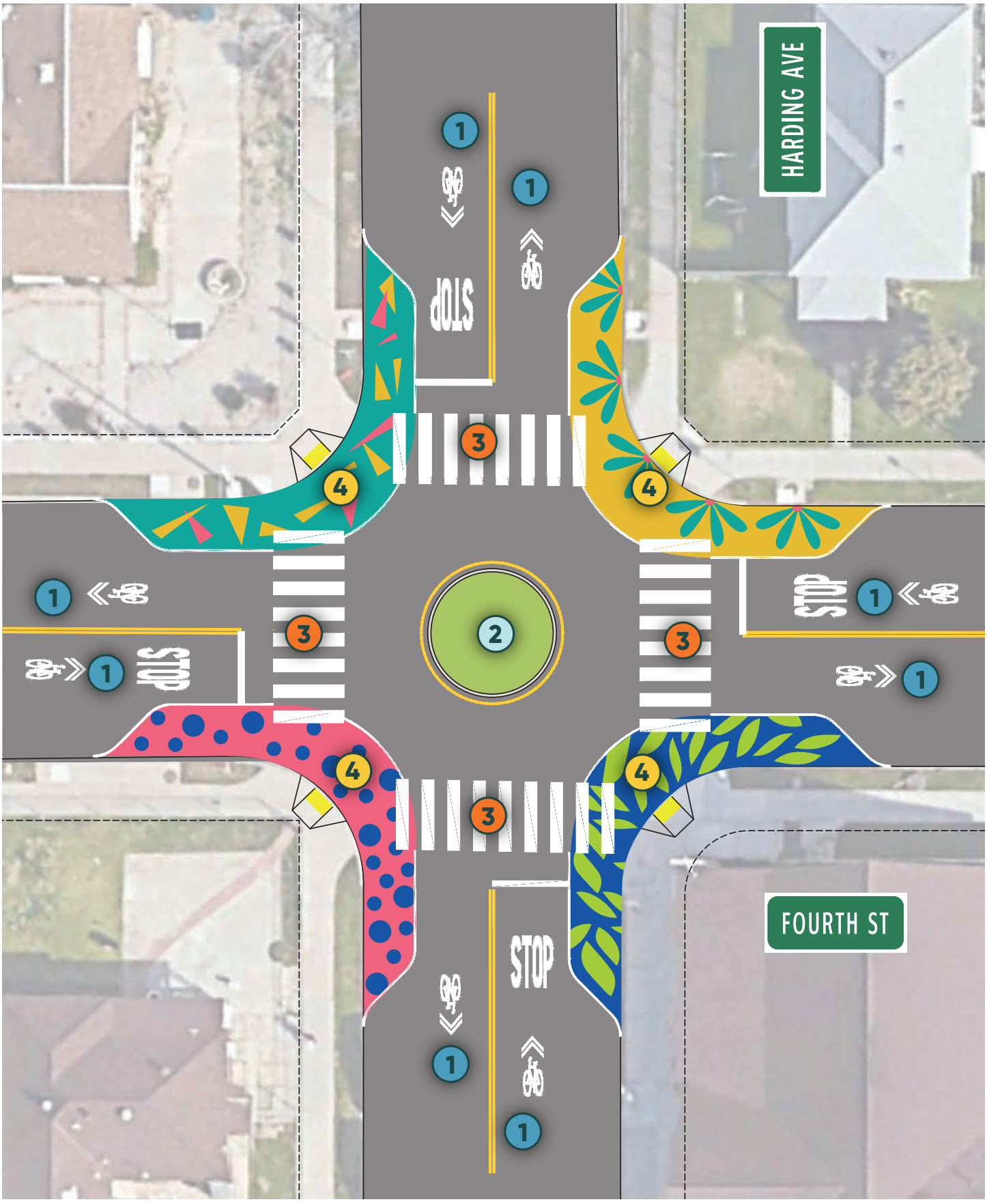


Figure 9: Typical Bicycle Boulevard Design Treatments

Typical Bike Boulevard Design (example at Harding Avenue at Fourth Street)

The project team developed standard design plans for implementing a Class III Bicycle Boulevard network along well-connected residential streets. Feedback from the advisory group and community pop-ups suggested that residents enjoy walking and bicycling along residential streets like Orange Grove Avenue and Harding Avenue. The bicycle boulevard treatments complement existing calm streets that may already have speed bumps and intersections with all-way stop signs. The design treatments can be applied at other all-way stop controlled intersections throughout San Fernando to establish low stress walking and biking routes for the community.

Recommendations:

1. **A neighborhood bicycle network** creates connections for bicyclists throughout San Fernando.
2. **Mini traffic circles** help control speeding at residential intersections.
3. **Continental crosswalks** improve visibility for people crossing the street.
4. **Painted curb extensions** reduce crossing distances and provide space for public art.

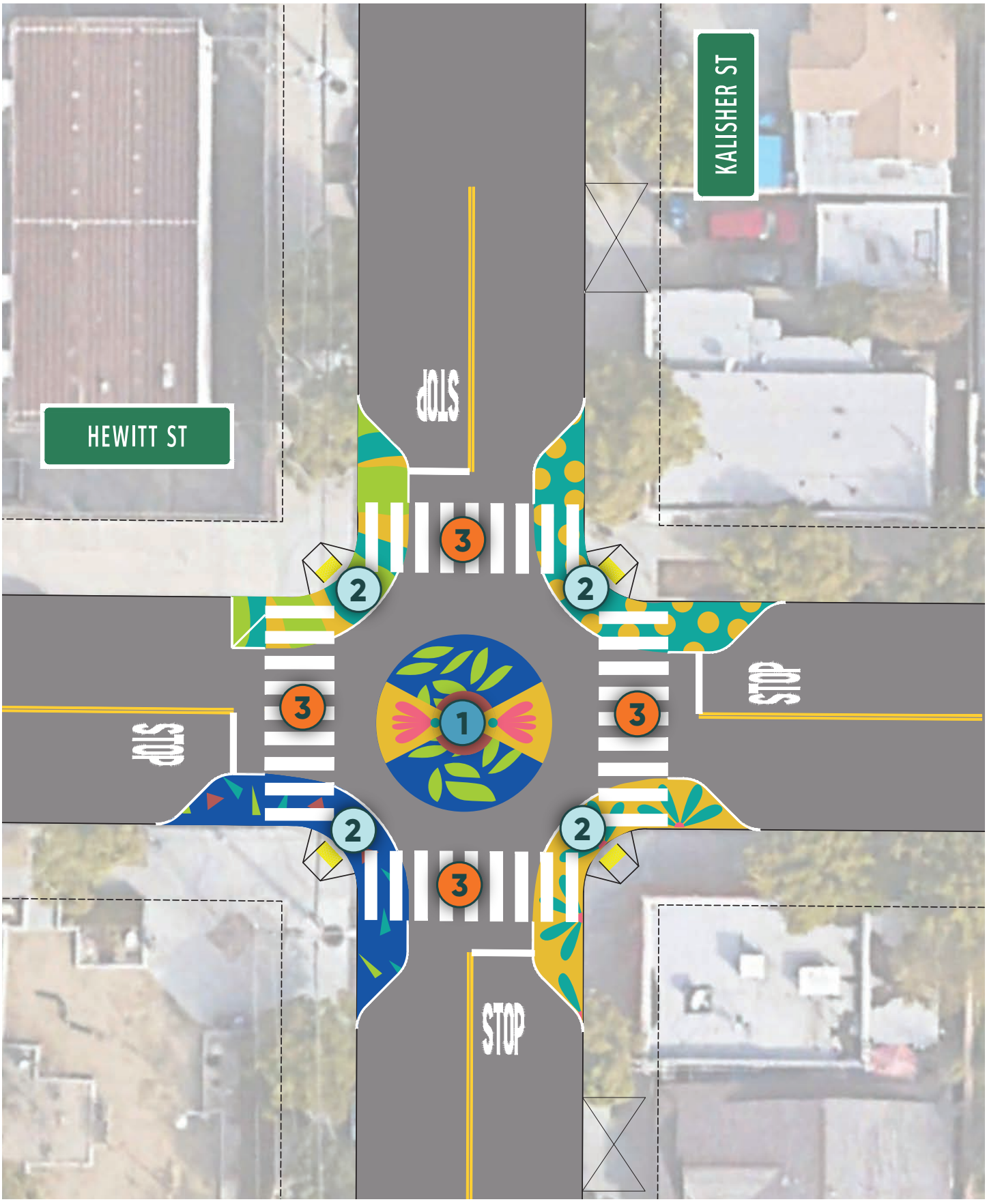


Figure 10: Kalisher Street Improvements

Kalisher Street

The southwest area of San Fernando scored very high under the equity index as part of the prioritization methodology, and community members indicated that this area should be prioritized for overall improvements. Although there are several streets and intersections identified for improving walking and bicycling, Kalisher Street stands out as a key corridor with several existing challenges, including: the lack of consistent all-way stop-controlled intersections, speeding drivers that use Kalisher Street as opposed to Workman Street, multiple churches, schools, small businesses, and residences, among others. Moreover, this street has the potential to introduce artistic elements that celebrate the history of this working-class neighborhood through intersection murals and other traffic calming efforts.

Recommendations:

1. **4-way stop control and an intersection mural** calms traffic and improves safety for people crossing the street.
2. **Painted curb extensions** reduce crossing distances and provide space for public art.
3. **Continental crosswalks** improve visibility for people crossing the street.

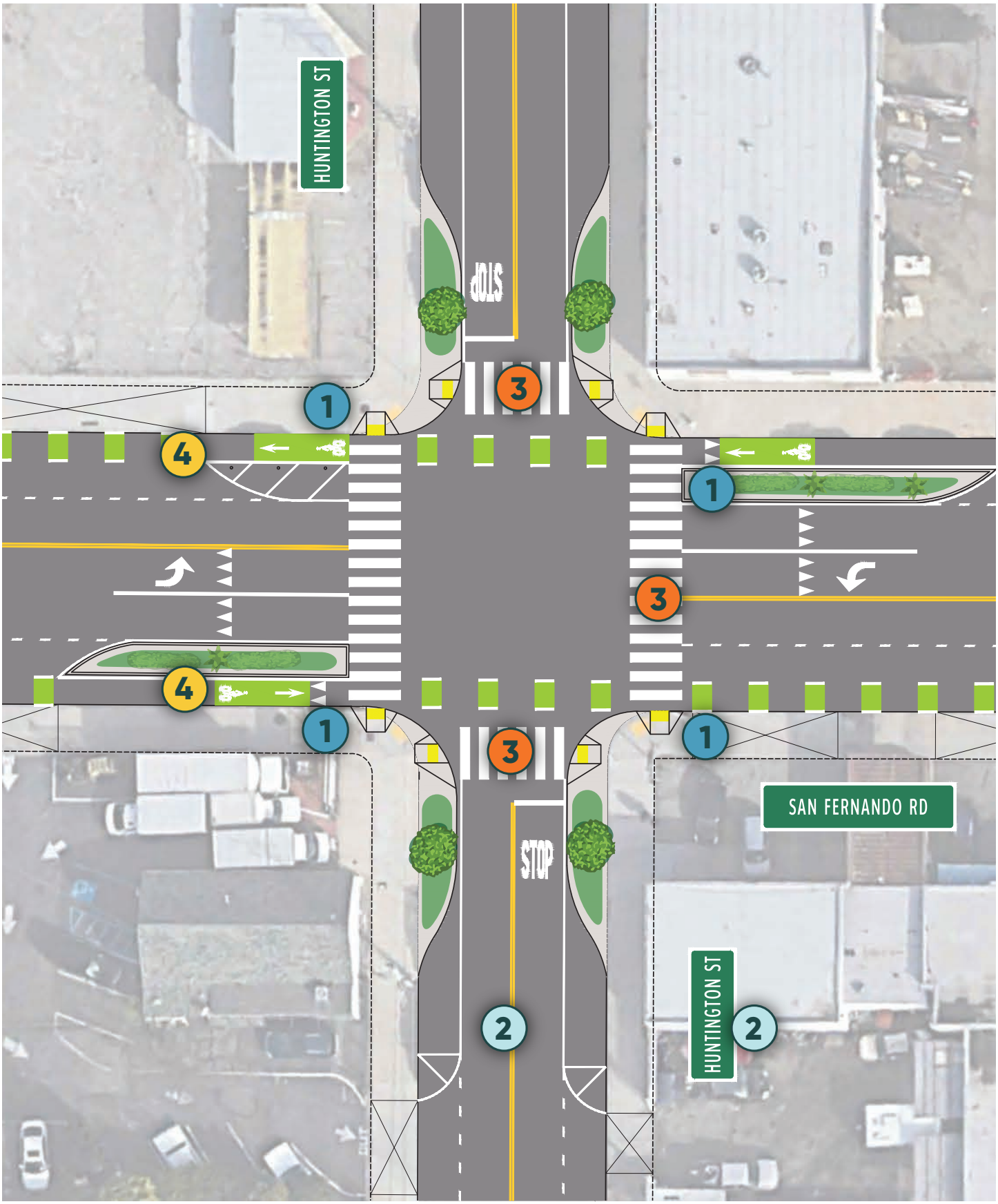


Figure 11: San Fernando Road from San Fernando Mission Boulevard to Hubbard Street

San Fernando Road from San Fernando Mission Boulevard to Hubbard Street

As a key Northwest entrance to the City from the neighborhood of Sylmar, this segment of San Fernando Road has the potential to create regional connections and improve conditions for all modes. As a parallel street to Truman Street, San Fernando Road has a similar mix of commercial land use types including automobile repair shops, restaurants, and medical services. There are also empty lots and potential plans for redevelopment in this area which can lead to increased walking and biking trips just west of the San Fernando Mall. A road reconfiguration is recommended to provide room for bike lanes, improved pedestrian facilities, and a two-way center turn lane. Recent Average Daily Traffic (ADT) studies and our observed walk audit during the PM peak period show that San Fernando Road does not carry as much traffic as Truman Street, and can be a prime candidate for a road reconfiguration given the approximately 8,800 vehicles per day (ADT).[3] This threshold is less than the recognized criteria by FHWA which states that four-lane to three-lane road conversions for less than 10,000 ADT are great candidates that most likely do not affect capacity.[4]



5

Recommendations:

1. **Rectangular Rapid Flashing Beacons** (RRFBs) improve visibility for people crossing the street.
2. **Concrete curb extensions** reduce crossing distances and provide space for trees and landscaping.
3. **Continental crosswalks** improve visibility for people crossing the street.
4. A **buffered bike lane** is more comfortable with less confident riders and provides additional distance between people biking and people driving.

3 City of San Fernando Transportation and Safety Commission Meeting, November 3, 2021, page 59: https://ci.san-fernando.ca.us/wp-content/uploads/2021/11/TSC-Agenda-Packet-11-3-21.pdf

4 https://safety.fhwa.dot.gov/road_diets/resources/pdf/fhwasa17021.pdf

5 https://www.mass.gov/info-details/what-are-road-diets

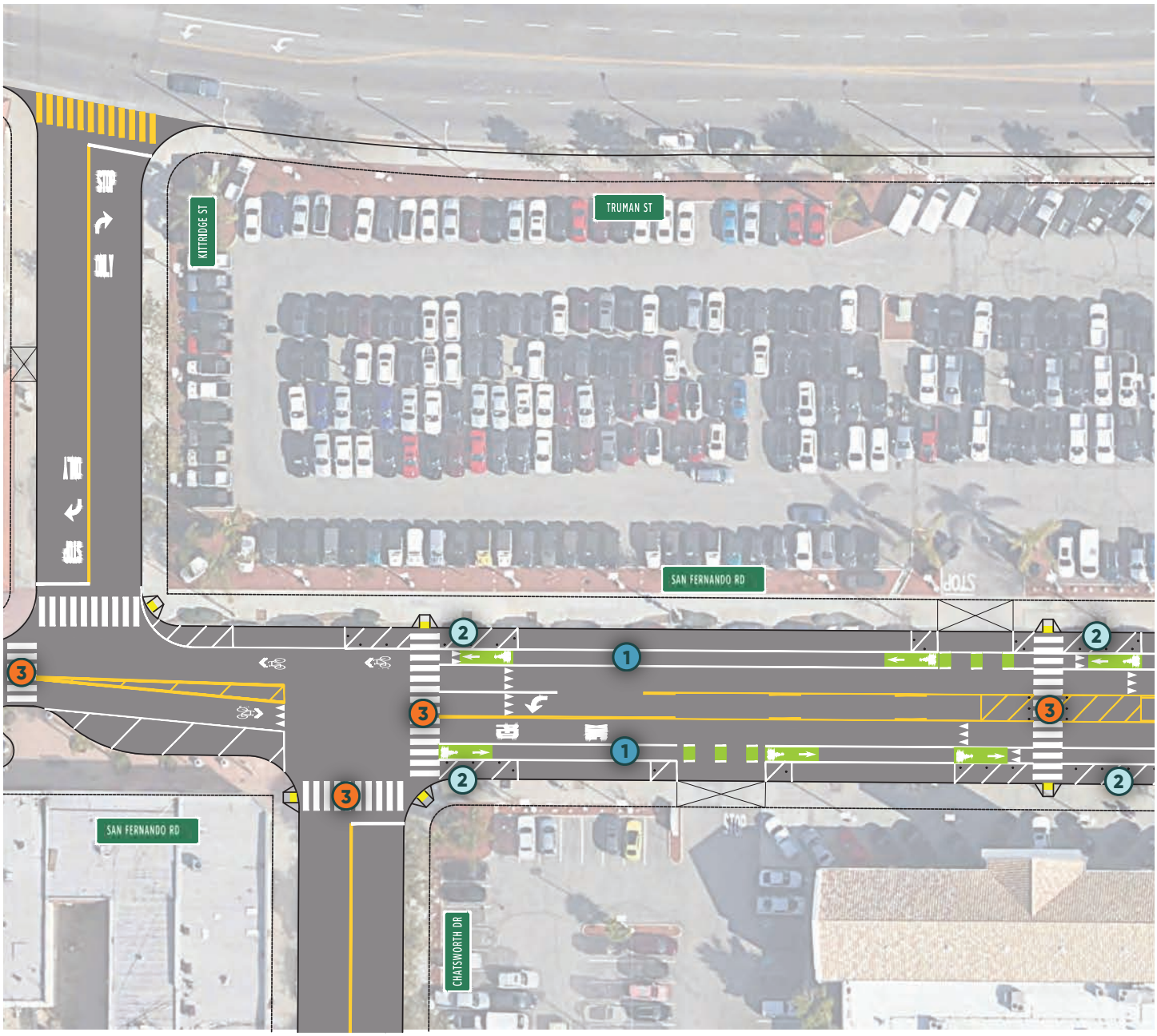


Figure 12: San Fernando Road from Wolfskill Street to Brand Boulevard

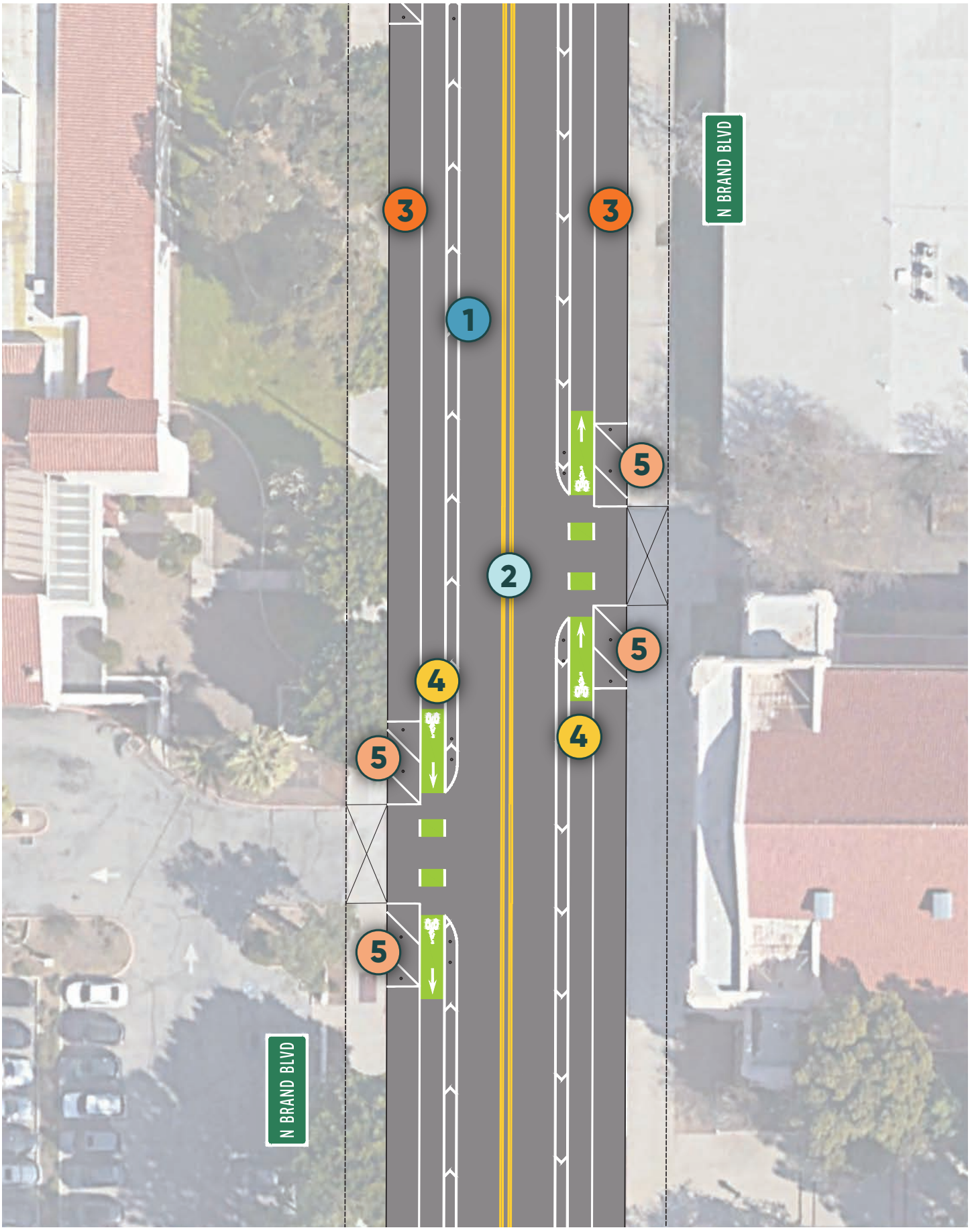
San Fernando Road from Wolfskill Street to Brand Boulevard

