CITY OF LAKEPORT

ACTIVE TRANSPORTATION PLAN DRAFT REPORT

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Prepared for

CITY OF Lakeport CALIFORNIA

Prepared by

CIVICWELL BLUE ZONES® NELSON NYGAARD

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Public Participants

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The development of this Active Transportation Plan reflects our community's dedication to enhancing walkability, bikeability, and overall quality of life in Lakeport.

Table of Contents

List of Tables

List of Figures

1 INTRODUCTION

ABOUT THE ACTIVE TRANSPORTATION PLAN

This Active Transportation Plan (ATP) aims to advance multimodal transportation choices that work, and to support a healthy and sustainable transportation environment in Lakeport for people of all ages and abilities. This plan is developed in collaboration with key stakeholders at the city, county, Tribal nations, and state levels of government.

"Active transportation" includes all types of human-powered mobility, such as walking, biking, transit and other mobility assistive devices.

MISSION: Lakeport is a beautiful community. We work to ensure it remains a wonderful place to raise a family, enjoy retirement, recreate, and live a healthy, fulfilling life.

COMMUNITY VISION: The charm and values of the Lakeport community are what will endure for generations to come. Those attributes will be maintained, in part, through the effective delivery of municipal services.

CITY OF LAKEPORT SNAPSHOT

Lakeport is a small city located in Lake County, California, known for its proximity to Clear Lake. Based on the 2022 American Community Survey data[1], Lakeport has a population of approximately 5014 people and has a population density of about 1617 people per square mile, which is considered low compared to more urban areas.

Age	The median age in Lakeport is around 42.7 years with a majority of its population (22.4%) between the ages of 25 to 44 years.
Gender	The gender distribution in Lakeport is 86.4 males to 100 females. Women make up 53.6% of the population, while men represent around 46.4%.
People with Disability	About 17% of the population have either hearing, vision, cognitive, ambulatory, self-care or independent living disability.

[1] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2022

Income level	The median income in Lakeport is $38,540, with most of the working force (16.6%) earning $75,000 or more, followed by those earning $35,000 to $49,999.
Language Diversity:	About 12.2% of the population speak a language other than English at home, mostly Spanish.
Commute Mode	Most Lakeport residents (80%) rely on private vehicles for transportation. Public transit options are limited, and a small percentage (1.3%) of the population walk or bike to work or other destinations.
Commute Distances and Times:	About 23.9% of workers depart from home to work between 7:30am and 7:59am, followed closely by commuters who leave 30 minutes earlier. The majority (42.1%) of these workers travel less than 10 minutes to their place of work, and about 20.1% take between 15 and 19 minutes to get to their place of work. About 22.1% of workers travel for more than 30 minutes to get to their place of work.

Many areas in central Lakeport include a historic portion of tightly gridded streets with topography that is friendly for walking and bicycling. These short blocks and generally narrow local streets hold down traffic speeds. However, there are also locations that are hilly with suburban style street patterns that make trips by these modes difficult. Some principal streets are overbuilt to maximize speed and efficiency of cars or accommodate the larger vehicles that access commercial destinations and the lake.

Lakeport's economy depends on large vehicles and trailer access, but that also creates challenges that can be addressed with proper street designs. An emphasis on designing for the ordinary street user, and less emphasis on the largest possible vehicle must be incorporated.

Most principal streets lack adequate sidewalks, so the parallel streets need to be designed and enforced with slow speeds, so that children can be free to walk from place to place without putting themselves at risk. A connected network for walking and cycling is essential for safety, comfort and access to achieve a multimodal transportation system. Lakeport wishes to encourage people to choose options that don't require a car.

PLANNING CONTEXT

This plan builds on adopted plans important to the region, including:

- Lake County 2030 Regional Blueprint Program
- 2025 Lakeport General Plan

- 2040 Lake County Regional Transportation Plan (2022)
- 2019 Lake County Pedestrian Facility Needs Study
- 2016 Lake County Active Transportation Plan
- 2020 Eleventh Street Corridor Multimodal Engineered Feasibility Study
- 2012 Forbes Creek Neighborhood Improvement Study
- 2011 Lake County Regional Transportation Bikeway Plan

Key takeaways from the review of those documents include:

- Both regional and city plans focus on **improving safety and accessibility for cyclists and pedestrians.** (Lake County 2030 Regional Blueprint, 2025 Lakeport General Plan, and the County Regional Transportation Plan).
- **Prioritizing bikeway development and pedestrian infrastructure**, with efforts to secure funding and integrate amenities into new developments.
- **Sidewalk construction to fill gaps** is a recurring theme in multiple studies (2019 Pedestrian Facility Needs Study, 2012 Forbes Creek Neighborhood Study). Some priority areas include **Lakeshore Boulevard, 11th Street, and Martin Street.**
- The Eleventh Street Corridor Feasibility Study and the Bikeway Plan along with proposed Forbes Creek Trail address **the need for better connectivity along essential routes** (e.g., State Route 29, 11th Street), particularly through multi-modal transportation options.
- **Emphasis on targeted improvements and reliance on grants for infrastructure** due to limited local funding.
- Plans emphasize a long-term strategy**, community involvement, and updates to adapt to changing needs and ensure accessibility.**

PLAN OBJECTIVES

The plan objectives were informed by the plan review, existing conditions analysis, and community input. They are meant as a tool to create Lakeport's vision and are used to prioritize project recommendations. These objectives will be the benchmark for measuring successful plan implementation.

1. Create safe, accessible and comfortable places for people to walk in Lakeport, using high quality marked crosswalks, sidewalks, and trails.
2. Create safe, accessible and comfortable places for people to bike in Lakeport, using neighborhood greenways, low stress on-street bikeways, and trails.

3. Connect people with the places they want to and need to go on continuous walkways and bikeways.
4. Invest equitably, centering on places where crashes have occurred or where vulnerable populations live.

2 EXISTING CONDITIONS

The existing conditions analysis provides a foundational understanding of the current active transportation landscape in Lakeport. This chapter evaluates the extent and connectivity of the sidewalk and bicycle network and assesses traffic safety concerns. Additionally, it reviews transit and school access to identify mobility challenges and opportunities for improvement and concludes with some field observations to supplement this analysis.

Key Takeaways

- Excessive vehicle speeds in many areas create unsafe and uncomfortable conditions for street crossings, walking, and bicycling. Current road designs prioritize speed over walkability and safety.
- School zone pick-up and drop-off activities often result in potential conflicts between different users of the space.
- There is a clear need for dedicated, separate spaces to ensure that students and pedestrians do not have to share lanes with vehicular traffic.
- Some low-volume streets could be ideal for prioritizing walking and bicycling, though they may not always align with the most direct routes.

SIDEWALK AND BICYCLE NETWORK COVERAGE

Lakeport's sidewalk and bike lane network is limited, with many streets lacking sidewalks entirely on one or both sides, resulting in significant gaps and missing segments. The absence of continuous sidewalks and bike lanes creates safety and accessibility challenges, making walking and cycling less practical.

Survey respondents highlighted that on-street improvements, such as bike lanes and sidewalks, are a priority for enhancing active transportation. Addressing these gaps is critical to improving connectivity and encouraging active transportation within the city.

Sidewalks on key roads—such as Main Street, Forbes, Lakeport Boulevard, Armstrong Street, High Street, and 11th Street—require even higher standards, including adequate setbacks, shade, continuity, width, and proper maintenance. Figure 12 and Figure 14 of all existing and proposed sidewalks and bike facilities can be found in Chapter 5.

TRAFFIC AND RELATED SAFETY

Key corridors with over 5,000 vehicles per day, such as High Street, Eleventh Street, Lakeport Boulevard, and Main Street, are, in some places, missing formal sidewalks with curb and gutter, enhanced crosswalks, lighting, and dedicated bike lanes. A resident survey identified these high-traffic areas as unsafe, citing inadequate pedestrian infrastructure, limited bike lanes, and reckless driving.

Streets with under 3,000 vehicles per day are ideal for neighborhood greenways or shared street designs, offering safer options for pedestrians and cyclists. Between 2019 and 2023, Lakeport recorded 59 collisions, primarily in the downtown area (e.g., N Main Street, N Forbes Street, Clearlake Avenue, and Eleventh Street). Automobile right-of-way violations (29%), improper turning (15%), unsafe speed (14%), and alcohol-related impairments (12%) were the main causes, posing significant risks to pedestrians and cyclists. Unsafe speeds exacerbate the risks, reducing reaction times and increasing the likelihood of severe injuries, particularly among older adults who were disproportionately represented in crashes. Ten crashes involved people walking or bicycling.

Figure 1: Snapshot of Existing Conditions in Lakeport

Pedestrian with walker on Main Street


Pedestrians on Lakeshore


Intersection and Crosswalk in Downtown Lakeport


Street & Intersection condition on Eleventh Street

Figure 3: Average Daily Traffic

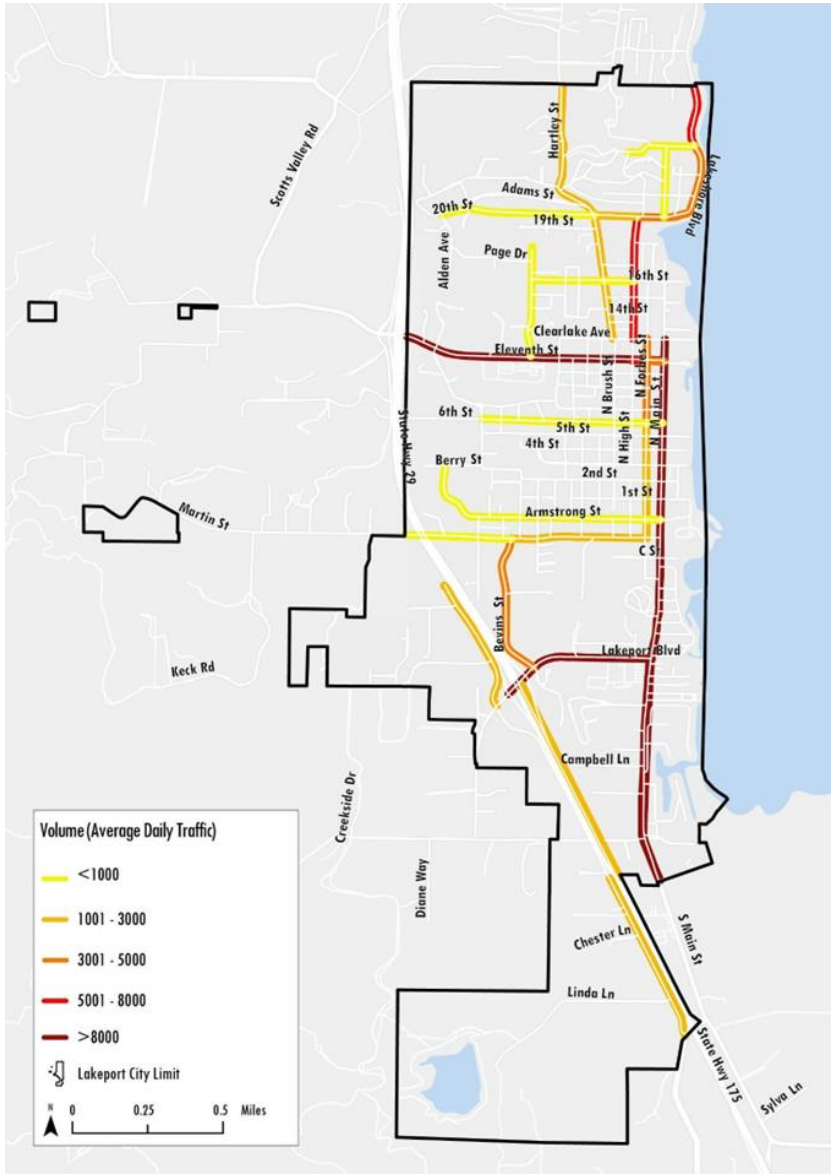
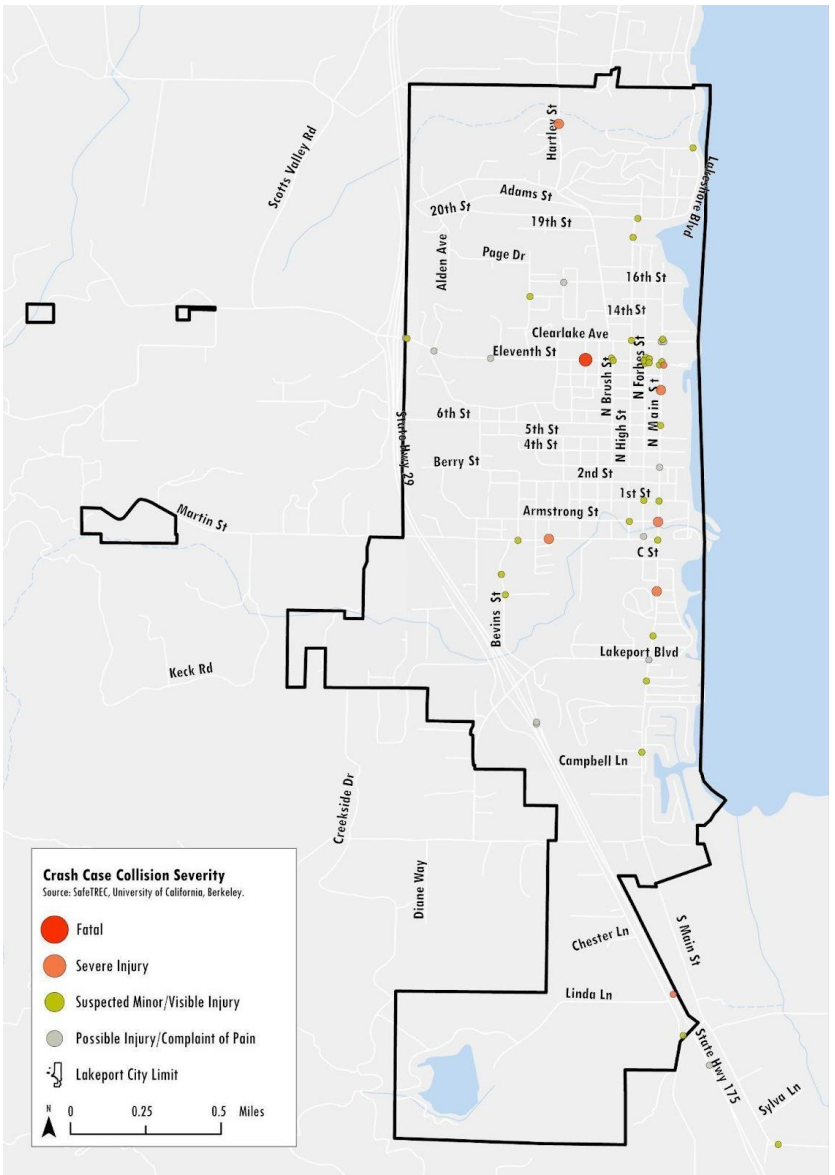


Figure 2: Collision Severity at Lakeport



PUBLIC TRANSIT

Public transit is vital for connecting destinations beyond the reach of pedestrians and cyclists, especially in small towns and rural areas like Lakeport. Operated by the Lake Transit Authority (LTA), Lakeport benefits from strong regional connectivity, including routes circling Clear Lake and extending to Ukiah.

Key Routes Serving Lakeport:

1. **Route 1**: Links Lakeport to northern and eastern communities, including Upper Lake, Lucerne, Nice, and Clearlake, with hourly service throughout the day.
2. **Routes 4 and 4A**: Provide connections to Kelseyville, Konocti Casino, Soda Bay, Lower Lake, and Clearlake, with limited service in the morning and evening.
3. **Route 7**: Connects Lakeport to Ukiah and Mendocino College, offering service via four buses throughout the day.
4. **Route 8**: Focuses on city destinations, including Mendocino College, but excludes local schools.

Existing Issues and Conditions:

- The LTA website has only a partial list of bus stops. A complete inventory is available in the 2019 Lake Transit Authority Bus Passenger Facility Plan, but it is not fully integrated online or on Google Maps.
- All LTA buses are equipped with bike racks that hold two bicycles, allowing for multimodal transportation. However, some stops lack adequate bike parking or connections to schools and other key destinations.

SCHOOL ACCESS

The distribution of students, schools, and Lake Transit routes highlights accessibility challenges in Lakeport. While the clustering of Clear Lake High School, Terrace Middle School, and Lakeport Elementary in the northeast benefits nearby residents, students in southern and western areas, such as Armstrong Street, Campbell Lane, or Linda Lane, face significantly longer commutes.

Lakeport's lakeside geography and dispersed student population emphasize the importance of safe walking and biking routes, reliable school buses, and accessible public transit. However, limited data on specific student commute patterns hinders comprehensive planning. Additionally, three schools—Lake County Tribal Health Preschool, Clear Lake High School, and Head Start Child Development—are located over a quarter mile from transit routes, making access via public transit challenging.

Recent infrastructure improvements, such as the marked crosswalk at Winter Avenue and Rainbow Road, provide some benefit, but gaps remain. For example, this crosswalk connects to an informal trail rather than formal pedestrian infrastructure.

School Traffic and Bus Safety Concerns

School traffic poses safety and logistical challenges. The district is evaluating a new parking lot at the southwestern campus corner to address congestion. Concerns about the bus system include observed drug use and general safety challenges for students. The extent of these issues during student transit times remains unclear.