Similar to the western section of San Fernando Road, the eastern section from Wolfskill Street to Brand Boulevard is another key gateway to the city and direct connection to the San Fernando Mall. This area is surrounded by auto dealerships and community feedback indicated issues and potential conflicts between speeding drivers and pedestrians, primarily dealership employees. Our team recommends a road reconfiguration to match the proposed western section of San Fernando Road, and ADT data similarly matches the criteria of less than 10,000 vehicles, at approximately 6,100 daily vehicles.[6] The intersection of San Fernando Road and Chatsworth Drive is particularly complex given the number of travel lanes, turning movements, marked crosswalks, and the offset intersection at Kittridge Street. During the community site visit at the second open streets charrette, residents noted that this is a difficult intersection for all modes and that the proposed design would create a more predictable and safer feeling street.

Recommendations:

1. **A bike lane** creates dedicated space for people riding bikes.
2. **Painted curb extensions** reduce crossing distances.
3. **Continental crosswalks** improve visibility for people crossing the street.

6 City of San Fernando Transportation and Safety Commission Meeting, November 3, 2021, page 59: https://ci.san-fernando.ca.us/wp-content/uploads/2021/11/TSC-Agenda-Packet-11-3-21.pdf


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Brand Boulevard from Truman Street to Fourth Street

Brand Boulevard is one of the city's few streets connecting all of San Fernando in the northeast – southwest direction without interruptions from the railway. Residents wishing to connect to either side of San Fernando have to use Hubbard Street, Maclay Avenue, Brand Boulevard, and Jessie Street, and none of these streets offer safe biking facilities. The proposed design for Brand Boulevard intends to create safer facilities for people biking, and additional space for passenger loading zones in front of San Fernando Middle School and the Los Angeles County Courthouse, through the application of a road diet. The road diet creates a lower stress and narrower-feeling street to match the calm character of Brand Boulevard north of Fourth Street. More importantly, the additional buffered bike lane can encourage students to bike to school and establishes Brand Boulevard and a biking route.

Recommendations:

1. **Roadway reconfiguration** from four lanes to two lanes helps calm traffic.
2. **Double yellow lines** create separation for moving vehicles.
3. A **new parking/loading zone** on both sides of the street provides a designated space for parking and loading/unloading activities.
4. A **buffered bike lane** on both sides of the street is more comfortable with less confident riders and provides additional distance between people biking and people driving.
5. **Buffer zones near driveways with flexible bollards** improve visibility for people riding in the bike lane.

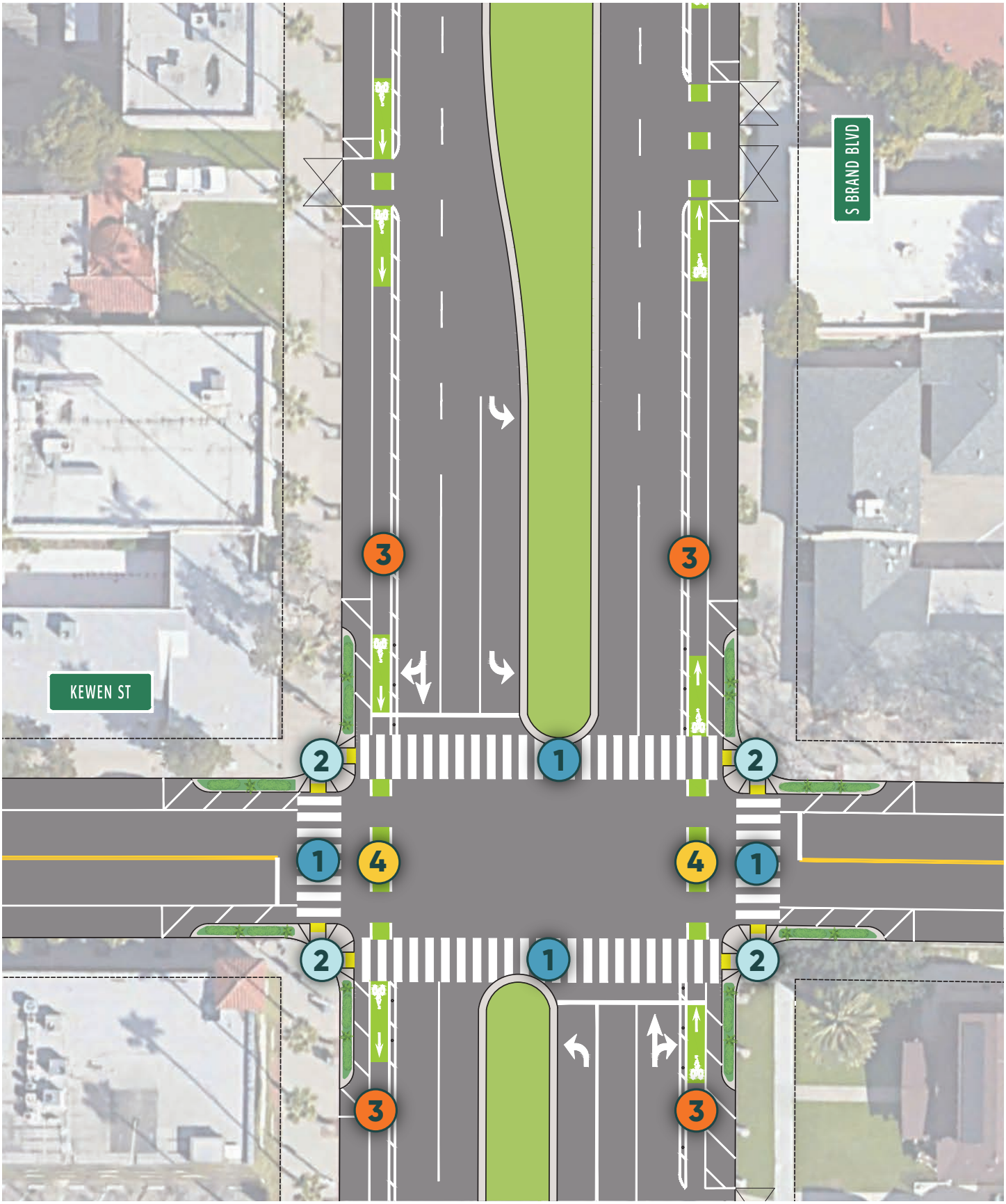
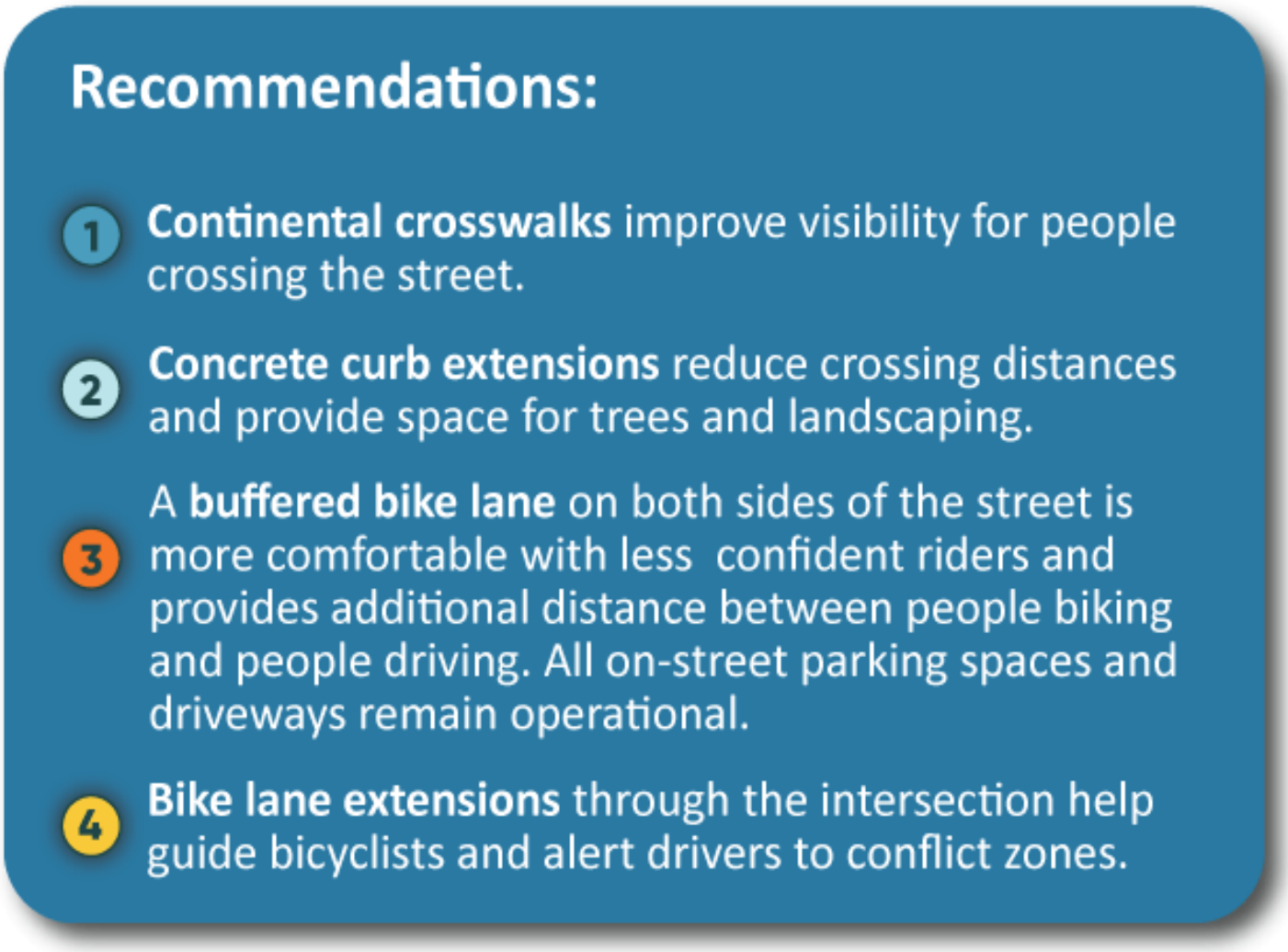


Figure 13: Brand Boulevard from Truman Street to O"Melvany Avenue

Brand Boulevard from Truman Street to O'Melveny Avenue

Brand Boulevard in the City of Los Angeles has standard five-foot bike lanes that disappear when traveling northbound into the City of San Fernando. As mentioned in the concept plan for approach for the northern section of Brand Boulevard, this segment introduces buffered bike lanes to establish a safe option for biking and walking throughout San Fernando. Additional elements included in this southern segment help pedestrians as they cross the wide profile of Brand Boulevard, which include high-visibility crosswalk markings, extended pedestrian signal timing to help older adults cross the street without waiting in the median island, and curb extensions with landscaping elements which are currently being designed by the local organization Tree People. These elements not only create a safer Brand Boulevard, but also help beautify the street while providing opportunities for green infrastructure.



Rapid Implementation Projects

In order to improve small, immediate need locations, the project team outlined a set of Rapid Implementation Project types that can apply to many locations throughout San Fernando. Concept designs for specific locations in San Fernando that detail geometric changes in the roadway including new crosswalks, bike lanes, changes in vehicle travel lanes, and locations for expanded sidewalks and opportunities for green infrastructure were also prepared. These projects may take 2-3 years to fund and construct. The following improvements, or countermeasures, were identified for rapid implementation.

High-Visibility Crossing Markings

High-visibility crosswalk markings, such as continental or ladder-style, are preferred over parallel line markings to improve visibility to approaching motorists. High-visibility crosswalk markings reinforce legal crosswalks at intersections and create legal crossings at non-intersection locations. These crosswalk markings warn motorists to expect pedestrian crossings and clarify that motorists are expected to yield right-of-way to crossing pedestrians. At uncontrolled locations, high-visibility crosswalk markings identify a preferred crossing location for pedestrians.

General Maintenance

Many locations inventoried during the walk and bike audits can be improved with basic general maintenance ranging from repainting designated curb zones (red curb areas), replacing damaged signs, repairing existing RRFB's, and the overall maintenance of the Mission City Trail.

Leading Pedestrian and Bicycle Intervals

Leading pedestrian intervals (LPIs) give pedestrians a "head start" to cross the street a few seconds before motorists can legally turn right. LPIs typically last at least 3 seconds but can range in length depending on intersection context. The LPI allows pedestrians to establish themselves in the crosswalk, thus improving crossing conditions. Similarly, Leading Bicycle Intervals (LBIs) provide bicyclists an opportunity to enter an intersection before vehicles are given a green indication. LBIs can be easily programmed into existing signals to give bicyclists an advanced green signal for a minimum of three to seven seconds before motorists can proceed through the intersection. LPI installation requires reprogramming the traffic signal to accommodate the advance pedestrian interval. In rare cases, agencies may need to upgrade signal controllers. The cost associated with LPI can range from $200 (controller setting changes only) to $1200 each (pedestrian/vehicle study, retiming analyses, incorporating the formers setting changes).[7]

Rectangular Rapid Flashing Beacons (RRFB's)

Rectangular Rapid Flashing Beacons (RRFBs) are placed on both sides of an uncontrolled crosswalk and are paired with a pedestrian crossing sign as well as an arrow pointing at the crosswalk. RRFBs can be actuated or pedestrian actuated, and feature an irregular, eye-catching flash pattern to call attention to the presence of pedestrians. FHWA has general guidance on the application of RRFB's for different roadway criteria.[8]

Sidewalk Repair

The City of San Fernando is proactive in repairing broken sidewalks caused by tree roots. These present tripping hazards and should be addressed on a short-term basis.

Signal Timing Adjustments for Elderly/Disabled Pedestrians

Pedestrian crossing times at signalized intersections are typically calculated using an average adult walking speed of 3.5 feet per second. However, San Fernando has an active elderly community and some of the city's signalized intersections may not provide adequate time for some pedestrians to cross long wide streets. Where applicable, a few signal timing adjustments should be implemented, including extending pedestrian crossing times and adjusting timings at locations with operational issues.

7 FHWA Countermeasure Tech Sheet: https://safety.fhwa.dot.gov/ped_bike/step/resources/docs/fhwasa19040.pdf

8 FHWA Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations

Yield to Pedestrian Signs and Advanced Yield Line Markings

"Yield to Pedestrians" signs and advanced yield line markings (i.e., "Shark's Teeth) are installed in tandem with RRFBs to reinforce the current law that pedestrians have the right of-way when using crosswalks and motorists are required to yield. Table 2 outlines Rapid Implementation projects at locations not covered in the Concept Plan project area boundaries, and were specifically identified through the walk and bike audit efforts. There may be other areas in San Fernando that can benefit from rapid implementation projects that have not yet been identified through this project effort. These projects may also interface with other ongoing efforts such as any forthcoming Public Works maintenance request program or the recent city Beautification Program.

Table 2: Rapid Implementation Projects

Improvement Type	Location
Sidewalk Repair	Harding Ave. between 8th St and Phillipi St.
	Brand Blvd. between Fourth St. and Third St.
	Fourth St. between Brand Blvd. and Jessie St.
New Signing and Striping	Install daylighting elements along San Fernando Rd. by auto dealerships
	Install green pavement markings where the Mission City Trail crosses local streets
	Install daylighting elements at Harding Ave. and Mountain View St. near curb ramps
General Maintenance	Repair RRFB at Glenoaks Blvd. and Alexander St.
	Repair RRFB at Maclay Ave. and Third St.
	Repaint red curb along Fifth St.
	Maintain planters along Maclay Ave.
	General Mission City Trail maintenance
	Address lifted tree well/grates near Hubbard St. and Mission City Trail
	Address lifted tree well/grates near Brand Blvd. and Eight St.
	General maintenance of public parking lot on Hollister St.
Upgrade to High-Visibility Crosswalk Markings	Maclay Ave. and Eight St.
	Maclay Ave. and Seventh St.
	Maclay Ave. and Fifth St.
	Maclay Ave. and Fourth St.
	Maclay Ave. and Third St.
	Maclay Ave. and Second St.
	Brand Blvd. and De Garmo St.
	Brand Blvd. and Fifth St.
	Brand Blvd. and Seventh St.
	Brand Blvd. and Hollister St.
	Fifth St. and Harding Ave.
	Fifth St. and Alexander St.
	Fourth St. and Park Ave.
	Park Ave. and Robert F. Kennedy Dr. (move SB stop bar closer to intersection)
	Sand Fernando Mission and Mott St.
	Kalisher St. and Griffith St.
	Kalisher St. and Hewitt St.

Improvement Type	Location
Increase Pedestrian Walk Phase	Maclay Ave. and Seventh St.
	Maclay Ave. and Fifth St.
	Maclay Ave. and Fourth St.
	Maclay Ave. and Truman St.
	Glenoaks Blvd. and Harding Ave.
	Truman St. and Wolfskill St.
	Brand Blvd. and Hollister St.
	Brand Blvd. and Kewen St.
	SF Mission Blvd. and Hollister Street
Traffic Calming	Install new four-way stop sign at Fourth St. and Fermoore St.
	Install new RRFB at Maclay and Second St.

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Chapter 5:
What's Next?



What's Next?

The City of San Fernando should focus on continuing to build community support and stewardship for safe and active streets project, as well as focus on funding and implementation to create a more livable San Fernando. The projects recommended in this Plan for implementation can benefit from multiple funding sources and ongoing community engagement. While some projects include safety treatments that can be implemented on a quick timeframe (signal timing adjustments, general maintenance, signing and striping at key intersections, etc.), other projects may require more community and political support, such as road reconfigurations and implementing a neighborhood bike network. Nevertheless, there is ample funding for both infrastructure and programmatic project types, as well as funding for urban greening and beautification. With support from ongoing City policies such as the 2022-2027 Strategic Goals and the City's Beautification Plan, grant funding applications for Safe and Active Streets will be competative, contextual, and move City goals forward.

Funding Sources

The following funding sources available to achieve the Implementation Plan goals are listed in Table 3.

Table 3: Funding Sources

Program/ Funding Source	Lead Agency	Description	Eligible Projects	Next Steps
Urban Greening	California Natural Resources Agency	Part of a statewide initiative to utilize cap-and-trade dollars to fund projects that help reduce greenhouse gas emissions.	Projects that develop green infrastructure, including bicycle and pedestrian facilities	The last round of funding was awarded in March 2020. No additional funding is available at this time, but interested applicants should check the website for updates: https://resources.ca.gov/grants/urban-greening/
Active Transportation Program (ATP)	California Transportation Commission	Consolidates many former federal and state programs to fund a wide range of capital and non-capital projects. A strong preference is given to projects in disadvantaged communities.	Active transportation infrastructure or non-infrastructure projects, quick-build project pilots, and active transportation plans (the minimum request for funds is $250,000)	Applications are available annually. There are five application types (large project, medium project, small project, non-infrastructure only, or plan). More information at: https://catc.ca.gov/programs/active-transportation-program
Local Streets and Roads Program	California Transportation Commission	Uses funds from SB 1 to fund projects on the local streets and roads system.	Projects that support basic road maintenance, rehabilitation, and safety projects	To be eligible for funding, the City of San Fernando must submit a proposed project list to the California Transportation Commission. More information at: https://catc.ca.gov/programs/sb1/local-streets-roads-program

Program/ Funding Source	Lead Agency	Description	Eligible Projects	Next Steps
Solutions for Congested Corridors	California Transportation Commission	Provides $250 million annually to achieve a balanced set of transportation, environmental, and community access improvements that reduce congestion throughout the state.	Projects that implement specific transportation performance improvements (like bicycle lanes or pedestrian improvements) designed to reduce congestion by providing more transportation choices to residents, commuters, and visitors and are part of a comprehensive corridor plan	The next application cycle will be for fiscal years 2022-2023. More information at: https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program
State Transportation Improvement Program (STIP)	Caltrans	Allocates certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements.	Transportation-related capital improvement projects	The STIP is a five-year plan, updated every two years. City staff should work with regional transportation authorities to nominate projects for inclusion in the STIP. More information at: https://catc.ca.gov/programs/state-transportation-improvement-program
Assessment Districts	City of San Fernando	Creates a local mechanism to fund public improvements. Examples of assessment districts include Mello-Roos Community Facility Districts, Infrastructure Financing Districts, Open Space Districts, or Lighting and Land-scape Districts.	A variety of project types, including construction and maintenance of bicycle and pedestrian facilities	If the City of San Fernando is interested in establishing an assessment district, the City will need to adopt a Resolution of Intention stating the intent to form an assessment district. The resolution needs to state the name of district, type of facilities to be financed, sets the time and place for the public hearing, and orders the preparation of an engineer's report. Proposition 218 ballots are mailed to each property owner within the district. If the majority vote in favor for formation, and public hearing is concluded, the district is formed.

Program/ Funding Source	Lead Agency	Description	Eligible Projects	Next Steps
Metro Active Transport, Transit First/ Last Mile Program (MAT)	Los Angeles County Metropolitan Transportation Authority	Utilizes Measure M funds (approximately $857 million) over 40 years to support active transportation infrastructure projects throughout Los Angeles County.	Capital projects that improve or grow the active transportation network or expand the reach of transit and are consistent with Metro's First/Last Mile Strategic Plan or Active Transportation Strategic Plan.	Program cycles occur every 2-5 years (the last cycle was awarded in 2020 for fiscal years 2021-2025). More information at: https://www.metro.net/projects/metro-active-transport-mat-program/
Sustainable Communities Program	Southern California Association of Governments	Provides a mechanism to promote local jurisdictional efforts to test local planning tools.	Planning efforts related to integrated land use, active transportation, or climate action and greenhouse gas reduction.	Calls for applications are released throughout the fiscal year. More information at: https://scag.ca.gov/sustainable-communities-program
Affordable Housing and Sustainable Communities Program	Strategic Growth Council	Funds projects that facilitate compact development, including bicycle infrastructure and amenities, with neighborhood scale impacts. Available to government agencies and institutions (including local government, transit agencies and school districts), developers and nonprofit organizations.	Transportation projects that support transit-oriented development and reduce green-house gas emissions, including projects that encourage connection to transit networks as well as bicycle and pedestrian facilities.	Applications are invited through the issuance of Notice of Funding Availability (NOFA) yearly. Subscribe to the AHSC email list to receive notifications and announcements. More information at: https://www.hcd.ca.gov/grants-funding/active-funding/ahsc.shtml
Community Grant Program	PeopleForBikes	Supports projects and advocacy initiatives that make it easier and safer for people of all ages and abilities to ride.	Bicycle infrastructure projects, including bike paths/lanes/trails/bridges and bike end-of-trip facilities up to $10,000	1-2 grant cycles are opened per year. More information at: https://www.peopleforbikes.org/grant-guidelines
Transformative Climate Communities	California Strategic Growth Council and Department of Conservation	Funds community-led development and infrastructure projects that achieve environmental, health, and economic benefits in disadvantaged communities.	Bicycle and pedestrian facilities	The TCC Program does not currently have funding allocated for the next round of awards, but more information can be found at: https://sgc.ca.gov/programs/tcc/resources/

Program/ Funding Source	Lead Agency	Description	Eligible Projects	Next Steps
Local Partnership Program (LPP)	California Transportation Commission	Funds public agencies in which voters have approved fees, tolls or taxes dedicated solely to transportation improvements.	Bicycle and pedestrian facilities, transit facility improvements, and projects that mitigate environmental impacts of new transportation infrastructure on air or water quality.	Funding is distributed annually in a formulaic program and a competitive program. The formulaic program distributes 60% of the total funds based on tax/toll/fee revenues, while the competitive program distributes 40% of the total funds in a competitive application process. More information at: https://catc.ca.gov/programs/sb1/local-partnership-program
The Clean Mobility Options Voucher Pilot Program	CALSTART and Shared-Use Mobility Center	Provides $20 million from California Climate Investments for zero-emissions shared mobility projects (such as car sharing, bike sharing, and on-demand sharing) in disadvantaged and low-income communities, including some tribal and affordable housing communities	Bikeshare/scootershare programs, innovative transit services, infrastructure projects related to shared mobility	Applications are available annually. More information at: https://www.cleanmobilityoptions.org/

Evaluation and Monitoring

Ongoing Safety Evaluation

Once projects are implemented, city staff should monitor the safety countermeasures to determine overall effectiveness and identify any necessary field adjustments. This evaluation will help inform any necessary changes to the mid- and long-term improvements before they are designed and constructed. The city should also monitor crash history at the project locations, although a longer time period following implementation may be required to fully quantify safety improvements (typically 3-5 years).

Pedestrian and Bicycle Counts

The city should also consider conducting counts to assess a change in the number of walking and bicycling trips for specific areas. This can be done either in-house using count detection equipment, as part of a community count program working with volunteers, through the use of a third party vendor, or using automated counters. The Southern California Association of Governments (SCAG) has established a robust count program specific to volunteers and has resources available in their project website: *https://atdb.scag.ca.gov/Pages/Tutorials.aspx*. The count locations can also be prioritized at previous count locations to assess the success of supportive active transportation infrastructure.

Programmatic Recommendations

The 2017 Safe and Active Streets Plan includes a detailed list of programmatic recommendations. The project team recommends the following programmatic recommendations and policies be adopted as they specifically support recommendations outlined for the Implementation Plan (see Table 4).

Table 4: Policy and Program Recommendations

Program or Policy	Description
Bicycle Registration Program	Bike registration programs are typically managed at the local level through municipal police departments. Registration programs record the bike's serial number, the bike owner's contact information, and possibly a description and/or photo of the bike which is then stored on a police department database. When a registered bike is reported stolen, the bike is then flagged in the police department's bike registry database. If the bike is recovered by the police department, it can easily be returned to the owner using the contact information recorded in the database. Registration programs can increase the rate in which stolen bicycles are returned to their owners without requiring much effort and funding by the police department. Bike registration programs can reduce the burden that police department bear when having to store recovered bicycles, and may be a good public relations exercise showing that the police are proactively addressing bicycle theft issues.
Capital Improvements Projects / Complete Streets Checklist	Create checklist for capital projects on and adjacent to streets (repaving, re-striping, reconstruction) that ensures City staff review the infrastructure recommendations of this Plan at the time of project development
End of Trip Facilities	Providing facilities at destination such as showers, lockers, secured bike parking, and repair tools can encourage people to decide to choose to make their trips using active modes of transportation. These amenities can make people who choose to travel using active modes of transportation comfortable and feel supported. Having more employees bike or walk provides many benefits to employers, including increased employee productivity, better health, reductions in absenteeism, reduced commute time, cost, and stress resulting from parking and congestion, and a positive public image as organization that values the health of its employees and the environment.
Reduce speeds near schools	Evaluate, and if feasible, implement a School Zone program (15 mph speed limits).
Safe Routes to School Initiatives	Continue to pursue funding sources for the Safe Routes to School Plans created as part of the 2017 SASIP. Work with local schools to make improvements that promote safe walking and bicycling to schools.
Safety Initiatives	Develop a safety campaign, based on the City's collision data, to share information with the community about traffic safety for all modes. Develop specific materials and programs for driver safety education. Develop educational materials demonstrating how to navigate and interact with newer active transportation facilities (e.g. bike boxes, Pedestrian Hybrid Beacons, separated bike lanes, etc.)

Appendices

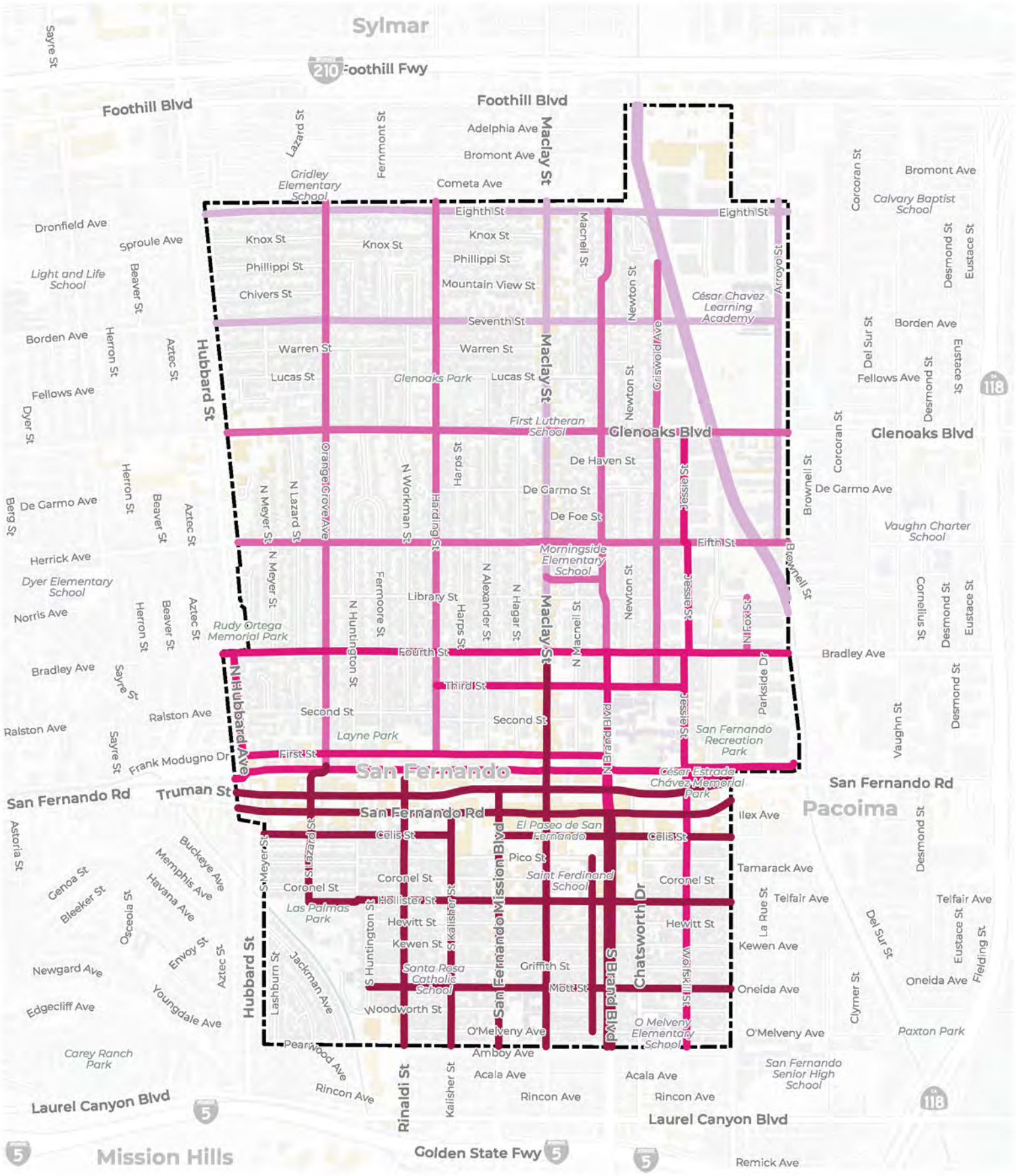
A - Prioritization Maps

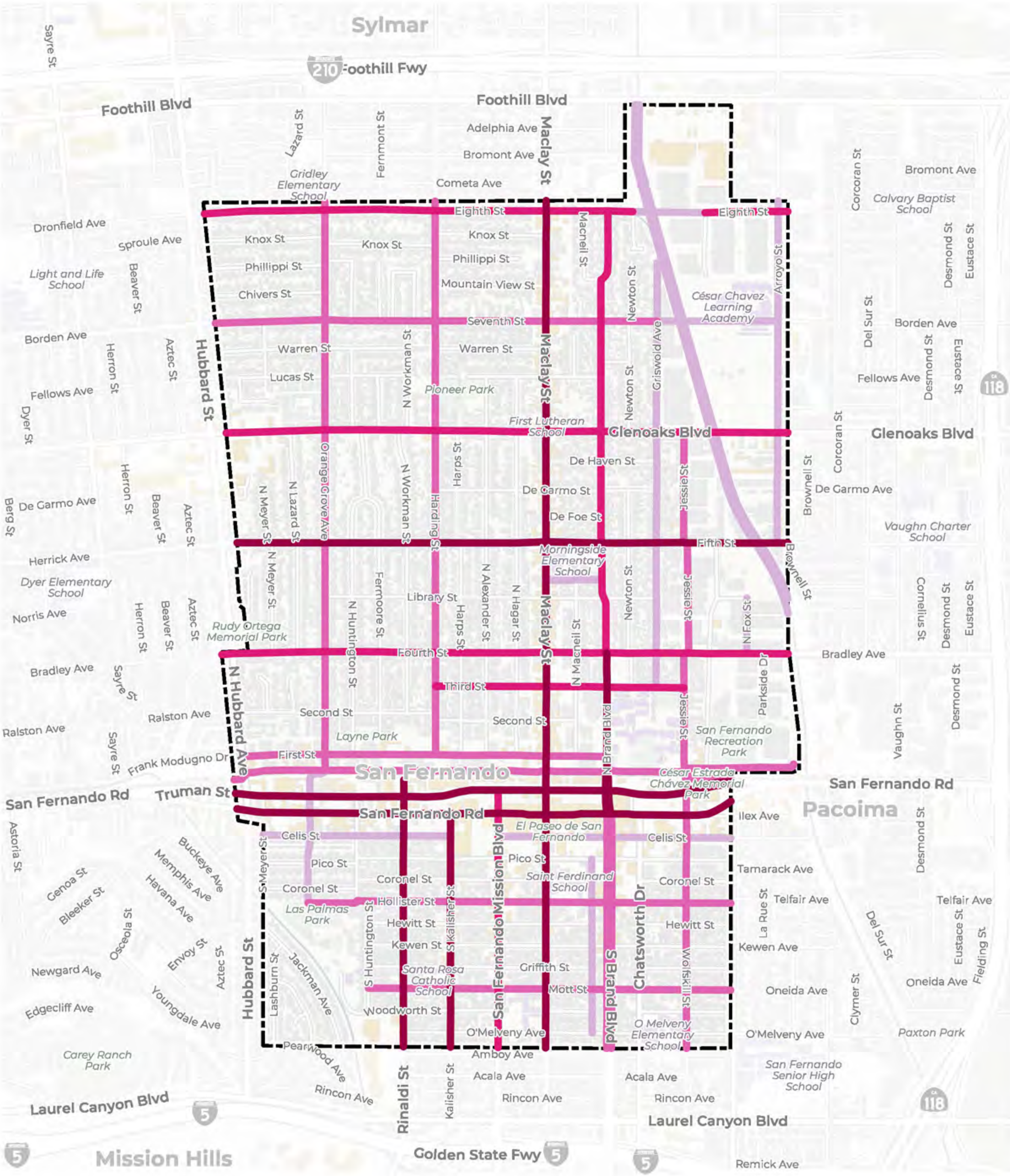
B - Walk and Bike Audit Maps

C - Concept Design Plans

D - Cost Estimates




Sylmar
Foothill Fwy
Foothill Blvd
Maclay St
Eighth St
Seventh St
Warren St
Lucas St
Glenoaks Park
Glenoaks Blvd
First Lutheran School
Morningside Elementary School
Fifth St
Fourth St
Third St
Second St
Layne Park
San Fernando
San Fernando Rd
Truman St
Pacoima
Ilex Ave
Tamarack Ave
Telfair Ave
Kewen Ave
Oneida Ave
O'Melveny Ave
Paxton Park
San Fernando Recreation Park
César Estrada Chávez Memorial Park
César Chavez Learning Academy
Calvary Baptist School
Vaughn Charter School
Gridley Elementary School
Light and Life School
Dyer Elementary School
Rudy Ortega Memorial Park
Las Palmas Park
Saint Ferdinand School
Santa Rosa Catholic School
O Melveny Elementary School
San Fernando Senior High School
Carey Ranch Park
Mission Hills
Laurel Canyon Blvd
Golden State Fwy
Remick Ave
Hubbard St
Brand Blvd
Mission Blvd
Chatsworth Dr
Rinaldi St
Hubbard Ave
Glenoaks Blvd
Cornelius St
Desmond St
Eustace St
Fielding St
Del Sur St
Clymer St
Vaughn St
Brownell St
Parkside Dr
Bradley Ave
Ralston Ave
Frank Modugno Dr
Borden Ave
Fellows Ave
De Garmo Ave
Herrick Ave
Norris Ave
Bromont Ave
Adelphia Ave
Cometa Ave
Eighth St
Knox St
Phillippi St
Mountain View St
Chivers St
Sproule Ave
Dronfield Ave
Borden Ave
Fellows Ave
De Garmo Ave
Herrick Ave
Norris Ave
Bradley Ave
Ralston Ave
Edgecliff Ave
Newgard Ave
Youngdale Ave
Envoy St
Havana Ave
Memphis Ave
Buckeye Ave
Bleeker St
Genoa St
Astoria St
Berg St
Dyer St
Sayre St
Beaver St
Herron St
Aztec St
Lazard St
Fernmont St
Macneil St
Newton St
Griswold Ave
Arroyo St
Corcoran St
Brownell St
Jessie St
Harps St
Harding St
N Workman St
N Meyer St
N Lazard St
Orange Grove Ave
N Huntington St
Fermoore St
N Alexander St
N Hagar St
N Maclay St
N Fox St
Library St
Coronel St
Celis St
Pico St
Hollister St
Hewitt St
Kewen St
Griffith St
Mott St
Woodworth St
O'Melveny Ave
Amboy Ave
Acala Ave
Rincon Ave
Pearwood Ave
Jackman Ave
Lashburn St
S Huntington St
S Kalisher St
S Meyer St
S Lazard St
S Maclay St
S Mission Blvd
S Brand Blvd
Wolfskill St
La Rue St
Kalisher St
Rinaldi St
Equity Priority
Priority
High
Low
April 2021
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THE CITY OF SAN FERNANDO
TOOLE DESIGN