Route 8 Challenges

Route 8 has the potential to connect students to schools but faces significant accessibility and safety issues:

- The nearest stop to Clear Lake High School (Lakeshore Boulevard and Lange Street) is a quarter mile from campus, requiring a 15-minute walk. The northbound stop lacks signage or shelter, while the southbound stop has only a sign located 300 feet away.
- Pedestrians from the northbound route must cross three lanes of traffic on Lakeshore Boulevard (posted speed: 35 MPH) without a marked crosswalk, and the intersection lacks sidewalks.
- Stopping sight distances for motorists approaching this intersection may not meet recommended safety standards, potentially requiring remedial measures.

Schedule Limitations

The northbound Route 8 bus begins service at 8:10 AM, which is too late for middle and elementary students and tight for high school students needing to arrive at 7:30 AM for Period 0. The southbound bus schedule is slightly better but still inconsistent with student needs. A 15-minute earlier northbound arrival is essential for improved accessibility.

FIELD OBSERVATION

Field visits and observations identified two types of corridors, each requiring distinct design considerations to improve safety and usability:

- **Primary corridors** are higher volume streets that focus on the movement of vehicles. A safer and more comfortable experience for people walking or bicycling would require investments in buffered or separated bike lanes, sidewalks, and shade.
- **Secondary corridors** are low speed and low volume streets and pathways with the potential to provide high quality parallel or alternative routes to primary corridors. With

low-cost changes, these streets become safe, comfortable routes that are equitably shared by all road users.

Table 1: List of Identified Primary and Secondary Corridors

Primary corridors	Secondary corridors
Lakeshore/High/Clear Lake/Main	Twentieth Street
Eleventh	Sixteenth/Mellor/Page
Bevins	Fifth & Sixth
Martin	Second/Compton/Berry
Parallel Drive	Esplanade Street
Westside Park Road	School Campus to Shady Lane
Lakeport Boulevard	Forbes
	Hartley
	Tenth
	Armstrong

Field reviews also highlighted discontinuous sidewalk networks, limited bicycle facilities, and deteriorating road conditions, particularly on Bevins Street, Armstrong Street, and the stretch from 2nd to 6th Street. The project analysis and engagements inform the approach to identifying key barriers and opportunities for enhancing active transportation in Lakeport.

3 ENGAGEMENT

This section summarizes the stakeholder engagement process for developing the Lakeport Active Transportation Plan. The process included an advisory group, multi-day community events in May 2024, focus groups, and participation in Lakeport's National Night Out in October 2024.

The engagement aimed to identify needs and improvements for safe, connected, and accessible transportation that supports community character and revitalization. This section also highlights the key takeaways of community survey and initial project identification.

KEY EVENTS AND ENGAGEMENTS

Advisory Group

An advisory group was convened to help identify important sensitivities to consider and pertinent information regarding the conditions, history, and needs of the community. The group also provided guidance on opportunities and methods for outreach, stakeholders to engage, and coordination with other community initiatives and planning activities impacting the community.

Participants included staff from the City of Lakeport Public Works, Community Development and Police departments, and representatives from the Lakeport Unified School District, Lake County Chamber of Commerce, Lakeport Economic Development Advisory Committee, Lake Area Planning Council, Caltrans District 1, and local residents.

Active Transportation Plan Multiday Community Events, May 5 – 8, 2024

The primary method for engaging the community was a multi-day series of events held over the course of four days in May 2024 in which residents and stakeholders identified needs and discussed ideas for improvements that support safety, connectivity, access and comfort for walking, rolling, bicycling, transit, safe routes to school, and that also support town character and community revitalization.

Events and activities included a pop-up table at the Cinco de Mayo Celebration, stakeholder focus meetings, community workshop, walking assessments and on-site working sessions, and input and feedback session at the annual Lakeport Economic Development Advisory Committee Summit.

The team also launched an on-line survey and interactive map to collect community input. The list of events, activities and outcomes are highlighted below.

- **Cinco de Mayo Celebration, May 5, 2024:** Members of the Blue Zones consultant team had a booth at Library Park and spoke with approximately 40 to 50 people throughout the day. Residents expressed a preference for Forbes Street due to its smoother pavement and lower traffic volume compared to Main Street. Out-of-towners said they came to Lakeport to walk the promenade and enjoy the park complex and suggested the route extend further to the north and south.

Figure 4: Interaction at the Cinco de Mayo Celebration

- **Public Workshop, May 6, 2024:** Approximately two dozen people attended the evening community workshop held at City Hall. Walkability and bike-ability expert Dan Burden of Blue Zones highlighted takeaways from team walking and biking assessments, observation of schools during drop off and pick up hours, and impromptu input and feedback from residents in the field. He then presented principles and tools for building healthy, walkable, sustainable and prosperous places for people of all ages and abilities.

Figure 5: Participant Discussion at Public Workshop

Afterward, participants broke into small groups around large aerial table maps, marked up and discussed assets, barriers and opportunities for active transportation, and reported out the results. Themes and recommendations included:

- Maintain small town feel
- Ensure walking, biking, safety and appeal for all (youth, school children, seniors, adults, visitors, tourists and patrons)
- Consider access too everything (lake, schools, services, transit, trails, bicycling)
- Lots of vibrant things to do downtown – highlight, connect and support vitality
- Improve sidewalks, make them complete and even
- Need better roadway conditions, even and finished pavement
- Add bicycle lanes (currently there are very few)
- More respect for bicyclists (better infrastructure, safety, etc.)
- Kelseyville, though a different context, is an example of safety and good infrastructure for bicyclists and walking (clean, designated facilities, even and clear path of travel)

- **Lakeport Economic Development Advisory Committee Summit:** Dan Burden of Blue Zones gave an abbreviated version of the previous workshop presentation with additional details about the relationship between traffic safety, walkability, placemaking and successful main streets.

  In the discussion that followed, attendees highlighted several issues, including intermittent sidewalks forcing people walking into the street, debris posing risks for people bicycling, and conflicts between skateboarders and pedestrians. There was also a call for reducing downtown speeds, improving transit connections, and addressing parking difficulties.

Figure 6: Advisory Committee Summit

Focus Groups

Small group meetings and one-to-one interviews were also held with key stakeholders, including:

- Chamber of Commerce
- Lake County Office of Education
- City Executive Team (department heads)
- Scotts Valley Band of Pomo Indians
- CEO of Tribal Health Coalition
- CEO of Lakeport Fairgrounds

- Lake Links (transportation for elderly, disabled and low-income Lake County residents)

Key takeaways included:

1. Main Street traffic calming: Interest and support was expressed for ways to encourage slower speeds, attract visitors and promote downtown foot traffic.
2. Need for safe routes for students: Students are obtaining driver's licenses at lower rates and prefer walking or biking to school, particularly along specific routes, while concerns about vehicle traffic safety persist. A collaborative effort is underway that aims to redesign drop-off processes and improve public transit options, alongside a unified Safe Routes to School plan to enhance student safety and transportation access.
3. Interest in the Forbes Creek Trail: The CEO of the Tribal Health Consortium expressed interest in a Forbes Creek trail potentially spanning from Martin to the west side of the highway and might include a bridge over Forbes Creek. Public access is under consideration. This will potentially connect various THC (Tribal Health Consortium) facilities.
4. Project Classification and Immediate Implementation: City staff emphasized the need to classify projects by cost (low, medium, high) and focus on quick-build projects for immediate implementation. Other key strategies mentioned include securing funding, developing 30% design plans, and prioritizing high-impact projects like the Lakeshore sidewalks.
5. Trail Development and Neighborhood Impact: The CEO of Lakeport Fairgrounds supported the concept of a trail along Forbes Creek. They expressed a number of concerns about a route on the eastern edge of the fairgrounds property connecting D Street and South Forbes Street. These concerns include future projects in that area, exacerbation of the problem with people climbing the fence in that area to enter without paying, and impact on the Lupoyoma Circle neighborhood.

Figure 7: Focus group with City Executive Management (Left) and Scotts Valley Band of Pomo Indians (Right)

Lakeport National Night Out, October 1, 2024

City and CivicWell staff hosted a station at the City booth at National Night Out at Xabatin Community Park. It included maps and posters with proposed walking and bicycling routes and potential tools for changes based on the existing conditions analysis and community and stakeholder input. Approximately 30 visitors engaged in conversations and provided feedback about needs, opportunities and priorities for improvements. Comments included:

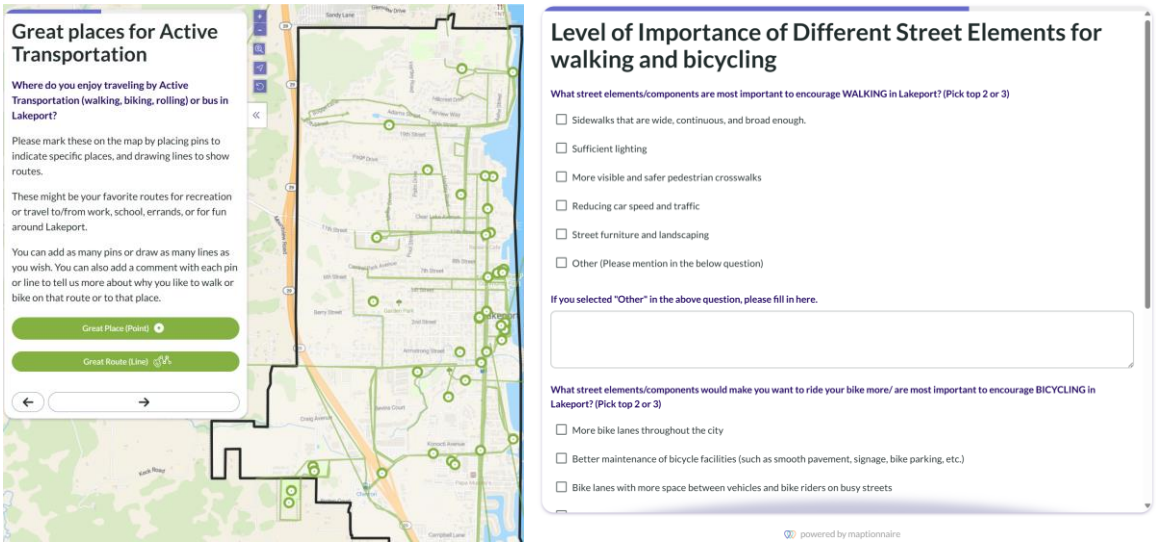
- Interest and support for adding bicycle lanes on Main Street
- Interest and support for complete/improved sidewalks on Forbes Street (some noted they routinely use Forbes for walking)
- Several upvoted the idea of a "decoupling strategy" that would emphasize streets with low vehicular traffic for installation of cheaper and more quickly attainable improvements to support walking and bicycling at the same time as considering more complex and time intensive changes on higher volume streets
- Identification of 11th Street as one of the more important streets to slow traffic down
- Create walking and biking map for residents and visitors
- Provide direction and distance wayfinding signage
- Build and expand on downtown "Anne Blue Walking Path" medallions
- Look at infrastructure gaps like Central Park Avenue, which has inadequate to non-existent pavement
- Consider flag holders, other enhancements at crosswalks for visibility and safety

COMMUNITY SURVEY

The community survey was hosted on Maptionnaire (An online survey tool that allows respondents to provide location-specific input, Figure 8) for two months (May 2024 to July 2024). Seventy-seven people responded to the survey, which was available in English and Spanish language.

The survey aimed to identify issues with current active transportation infrastructure, explore opportunities for improvement, and understand community priorities for active transportation projects. To ensure wide participation, promotional materials were distributed through various channels: Lake County Chamber of Commerce newsletter, Lakeport Police Department social media accounts, Lake Transit Buses, and all Project Advisory Group (PAG) members.

Figure 8: Snapshot of the Maptionnaire Survey



The survey findings provide important directions about how to invest in active transportation in Lakeport:

- Map based responses highlight **challenging location and routes,** with 45% of commenting on poor sidewalks and bike lanes. Frequently mentioned problematic streets include Main Street, 11th Street, High Street, 2nd Street, and Lakeport Boulevard. The other concerns include poor road conditions and reckless driving.
- **North High Street and Main Street** are considered challenging routes by some, they are also regarded as "great routes" for walking and biking. This suggests that they are significant thoroughfares for active transportation.
- **"Safety and Comfort"** and "**Mobility and Connectivity"** are noted as the top priority for future investment decisions to support active transportation.
- The top three focus areas for infrastructure improvements include off-street pedestrian and bicycle paths, sidewalk improvements, and on-street bicycle improvements.
- Focus on building wider, continuous sidewalks followed by more visible and safer pedestrian crosswalks to promote walking.
- Many people are interested in cycling but are hesitant to do so due to safety worries or a lack of confidence. **More bike lanes with sufficient space** were identified as the most important elements to encourage biking and making it safer.
- The survey was **completed by 77 respondents** of whom more than half didn't provide demographic information. The following reveal **demographic characteristics of the respondents** who provided demographic information and other key takeaway include:
  - Most respondents were between 55-64 years of age.
  - White/Caucasian individuals formed the largest racial group among respondents.

- Women outnumbered men among survey participants.
- Household incomes clustered in the mid-to-upper ranges ($110,000-$149,999).
- Residents from Lakeport participated most frequently, followed by those from Kelseyville and North Lakeport.
- Driving was the most preferred mode of transportation, with walking as the second choice.

In-person engagement sought to limit the impact of potential bias in the survey data due to the small number of respondents and overrepresentation/underrepresentation of certain groups compared to the City's population.

INITIAL PROJECT IDENTIFICATION

The project identification process for the Active Transportation Plan followed a two-step approach to ensure a comprehensive understanding of critical transportation needs. Needs were identified by direct engagement with staff and advisory group members as well as data driven analyses.

Stakeholder Priorities

The first phase involved direct engagement with key stakeholders, gaining insight into mobility challenges and identifying priority locations for infrastructure improvements. Their input helped identify critical projects that would address safety concerns, accessibility gaps, and connectivity issues from a community perspective.

1. **Lakeshore Boulevard (City Limits to Hartley, Hartley to 20th)**

   Ranking: Top priority

   Rationale: This project is crucial for improving pedestrian and bicycle safety and could tie into the Safe Routes to School project we recently completed. It also has the potential to extend beyond the city limits to Rainbow Street and Howard Street, completing a connected route to the schools.
   Within the city limits, there are right-of-way and environmental challenges, particularly adding continuous sidewalks on both sides of Lakeshore Boulevard, including the lake-adjacent section. Additionally, the undeveloped lot just north of Lange Street has plans for future development, and any development will require the installation of curb, gutter, and sidewalk, which will be important to consider as this project progresses.

2. **Tenth Street Pedestrian and Bicycle Improvements (Preferred Alternative to Eleventh Street)**

   Ranking: Top priority

Rationale: As a low speed and volume street parallel to Eleventh Street, Tenth Street offers a vital alternative to Eleventh Street for pedestrian and bicycle travel. This has the advantage of short-term, low-cost improvement that could be integrated with more extensive, long-term measures. Challenges such as right-of-way, utility relocation, and open drainage need to be addressed.

3. **Lakeport Blvd Improvement Project (Phase 1)**

   Ranking: High priority

   Rationale: This project has been in development for over a decade. Initially aimed at constructing a roundabout at Lakeport Blvd and South Main Street, the project has evolved due to financial and right-of-way challenges. The City has secured $900,000 in funding, and the project is currently in the design phase, with construction scheduled for FY 26/27. Phase 1 will fill in the missing sidewalk on the north side, include a mid-block protected crosswalk with a Rectangular Rapid Flashing Beacon (RRFB), and incorporate Full Depth Recycling (FDR) for road reconstruction.

4. **North High Street (Tenth Street to Twentieth Street) Pedestrian Improvements**

   Ranking: High priority

   Rationale: This project connects from Tenth Street to Twentieth Street, ensuring continuity for pedestrians and cyclists along North High Street. Addressing challenges such as right-of-way, utility relocation, and ADA upgrades is essential. This route is a vital connector for improving the network.

5. **Forbes Street Improvements (Bike/Ped Safety)**

   Ranking: High priority

   Rationale: Forbes Street is a primary alternate route to Main Street for cyclist and pedestrian safety. As a lower volume street there is an opportunity for short-term, cost-effective improvements to support pedestrian and bicyclist mobility.

Existing Condition Analysis and Community Engagement

The second phase of project prioritization used a data-driven desktop analysis of existing conditions and inputs from community engagements. This included assessing sidewalk and bicycle network coverage, incorporating stakeholder feedback, evaluating traffic safety elements, and analyzing transit and school access alongside field observations. By identifying infrastructure gaps, safety risks, and barriers to active transportation, this analysis revealed

additional project needs to complement those discovered through direct engagement with staff and the advisory group.

The existing conditions analysis, combined with community engagement findings and current projects from the **2040 Lake County Regional Transportation Plan** and the **Lake County Active Transportation Plan**, informed the identification of key projects. These include key connection projects, pedestrian and bicycle improvements, and intersection upgrades,. Projects identified through this analysis were screened with all potential projects, as described in Chapter 5.