Safety Priority

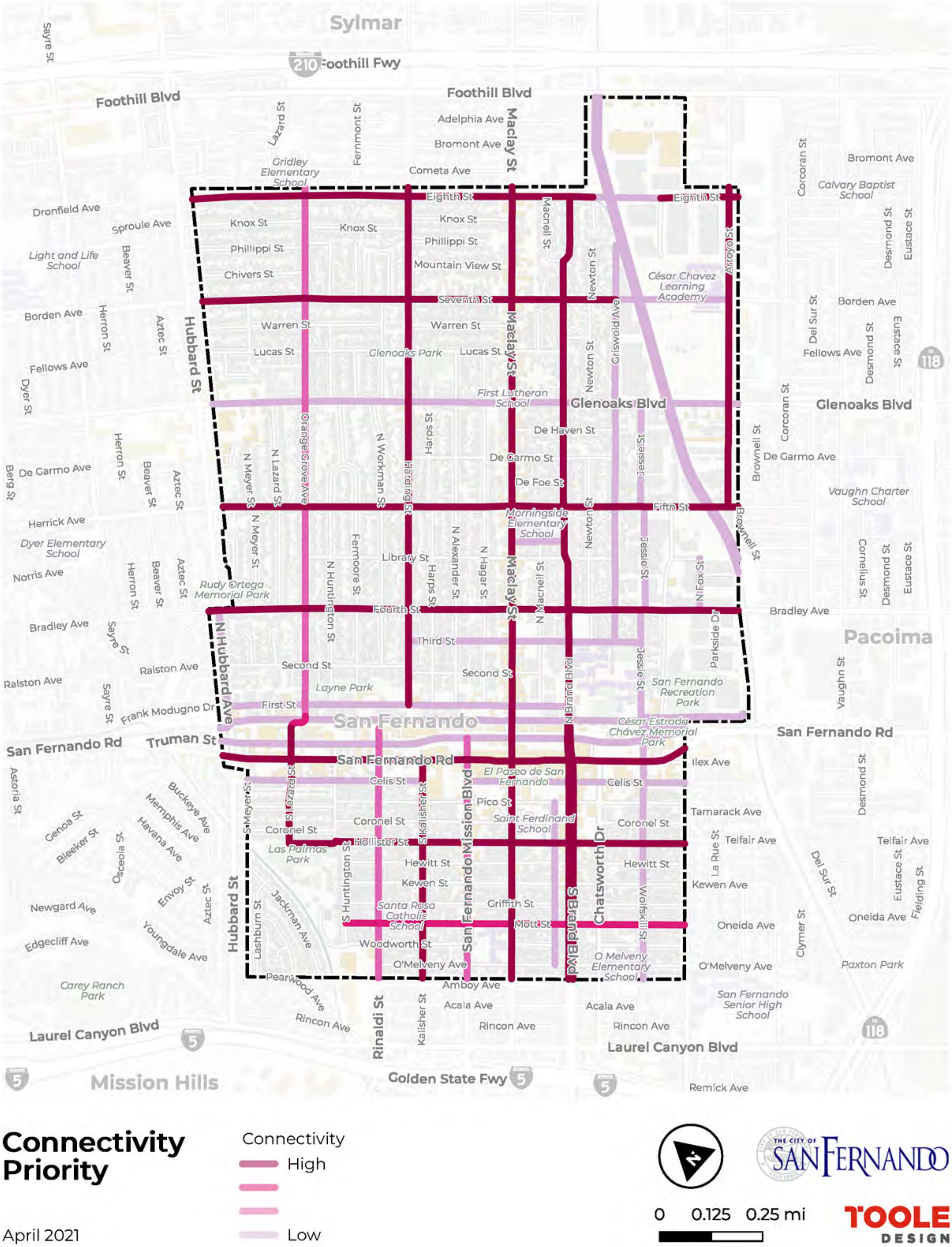
Priority

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April 2021

0 0.125 0.25 mi

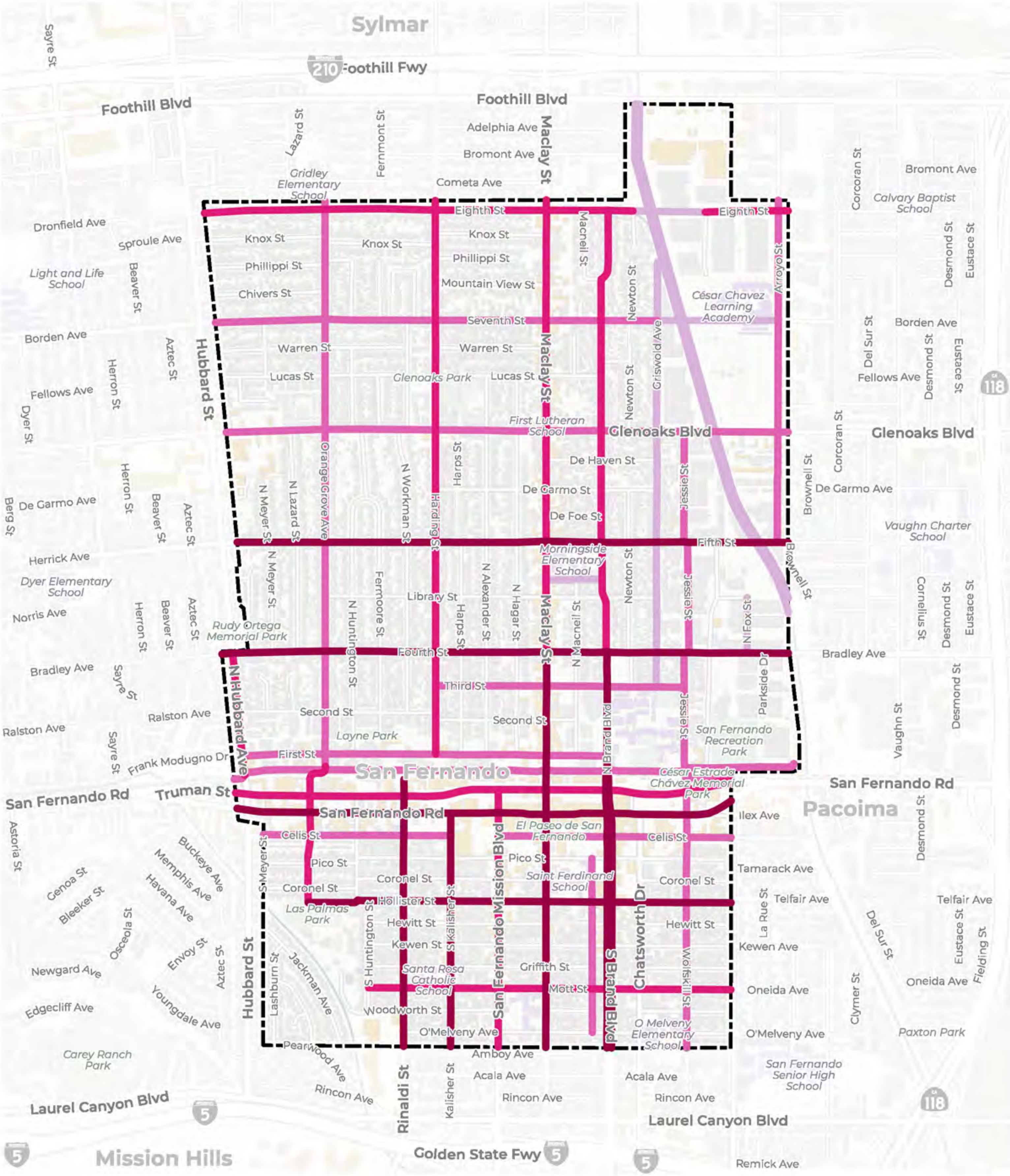


Connectivity Priority

April 2021

THE CITY OF SAN FERNANDO

TOOLE DESIGN



Overall Priority

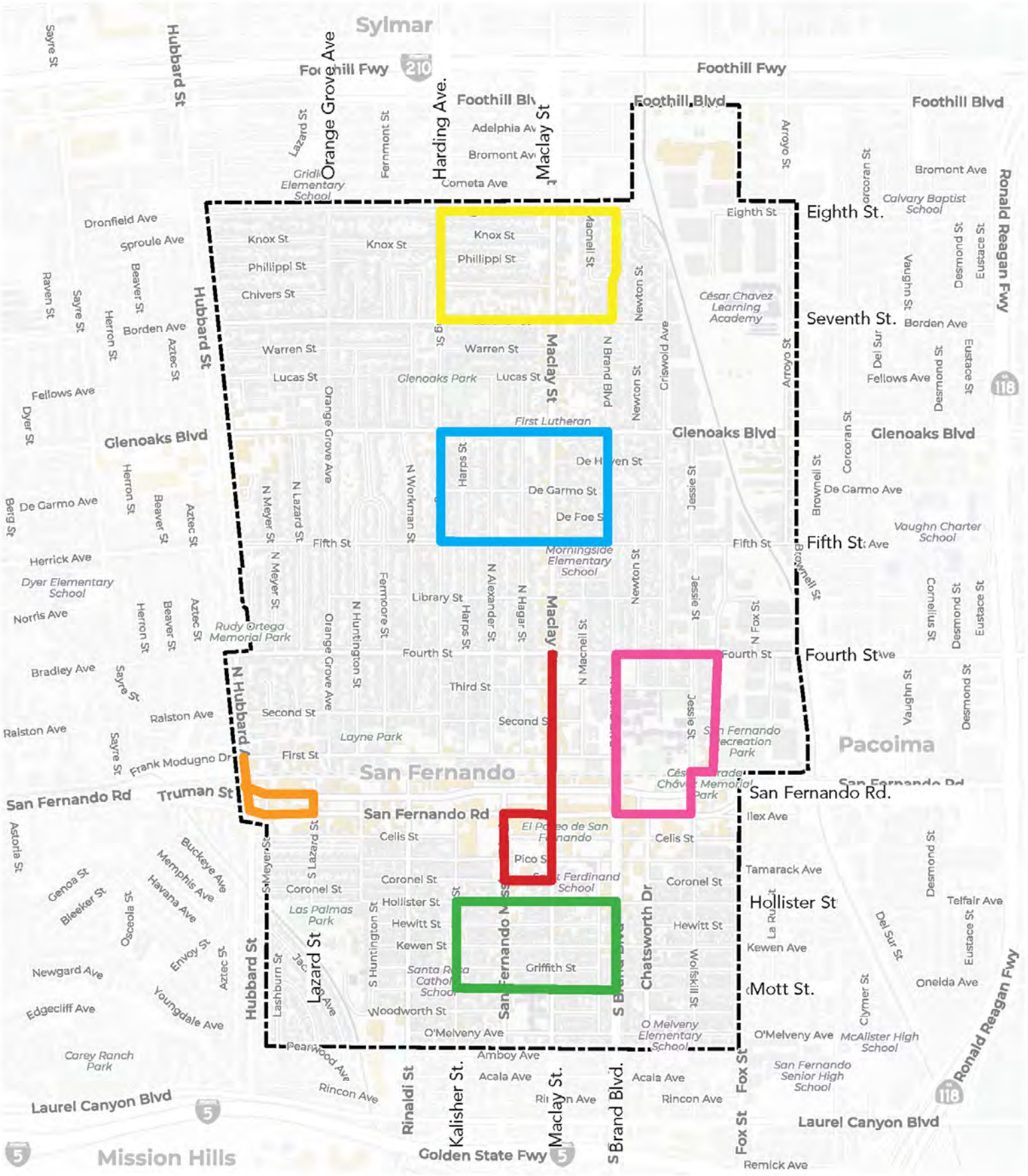
Priority
- High
- Low

April 2021

0 0.125 0.25 mi

THE CITY OF SAN FERNANDO

TOOLE DESIGN



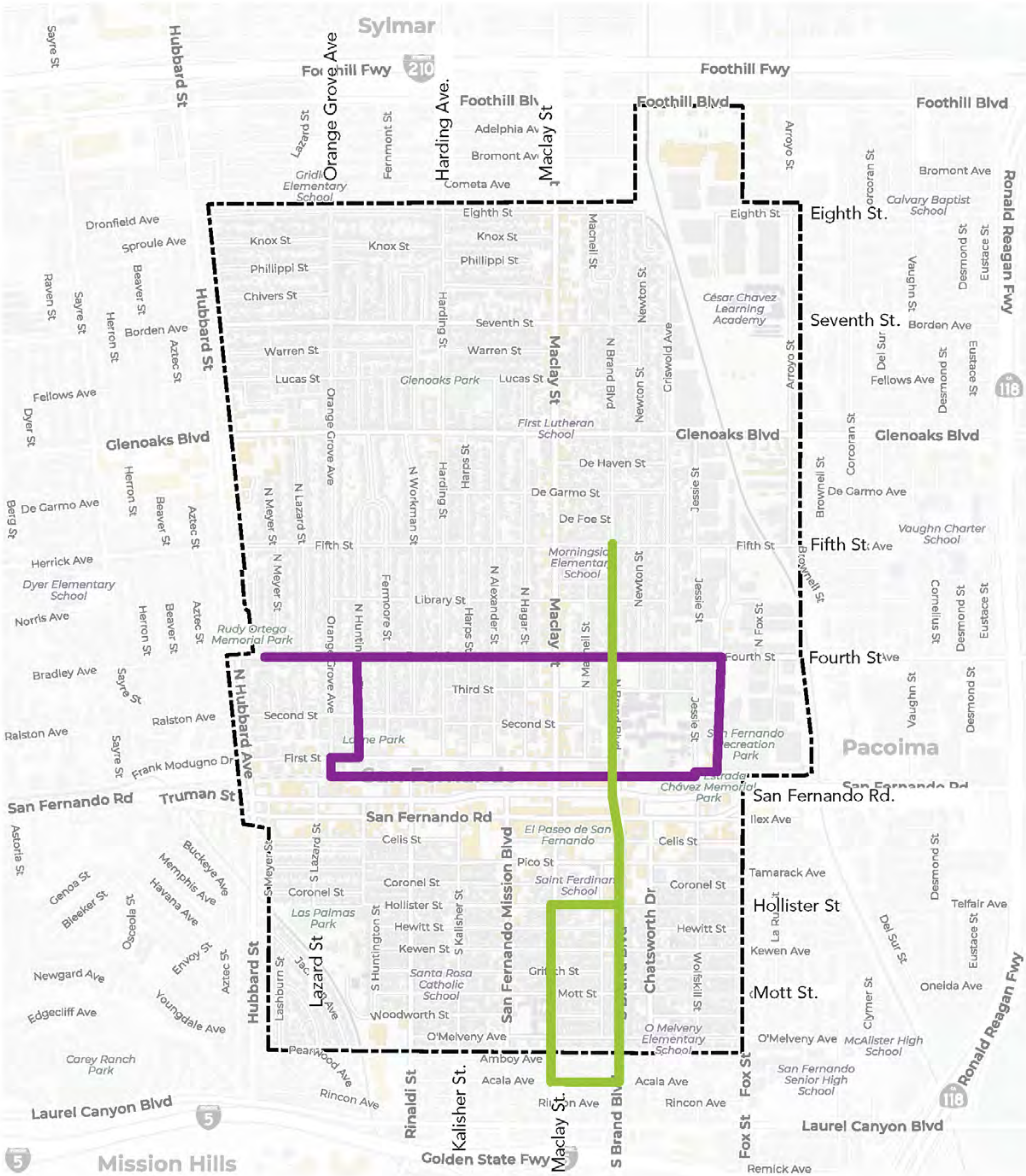
Walk Audit Route Map

- Commercial
- School
- Park
- City Limits

(1.2 mi.)
(1.2 mi.)
(0.5 mi.)
(1.3 mi.)
(1.2 mi.)
(1.1 mi.)

0 0.125 0.25 mi

April 2021



Bike Audit Route Map

- Commercial
- School
- Park
- City Limits
- (2.8 mi.)
- (2.6 mi.)

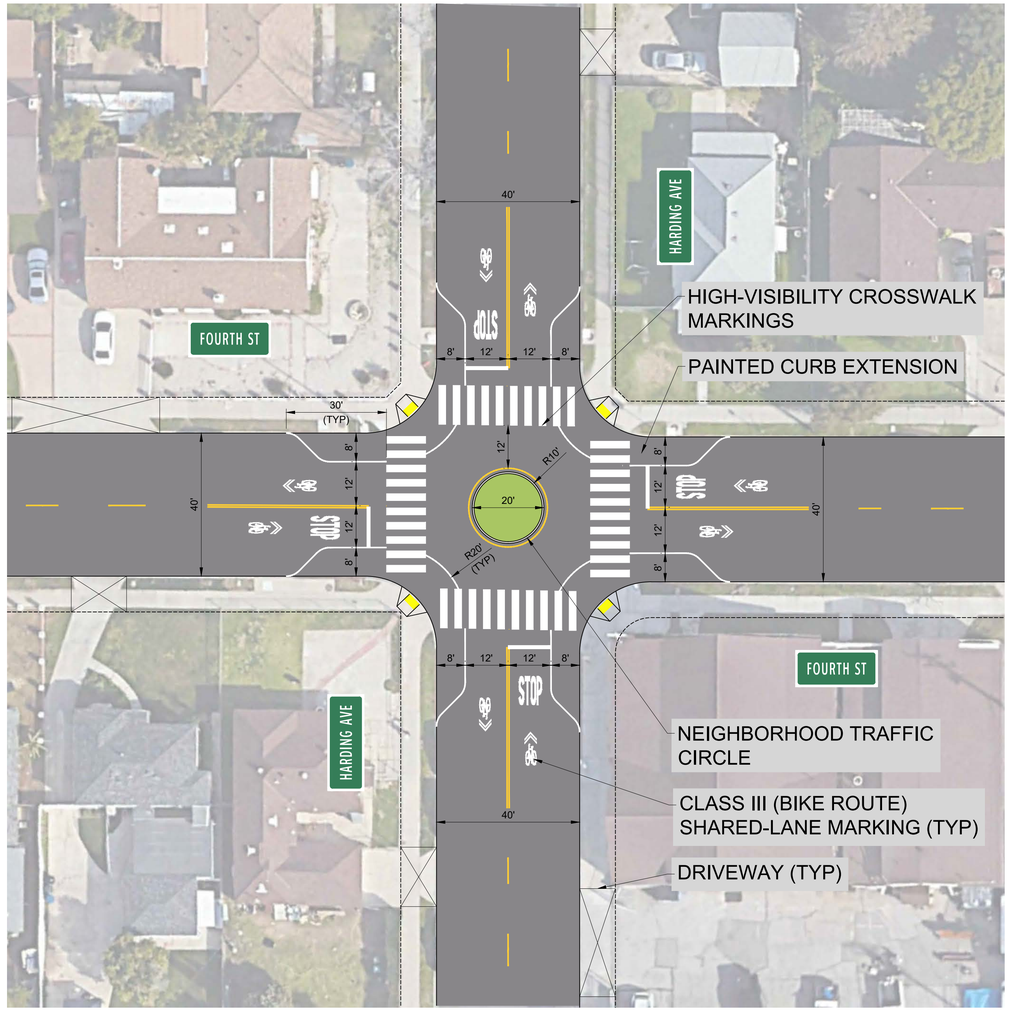
0 0.125 0.25 mi

THE CITY OF SAN FERNANDO

TOOLE DESIGN

April 2021

Appendix C - Concept Design Plans



0 20' 40' 60'

SCALE IN FEET

CONCEPTUAL DESIGN
PRELIMINARY - NOT FOR CONSTRUCTION

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CITY OF SAN FERNANDO

CONCEPTUAL DESIGN

HARDING AVE & FOURTH ST

PROJECT NO. G0047
DATE 12/3/2021
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SHEET NO. 1 OF 21



0 20' 40' 60'

SCALE IN FEET

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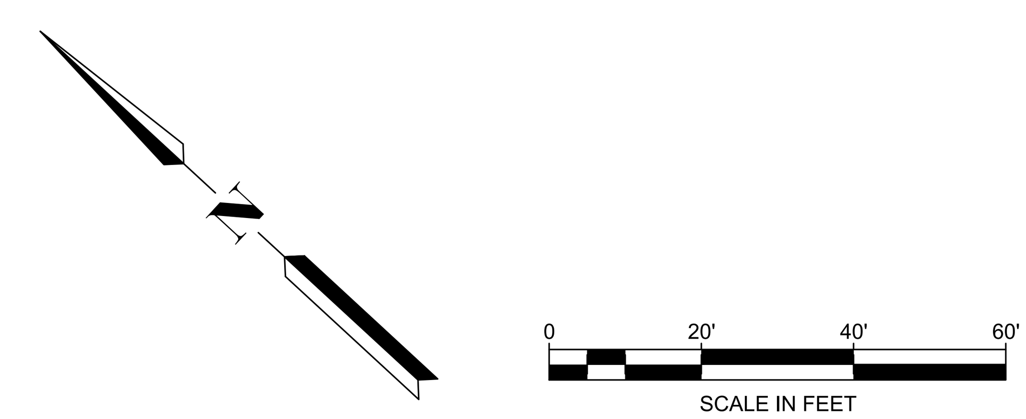
CONCEPTUAL DESIGN

HUBBARD AVE & TRUMAN ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 2 OF 21

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12/3/2021

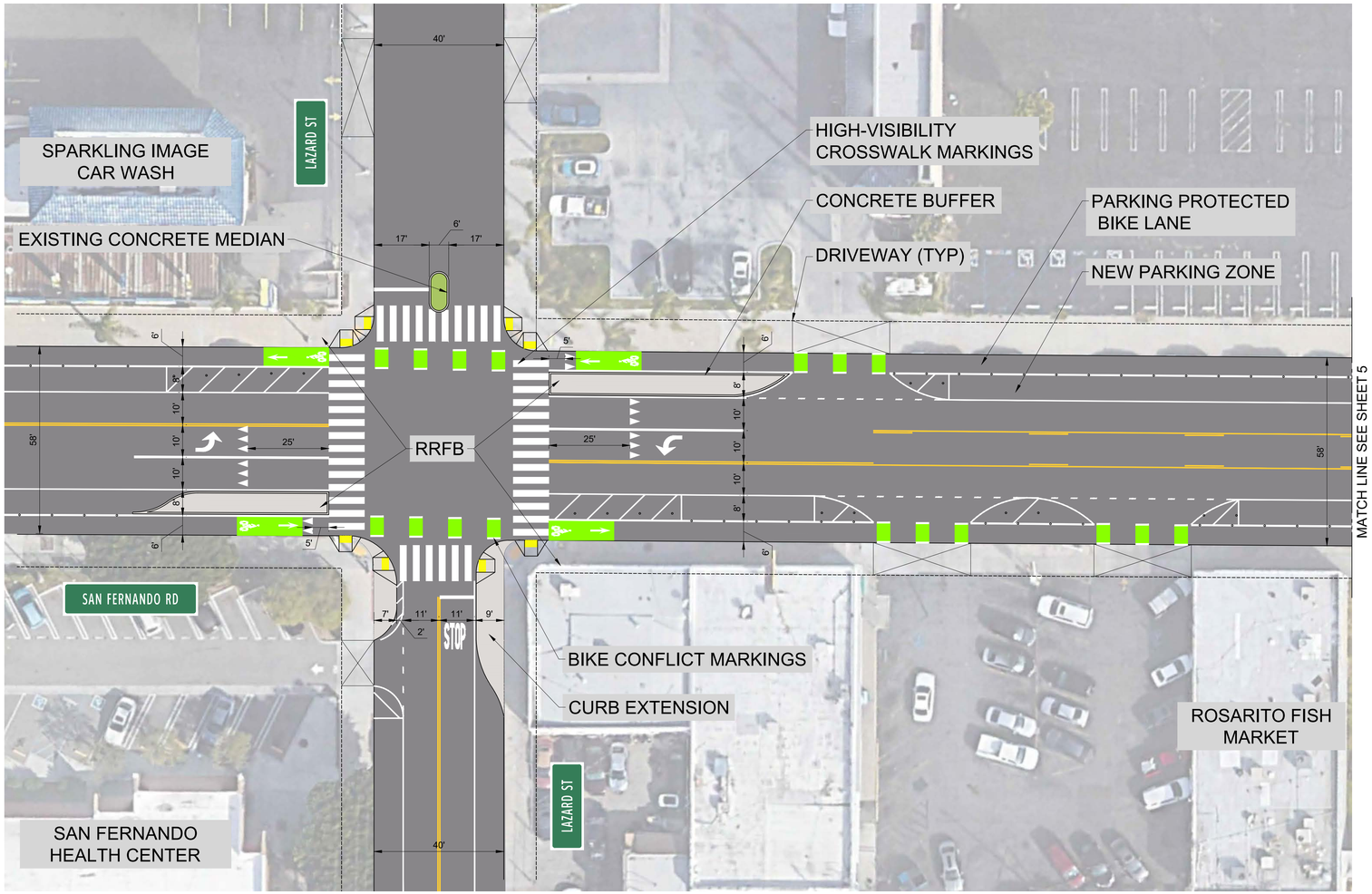




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MATCH LINE SEE SHEET 5

0 20' 40' 60'

SCALE IN FEET

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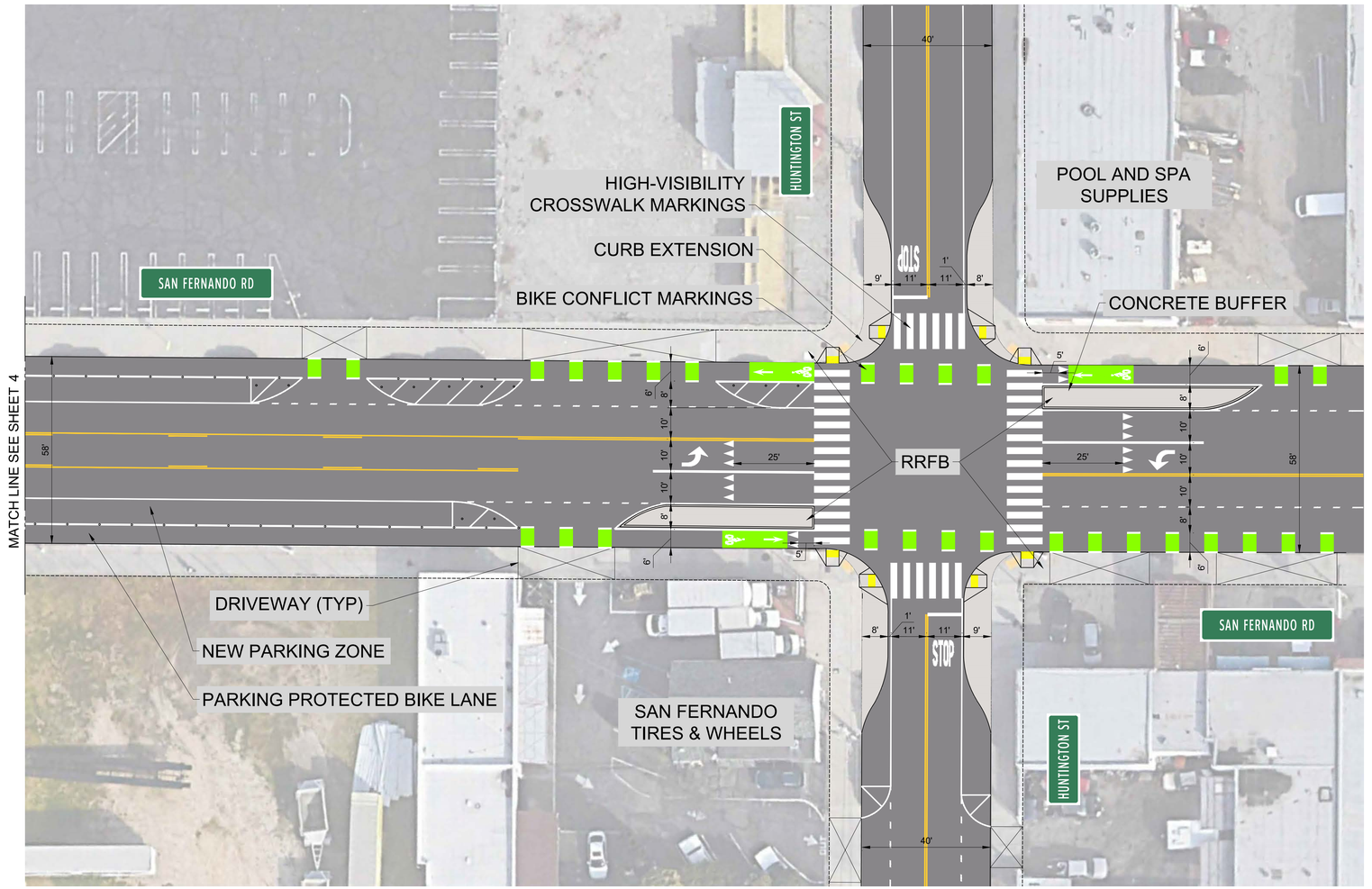
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SAN FERNANDO ROAD -
LAZARD ST TO HUNTINGTON ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 4 OF 21



0 20' 40' 60'

SCALE IN FEET

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CITY OF SAN FERNANDO

CONCEPTUAL DESIGN

SAN FERNANDO ROAD - LAZARD ST TO HUNTINGTON ST (2)

PROJECT NO. G0047

DATE 12/3/2021

DRAWING NO.

SHEET NO. 5 OF 21

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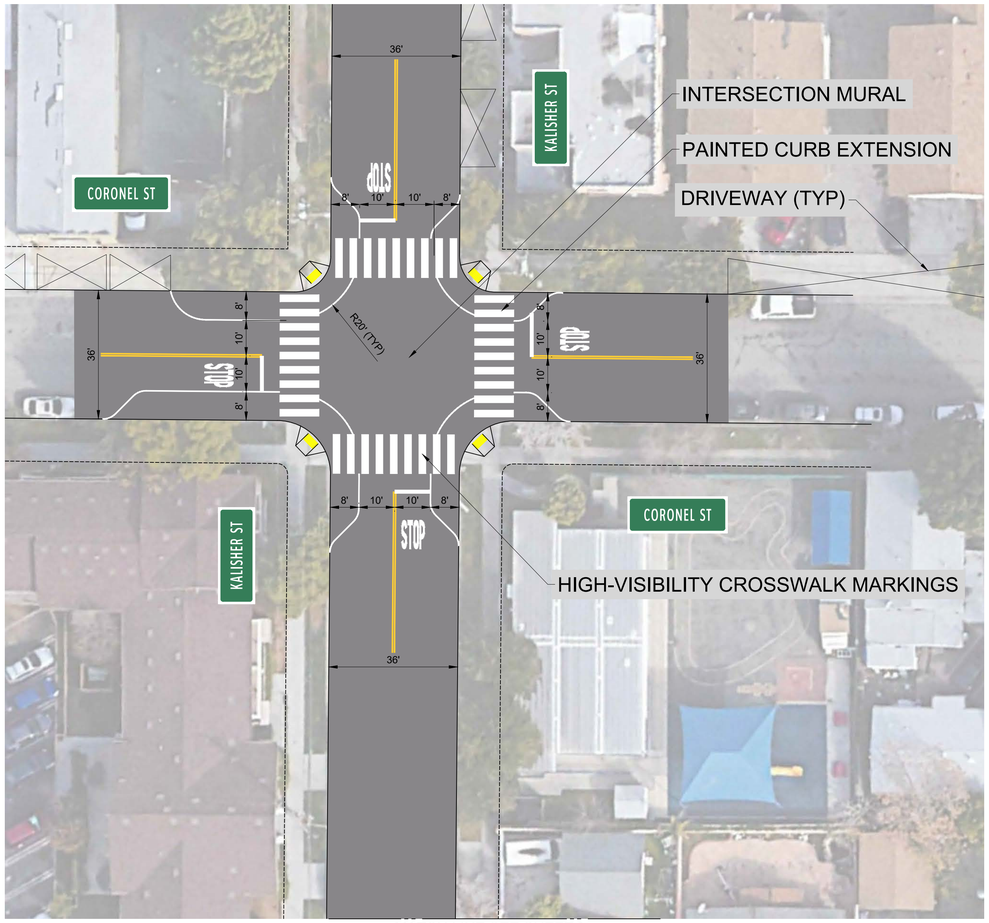
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SAN FERNANDO RD - BRAND BLVD TO CHATSWORTH DR

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 6 OF 21

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MATCH LINE SEE SHEET 8

0 20' 40' 60'

SCALE IN FEET

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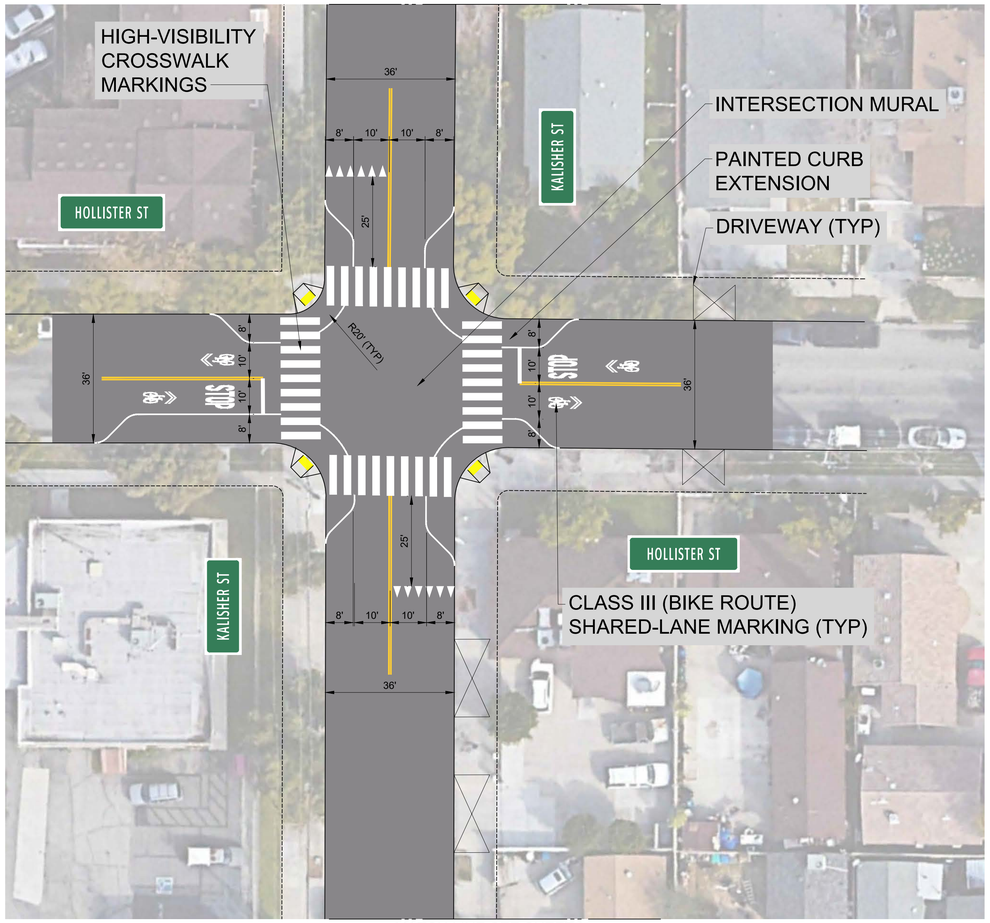
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KALISHER ST & CORONEL ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 7 OF 21

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MATCH LINE SEE SHEET 7



MATCH LINE SEE SHEET 9

0 20' 40' 60'

SCALE IN FEET

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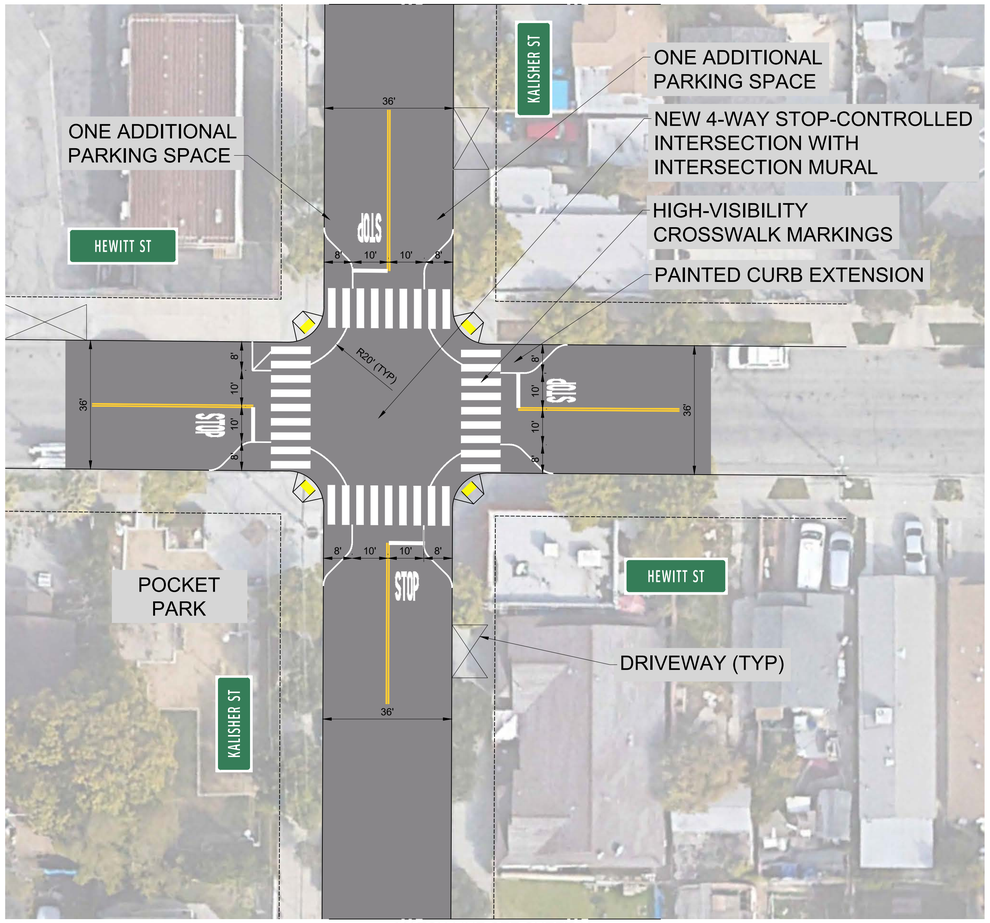
KALISHER ST & HOLLISTER ST