Key Connection Projects

1. **South Main/Lakeport Boulevard Protected Bike Lanes** provides a more comfortable and safer route of travel to many commercial and residential areas of Lakeport, including a bridge connection over Route 29.
2. **Forbes Creek Trail or Estep/Larrecou** is a low-speed off-street connection from Lakeport Blvd/Rout 29 area, where the new Courthouse is under construction, the fairgrounds and baseball fields are located.
3. **Forbes Street Connector Intersection Project** provides connectivity improvements to the primary low volume north/south routes through town.
4. **Bevins area Trail** is a north/south off-street connection from Lakeport Blvd to key neighborhoods.
5. **Parallel Drive Trail** is the primary off-street north/south facility on the west side of Route 29.

Pedestrian Infrastructure

1. **Sidewalks on Twentieth from Hartley to Lakeshore to the city limits** would connect the sidewalks on Hartley to the other side of the school on Lakeshore.
2. **Eleventh Street** is the primary east/west connector from Main Street to SR 29, and an important shopping area.
3. **Lakeport Blvd from Bevins to Main St** is the main commercial area in the south end of town, and serving the new courthouse.
4. **Main/High/Lakeshore Infill** is a richly saturated, highly used street system serving many neighborhoods, commercial areas and the schools.
5. **Howard/Rainbow/Winter/Beach/Lakeshore Area** is the area north of the school campus serving numerous students and other areas outside of the city.
6. **Twentieth/Lakeshore to Lange** is a vital connector from the campus to Lakeshore Blvd. Many parents us this street to walk their students to school.

Bicycle Infrastructure

1. **Eleventh Street** is the primary east/west connector from Main Street to SR 29, and an important shopping area.
2. **Bevins Street** is a north/south off-street connection from Lakeport Blvd to key neighborhoods.
3. **Martin Street** is an important east/west connector with multi-use developments and connections to the fairgrounds and main street.
4. **Westside Park Road** connect numerous new developments and gives access to the Westside Park.
5. **County Courthouse** access is provided by Bevins Street.
6. **Lakeport Blvd from Bevins to Main St** is an important east/west connector on the south end of town.

Intersection Improvements

1. **Esplanade to Forbes** serves as a vital connector for numerous lakeside homes. While this is not an intersection, this stretch would benefit from intersection improvements at C Street and Main Street to enhance traffic flow and safety for both drivers and pedestrians.
2. **Neighborhood Greenway Network Crossings** (Sixteenth Street, Tenth Street, Second Street, etc.) improved crossings of Main Street to connect residential neighborhoods with recreational and other uses.
3. **Lakeport & Main** improve for all modes of travel, and all users. This intersection is an important gateway entry.
4. **Lakeport & Forbes** (if the connector goes through) will connect important shopping districts and land uses.
5. **Lakeport & Bevins** provides access to the new county courthouse meeting safety improvements for all road users.

4 NETWORK DECOUPLING

Many low-volume slow speed streets in Lakeport are already conducive to walking and biking. With targeted, network-wide investments in traffic calming, these streets could provide the connected and continuous experience that residents are seeking. This plan aims to support bicycle and pedestrian traffic on alternatives to the main street to avoid right-of-way conflict and design challenges that could hinder large vehicle access. Where principal streets must be designed, operated and maintained for all modes of travel, a network decoupling approach supports a quieter system of neighborhood greenways, accommodating a diverse range of trips.

NETWORK DECOUPLING THROUGH NEIGHBORHOOD GREENWAYS

Network decoupling is a broader strategic approach which involves creating an additional network of slow streets and trails in tandem with improvements to busier roads that can take longer to implement. This helps to reduce conflicts between motor vehicles and non-motorized travelers, ensuring safer, more comfortable routes.

To avoid attracting high volumes of motor vehicle traffic to the on street links in the network, shared, Neighborhood Greenway treatments are added. These include traffic calming, clear signage, and pavement markings. Decoupling the active transportation network from the motor vehicle network is the primary strategy for building a safer, more cohesive transportation network in Lakeport.

Complementary large-scale trail and intersection projects will further enhance connectivity, and additional safety and connectivity improvements are also identified across the city, even if they are not directly part of the neighborhood greenway network.

PROPOSED LAKEPORT NEIGHBORHOOD GREENWAY NETWORK

The Neighborhood Greenway Network is designed to prioritize bicycle and pedestrian traffic on selected streets, while still allowing access for local motorists. Through motor vehicle traffic will be routed to other streets and local traffic would be slowed to 15-20 MPH. This allows bicyclists and pedestrians to use the streets safely and comfortably. The aim is to create a street so calm that people enjoy walking or rolling there even in the absence of curbs, sidewalks and formal bicycle facilities. These streets add value by creating calmer, quieter neighborhoods for the residents.

Figure 9: Examples of Neighborhood Greenway Concepts

Neighborhood Greenway Tools

This section outlines tools for building the neighborhood greenway which some of the current lakeport projects are already supporting.

A. Traffic Calming: Traffic calming measures (e.g., raised crossings, curb extensions, chicanes) are necessary to make principal streets safer, more comfortable, inviting and accessible. Traffic calming is especially critical in commercial and mixed-use areas, and for SRTS corridors.

Lakeport currently lacks a comprehensive traffic calming manual. The city should prioritize adopting a traffic calming manual and program.

B. Enhanced Crossings: Rectangular Rapid Flashing Beacons (RRFBs) are currently being added along Martin Street, Oak Knoll Avenue, D Street, and Helena Avenue. These enhanced crossings on D street/Helena Avenue could serve to connect a future neighborhood greenway to Main Street if a connection through the fairgrounds is not possible.

Other crossing enhancements such as pedestrian refuge islands and raised crosswalks

Figure 10: Examples of Neighborhood Greenway Tools

Chicane to slow speed in San Francisco
Source: NACTO

Enhanced Crossing with RRFB in Kirkland, Washington

are vital for making intersections safer and easier to navigate for pedestrians and cyclists, especially on busy streets.

C. Trails and Protected Bike Lanes: These facilities provide a physical barrier or separation between cyclists and motor vehicles, reducing the level of stress for cyclists and enhancing safety on high-speed or high-volume roads. Over time the bicycle network would be built out with a combination of facility types that decrease the level of traffic stress, with trails or increasing separation for on-street bikeways where motor vehicle speeds and volumes are higher.

Protected Bike Lane in Davis, California

Buffered Bike Lane in Venice, Florida

D. Streetscapes:

These are improvements that enhance the aesthetic and functional aspects of the street, such as landscaping, trees, pedestrian-scale lighting, and benches.

These elements make streets more inviting and comfortable for walking and cycling.

Pedestrian Friendly Streetscape Elements in Portland Oregon

E. Diverters: Diverters redirect motor vehicle traffic away from certain streets while still allowing pedestrian and bicycle movements. This helps to reduce thorough traffic and makes streets safer for non-motorized users.

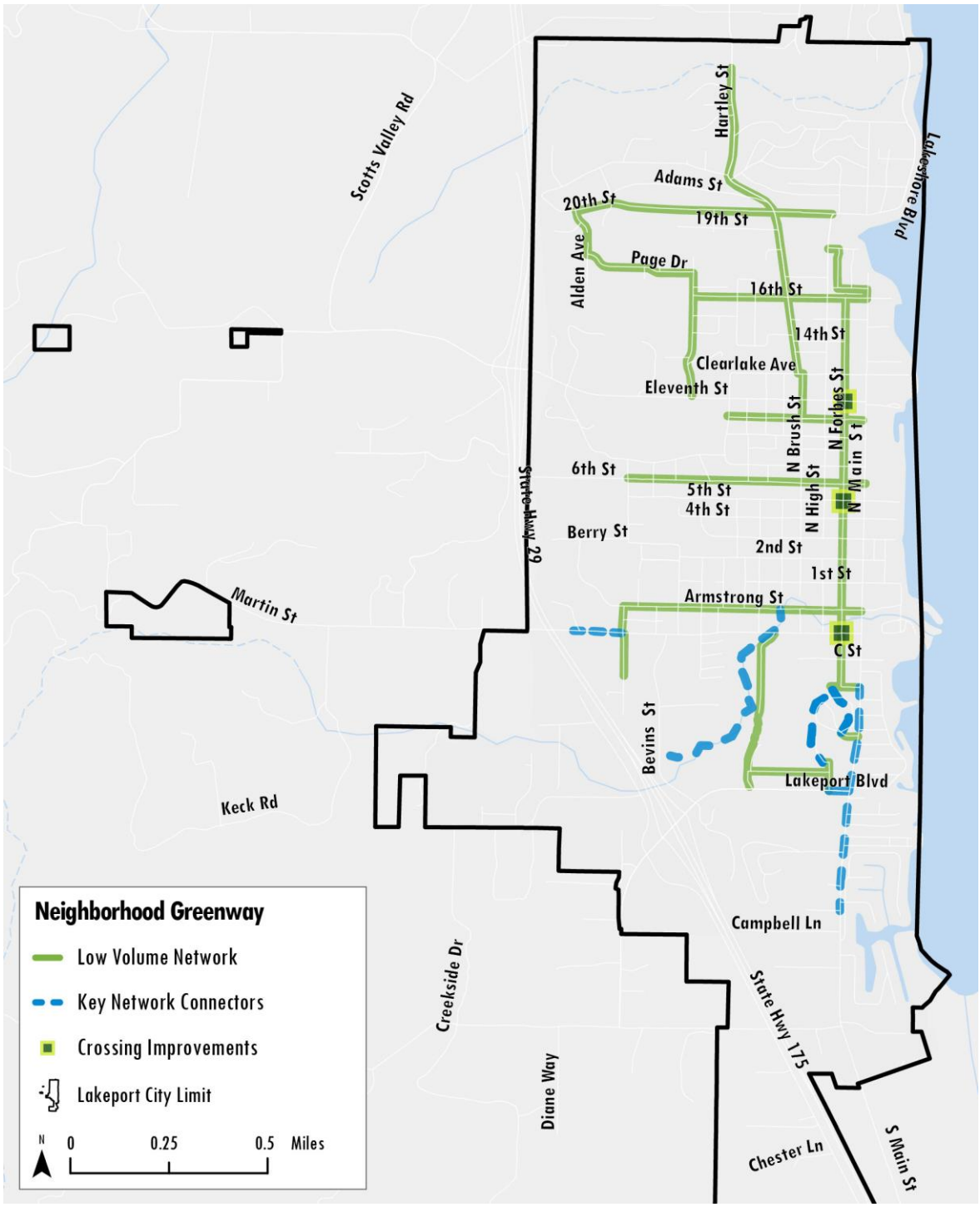
F. Removing Centerlines on Low Volume Streets: Streets lower than 6,000 vehicles per day benefit from centerline removals because the additional judgment required to drive on these streets slows vehicle speeds. This also reduces maintenance costs.

Traffic Diverter for low stress biking environment in Portland, Oregon; Source: J.Maus/BikePortland

G. Edge Lane Treatments: Edge Lane treatments can be used on low-speed, low-volume roads without formal bike lanes or sidewalks. While some treatments may serve as interim solutions to fill gaps between key

community destinations, they can also be long-term solutions where road conditions remain suitable. These treatments include pedestrian lanes and advisory shoulders.

Figure 11: Neighborhood Greenway Map



Lakeport's Neighborhood Greenway Network

- **Low-Traffic North/South Streets:** It is assumed that the north/south streets in the central neighborhoods already have low traffic volumes and will require minimal improvements. However, streets with higher traffic volumes that provide important north/south connections should be considered for upgrades.
- **Street Segments Needing Enhanced Facilities:** Some street segments, such as Twentieth and Hartley Streets, may not be ideal for diverting motor vehicle traffic. These streets will require a combination of standard bicycle and pedestrian facilities and traffic calming measures to ensure they are safe and comfortable for all users.

Network Connectivity and Expansion

- **Connections to Key Destinations:** The Neighborhood Greenway Network does not cover every destination in Lakeport (e.g., the lower end of South Main Street). Instead, it is intended as a starting point to promote and expand active transportation in the city. The primary goal is to connect most homes to key destinations such as downtown and schools, ensuring convenient access for residents.
- **Gaps in the Network:** The Neighborhood Greenway Network map highlights areas that require higher-cost, higher-impact facilities to improve connectivity. These gaps should be prioritized for future upgrades, alongside other important facilities or those on busier roads. Dashed lines on the map represent connections that need further feasibility studies and alignment work.
- **Minimizing Out-of-Direction Travel:** One core goal of the Neighborhood Greenway Network is to minimize the additional travel distance required to use the network. In the central Lakeport area, east/west routes are approximately ¼ mile apart, meaning that home-to-network travel adds no more than ⅛ mile—about one minute by bicycle or three minutes walking. Limiting detours is crucial to the network's success.

Specific Streets and Routes

- **Lange Street & Campus Routes:** Lange Street, the road through the campus, and routes north of the campus experience high volumes of students and vulnerable road users. These streets should be a unique part of the network, with improvements requiring collaboration between the Lakeport Unified School District and the City. Priorities for these routes should include physical separation, off-street facilities, or very low traffic volumes to enhance safety.
- **Royale Avenue to K/Esplanade Connection:** A potential connection between Royale Avenue and K/Esplanade Streets should be explored. This would provide

students around Royale Avenue with a safer route to access Forbes Street without traveling along Main Street. Given that Esplanade is prone to flooding, this connection could serve as an important alternative route.

- **Parallel Drive Shared-Use Path:** A bi-directional, shared-use path on the east side of Parallel Drive could provide a safe, uninterrupted route for vulnerable road users. This path would have no driveways and minimal intersections, making it an ideal facility to connect to destinations on the west side of SR 29. Key crossings (e.g., at Mendocino College, Lakeport Boulevard, Westside Park Road) need enhancements to maintain high safety standards.
- **Lakeport Boulevard Improvements:** Lakeport Boulevard is a critical connection within the gateway with access to SR 29 that connects commercial areas on both sides of the highway but currently remains an obvious gap. It links important destinations such as Parallel Drive, the Lake County Tribal Health Clinic, and the future county courthouse. Though basic connections exist, this street will require more comprehensive treatment to integrate fully into the network.
- **Traffic Calming:** Input was provided from the community survey related to traffic calming measures for Russell, Armstrong, and Second Streets.

Long-Term Connectivity Goals

- **SR 29 Parallel Trail:** This lightly developed corridor already has several existing connections, and a path through this area would provide a city-spanning route from Shady Lane to a potential terminus at the future Forbes Creek Trail or a connection near Bevins Street close to Lakeport Boulevard.
- **Low-Traffic Streets:** Some streets, such as Hillcrest/Forest Drive, already have very low traffic volumes, making them naturally attractive to active transportation users. While these streets are not currently marked on the Neighborhood Greenway Map, they could be improved in the future if needed to further support the active transportation network.

5 PRIORITY PROJECTS

This section describes how projects consolidated from the engagements with stakeholders, field review, data analysis, and existing plans in the Lakeport area were scored to assess their relative potential to enhance safety, accessibility, and connectivity. Projects were scored within the categories of walk, bike, neighborhood greenway, trail, and intersection improvements.

PRIORITIZATION FRAMEWORK

The project prioritization framework assesses active transportation needs by scoring factors such as proximity to key destinations, crash severity, equity considerations, and existing infrastructure. The weights for each factor also consider the importance of the neighborhood greenway network as a tool that will lead the city toward a connected and comprehensive network of streets and trails decoupled from the vehicle network. Table 2 describes the framework with the scoring criteria and weights.

Table 2: Project Prioritization Methodology

Higher score = High need for prioritization/intervention

Proximity to Key Destinations		
Element		Weight
Proximity to school/on suggested route to school	Within 0.25 miles of a school or on school route	5
	Within 0.5 mile	3
	More than 0.5 mile and not on school route	0
Proximity to other key destinations (commercial center, park/open space, trail, bus stop, senior center, Mobile Homes)	Within 0.25 miles	1
	Within 0.5 mile	0.5
	More than 0.5 mile	0
New/Upcoming development	Within .25 miles of planned development (client to provide key parcels for this)	2
Part of the neighborhood greenway network	Within .25 miles of a centerline associated with the neighborhood greenway decoupled network	10
Severity of Crashes		
Crash Type		Weight

Fatal and Severe Injury	Within 0.25-mile buffer	20
Other Visible Injury	Within 0.25-mile buffer	2
Complaint of Pain	Within 0.25-mile buffer	1
Equity		
Element		Weight
The low-income population within 1/4-mile (percent of the total population)	Above household median income rate (23.7%)	1
	Below the citywide rate (23.7% and below)	0
Zero Vehicle Household	Block group with highest zero vehicle household	1
Challenging location input from community and stakeholder (Advisory committee)	▪ Maptionnaire inputs ▪ Input from staff and committee ▪ In-person engagement inputs	5
Safety and Comfort		
Element		Weight
Sidewalk	Presence of Sidewalk on both side	0
	Presence of Sidewalk on one side	1
	No sidewalk	2
Bike Facility Gap	Bike Path (Yes)	0
	Bike Path (No)	1
Prior Study and Plan Identified Projects	Includes RTP projects, General Plan, Bike and Ped Plan, anything else from Capital projects or city initiatives?	3
Existing Condition Field Review and Inputs	Primary Corridor	1
	Secondary Corridor	2

RECOMMENDED PROJECTS

The final project list represents a combination of both stakeholder input and data-driven analysis, ensuring a well-rounded approach to addressing active transportation needs. By integrating community perspectives with a detailed assessment of existing conditions, and identification of projects from other plans developed for the Lakeport area, the recommended projects prioritize safety, accessibility, and improvements in connectivity.

Walkway Priority Projects

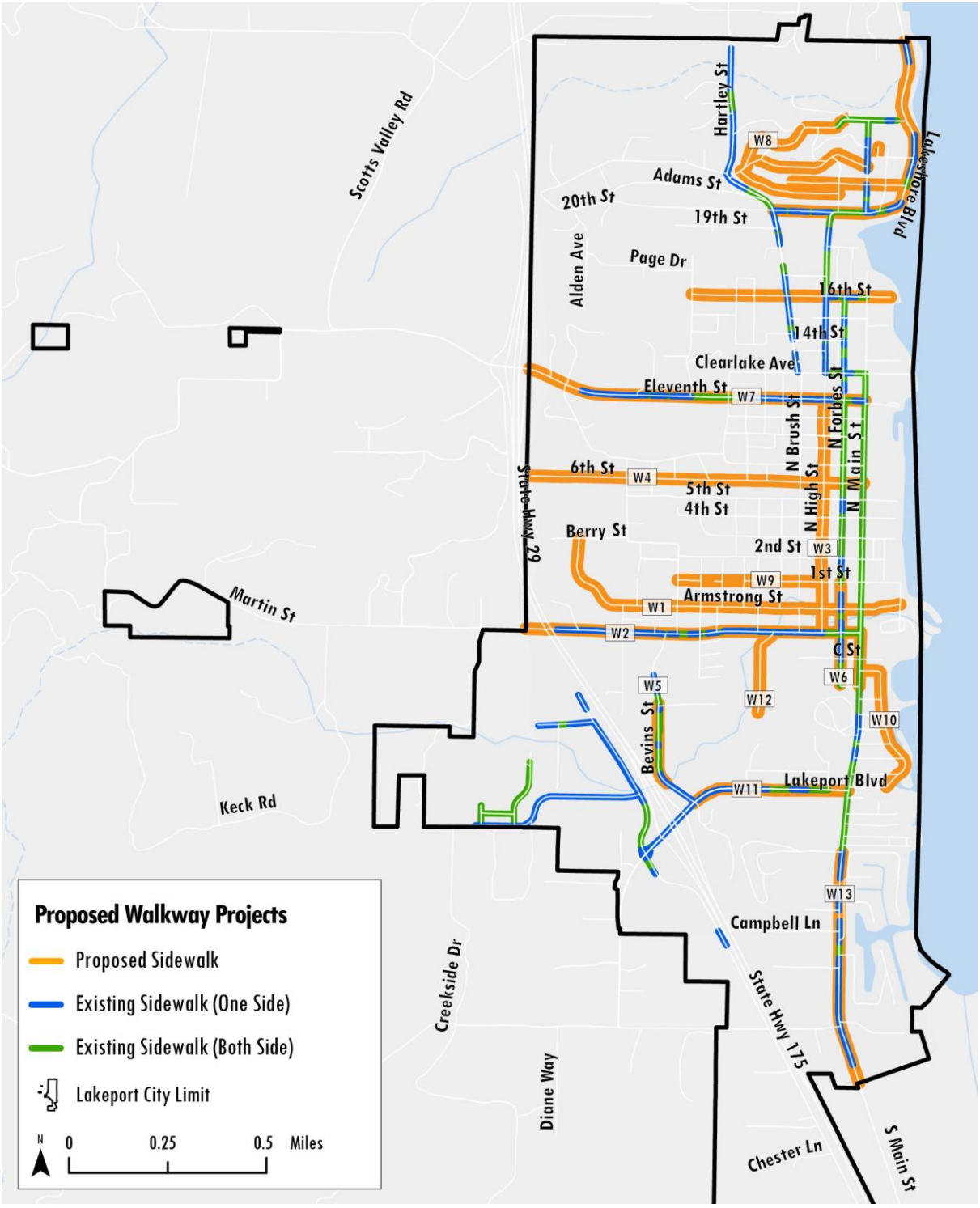
A walkway project is assumed to be a 6' ADA-compliant sidewalk with curb and gutter. Curb and gutter are discontinuous along these segments and the spot locations of existing sidewalk pose an estimating risk. A spot checked was done along with the segments using Google Streetview and estimated that roughly 50% of the total walk project segment length would require a new curb and gutter and 50% would require new sidewalk. Where sidewalk exists, an estimate of 25% of the sidewalk requires removal and replacement due to ADA compliance deficiencies.

Table 3: Proposed Walkway Projects with Priority and Cost Opinion (Construction Only and Total)

ID	Street Name	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
W1	Armstrong St	City limits (east)	Berry Street	Medium-high priority	$1,415,000	$2,839,000	Sidewalk
W2	Martin St	Main Street	City limits (west)	Medium-high priority	$1,274,000	$2,555,000	Sidewalk
W3	N High St	Martin Street	11th Street	Medium-high priority	$889,000	$1,783,000	Sidewalk
W4	6th St	North Main Street	City limits (west)	Medium-high priority	$1,264,000	$2,535,000	Sidewalk
W5	Bevins St	Bevins Court	Forbes Creek	Medium-high priority	$310,000	$621,000	Sidewalk
W6	S Forbes St	1st Street	D Street	Medium-high priority	$389,000	$779,000	Sidewalk
W7	11th St	Main Street	City limits	Medium-high priority	$1,295,000	$2,598,000	Sidewalk
W8	Hillcrest Dr	Terrace Dr	Giselman St	Medium-high priority	$443,000	$889,000	SRTS Sidewalk
W9	1st St	North High Street	North Russell Street	Medium-high priority	$545,000	$1,093,000	Sidewalk

ID	Street Name	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
W10	Esplanade St	South Main Street	Lakeport Boulevard	Medium-high priority	$568,000	$1,138,000	Sidewalk
W11	Lakeport Boulevard	Main Street	Bevins Street	Medium-high priority	$598,000	$1,200,000	Sidewalk
W12	Estep St	Martin Street	End of segment	Medium-high priority	$329,000	$659,000	Sidewalk
W13	S Main St	Martin Street	City limits (south)	Medium-high priority	$1,092,000	$2,191,000	Sidewalk
W14	Fairview Way	Terrace Dr	Green St	Medium priority	$394,000	$790,000	SRTS Sidewalk
W15	20th St	Hartley Street	Lakeshore Boulevard and then to the city limits	Medium-low priority	$1,130,000	$2,267,000	Sidewalk
W16	Forest Dr	Terrace Dr	Lange St	Medium-low priority	$509,000	$1,022,000	SRTS Sidewalk
W17	Sayre St	Lakeshore Blvd		Medium-low priority	$432,000	$866,000	SRTS Sidewalk
W18	Terrace St	Jones St		Medium-low priority	$37,000	$74,000	SRTS Sidewalk
W19	16th St	Mellor Drive	City limits (east)	Medium-low priority	$755,000	$1,514,000	Sidewalk

Figure 12. Existing and Proposed Walkway Projects



Note: Priority proposed walkways are labeled in the map and described in the above Table 3.

Bike Projects

Bike projects were defined for each location based on the most likely bike lane class based on width, street context, and connectivity. The intent was to create the lowest stress links possible within the available right of way. A bike project is assumed to include the following elements:

- Lane striping
  - Class II: 3-line striping (bike lane x 2, centerline)
  - Class III: Shared lane markings every 300' feet
  - Class IV: 5 lane striping (bike lane with buffer line x 2, centerline)
- For Class IV, continuous concrete physical protection

Figure 13: Examples of Bike Project Elements

Source: Silicon Valley Bicycle Coalition

Source: California Bicycle Coalition

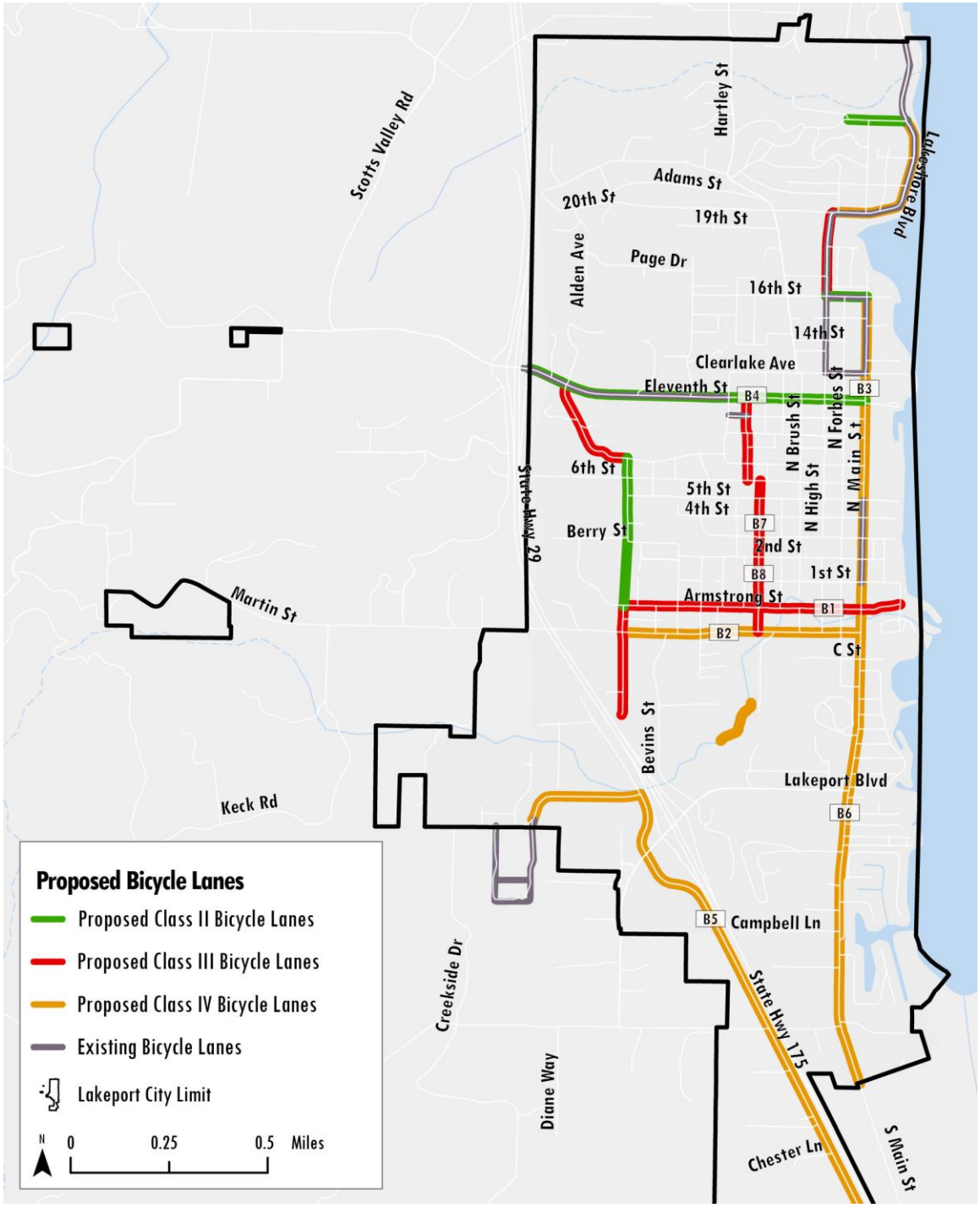
Source: Silicon Valley Bicycle Coalition

Table 4: Proposed Bike Projects with Priority and Cost Opinions (Construction Only and Total)

ID	Street Name	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
B1	Armstrong St	City limits (east)	Spurr Street	Medium-high priority	$198,000	$376,000	Class III/II
B2	Martin St	Main Street	City limits (west)	Medium-high priority	$716,000	$1,363,000	Class IV
B3	N Main St	16th Street	1st Street	Medium-high priority	$854,000	$1,627,000	Class IV
B4	11th St	Main Street	City limits (west)	Medium-high priority	$242,000	$461,000	Class II
B5	Parallel Dr	Westside Park Road	City limits (south)	Medium-high priority	$1,707,000	$3,252,000	Class IV
B6	S Main St	1st Street	City limits (south)	Medium-high priority	$1,517,000	$2,890,000	Class IV
B7	N Estep St	6th Street	1st Street	Medium-high priority	$6,000	$11,000	Class III
B8	S Estep St	1st Street	Martin Street	Medium-high priority	$3,000	$6,000	Class III
B9	S Smith St	Armstrong Street	State Highway 29	Medium priority	$6,000	$12,000	Class III
B10	Spurr St	Central Park Avenue	Armstrong Street	Medium priority	$106,000	$201,000	Class II
B11	High St	20th Street	16th Street	Medium-low priority	$254,000	$484,000	Class IV
B12	N High St	20th Street	16th Street	Medium-low priority	$5,000	$9,000	Class III
B13	Lange St	Lakeshore Boulevard	Forest Drive	Medium-low priority	$42,000	$79,000	Class II
B14	Lakeshore Boulevard	Green Street	Lange Street	Medium-low priority	$451,000	$859,000	Class IV
B15	Manzanita St	6th Street	11th Street	Medium-low priority	$5,000	$9,000	Class III
B16	16th St	North Main Street	North High Street	Low priority	$29,000	$55,000	Class II

ID	Street Name	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
B17	Westside Park Rd	Parallel Drive	City limits	Low priority	$366,000	$696,000	Class IV
B18	Central Park Ave	Spurr Street	11th Street	Low priority	$6,000	$12,000	Class III

Figure 14: Existing and Proposed Bicycle Projects



Note: Proposed priority bike projects are labeled in the map and described in the above Table 4.

Neighborhood Greenway Projects

The Neighborhood Network prioritizes bicycle and pedestrian travel while maintaining local motorist access. Through traffic is redirected, and speeds are reduced to 15-20 MPH, creating a safe, comfortable environment for walking and biking. By calming traffic, these streets enhance neighborhood livability and provide a quieter, more inviting space for residents.

Table 5: Proposed Neighborhood Greenway Projects with Priority and Cost Opinions (Construction Only and Total)

ID	Street	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
N1	Hartley St	Tenth Street	City limits (north)	High priority	$243,000	$463,000	NG
N2	Armstrong St	Smith Street	Main Street	High priority	$165,000	$314,000	NG
N3	6th St	North Main Street	Spurr Street	High priority	$141,000	$268,000	NG
N4	Forbes Creek Trail	Armstrong Street to the south (.41 mile to private lands)		High priority	$290,000	$552,000	Trail
N5	N Forbes St	16th Street	1st Street	High priority	$170,000	$323,000	NG
N6	S Forbes St	1st Street	Lakeport Boulevard	High priority	$97,000	$185,000	NG
N7	S Main St	D Street	Grace Lane	High priority	$134,000	$255,000	NG
N8	Estep St	Martin Street	End of segment	High priority	$52,000	$98,000	NG
N9	Konocti Ave	S Larrecou Lane	Forbes Street	Medium-high priority	$47,000	$89,000	NG
N10	Lupoyoma Hts	South Main Street	Lupoyoma Circle	Medium-high priority	$32,000	$61,000	NG
N11	Lupoyoma Cir	South Forbes Street	Lupoyoma Heights	Medium-high priority	$81,000	$154,000	NG
N12	S Smith St	Armstrong Street	State Highway 29	Medium-high priority	$65,000	$124,000	NG

ID	Street	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
N13	Tenth St	North Main Street	Pool Street	Medium-high priority	$82,000	$155,000	NG
N14	20th St	Green Street	City limits (west)	Medium priority	$158,000	$300,000	NG
N15	Mellor Dr	Page Drive	11th Street	Medium-low priority	$76,000	$144,000	NG
N16	Larrecou Ln	Lakeport Boulevard	End of segment	Medium-low priority	$31,000	$59,000	NG
N17	16th St	Mellor Drive	North Main Street	Medium-low priority	$104,000	$197,000	NG
N18	Montana Vista St	Via del Lago	Mariah Way	Medium-low priority	$30,000	$57,000	NG
N19	Mariah Way	Montana Vista Street	Main Street	Medium-low priority	$18,000	$35,000	NG
N20	Page Dr	Mellor Drive		Medium-low priority	$66,000	$126,000	NG

Neighborhood greenway projects include the following elements:

- Signage (Wayfinding, Identification) every 125' bidirectional
- Diverters every 2500'
- Traffic Circles every 1000'
- Speed Cushions every 150'
- Centerline removal continuous along project length
- Shared lane markings every 300'

Since some segments of the neighborhood greenway network intersect, the number of diverters and traffic circles needed may be less than estimated. The location of these elements should be investigated in a future effort considering the network holistically to construct these elements in the most efficient, impactful locations.

Trail Projects

Trail projects vary in complexity based on several factors, including topography, surface material, width, and the need for infrastructure elements such as bridges, culverts, and boardwalks. Additional considerations include amenities like benches, lighting, and signage, as well as right-of-way requirements and intersection treatments. These elements influence the design and implementation of trails, ensuring they provide safe, accessible, and connected routes for users. Intersection treatments are considered separately, as their scope is highly context-dependent and may overlap with other project recommendations.