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MATCH LINE SEE SHEET 8



MATCH LINE SEE SHEET 10

0 20' 40' 60'

SCALE IN FEET

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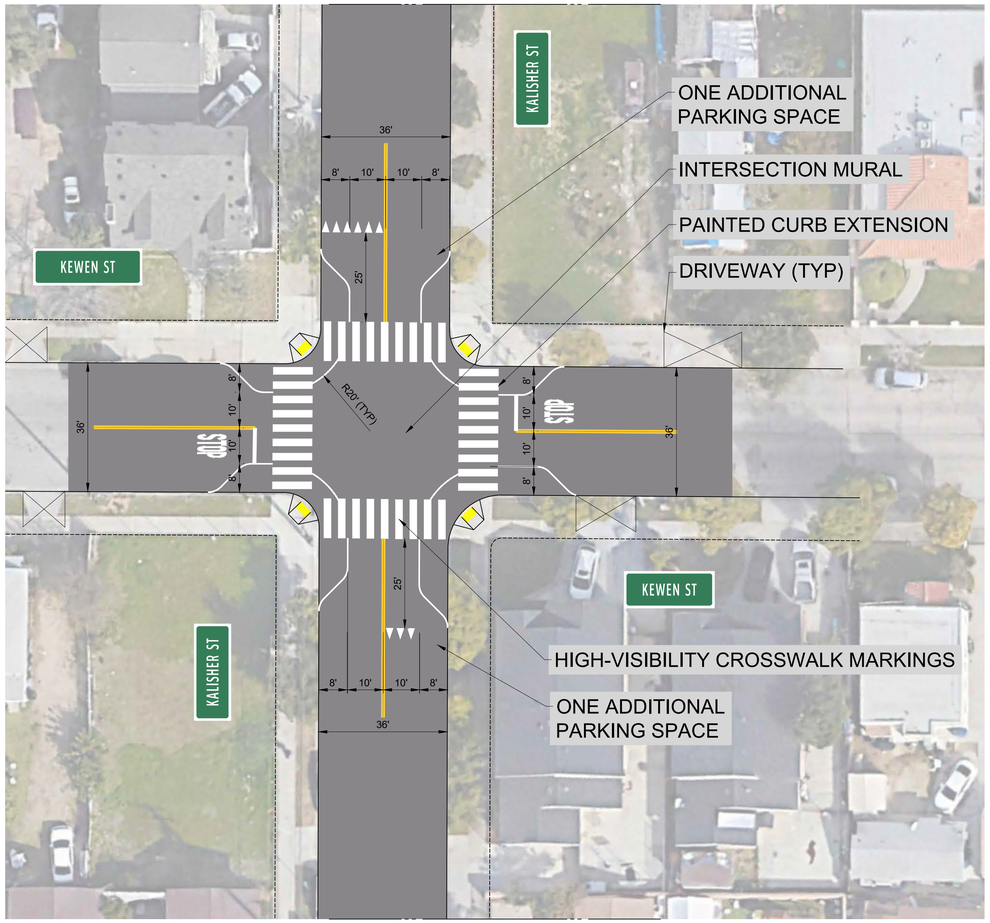
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MATCH LINE SEE SHEET 9



MATCH LINE SEE SHEET 11

0 20' 40' 60'

SCALE IN FEET

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KALISHER ST & KEWEN ST

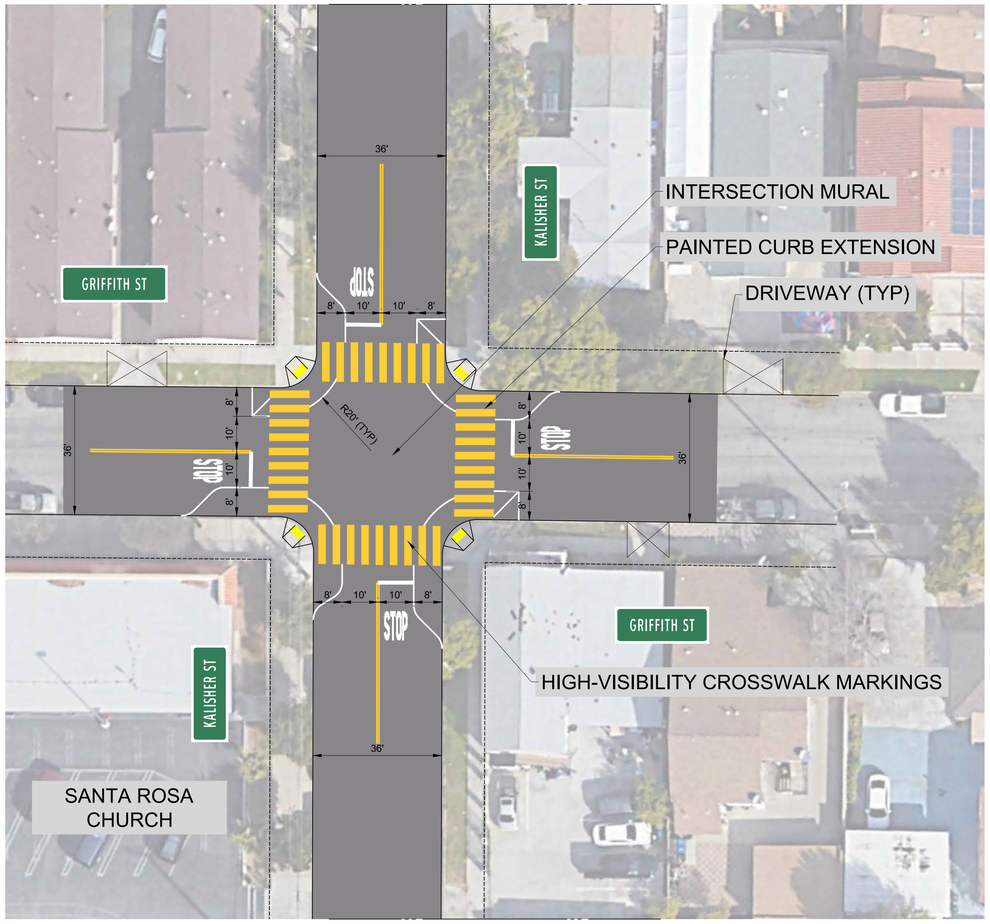
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SHEET NO. 10 OF 21

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MATCH LINE SEE SHEET 12

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SCALE IN FEET

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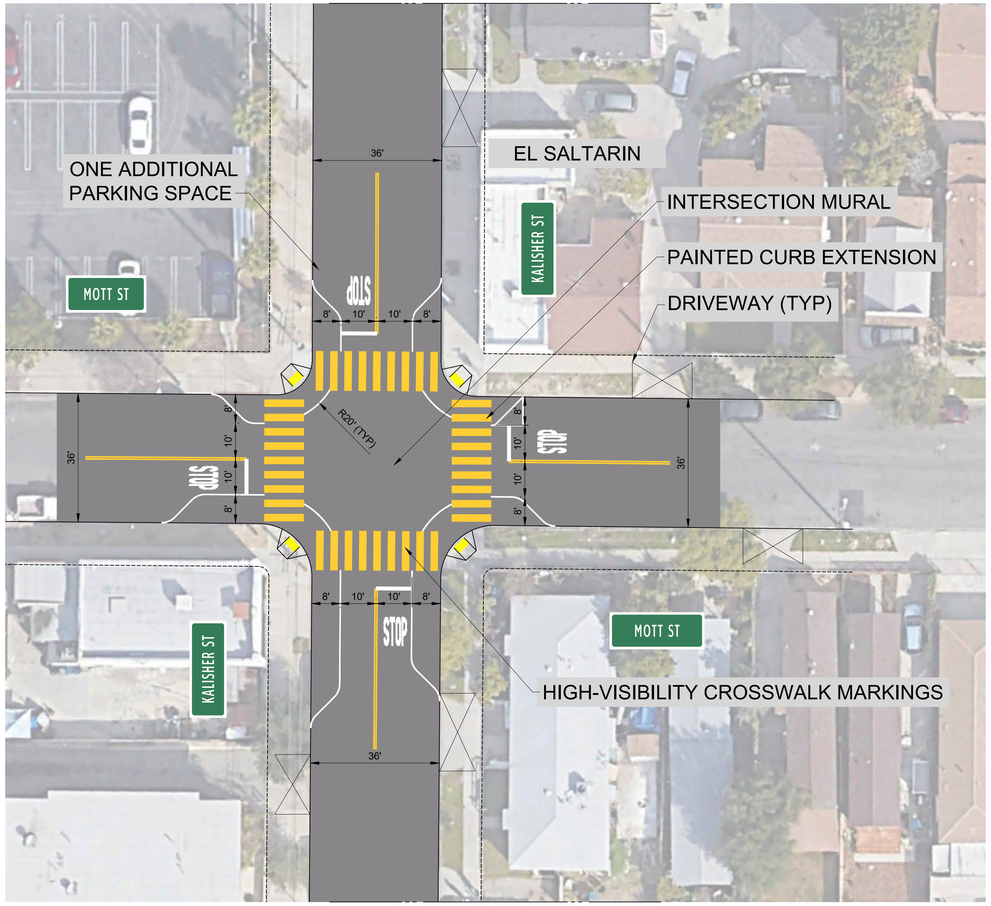
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DATE 12/3/2021
DRAWING NO.
SHEET NO. 11 OF 21

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12/3/2021

MATCH LINE SEE SHEET 11



MATCH LINE SEE SHEET 13

0 20' 40' 60'

SCALE IN FEET

CONCEPTUAL DESIGN
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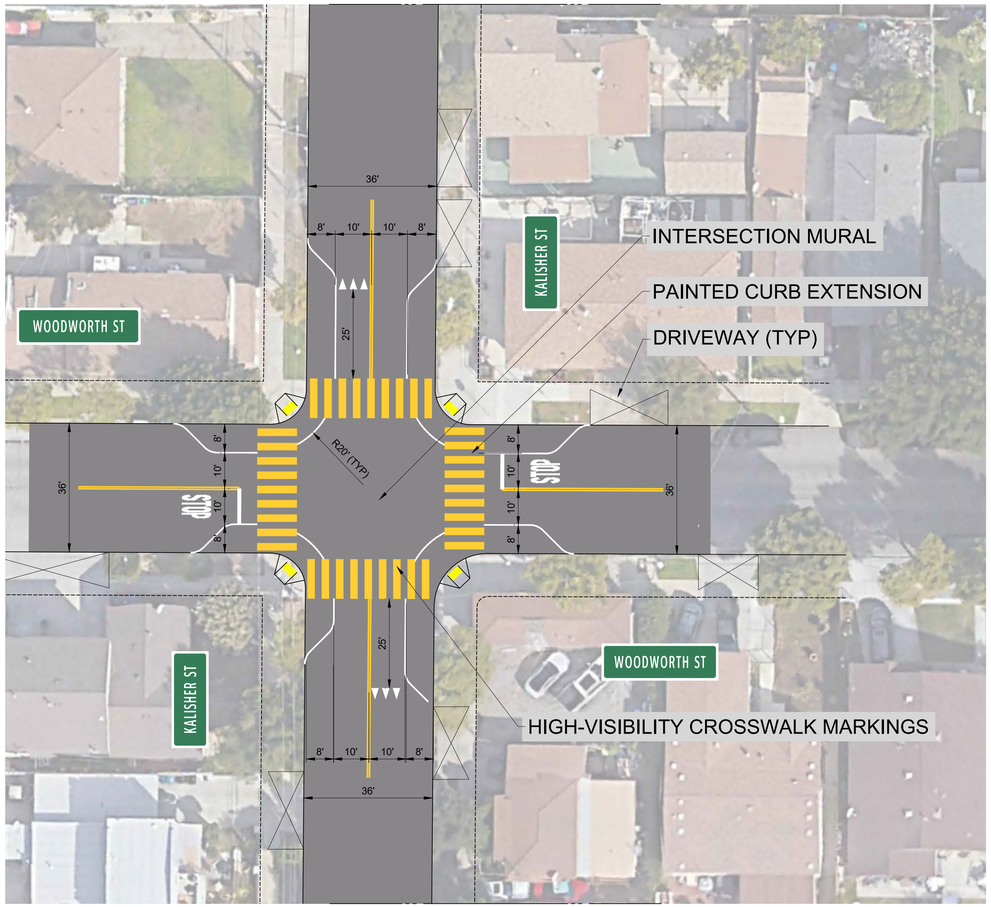
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MATCH LINE SEE SHEET 14

0 20' 40' 60'
SCALE IN FEET

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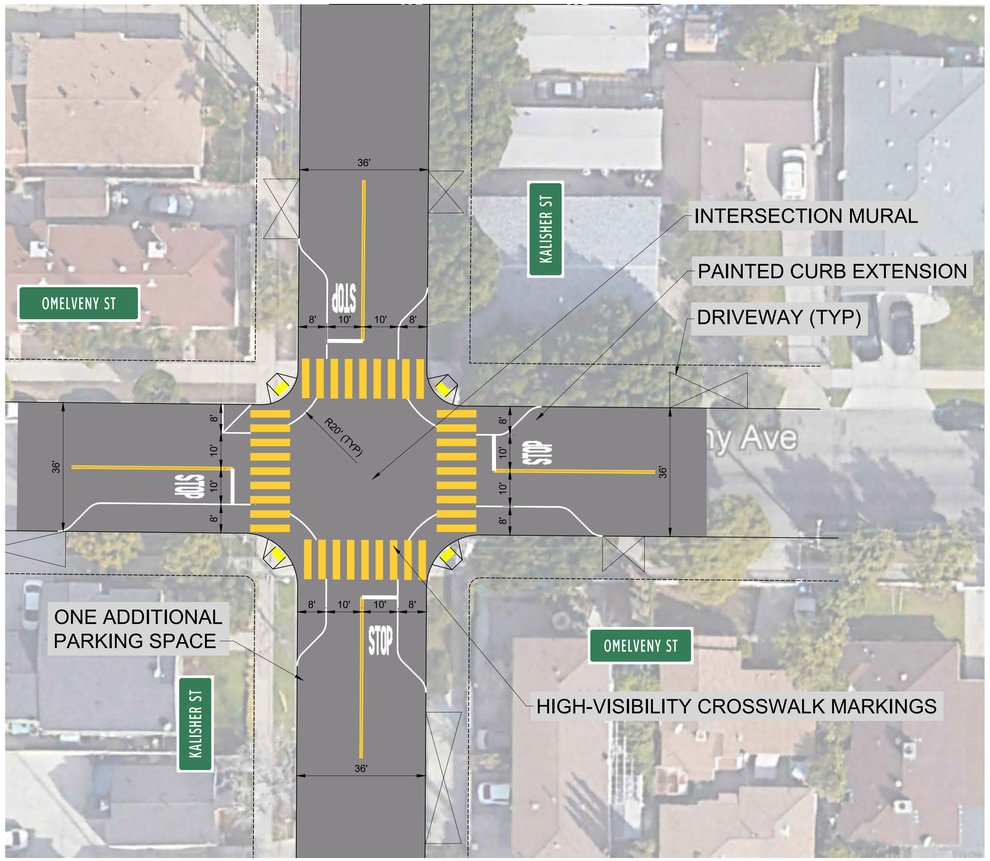
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KALISHER ST & WOODWORTH ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 13 OF 21

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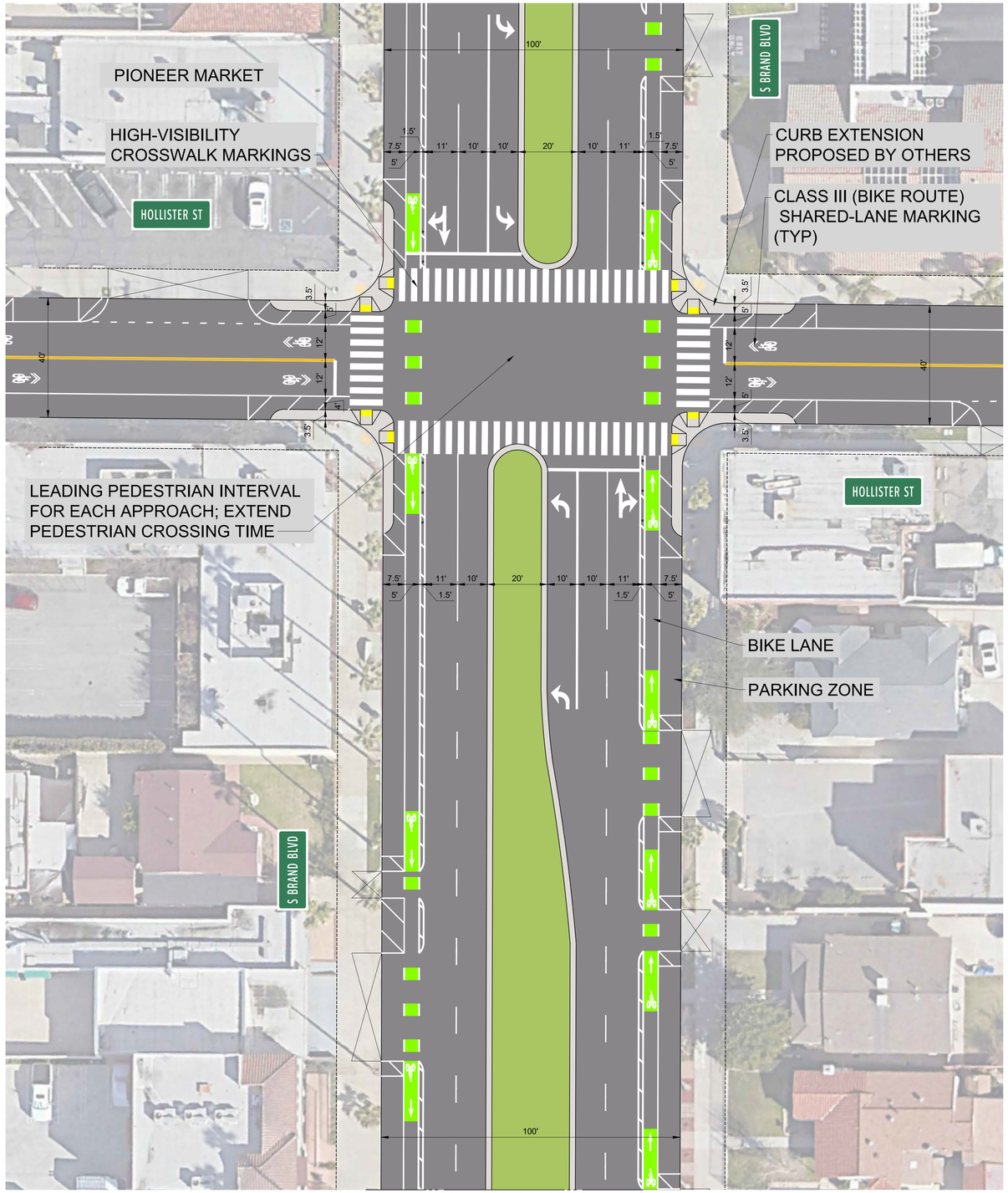
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PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 14 OF 21



MATCH LINE SEE SHEET 16

0 20' 40' 60'