Table 6: Proposed Trail Projects with Priority and Cost Opinions (Construction Only and Total)

ID	Street Name	From	To	Priority	Construction Cost Opinion	Total Cost Opinion	Project Type
T1	Bevins Court	Martin Street	Forbes Creek	Medium-high priority	$406,000	$774,000	Trail
T2	Spur Street on to South Smith Street	Eleventh Street	Martin Street	Low priority	$581,000	$1,107,000	Trail
T3	9th St	Pool Street	End of segment to the west	Low priority	$223,000	$425,000	Trail

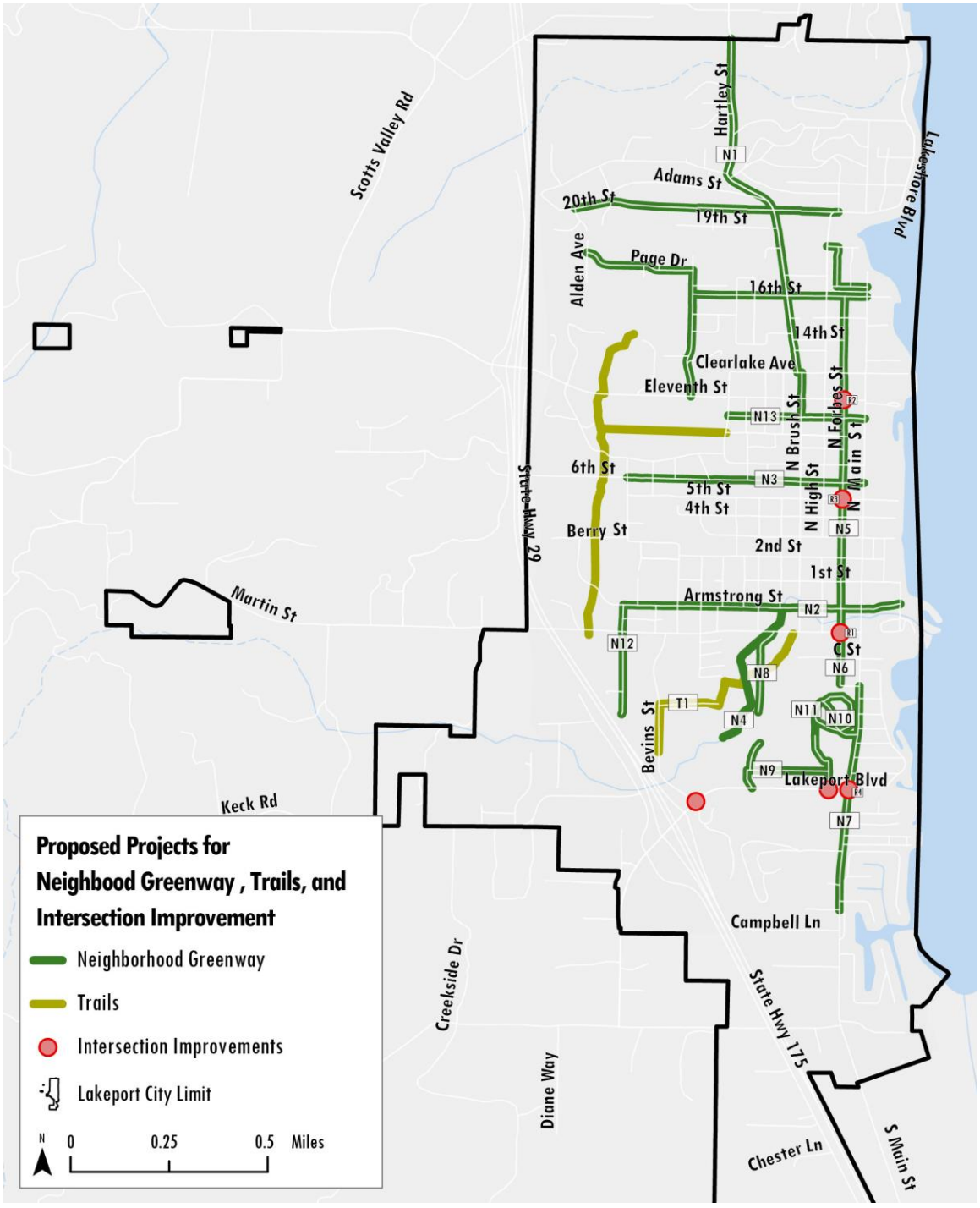
Intersection projects

Intersections play a critical role in the safety and efficiency of an active transportation network. Well-designed intersections improve connectivity, reduce conflicts between different modes of travel, and enhance overall accessibility. The table below lists key intersection projects aimed at improving pedestrian and bicyclist safety, addressing visibility and crossing challenges, and integrating infrastructure elements that support multimodal travel.

Table 7: Proposed Intersection Projects with Priority

ID	Street 1	Street 2	Priority level	Notes
I1	Martin Street	Forbes Street	Medium-high priority	Included in Neighborhood Greenway cost
I2	11th Street	Forbes Street	Medium-high priority	Included in Neighborhood Greenway cost
I3	5th Street	Forbes Street	Medium-high priority	Included in Neighborhood Greenway cost
I4	Main Street	Lakeport Boulevard	Medium-high priority	Included in Neighborhood Greenway cost
I5	Forbes Street	Lakeport Boulevard	Medium priority	Included in Neighborhood Greenway cost
I6	Bevins Street	Lakeport Boulevard	Medium-low priority	Roundabout ($500,000)

Figure 15 Proposed Projects for Neighborhood Greenway, Trails and Intersection Improvements



Note: Proposed priority projects are labeled in the map and described in the above Table 5, Table 6, and Table 7.

CONCEPT ILLUSTRATION

A reference for the proposed cross-section for Lakeport Boulevard has been provided in this section. Please refer to Annexure B to view the proposed cross-sections for the following streets:

1. Lakeshore Boulevard
2. Downtown Main Street
3. North and South Main Street
4. Lakeport Boulevard
5. Tenth Street
6. Eleventh Street (Commercial)
7. Eleventh Street (Residential)
8. North High Street
9. Forbes Street
10. Martin Street
11. Armstrong Street
12. Hartley Street

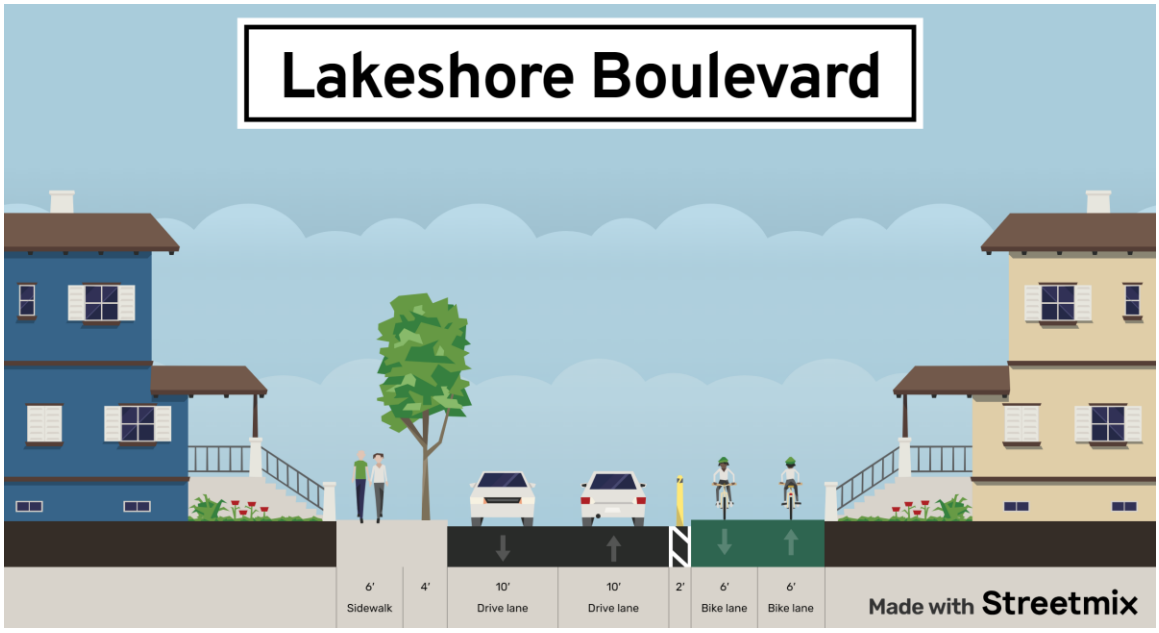
Lakeshore Boulevard

Rationale: This project is essential for improving pedestrian and bicycle safety along Lakeshore Boulevard, a key route that connects to the recently completed Safe Routes to School project. It serves as a scenic and critical connector to numerous city and county destinations. In addition to enhancing safety, the project has the potential to extend beyond city limits to Rainbow Street and Howard Street, creating a fully connected route to local schools.

Challenges: There are right-of-way and environmental challenges, particularly in constructing continuous sidewalks on both sides of Lakeshore Boulevard, including the lake-adjacent section. Additionally, the undeveloped lot just north of Lange Street is slated for future development, which will require the installation of curb, gutter, and sidewalks—factors that should be integrated into project planning.

Additional Opportunity: Informal trails connecting the school campus to Winter Avenue and Beach Lane should be upgraded to **formal, off-street trails**, improving student access to nearby homes and further enhancing connectivity.

Figure 16: Proposed Cross Section for Lakeshore Boulevard



Proposed Safety Enhancements: To achieve a target speed of **25 mph** (currently **35 mph**), the following measures are proposed:

- **Lane Narrowing:** Travel lanes will be reduced to **10 feet in width** and turn lanes will be eliminated.
- **Multimodal Infrastructure:** A **lakeside, two-way protected raised path** will be installed for pedestrians and cyclists.
- **Sidewalk & Buffer:** A **6-foot-wide sidewalk** with a **4-foot buffer** will be added on the west side, enhancing pedestrian safety.

RECOMMENDED PROGRAMS

This section describes programs to support multimodal transportation in Lakeport focused on improving access to schools and transit.

Enhancing Pedestrian Infrastructure for School Access

Improved pedestrian infrastructure is critical for students living north of the main school campus. Proposed solutions include:

- **Sidewalks**: Adding sidewalks along Lakeshore, Rainbow, and Howard streets.
- **Trails**: Creating separate trails that connect the campus to Winter Avenue and Beach Lane. Winter Avenue and Beach Lane are low-traffic streets that already function well as shared spaces, providing connections to Rainbow Road

- **Intersection Enhancements**: Improving the Beach Lane/Rainbow Road intersection to offer safer alternatives for students from high-density housing areas, reducing the need to walk along busy Lakeshore Boulevard.

Exploring a Partnership with Lake Transit Authority

A partnership between Lake Transit Authority and the Lakeport Unified School District could address the school district's chronic bus driver shortage, reduce school-area traffic, and increase bus ridership. This type of collaboration has proven successful in other regions, including larger cities where student safety challenges are even more pronounced.

To enhance safety, one option is the use of chaperones on student-specific bus routes. Such measures could reassure parents and encourage greater adoption of public transit by students.

Recommendations for improvement to make the bus system a viable option for student transportation:

- Adjust **route timing** to align better with school schedules.
- Install **shelters** at bus stops to protect students from the weather.
- Introduce **student passes** and consider additional safety enhancements to build trust and encourage parents to switch from driving to using public transit.

Learning from Successful Programs

Statewide school transit pass programs demonstrate the potential benefits of well-designed public transportation systems for students:

- **Sacramento: RydeFreeRT (RFRT)**: The RydeFreeRT[2] program, provides free transit passes to K-12 students. An evaluation conducted after 1–2 years of implementation highlighted several positive outcomes, including:
  - A reduction in automobile trips for students.
  - Increased bus use for non-school destinations, potentially reducing car trips for these purposes as well.
  - Higher participation rates among non-white students.
- **San Mateo County: SamTrans Youth/Student Rider Program**
  San Mateo County offers a youth and student rider program through SamTrans[3]. A prospective study with suggested strategies for improving this program is available.

[2] https://www.sacrt.com/rydefreert/

[3] https://www.samtrans.com/rider-info/youth-riders

By combining improved infrastructure, strategic partnerships, and lessons from successful transit programs, the district can significantly enhance student access to schools while addressing safety, traffic, and equity concerns.

6 APPENDICES

APPENDIX A

A detailed analysis and key findings for the following sections can be found in the existing conditions memo, which includes:

- Chapter 1: Introduction
- Chapter 2: Engagement
- Chapter 3: Field Review
- Chapter 4: Data Analysis
- Chapter 5: Key findings

APPENDIX B

This section covers supporting details for Chapter 5: Recommended Projects. It includes cost assumptions and project estimation to develop the unit cost for each project, as well as a map of all the proposed projects with their priority. The proposed cross-sections for 12 projects can be referenced through this separate document link.

Cost Assumptions

The general assumptions used for the project costing are:

- Cost opinion is provided in 2024 dollars
- Unit costs are reflective of smaller scale projects
- Sources include City of Lakeport bid tabs, planning-level quantity estimates, and judgement from similar projects around California
- Driveway costs are incidental, and covered by project contingency
- Landscaping and seeding is incidental, and covered by project contingency
- Erosion control is incidental, and covered by project contingency
- Earthwork and grading is incidental, and covered by project contingency
- Lakeport, CA typical block length is 200'
- All projects are assumed to occur the public right-of-way however grading and topographic constraints may require work outside of the ROW or real estate coordination (easements or acquisitions). This investigation and cost are assumed to be outside the scope of this project
- No signal work is included or recommended

Project Estimation

The following elements were used in developing unit costs for each project type.

Walk Projects

- Curb Ramps - Assume 8 per intersection (2 directional ramps per corner)
- New Sidewalk – 6’ wide 4” Sidewalk; commercial driveways may require a thicker sidewalk section which would increase cost
- Remove and Replace Sidewalk – Includes removal and construction of new sidewalk
- New Curb and gutter – Assumed everywhere sidewalk is proposed but where no curb and gutter exist
- Crosswalk Markings – Hi-visibility white thermoplastic crosswalks
- Lighting – Unit cost will vary based on access to electric service, fixture type, and scale of installation
- Street Trees – Assumed cost of mature (65-gal native tree); Unit cost may vary depending on species, initial irrigation requirements, and scale of installation

Bike Projects

- Pavement Markings – lane assignment legends and other stencils
- Green Bike Lanes – green thermoplastic
- Resurfacing – 2” mill and overlay
- Concrete Protection – continuous concrete curb
- Bike Lane Symbols – bike and arrow stencils, white thermoplastic
- Bike lane striping – long line thermoplastic white or yellow striping

Bike Boulevard

- Signage – Wayfinding and route identification signage, custom design
- Diverters – Concrete elements to force right turns
- Traffic Circles – 20' diameter concrete traffic circles, hardscaped
- Speed Cushions – 6’ x 25’ Asphalt speed cushions
- Centerline removal – grinding of centerline
- Shared Lane Markings Stencils – white preformed thermoplastic

Trail

- Section – 2" Asphalt over 4” Class II Aggregate Base

Proposed Projects

Figure 17. Map of Priority Projects (City Level)

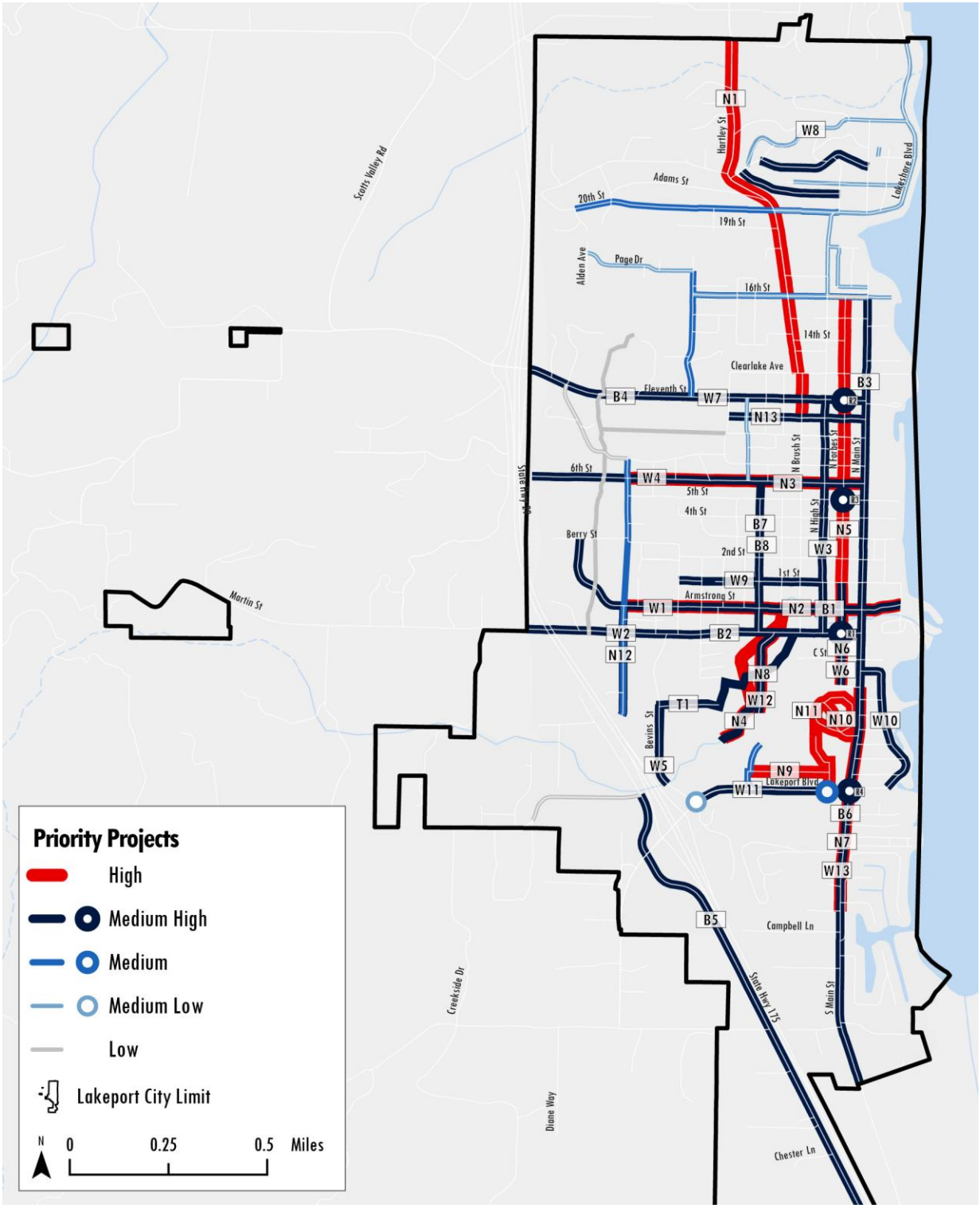
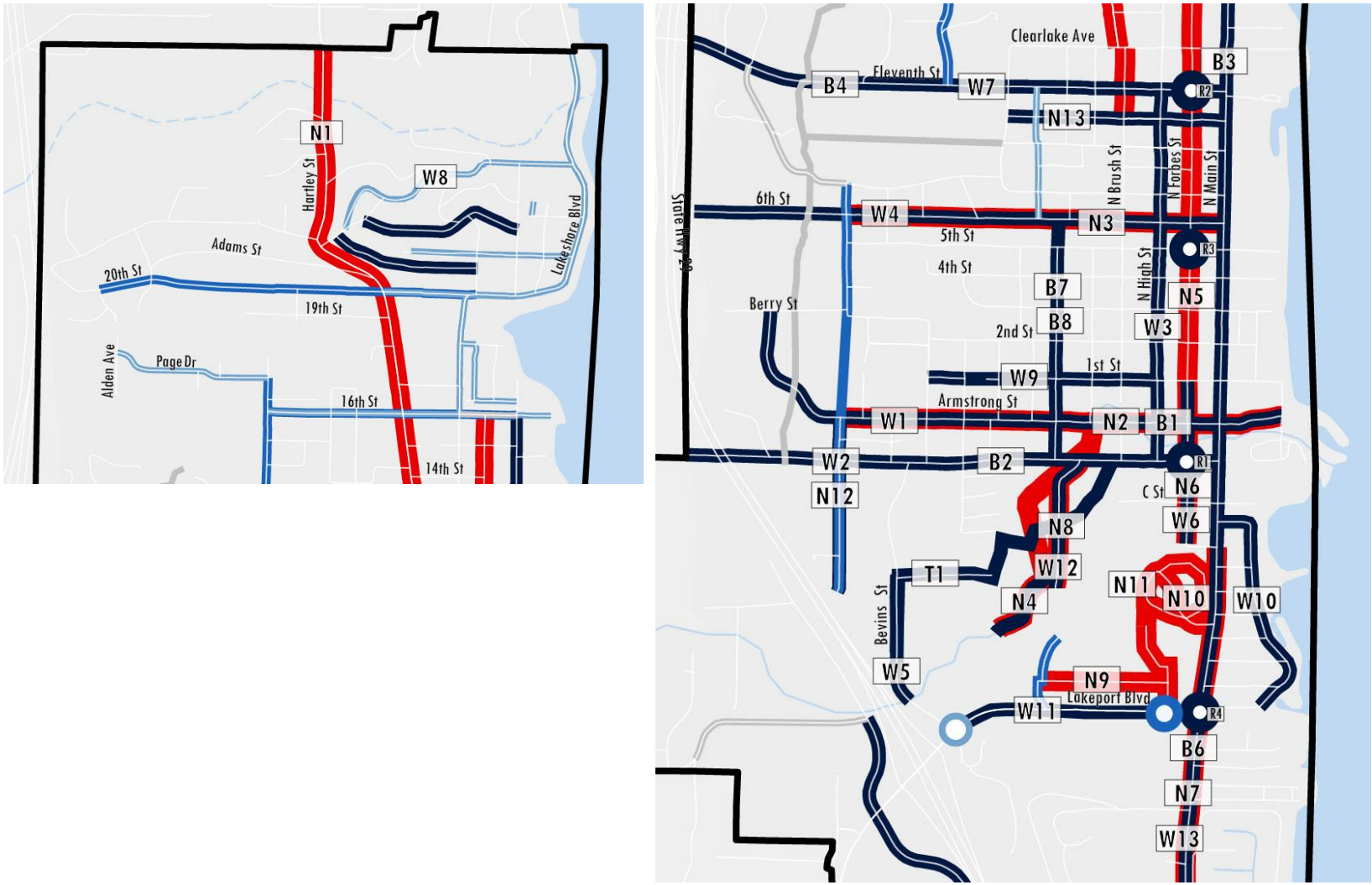
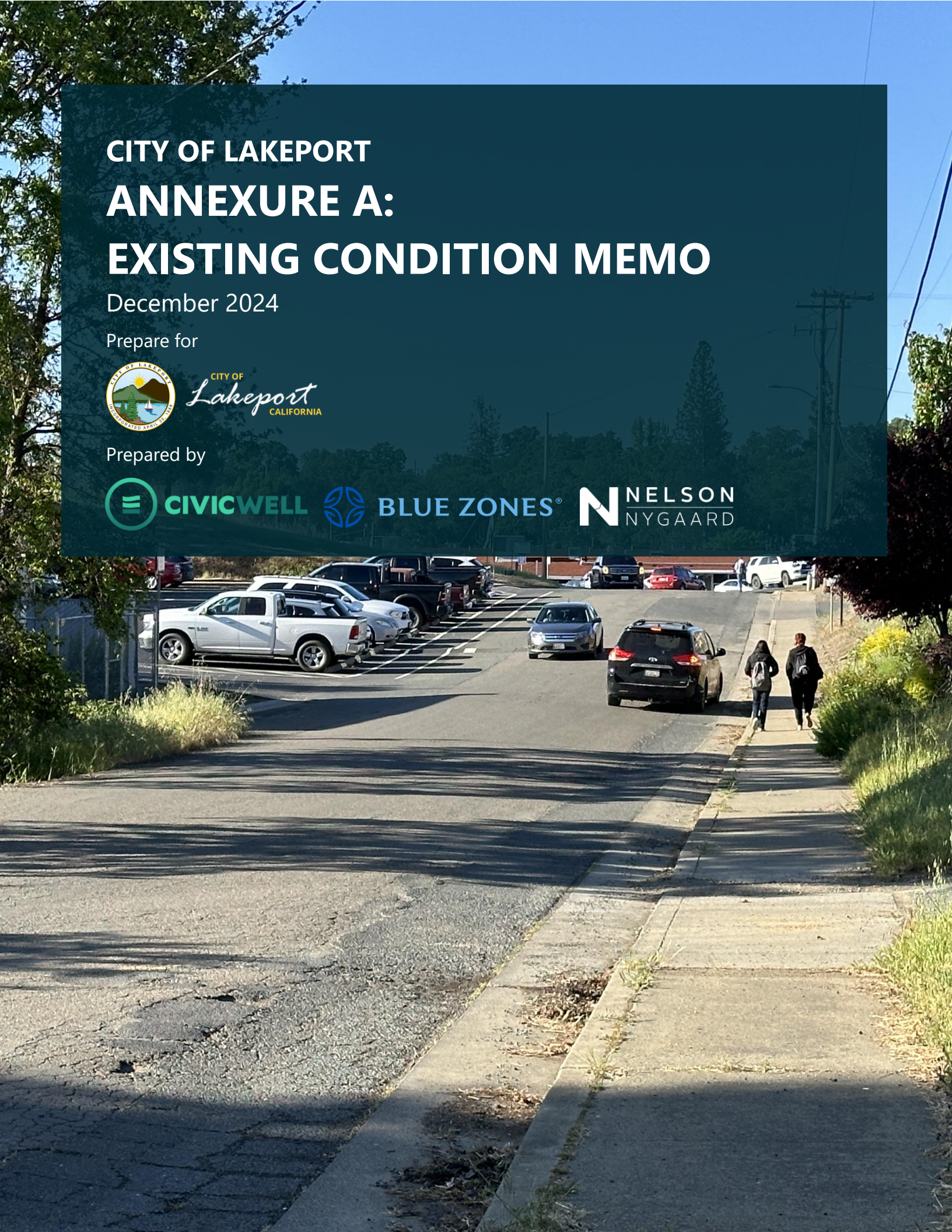


Figure 18: Priority Projects in North and Central parts of the Lakeport City





CITY OF LAKEPORT

ANNEXURE A: EXISTING CONDITION MEMO

December 2024

Prepare for

CITY OF Lakeport CALIFORNIA

Prepared by

CIVICWELL BLUE ZONES® NELSON NYGAARD

Table of Contents

List of Tables

List of Figures

1 INTRODUCTION

About the Active Transportation Plan

The City is developing an Active Transportation Plan (ATP) to advance multimodal transportation choices that work, and to support a healthy and sustainable transportation environment in Lakeport for people of all ages and abilities. This plan is developed in collaboration with key stakeholders at the city, county, Tribal nations, and state levels of government.

"Active transportation" includes all types of human-powered mobility, such as walking, biking, transit and other mobility assistive devices.

MISSION: Lakeport is a beautiful community. We work to ensure it remains a wonderful place to raise a family, enjoy retirement, recreate, and live a healthy, fulfilling life.

COMMUNITY VISION: The charm and values of the Lakeport community are what will endure for generations to come. Those attributes will be maintained, in part, through the effective delivery of municipal services.

City of Lakeport Snapshot

Lakeport is a small city located in Lake County, California, known for its proximity to Clear Lake. Based on the 2022 American Community Survey data[1], Lakeport has a population of approximately 5014 people and has a population density of about 1617 people per square mile, which is considered low compared to more urban areas.

Age	The median age in Lakeport is around 42.7 years with a majority of its population (22.4%) between the ages of 25 to 44 years.
Gender	The gender distribution in Lakeport is 86.4 males to 100 females. Women make up 53.6% of the population, while men represent around 46.4%.
People with Disability	About 17% of the population have either a hearing, vision, cognitive, ambulatory, self-care or independent living disability.
Income level	The median income in Lakeport is $38,540, with most of the working force (16.6%) earning $75,000 or more, followed by those earning $35,000 to $49,999.

[1] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2022

Language Diversity:	About 12.2% of the population speak a language other than English at home, mostly Spanish.
Commute Mode	Most Lakeport residents (80%) rely on private vehicles for transportation. Public transit options are limited, and a small percentage (1.3%) of the population walk or bike to work or other destinations.
Commute Distances and Times:	About 23.9% of workers depart from home to work between 7:30am and 7:59am, followed closely by commuters who leave 30 minutes earlier. The majority (42.1) of these workers travel less than 10 minutes to their place of work, and about 20.1% take between 15 and 19 minutes to get to their place of work. About 22.1% of workers travel for more than 30 minutes to get to their place of work.

Many areas in central Lakeport include a historic portion of tightly gridded streets with topography that is friendly for walking and bicycling. These short blocks and generally narrow local streets hold down traffic speeds. However, there are also locations that are hilly with suburban style street patterns that make trips by these modes difficult. Some principal streets are over-built to maximize speed and efficiency of cars or accommodate the larger vehicles that access commercial destinations and the lake.

Lakeport's economy depends on large vehicles and trailer access, but that also creates challenges that can be addressed with proper street designs. An emphasis on designing for the ordinary street user, and less emphasis on the largest possible vehicle must be incorporated.

Most principal streets lack adequate sidewalks, so the parallel streets need to be designed and enforced with slow speeds, so that children can be free to walk from place to place without putting themselves at risk. A connected network for walking and cycling is essential for safety, comfort and access to achieve a multimodal transportation system. Lakeport wishes to encourage people to choose transportation options that don't require a car.

Existing Plan Review

This section provides a review of various plans and documents relevant to Lakeport to understand the existing conditions, identify policies and programs in place to support active transportation.

Key takeaways from the review includes:

- Both regional and city plans focus on **improving safety and accessibility for cyclists and pedestrians.** (Lake County 2030 Regional Blueprint, 2025 Lakeport General Plan, and the County Regional Transportation Plan)

- **Prioritizing bikeway development and pedestrian infrastructure**, with efforts to secure funding and integrate amenities into new developments.
- **Sidewalk construction to fill gaps** is a recurring theme in multiple studies (2019 Pedestrian Facility Needs Study, 2012 Forbes Creek Neighborhood Study). Some priority areas include **Lakeshore Boulevard, 11th Street, and Martin Street.**
- The Eleventh Street Corridor Feasibility Study and the Bikeway Plan along with proposed Forbes Creek Trail address **the need for better connectivity along essential routes** (e.g., State Route 29, 11th Street), particularly through multi-modal transportation options.
- **Emphasis on targeted improvements and reliance on grants for infrastructure** due to limited local funding.
- Plans emphasize a long-term strategy**, community involvement, and updates to adapt to changing needs and ensure accessibility.**

Lake County 2030 Regional Blueprint Program[2]

The Lake County 2030 Regional Blueprint program, initiated by the Lake County/City Area Planning Council in 2008, aims to proactively address the anticipated growth of the county by 2030 through comprehensive regional planning. Supported by grants from Caltrans, the initiative integrates various public policy areas such as land use, transportation, water, and energy, emphasizing citizen and stakeholder involvement. It utilizes scenario-based planning and GIS modeling to explore the impacts of different growth scenarios, with the goal of creating a Preferred Growth Scenario. The Blueprint provides a framework to guide local planning decisions, promoting sustainable growth and preserving the county's quality of life. Through three phases of development, involving community workshops and collaboration with local agencies, the program seeks to create a shared vision for the future of Lake County, ensuring preparedness for anticipated growth while maintaining the region's unique identity and environment. The transportation element of the plan include:

- Enhance the safety of roads for drivers, cyclists, pedestrians, and equestrians.
- Improve the roads serving as access points in and out of the County to ensure safer transportation for all.

[2] Lake County 2030 Regional Blueprint Program, 2010, https://www.lakeapc.org/wp-content/uploads/2018/06/Final-Blueprint-2030.pdf

2025 Lakeport General Plan[3]

The Lakeport General Plan serves as a vital roadmap for the city's development and resource conservation, embodying the collective vision and values of its residents. Designed in accordance with California state law, the plan covers mandatory elements such as land use, transportation, and housing, as well as optional elements including urban boundaries, community design, and economic development. Through extensive public participation and periodic updates, the plan ensures alignment with evolving community needs and values. It provides decision-makers, developers, and the public with clear policy guidance, fostering sustainable growth while safeguarding the city's natural and built environment. With a horizon extending to 2025 and beyond, the plan establishes a framework for land use regulations, infrastructure improvements, and public services, embodying Lakeport's commitment to balanced social, environmental, and economic progress. The plan has a transportation element that details out policy initiative for bicycle transportation and pedestrian facilities. Some policy initiatives under this section include:

- Bikeways System Enhancement: Develop and maintain a safe and efficient bikeway system ensuring it covers key routes and areas.
- Grant Acquisition for Bikeway Construction: Actively seek grant funding to support the construction of new bikeways, and enhancing the existing infrastructure.
- Zoning Ordinance Amendment for Bicycle Amenities: Amend the Zoning Ordinance to mandate bicycle-related amenities like racks/storage facilities in various developments aiming to promote bicycle usage and accessibility.
- Right-of-Way Dedication and Plan Updates: Ensure new major land developments dedicate land for bicycle facilities, aligning with the Bikeways Plan.
- Enhanced Standards and Flexibility: The city will establish and enforce standards for pedestrian infrastructure in new developments, including sidewalks, curbs, and gutters.
- Improvement Initiatives and Accessibility: The city is committed to continually improving pedestrian facilities through various initiatives, including integrating sidewalks into new street improvements, utilizing funding sources such as TDA and CDBG for pedestrian projects, ensuring handicapped accessibility compliance and others.

[3] Lakeport General Plan 2025, https://www.cityoflakeport.com/community_development/lakeport_general_plan_2025.php

2040 Lake County Regional Transportation Plan (2022) [4]

The Lake County region has integrated the concept of active transportation into its transportation planning, aligning with goals of improved health, greenhouse gas reduction, and sustainability. Despite facing challenges such as poor road conditions and inadequate funding for maintenance, the region has received Active Transportation Grants to enhance infrastructure like sidewalks, multi-use paths, and bicycle facilities. Due to its limited revenue generation, Lake County heavily relies on grants and state/federal funding to support its infrastructure projects.

The City of Lakeport centers its active transportation efforts around four main activity hubs: downtown/lakefront parks, the cluster of public schools, Mendocino College campus, and Westside Park, though accessibility to the latter is hindered by limited bicycle and pedestrian facilities over State Route 29.

As the county seat and home to the majority of commercial services, Lakeport faces challenges in ensuring adequate bicycle and pedestrian access along key corridors such as 11th Street, prompting the completion of the Eleventh Street Corridor Multi-modal Engineered Feasibility Study in 2020 to address these concerns and pursue future grant opportunities for improvements.