SCALE IN FEET

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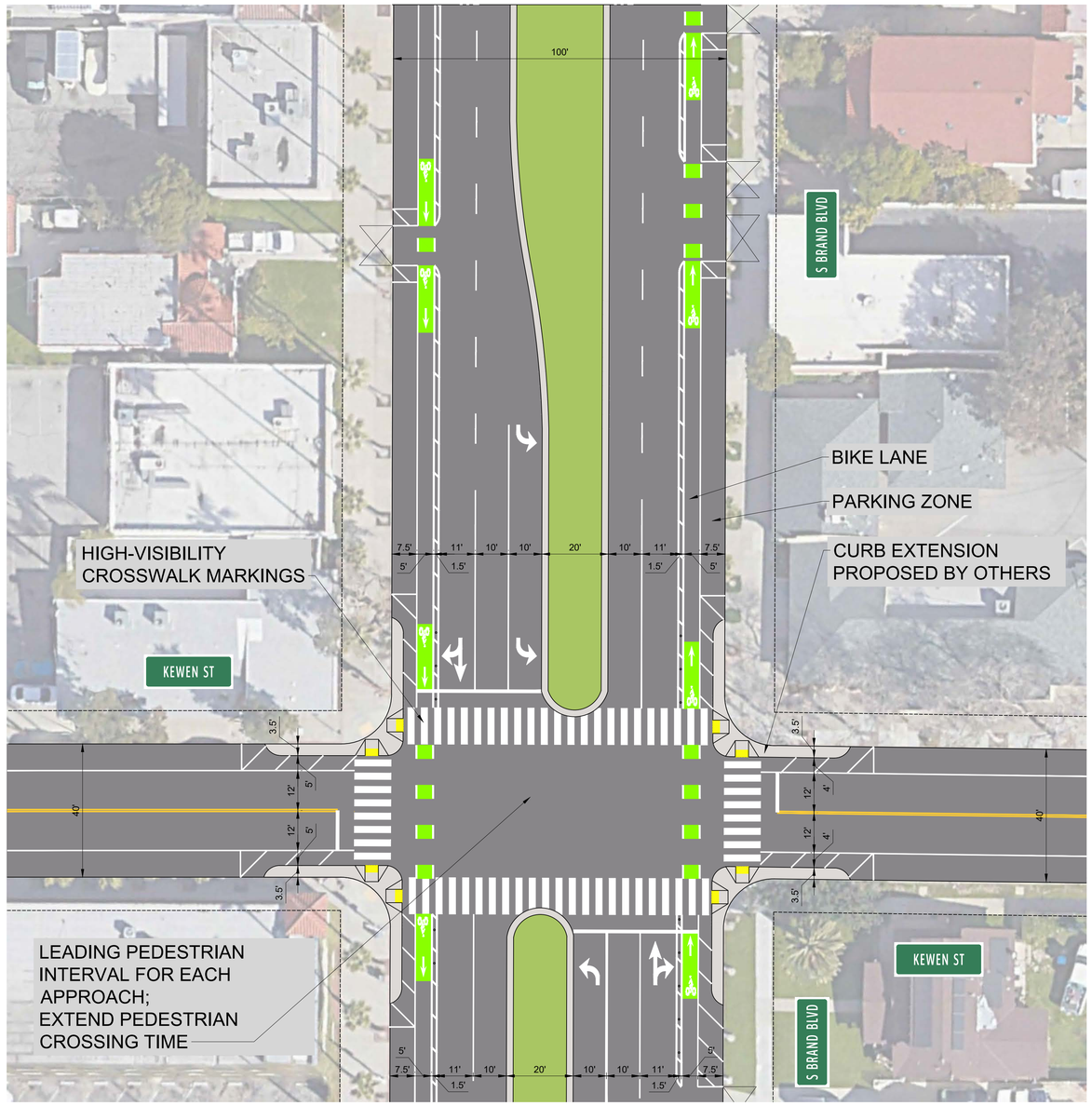
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CONCEPTUAL DESIGN

S BRAND BLVD & HOLLISTER ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 15 OF 21

MATCH LINE SEE SHEET 15



0 20' 40' 60'

SCALE IN FEET

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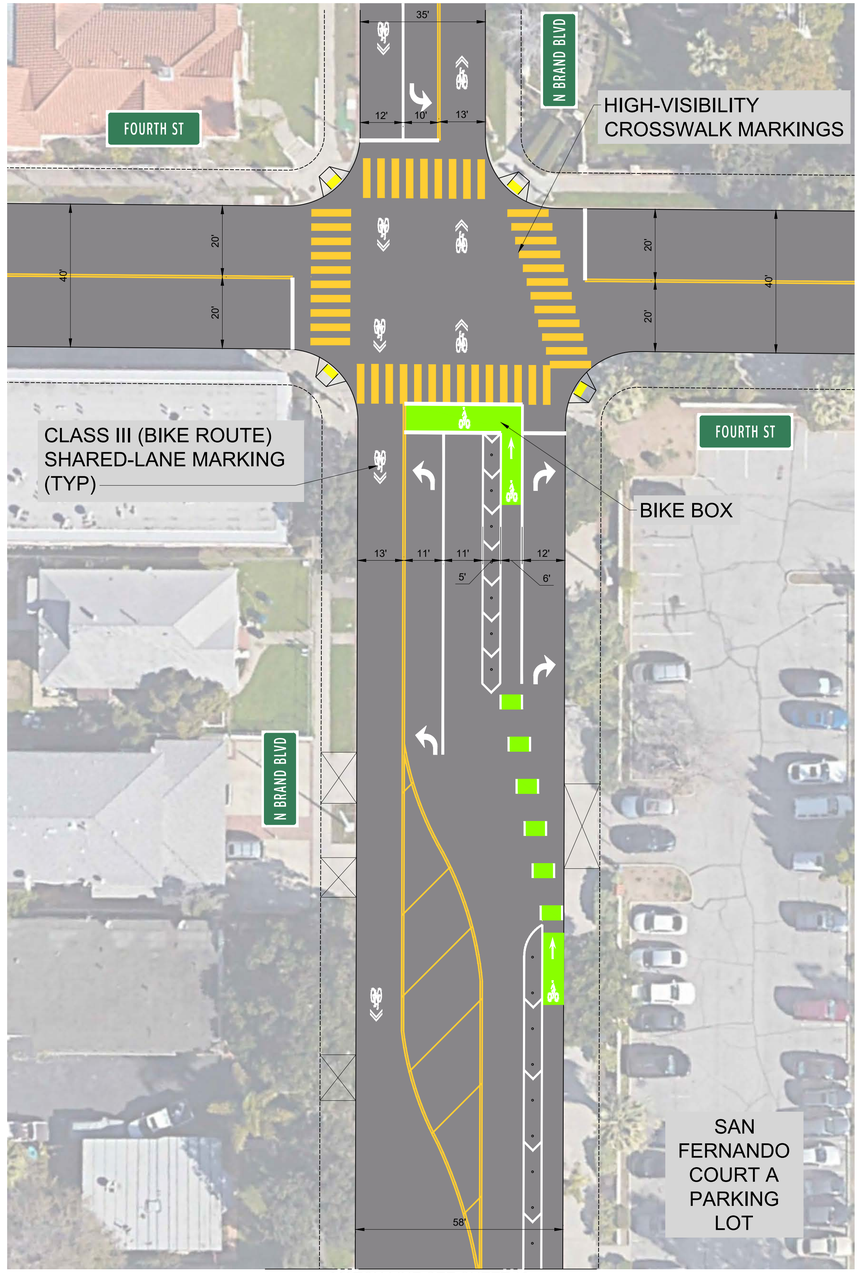
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S BRAND BLVD & KEWEN ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 16 OF 21



MATCH LINE SEE SHEET 18

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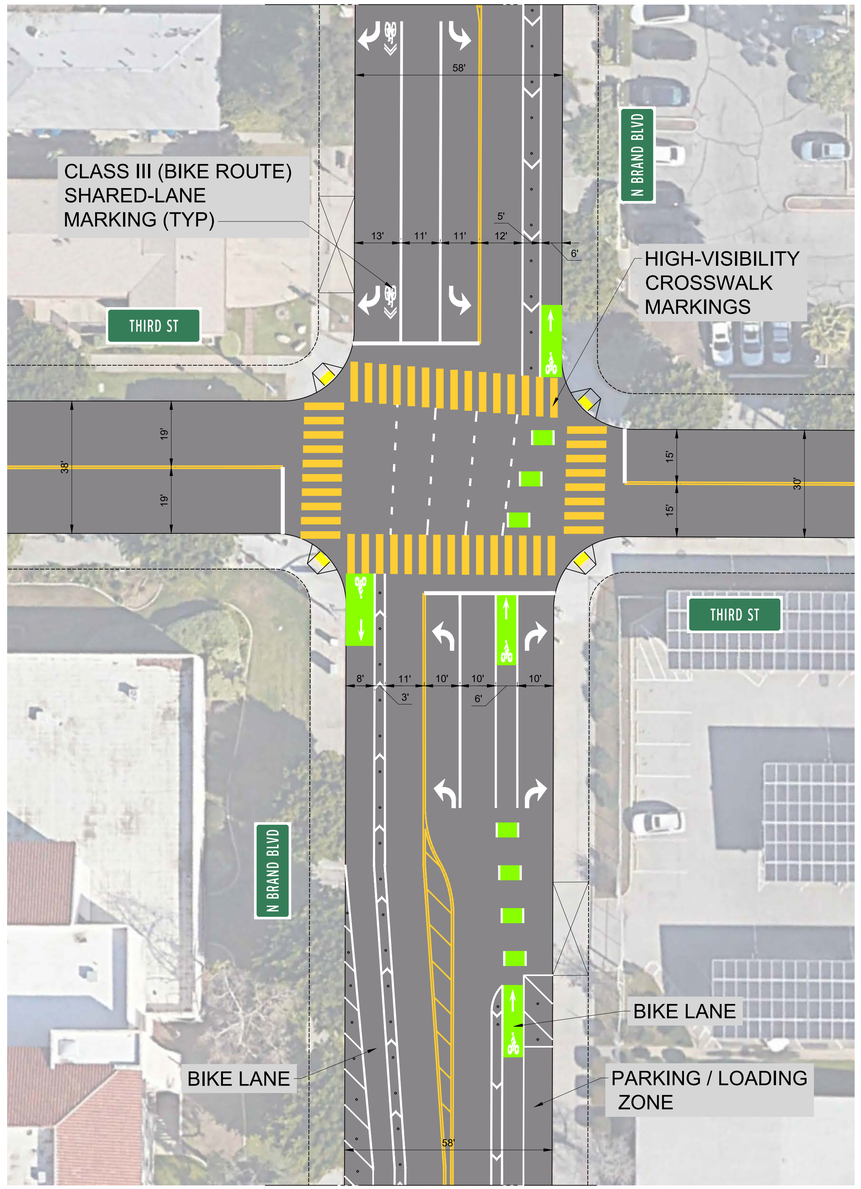
PROJECT NO. G0047

DATE 12/3/2021

DRAWING NO.

SHEET NO. 17 OF 21

MATCH LINE SEE SHEET 17



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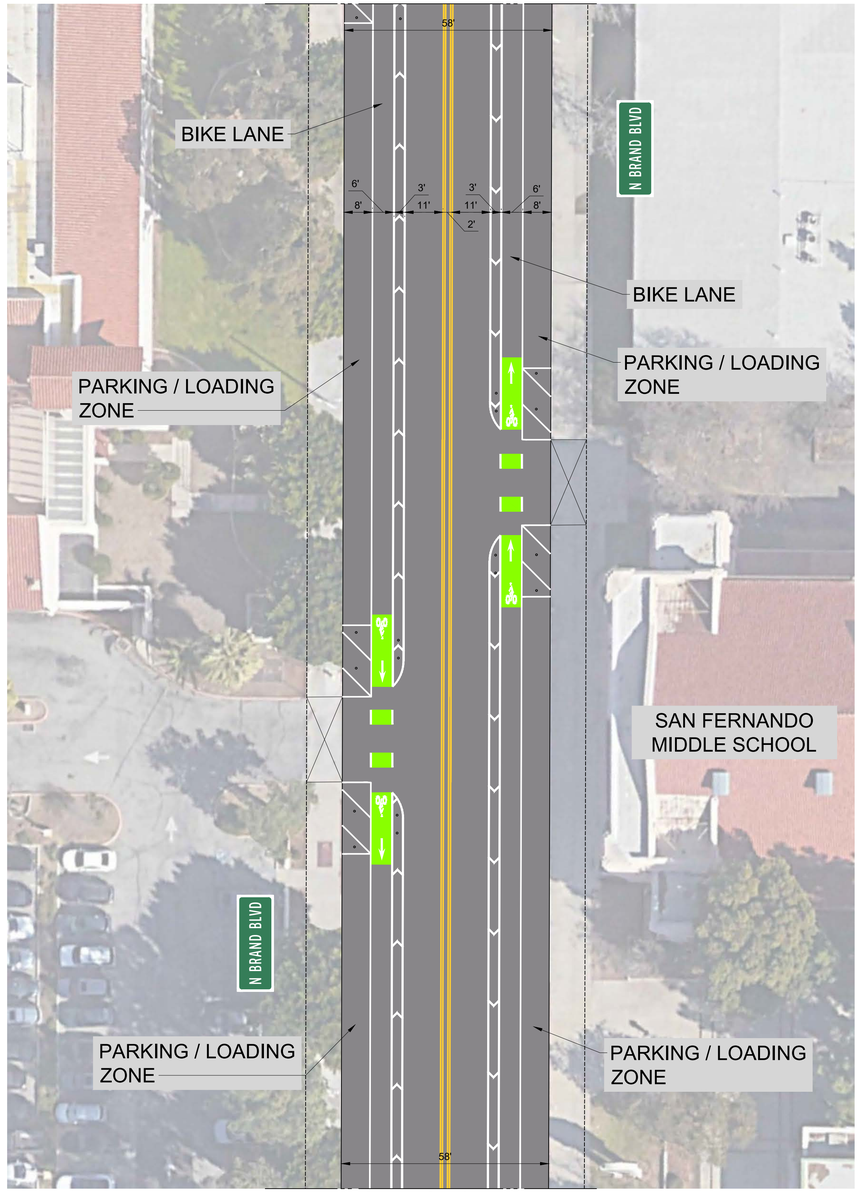
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N BRAND BLVD & THIRD ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 18 OF 21

MATCH LINE SEE SHEET 18



MATCH LINE SEE SHEET 20

0 20' 40' 60'

SCALE IN FEET

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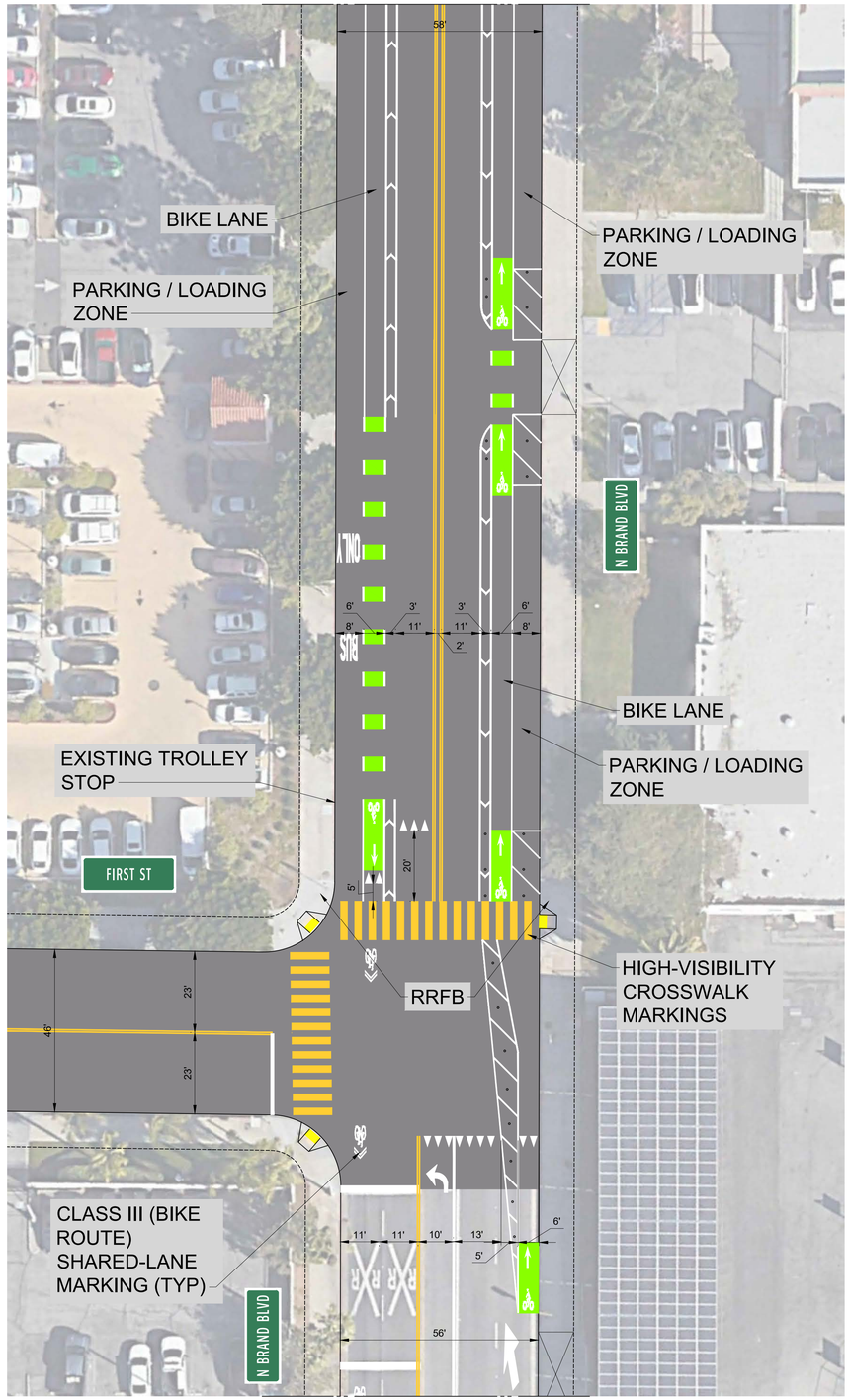
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SHEET NO. 19 OF 21