Important active transportation policies in this plan, relevant to Lakeport, include:

- OI-1.3: Support non-motorized, recreational opportunities in and around Clear Lake such as increased public access to the lake, trail development for hiking and equestrian uses, and continued efforts to develop a bike route around the lake.
- OI-6.2: Encourage non-motorized planning activities that result in lower GHG emissions and other air pollutants as a means of improving air quality in the region.
- OI-2.5: Encourage and support transit and active transportation planning and facility improvements
- OI-3.1: Facilitate implementation of the Active Transportation Plan (ATP) and construction of ATP and older Safe Routes to School (SRTS) projects to encourage students to walk and bike to school rather than traveling by car.
- OI-6.1: Pursue funding sources that encourage active transportation and promote active forms of recreation for residents and visitors of all ages and physical capabilities.

The plan recommends performance metrics for Active Transportation:

- The number of trips made by walking and bicycling

[4] https://www.lakeapc.org/wp-content/uploads/2022/02/Final-2022-RTP-ATP-2-9-22.pdf

- The number of injuries and fatalities to bicyclists and pedestrians
- The amount of ADA accessible sidewalks and street crossings
- The total amount of sidewalks and bike lanes by jurisdiction

Active transportation projects in Lakeport's financially constrained project list are:

- Tenth Street Bike Boulevard Improvement Project
- Hartley Road pedestrian improvements from twentieth street to the City Limits. This project has been completed.
- Roundabout- Lakeport Boulevard/Main Street

Table 1: Projects identified in 2040 Lake County Regional Transportation Plan

Project Name	Timeframe*	Cost ($1,000s)	Potential Funding Source
Class I Bike/Pedestrian Path adjacent to SR 29 right-of-way between Eleventh Street and Martin Street)	1 – 10 years	TBD	ATP, RTIP, HSIP
Safe Routes to School Lakeshore Boulevard pedestrian improvements	1 – 10 years	TBD	ATP, RTIP, HSIP
Martin Street (Bevins Street to Main Street)	1 – 10 years	TBD	ATP, RTIP, HSIP
North High Street (Eleventh Street to Twentieth Street) pedestrian improvements	1 – 10 years	TBD	ATP, RTIP, HSIP
Bevins Street (Lakeport Boulevard to Martin Street)	10 – 20 years	TBD	ATP, RTIP, HSIP
Eleventh Street (Central Park Avenue to North Main Street) continuous sidewalks	10 – 20 years	TBD	ATP, RTIP, HSIP
Lakeport Boulevard (South Main Street to Parallel Drive)	10 – 20 years	TBD	ATP, RTIP, HSIP
Safe Routes to School (Fairview, Forest, Hillcrest, Sayre, Terrace)	10 – 20 years	TBD	ATP, RTIP, HSIP
Downtown: Main Street, Forbes Street, Park Street between Martin Street and Eleventh Street	10 – 20 years	TBD	ATP, RTIP, HSIP
South Main Street (Martin Street to City Limits)	10 – 20 years	TBD	ATP, RTIP, HSIP
Lakefront Promenade	10 – 20 years	TBD	ATP, RTIP, HSIP
Parallel Drive (Mendocino College to Westside Park Road)	10 – 20 years	TBD	ATP, RTIP, HSIP
Twentieth Street (North High Street to Alden Street)	10 – 20 years	TBD	ATP, RTIP, HSIP

Project Name	Timeframe*	Cost ($1,000s)	Potential Funding Source
Hwy 175 (Parallel Drive to South Main Street)***	10 – 20 years	TBD	ATP, RTIP, HSIP
Esplanade Street and C Street pedestrian improvements	10 – 20 years	TBD	ATP, RTIP, HSIP
Forbes Creek Trail	10 – 20 years	TBD	ATP, RTIP, HSIP
Howard Avenue Trail	10 – 20 years	TBD	ATP, RTIP, HSIP
Sixth Street (Main Street to Spurr Street) pedestrian improvements	10 – 20 years	TBD	ATP, RTIP, HSIP
Westside Park Road	10 – 20 years	TBD	ATP, RTIP, HSIP
First Street	10 – 20 years	TBD	ATP, RTIP, HSIP
Lakeshore Boulevard (Beach Lane to Ashe Street)	10 – 20 years	TBD	ATP, RTIP, HSIP
North Main Street/Sixteenth Street pedestrian improvements	10 – 20 years	TBD	ATP, RTIP, HSIP
Martin/South High/South Forbes/First/C streets pedestrian improvements near Konocti Christian Academy and County Fairgrounds	10 – 20 years	TBD	ATP, RTIP, HSIP
Armstrong Street (North Main Street to Ruby Drive) pedestrian improvements	10 – 20 years	TBD	ATP, RTIP, HSIP
Roundabout - Eleventh Street / Forbes	Long Term	$5,000	STIP, ATP, HSIP, Local funds
Lakeport Boulevard Reconstruction $1,400 STIP, Local funds	Short term	$1,400	STIP, Local Funds

Source: 2040 Lake County Regional Transportation Plan (2022)

2019 Lake County Pedestrian Facility Needs Study[5]

This plan identified the ten most important and realistic pedestrian infrastructure improvements in each of the four case study areas in the county. In Lakeport, the road

[5]https://www.lakeapc.org/wp-content/uploads/2020/03/Lake-County-Pedestrian-Facility-Needs-Study-web.pdf

segments selected are listed below. Most of the improvements consist of sidewalk construction.

- Lakeshore Boulevard
- N. High Street
- N. Main Street/16th Street
- 11th Street
- 6th Street
- Martin Street/S. High Street/S. Forbes Street/1ST Street/C Street
- S. Main Street
- Armstrong Street
- Esplanade Street
- Lakeport Boulevard

2016 Lake County Active Transportation Plan[6]

The Lake Area Planning Council, in collaboration with the County of Lake, the City of Lakeport, the City of Clearlake, and the Lake Transit Authority, developed an Active Transportation Plan aimed at enhancing the bicycle and pedestrian network across the region. This plan, crafted through input from community stakeholders and the public, aligns with the 2015 Active Transportation Program Guidelines set by the California Transportation Commission, as well as Assembly Bill 101 (2013) and Senate Bill 99 (2013), with the goal of promoting active transportation modes. Additionally, it served as the non-motorized element for the 2022 Regional Transportation Plan update. The City of Lakeport, in its General Plan (2009), recognizes the need for pedestrian infrastructure improvements, with policies mandating sidewalks in new street developments and promoting improvement districts to share costs. The city aims to prioritize projects with broad community benefits, including a citywide inventory and mapping of existing pedestrian facilities to guide construction efforts.

Lakeport's General Plan Policy mandates land dedication for bicycle facilities in new developments, requires bike parking for parking areas exceeding five spaces, and advocates for bike-related amenities in commercial, industrial, and residential areas to promote bicycle use and improve storage facilities.

[6] https://www.lakeapc.org/wp-content/uploads/2018/06/Final-ATP-Plan-2016.pdf

2020 Eleventh Street Corridor Multimodal Engineered Feasibility Study[7]

The study was conducted to develop alternatives to enhance transportation access and safety along Eleventh Street. The alternatives assessed in below Table 2.

Table 2: Alternative Improvements on Eleventh Street by Segments

Segment	Alternative improvements on Eleventh street
SR 29 to U.S Post Office	Adding buffer to existing lanes, paved pedestrian path along south side of Eleventh street from SR 29 to Central Park Avenue.
US Post Office to Pool Street	Realignment of curbs, restriping bike lanes, addition of sidewalks, narrowing of travel lanes and two-way turn lanes, continuous sidewalks, and improved pedestrian crossings.
Pool Street to North Main Street	Widening of street from 32ft to 35 ft, restriping of roadway, construction of curb and gutter, relocation of utility poles, construction of mini-roundabout, implementation of bicycle boulevard and improved pedestrian crossing.

2012 Forbes Creek Neighborhood Improvement Study

The purpose of this study was to offer recommendations for enhancing the Forbes Creek neighborhood by addressing infrastructure needs while preserving its valued characteristics, providing innovative solutions to local issues, and establishing a framework for improving and maintaining residential areas in Lakeport. Different elements under the streets and sidewalks section are below.

Sidewalk Connectivity:

- Prioritize filling in missing sidewalk segments to connect the neighborhood to nearby destinations within a walking distance of ¼ to ½ mile.
- Implement short-term relief projects such as providing sidewalks, curb, and gutter on Armstrong Street (north side) and sidewalk improvements on Estep Street, Starr Street, and High Street.
- Establish centrally located pathways in both east-west and north-south directions for improved pedestrian connectivity.

[7] https://www.lakeapc.org/wp-content/uploads/2020/07/Eleventh-Street-Corridor-Multimodal-and-Engineered-Feasibility-Study.pdf

Street Greening:

- Consider additional measures for street greening such as parkway strips, tree wells, decomposed granite paths, and traffic calming elements like roundabouts or bulb-outs.
- Private property owners may contribute by planting shade trees near sidewalks.
- Implement greening elements to improve aesthetics and pedestrian experience.

ADA Compliance:

- Ensure all new and improved sidewalks comply with ADA standards, including ramps and street crossings.
- Retrofit existing sidewalks to meet ADA standards when installing new sidewalk segments.

Paving:

- Prioritize pavement repair and repaving efforts based on traffic volumes and pavement condition index (PCI).
- Focus on maintaining streets with good condition and minimal deterioration, using chip seal for cost-effective maintenance.

Traffic Calming:

- Implement traffic calming measures such as speed humps, mini-roundabouts, and bulb-outs to reduce speeds and improve safety.
- Monitor parallel streets for traffic diversion when implementing speed humps.
- Consider traffic calming measures on Russell, Armstrong, and Second Streets based on community feedback.

2011 Lake County Regional Transportation Bikeway Plan[8]

The Lake County Regional Transportation Bikeway Plan, developed by the Lake County/City Area Planning Council, is a five-year capital improvement program aimed at establishing commuter bikeways across all jurisdictions within Lake County, in compliance with the California Bicycle Transportation Act.

Lakeport, serving as the County seat of Lake County, stands as a significant employment hub with the majority of government offices, including the County Courthouse, located within its limits. Bordered by Clear Lake to the east and State Route 29 to the west, key routes like Lakeport Boulevard, Martin Street, and 11th Street are vital arteries, with proposed bikeways enhancing connectivity. Notably, upcoming projects, such as the new County Courthouse

[8] https://www.lakeapc.org/wp-content/uploads/2018/06/Regional-Bikeway-Plan-2011.pdf

and the relocation of the Mendocino College – Lake Center campus, are expected to catalyze further development, drawing commercial and retail interests to their vicinity, thus necessitating enhanced connectivity and infrastructure to accommodate increased traffic and activity.

To address the burgeoning development and accommodate the anticipated rise in traffic, Lakeport is undertaking strategic measures, including designating certain routes as both Class II and III, with Class III serving as an interim designation due to challenges in acquiring right-of-way for Class II improvements. The construction of interim Class III improvements, marked by signage and roadway markings, will facilitate seamless connectivity from residential neighborhoods through the downtown area to these new attractors. This comprehensive approach aligns with the city's short-term goals and ensures a continuous route linking residential areas to emerging commercial and institutional centers, thereby promoting accessibility and safety for cyclists and motorists alike.

2 ENGAGMENT

Stakeholder Input

This section outlines the process for engaging key stakeholders and summarizing their inputs for the development of the Lakeport Active Transportation Plan. The primary methods used were one-on-one interviews and focus groups with key stakeholders. These stakeholder input sessions were conducted in May 2024 for three days.

Table 3: List of Stakeholder and Interview Method

Stakeholder	Interview Method
City Residents	Focus Group
City Staff	Focus Group
CEO of Lakeport Fairgrounds	One-on-one interview
CEO of Tribal Health Consortium	One-on-one interview
Local Community Development Committee	Focus Group

Key Takeaways from Interviews

- **Preference for Forbes Street Over Main Street:** Residents expressed a clear preference for Forbes Street due to its smoother pavement and lower traffic volume compared to Main Street. Additionally, Martin Street was noted as heavily utilized by pedestrians, including many people in wheelchairs, which causes significant bike traffic.
- **Blue Zones:** Approximately 15-20% of respondents were aware of and supported the Blue Zones community vision and its efforts around Lake County.
- **Trail Development and Neighborhood Impact:** The CEO of Lakeport Fairgrounds supported the concept of a trail along Forbes Creek. They expressed a number of concerns about a route on the eastern edge of the fairgrounds property connecting D Street and South Forbes Street. These concerns include future projects in that area, exacerbation of the problem with people climbing the fence in that area to enter without paying, and impact on the Lupoyoma Circle neighborhood.
- **Tribal Health Consortium's Interest in the Forbes Creek Trail:** The CEO of the Tribal Health Consortium is interested in a Forbes Creek trail potentially spanning from Martin to the west side of the highway and might include a bridge over Forbes Creek. Public access is under consideration. This will potentially connect various THC (Tribal Health Consortium) facilities.
- **Concerns About Road Safety and Infrastructure**: The Local Community Development Committee highlighted several issues including intermittent sidewalks

forcing people walking into the street, debris posing risks for people bicycling, and conflicts between skateboarders and pedestrians. There is also a call for reducing downtown speeds, improving transit connections, and addressing parking difficulties.

- **Project Classification and Immediate Implementation**: City staff emphasized the need to classify projects by cost (low, medium, high) and focus on quick-build projects for immediate implementation. Other key strategies mentioned include securing funding, developing 30% design plans, and prioritizing high-impact projects like the Lakeshore sidewalks.
- **Need for safe routes for students**: Students are obtaining driver's licenses at lower rates and prefer walking or biking to school, particularly along specific routes, while concerns about vehicle traffic safety persist. A collaborative effort is underway that aims to redesign drop-off processes and improve public transit options, alongside a unified Safe Routes to School plan to enhance student safety and transportation access.

Community Engagement

As part of the effort to improve Lakeport's active transportation infrastructure, a comprehensive community engagement process was conducted. This process included focus groups, an open house, walking audits, an "informed consent process to build legitimacy, transparency and trust of the process by using a wide range of events. Easy access was provided for engagement, including an online community survey, designed to gather valuable input from residents and other stakeholders.

Advisory Group

An advisory group was convened to help identify important sensitivities to consider and pertinent information regarding the conditions, history, and needs of the community. The group also provided guidance on opportunities and methods for outreach, stakeholders to engage, and coordination with other community initiatives and planning activities impacting the community.

Participants included staff from the City of Lakeport Public Works, Community Development and Police departments, and representatives from the Lakeport Unified School District, Lake County Chamber of Commerce, Lakeport Economic Development Advisory Committee, Lake Area Planning Council, Caltrans District 1, and local residents.

Active Transportation Plan Multiday Community Events, May 5 – 8, 2024

The primary method for engaging the community was a multi-day series of events held over the course of four days in May 2024 in which residents and stakeholders identified needs and discussed ideas for improvements that support safety, connectivity, access and comfort for

walking, rolling, bicycling, transit, safe routes to school, and that also support town character and community revitalization.

Events and activities included a pop-up table at the Cinco de Mayo Celebration, stakeholder focus meetings, community workshop, walking assessments and on-site working sessions, and input and feedback session at the annual Lakeport Economic Development Advisory Committee Summit.

The team also launched an on-line survey and interactive map to collect community input. The list of events, activities and outcomes are highlighted below.

- ***Cinco de Mayo Celebration, May 5, 2024:*** Members of the Blue Zones consultant team had a booth at Library Park and spoke with approximately 40 to 50 people throughout the day. Residents expressed a preference for Forbes Street due to its smoother pavement and lower traffic volume compared to Main Street. Out-of-towners said they came to Lakeport to walk the promenade and enjoy the park complex and suggested the route extend further to the north and south.

Figure 1: Interaction at the Cinco de Mayo Celebration

- ***Public Workshop, May 6, 2024:*** Approximately two dozen people attended the evening community workshop held at City Hall. Walkability and bike-ability expert Dan Burden of Blue Zones highlighted takeaways from team walking and biking assessments, observation of schools during drop off and pick up hours, and impromptu input and feedback from residents in the field. He then presented principles and tools for building healthy, walkable, sustainable and prosperous places for people of all ages and abilities.

Figure 2: Participant Discussion at Public Workshop

Afterward, participants broke into small groups around large aerial table maps, marked up and discussed assets, barriers and opportunities for active transportation, and reported out the results. Themes and recommendations included:

- Maintain small town feel
- Ensure walking, biking, safety and appeal for all (youth, school children, seniors, adults, visitors, tourists and patrons)
- Consider access too everything (lake, schools, services, transit, trails, bicycling)
- Lots of vibrant things to do downtown – highlight, connect and support vitality
- Improve sidewalks, make them complete and even
- Need better roadway conditions, even and finished pavement
- Add bicycle lanes (currently there are very few)
- More respect for bicyclists (better infrastructure, safety, etc.)
- Kelseyville, though a different context, is an example of safety and good infrastructure for bicyclists and walking (clean, designated facilities, even and clear path of travel)

- ***Lakeport Economic Development Advisory Committee Summit:*** Dan Burden of Blue Zones gave an abbreviated version of the previous workshop presentation with additional details about the relationship between traffic safety, walkability, placemaking and successful main streets.

  In the discussion that followed, attendees highlighted several issues, including intermittent sidewalks forcing people walking into the street, debris posing risks for people bicycling, and conflicts between skateboarders and pedestrians. There was also a call for reducing downtown speeds, improving transit connections, and addressing parking difficulties.