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MATCH LINE SEE SHEET 21

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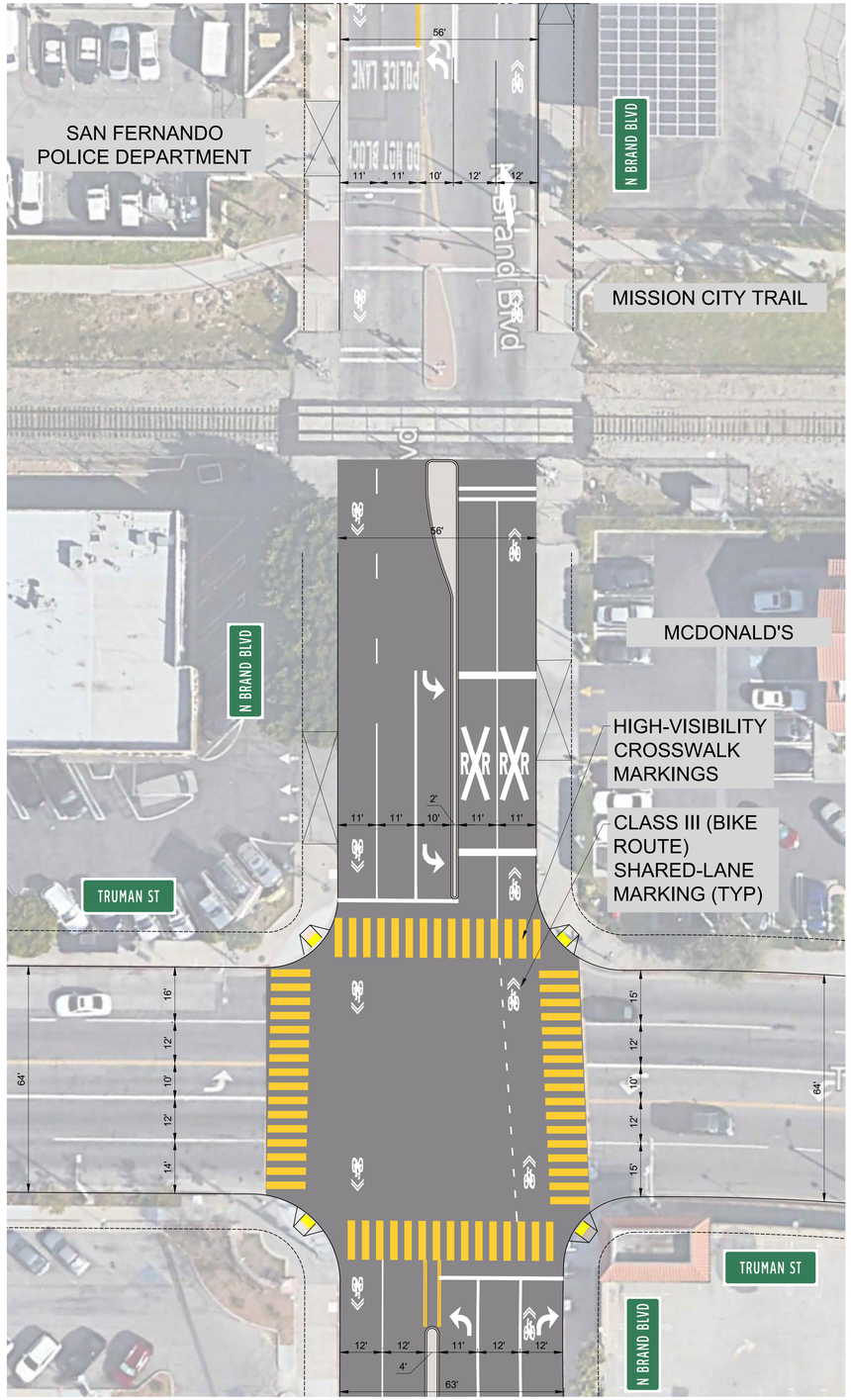
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N BRAND BLVD & FIRST ST

PROJECT NO. G0047
DATE 12/3/2021
DRAWING NO.
SHEET NO. 20 OF 21

MATCH LINE SEE SHEET 20



0 20' 40' 60'

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SHEET NO. 21 OF 21

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G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Harding Avenue and 4th Street

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	1024	LF	$ 2.50	$ 2,560.00
2	Removal of Pavement Markings	4	EA	$ 50.00	$ 200.00
3	4" Yellow Stripe	429	LF	$ 2.00	$ 858.00
4	4" Yellow Centerline (Caltrans Detail 1)	470	LF	$ 2.00	$ 940.00
5	4" White Stripe	298	LF	$ 2.00	$ 596.00
6	12" White Stripe	48	LF	$ 5.00	$ 240.00
7	Painted Curb Extension - Artwork	2600	SF	$ 10.00	$ 26,000.00
8	High Visibility Crosswalk - Continental - WHITE	880	SF	$ 5.00	$ 4,400.00
9	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	4	EA	$ 250.00	$ 1,000.00
10	Shared Roadway Bicycle Pavement Marking	8	EA	$ 225.00	$ 1,800.00
11	Concrete Curb Ramp	4	EA	$ 5,000.00	$ 20,000.00
12	Concrete Traffic Circle	1	EA	$ 60,000.00	$ 60,000.00
13	Furnish and Install Sign and Post	8	EA	$ 500.00	$ 4,000.00
				SUBTOTAL ITEMS	$ 122,594.00
				DESIGN (10%)	$ 12,259.40
				STORM WATER BEST MANAGEMENT PRACTICES (BMPs)	$ 5,000.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D + S) * 10%)	$ 13,985.34
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D + S) * 5%)	$ 6,992.67
				TRAFFIC CONTROL ((SUBTOTAL + D + S) * 5%)	$ 6,992.67
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + S + CM + M + TC) * 15%)	$ 25,173.61
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 14,711.28
				SEGMENT TOTAL	**$ 192,997.69**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Hubbard Street at Truman Street

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	565	LF	$ 2.50	$ 1,412.50
2	12" White Stripe	138	LF	$ 5.00	$ 690.00
3	High Visibility Crosswalk - Continental - WHITE	1530	SF	$ 5.00	$ 7,650.00
4	Detectable Warning Surface on Existing Curb Ramp	48	SF	$ 33.00	$ 1,584.00
				SUBTOTAL ITEMS	$ 11,336.50
				DESIGN	$ 10,000.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D) * 10%)	$ 2,133.65
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D) * 5%)	$ 1,066.83
				TRAFFIC CONTROL ((SUBTOTAL + D) * 5%)	$ 1,066.83
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + CM + M + TC) * 15%)	$ 3,840.57
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 1,360.38
				SEGMENT TOTAL	**$ 29,444.37**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Jessie Street at Robert F. Kennedy Drive

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	635	LF	$ 2.50	$ 1,587.50
2	Removal of Pavement Markings	1	EA	$ 50.00	$ 50.00
3	4" Yellow Stripe	599	LF	$ 2.00	$ 1,198.00
4	4" White Stripe	89	LF	$ 2.00	$ 178.00
5	6" White Stripe (Calltrans Detail 27B)	316	LF	$ 2.00	$ 632.00
6	12" White Stripe	12	LF	$ 5.00	$ 60.00
7	Bike Lane Stripe (Caltrans Detail 39)	828	LF	$ 3.00	$ 2,484.00
8	High Visibility Crosswalk - Continental - YELLOW	618	SF	$ 5.00	$ 3,090.00
9	Yield Line Pavement Marking	9	EA	$ 150.00	$ 1,350.00
10	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	1	EA	$ 250.00	$ 250.00
11	Bicycle Lane Pavement Marking	2	EA	$ 300.00	$ 600.00
12	Green (Chartruese) Color Painted Pavement	369	SF	$ 8.00	$ 2,952.00
13	Concrete Curb Ramp	6	EA	$ 5,000.00	$ 30,000.00
14	Concrete Curb Extension	2	EA	$50,000.00	$ 100,000.00
15	Furnish and Install Flexible Delineator (K71)	2	EA	$ 110.00	$ 220.00
16	Paint Red Curb	205	LF	$ 4.00	$ 820.00
17	Furnish and Install Sign and Post	4	EA	$ 500.00	$ 2,000.00
				SUBTOTAL ITEMS	$ 147,471.50
				DESIGN (10%)	$ 14,747.15
				STORM WATER BEST MANAGEMENT PRACTICES (BMPs)	$ 10,000.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D + S) * 10%)	$ 17,221.87
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D + S) * 5%)	$ 8,610.93
				TRAFFIC CONTROL ((SUBTOTAL + D + S) * 5%)	$ 8,610.93
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + S + CM + M + TC) * 15%)	$ 30,999.36
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 17,696.58
				SEGMENT TOTAL	**$ 237,661.74**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

San Fernando Road - San Fernando Mission Boulevard to Hubbard Street

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	9316	LF	$ 2.50	$ 23,290.00
2	Removal of Pavement Markings	12	EA	$ 50.00	$ 600.00
3	4" Yellow Stripe	8296	LF	$ 2.00	$ 16,592.00
4	4" White Stripe	8908	LF	$ 2.00	$ 17,816.00
5	8" White Stripe (Caltrans Detail 38A)	880	LF	$ 3.50	$ 3,080.00
6	12" White Stripe	200	LF	$ 5.00	$ 1,000.00
7	Bike Lane Stripe (Caltrans Detail 39)	4208	LF	$ 3.00	$ 12,624.00
8	Dashed Bike Lane Stripe (Caltrans Detail 39A)	3552	LF	$ 2.00	$ 7,104.00
9	High Visibility Crosswalk - Continental - WHITE	7376	SF	$ 5.00	$ 36,880.00
10	Yield Line Pavement Marking	128	EA	$ 150.00	$ 19,200.00
11	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	12	EA	$ 250.00	$ 3,000.00
12	Type IV Arrow Marking	16	EA	$ 200.00	$ 3,200.00
13	Bicycle Lane Pavement Marking	28	EA	$ 300.00	$ 8,400.00
14	Green (Chartruese) Color Painted Pavement	7652	SF	$ 8.00	$ 61,216.00
15	Concrete Curb Ramp	32	EA	$ 5,000.00	$ 160,000.00
16	Detectable Warning Surface on Existing Curb Ramp	48	SF	$ 33.00	$ 1,584.00
17	Concrete Curb Extension	24	EA	$50,000.00	$ 1,200,000.00
18	Furnish and Install Flexible Delineator (K71)	380	EA	$ 110.00	$ 41,800.00
19	Paint Red Curb	1020	LF	$ 4.00	$ 4,080.00
20	Furnish and Install Sign and Post	48	EA	$ 500.00	$ 24,000.00
				SUBTOTAL ITEMS	$ 1,645,466.00
				DESIGN (10%)	$ 164,546.60
				STORM WATER BEST MANAGEMENT PRACTICES (BMPs)	$ 20,000.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D + S) * 10%)	$ 183,001.26
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D + S) * 5%)	$ 91,500.63
				TRAFFIC CONTROL ((SUBTOTAL + D + S) * 5%)	$ 91,500.63
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + S + CM + M + TC) * 15%)	$ 329,402.27
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 197,455.92
				SEGMENT TOTAL	**$ 2,525,417.39**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

San Fernando Road - Wolfskill Street to Brand Boulevard

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	2276	LF	$ 2.50	$ 5,690.00
2	Removal of Pavement Markings	14	EA	$ 50.00	$ 700.00
3	4" Yellow Stripe	1283	LF	$ 2.00	$ 2,566.00
4	4" White Stripe	861	LF	$ 2.00	$ 1,722.00
5	8" White Stripe (Caltrans Detail 38A)	100	LF	$ 3.50	$ 350.00
6	12" White Stripe	110	LF	$ 5.00	$ 550.00
7	Two-Way Left Turn Lane Yellow (Detail 31)	275	LF	$ 5.00	$ 1,375.00
8	Bike Lane Stripe (Caltrans Detail 39)	1471	LF	$ 3.00	$ 4,413.00
9	Dashed Bike Lane Stripe (Caltrans Detail 39A)	250	LF	$ 2.00	$ 500.00
10	High Visibility Crosswalk - Continental - WHITE	1628	SF	$ 5.00	$ 8,140.00
11	High Visibility Crosswalk - Continental - YELLOW	270	SF	$ 6.00	$ 1,620.00
12	Yield Line Pavement Marking	40	EA	$ 150.00	$ 6,000.00
13	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	8	EA	$ 250.00	$ 2,000.00
14	Type IV Arrow Marking	4	EA	$ 200.00	$ 800.00
15	Shared Roadway Bicycle Pavement Marking	3	EA	$ 225.00	$ 675.00
16	Bicycle Lane Pavement Marking	9	EA	$ 300.00	$ 2,700.00
17	Green (Chartruese) Color Painted Pavement	1441	SF	$ 8.00	$ 11,528.00
18	Concrete Curb Ramp	2	EA	$ 5,000.00	$ 10,000.00
19	Detectable Warning Surface on Existing Curb Ramp	144	SF	$ 33.00	$ 4,752.00
20	Furnish and Install Flexible Delineator (K71)	42	EA	$ 110.00	$ 4,620.00
21	Paint Red Curb	292	LF	$ 4.00	$ 1,168.00
22	Furnish and Install Sign and Post	11	EA	$ 500.00	$ 5,500.00
				SUBTOTAL ITEMS	$ 77,369.00
				DESIGN	$ 10,000.00
				STORM WATER BEST MANAGEMENT PRACTICES (BMPs)	$ 5,000.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D + S) * 10%)	$ 9,236.90
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D + S) * 5%)	$ 4,618.45
				TRAFFIC CONTROL ((SUBTOTAL + D + S) * 5%)	$ 4,618.45
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + S + CM + M + TC) * 15%)	$ 16,626.42
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 9,284.28
				SEGMENT TOTAL	**$ 127,469.22**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Kalisher Street - Coronel Street to Omelveny Avenue

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	2420	LF	$ 2.50	$ 6,050.00
2	Removal of Pavement Markings	26	EA	$ 50.00	$ 1,300.00
3	4" Yellow Stripe	2940	LF	$ 2.00	$ 5,880.00
4	4" White Stripe	2100	LF	$ 2.00	$ 4,200.00
5	12" White Stripe	262	LF	$ 5.00	$ 1,310.00
6	Painted Curb Extension - Artwork	23400	SF	$ 10.00	$ 234,000.00
7	High Visibility Crosswalk - Continental - WHITE	3168	SF	$ 5.00	$ 15,840.00
8	High Visibility Crosswalk - Continental - YELLOW	3168	SF	$ 6.00	$ 19,008.00
9	Yield Line Pavement Marking	27	EA	$ 150.00	$ 4,050.00
10	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	26	EA	$ 250.00	$ 6,500.00
11	Shared Roadway Bicycle Pavement Marking	4	EA	$ 225.00	$ 900.00
12	Detectable Warning Surface on Existing Curb Ramp	384	SF	$ 33.00	$ 12,672.00
13	Furnish and Install Sign and Post	10	EA	$ 500.00	$ 5,000.00
				SUBTOTAL ITEMS	$ 316,710.00
				DESIGN (10%)	$ 31,671.00
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D) * 10%)	$ 34,838.10
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D) * 5%)	$ 17,419.05
				TRAFFIC CONTROL ((SUBTOTAL + D) * 5%)	$ 17,419.05
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + CM + M + TC) * 15%)	$ 62,708.58
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 38,005.20
				SEGMENT TOTAL	**$ 480,765.78**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Brand Boulevard - Truman Street to 4th Street

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	6050	LF	$ 2.50	$ 15,125.00
2	Removal of Pavement Markings	15	EA	$ 50.00	$ 750.00
3	4" Yellow Stripe	5342	LF	$ 2.00	$ 10,684.00
4	4" White Stripe	2087	LF	$ 2.00	$ 4,174.00
5	4" White Centerline (Caltrans Detail 1)	72	LF	$ 2.00	$ 144.00
6	6" Dashed White Stripe (Caltrans Detail 40)	216	LF	$ 3.00	$ 648.00
7	8" White Stripe (Caltrans Detail 38A)	767	LF	$ 3.50	$ 2,684.50
8	12" White Stripe	309	LF	$ 5.00	$ 1,545.00
9	Bike Lane Stripe (Caltrans Detail 39)	3395	LF	$ 3.00	$ 10,185.00
10	Dashed Bike Lane Stripe (Caltrans Detail 39A)	536	LF	$ 2.00	$ 1,072.00
11	High Visibility Crosswalk - Continental - YELLOW	2008	SF	$ 6.00	$ 12,048.00
12	Yield Line Pavement Marking	14	EA	$ 150.00	$ 2,100.00
13	STOP, PED, SLOW, SCHOOL, XING, WAIT, HERE Pavement Marking (A24D) and KEEP, CLEAR, BUS, ONLY Pavement Markings (A24E)	2	EA	$ 250.00	$ 500.00
14	Type IV Arrow Marking	20	EA	$ 200.00	$ 4,000.00
15	Type VI Arrow Marking	2	EA	$ 200.00	$ 400.00
16	Shared Roadway Bicycle Pavement Marking	27	EA	$ 225.00	$ 6,075.00
17	Bicycle Lane Pavement Marking	16	EA	$ 300.00	$ 4,800.00
18	Green (Chartruese) Color Painted Pavement	2773	SF	$ 8.00	$ 22,184.00
19	Detectable Warning Surface on Existing Curb Ramp	48	SF	$ 33.00	$ 1,584.00
20	Furnish and Install Flexible Delineator (K71)	96	EA	$ 110.00	$ 10,560.00
21	Furnish and Install Sign and Post	20	EA	$ 500.00	$ 10,000.00
				SUBTOTAL ITEMS	$ 121,262.50
				DESIGN (10%)	$ 12,126.25
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D) * 10%)	$ 13,338.88
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D) * 5%)	$ 6,669.44
				TRAFFIC CONTROL ((SUBTOTAL + D) * 5%)	$ 6,669.44
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + CM + M + TC) * 15%)	$ 24,009.98
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 14,551.50
				SEGMENT TOTAL	**$ 184,076.48**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

Brand Boulevard - Truman Street to Omelveny Avenue

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Removal of Thermoplastic Striping	4800	LF	$ 2.50	$ 12,000.00
2	Removal of Pavement Markings	32	EA	$ 50.00	$ 1,600.00
3	4" Yellow Stripe	3308	LF	$ 2.00	$ 6,616.00
4	4" White Stripe	11320	LF	$ 2.00	$ 22,640.00
5	4" White Centerline (Caltrans Detail 1)	192	LF	$ 2.00	$ 384.00
6	8" White Stripe (Caltrans Detail 38A)	1200	LF	$ 3.50	$ 4,200.00
7	12" White Stripe	792	LF	$ 5.00	$ 3,960.00
8	Bike Lane Stripe (Caltrans Detail 39)	9144	LF	$ 3.00	$ 27,432.00
9	Dashed Bike Lane Stripe (Caltrans Detail 39A)	1888	LF	$ 2.00	$ 3,776.00
10	High Visibility Crosswalk - Continental - WHITE	10912	SF	$ 6.00	$ 65,472.00
11	Type IV Arrow Marking	32	EA	$ 200.00	$ 6,400.00
12	Type VII Arrow Marking	16	EA	$ 200.00	$ 3,200.00
13	Shared Roadway Bicycle Pavement Marking	24	EA	$ 225.00	$ 5,400.00
14	Bicycle Lane Pavement Marking	72	EA	$ 300.00	$ 21,600.00
15	Green (Chartruese) Color Painted Pavement	9528	SF	$ 8.00	$ 76,224.00
16	Furnish and Install Flexible Delineator (K71)	88	EA	$ 110.00	$ 9,680.00
17	Paint Red Curb	2880	LF	$ 4.00	$ 11,520.00
18	Furnish and Install Sign and Post	48	EA	$ 500.00	$ 24,000.00
				SUBTOTAL ITEMS	$ 306,104.00
				DESIGN (10%)	$ 30,610.40
				CONSTRUCTION MANAGEMENT ((SUBTOTAL + D) *10%)	$ 33,671.44
				MOBILIZATION & DEMOBILIZATION ((SUBTOTAL + D) * 5%)	$ 16,835.72
				TRAFFIC CONTROL ((SUBTOTAL + D) * 5%)	$ 16,835.72
				CONSTRUCTION CONTINGENCY((SUBTOTAL + D + CM + M + TC) * 15%)	$ 60,608.59
				12% INFLATION (2% PER YEAR @ 6 YEARS)	$ 36,732.48
				SEGMENT TOTAL	**$ 464,665.87**

G0047 San Fernando Safe and Active Streets Implementation Plan Cost Estimate

City of San Fernando

STREET NAMES	ITEM TOTAL
HARDING AVENUE AND 4TH STREET	$ 192,997.69
HUBBARD STREET AND TRUMAN STREET	$ 29,444.37
JESSIE STREET AND ROBERT F. KENNEDY DRIVE	$ 237,661.74
SAN FERNANDO ROAD - SAN FERNANDO MISSION BOULEVARD TO HUBBARD STREET	$ 2,525,417.39
SAN FERNANDO ROAD - WOLFSKILL STREET TO BRAND BOULEVARD	$ 127,469.22
KALISHER STREET - CORONEL STREET TO OMELVENY AVENUE	$ 480,765.78
BRAND BOULEVARD - TRUMAN STREET TO 4TH STREET	$ 184,076.48
BRAND BOULEVARD - TRUMAN STREET TO OMELVENY AVENUE	$ 464,665.87
GRAND TOTAL	**$ 4,242,498.53**