Figure 3: Advisory Committee Summit

Focus Groups

Small group meetings and one-to-one interviews were also held with key stakeholders, including:

- Chamber of Commerce
- Lake County Office of Education
- City Executive Team (department heads)
- Scotts Valley Band of Pomo Indians
- CEO of Tribal Health Coalition
- CEO of Lakeport Fairgrounds
- Lake Links (transportation for elderly, disabled and low-income Lake County residents)

Key takeaways included:

1. Main Street traffic calming: Interest and support was expressed for ways to encourage slower speeds, attract visitors and promote downtown foot traffic.
2. Need for safe routes for students: Students are obtaining driver's licenses at lower rates and prefer walking or biking to school, particularly along specific routes, while concerns about vehicle traffic safety persist. A collaborative effort is underway that aims to redesign drop-off processes and improve public transit options, alongside a unified Safe Routes to School plan to enhance student safety and transportation access.
3. Interest in the Forbes Creek Trail: The CEO of the Tribal Health Consortium expressed interest in a Forbes Creek trail potentially spanning from Martin to the west side of the highway and might include a bridge over Forbes Creek. Public access is under consideration. This will potentially connect various THC (Tribal Health Consortium) facilities.
4. Project Classification and Immediate Implementation: City staff emphasized the need to classify projects by cost (low, medium, high) and focus on quick-build projects for immediate implementation. Other key strategies mentioned include securing funding, developing 30% design plans, and prioritizing high-impact projects like the Lakeshore sidewalks.
5. Trail Development and Neighborhood Impact: The CEO of Lakeport Fairgrounds supported the concept of a trail along Forbes Creek. They expressed a number of concerns about a route on the eastern edge of the fairgrounds property connecting D Street and South Forbes Street. These concerns include future projects in that area, exacerbation of the problem with people climbing the fence in that area to enter without paying, and impact on the Lupoyoma Circle neighborhood.

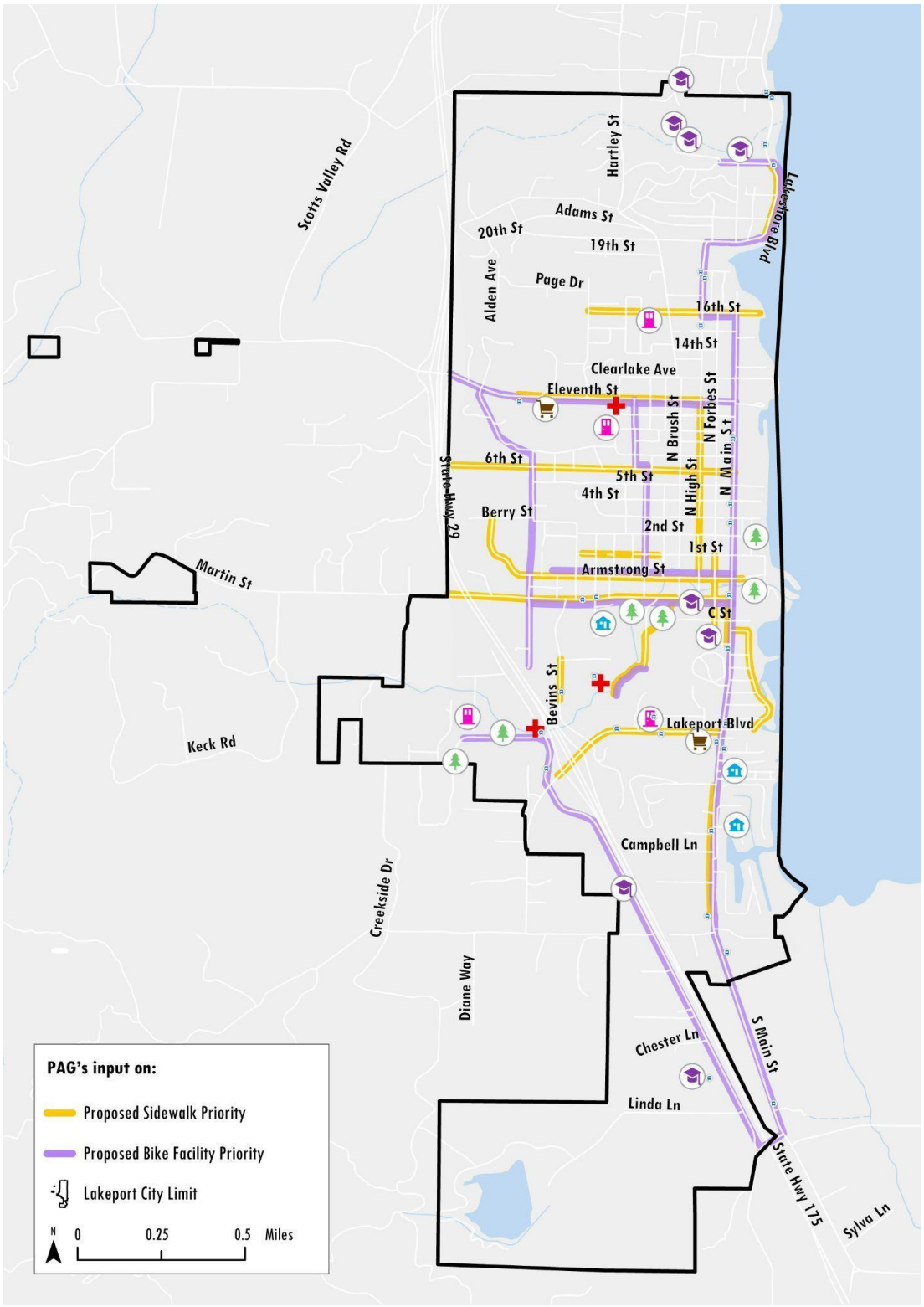
Figure 4: Focus group with City Executive Management Head (Left) and Scott Valley Band of Pomo Indians (Right)

Lakeport National Night Out, October 1, 2024

City and CivicWell staff hosted a station at the City booth at National Night Out at Xabatin Community Park. It included maps and posters with proposed walking and bicycling routes and potential tools for changes based on the existing conditions analysis and community and stakeholder input. Approximately 30 visitors engaged in conversations and provided feedback about needs, opportunities and priorities for improvements. Comments included:

- Interest and support for adding bicycle lanes on Main Street
- Interest and support for complete/improved sidewalks on Forbes Street (some noted they routinely use Forbes for walking)
- Several upvoted the idea of a "decoupling strategy" that would emphasize streets with low vehicular traffic for installation of cheaper and more quickly attainable improvements to support walking and bicycling at the same time as considering more complex and time intensive changes on higher volume streets
- Identification of 11th Street as one of the more important streets to slow traffic down
- Create walking and biking map for residents and visitors
- Provide direction and distance wayfinding signage
- Build and expand on downtown "Anne Blue Walking Path" medallions
- Look at infrastructure gaps like Central Park Avenue, which has inadequate to non-existent pavement
- Consider flag holders, other enhancements at crosswalks for visibility and safety

Figure 5: Input from Project Advisory Group on Proposed Priority Facilities



Community Survey

The community survey was hosted on Maptionnaire (An online survey tool that allows respondents to provide location-specific input) for two months (May 2024 to July 2024). Seventy-seven people responded to the survey, which was available in English and Spanish language.

The survey aimed to identify issues with current active transportation infrastructure, explore opportunities for improvement, and understand community priorities for active transportation projects. To ensure wide participation, promotional materials were distributed through various channels: Lake County Chamber of Commerce newsletter, Lakeport Police Department social media accounts, Lake Transit Buses, and all Project Advisory Group (PAG) members.

This section provides community survey analysis revealing demographic trends, transportation preferences, and infrastructure concerns. The following findings provide directions for the next steps and investment in Lakeport's active transportation plan:

- Map based response highlighted **challenging location and routes** with about 45% of comments highlighted issues with poor sidewalks and bike lanes. Frequently mentioned problematic streets include Main Street, 11th Street, High Street, 2nd Street, and Lakeport Boulevard. The other concerns include poor road conditions and reckless driving.
- **North High Street and Main Street** are considered challenging routes by some, they are also regarded as "great routes" for walking and biking. This suggests that they are significant thoroughfares for active transportation.
- **"Safety and Comfort"** and "**Mobility and Connectivity"** are noted as the top priority for the investment decisions with regards to promoting active transportation.
- The top three focus areas for infrastructure improvement include **off-street pedestrian and bicycle path, sidewalk improvement, and on-street bicycle improvement.**
- Focus on **building wider, continuous sidewalks** followed by **more visible and safer pedestrian crosswalks** to promote walking.
- Many riders are interested in cycling but hesitant to do so due to safety worries or a lack of confidence.
- **More bike lanes with sufficient spacing** were identified as the important element to encourage biking and making it safer.
- The survey was completed by 77 respondents of whom more than half didn't provide demographic information. The following reveal **demographic characteristics of the respondents:**

- The age 55-64 years was the most represented.
- Racially, White/Caucasian respondents formed the largest identified group.
- Higher representation of women compared to men.
- Household income data indicated a concentration in the mid-to-upper income ranges (earning between $110,000 and $149,999).
- Lakeport residents constituted the largest group of participants, followed by those from Kelseyville and North Lakeport.
- There is a high preference for driving followed by walking to get around the city.

In-person engagement sought to limit the impact of potential bias in the survey data due to the small number of respondents and overrepresentation/underrepresentation of certain groups compared to the City's population.

Challenging Locations & Routes for Active Transportation

Out of 38 comments regarding challenging routes, approximately 45% highlighted issues with poor sidewalks and bike lanes, specifically at Main Street, 11th Street, High Street, 2nd Street, and Lakeport Boulevard. Additionally, concerns were raised about poor road conditions on Bevins Street, Armstrong Street, and from 2nd to 6th Street, as well as 11th Street. Reckless driving and heavy traffic were also cited as issues.

Specific challenging locations mentioned included Main Street, Parallel Drive, Green Street, Hartley Street, from 2nd to 7th Street. These areas were frequently criticized for inadequate sidewalks, bike lanes, and overall road conditions.

Great Locations & Routes for Active Transportation

Respondents shared their favorite places and routes for active transportation (walking, biking, rolling) and bus travel in Lakeport. Many highlighted specific features such as the lakefront, parks, shopping centers, schools, libraries, fairgrounds, and museums as key reasons for their choices.

Popular active transportation destinations include the Carnegie Library and Park Street, Lange Street (around the Lakeport Elementary School), and areas between Lakeport Boulevard and Konocti Avenue (shopping center).

While North High Street and Main Street are considered challenging routes by some, they are also regarded as "great routes" for walking and biking. This suggests that they are significant thoroughfares for active transportation and these roads offer a variety of destinations and amenities.

Figure 7: Community's Input on Challenging Locations and Routes

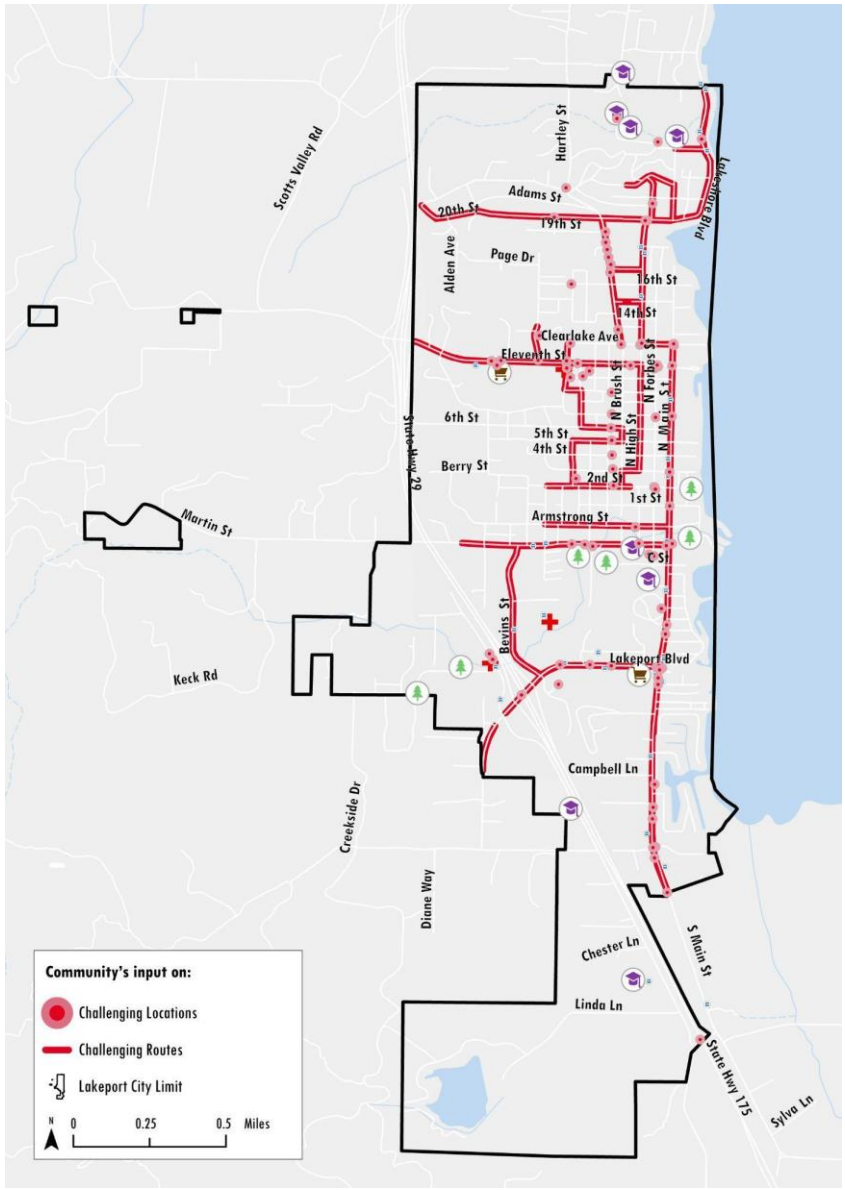
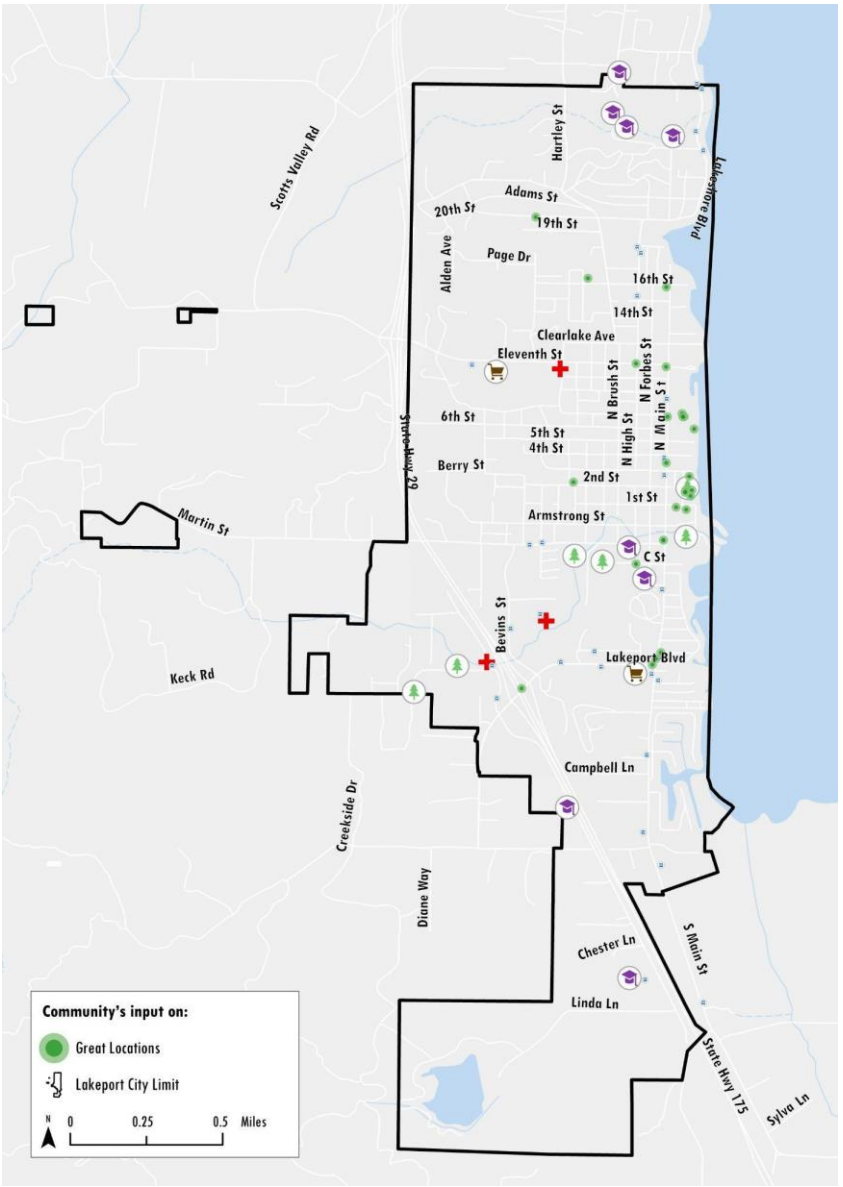


Figure 6: Community's Input of Great Locations



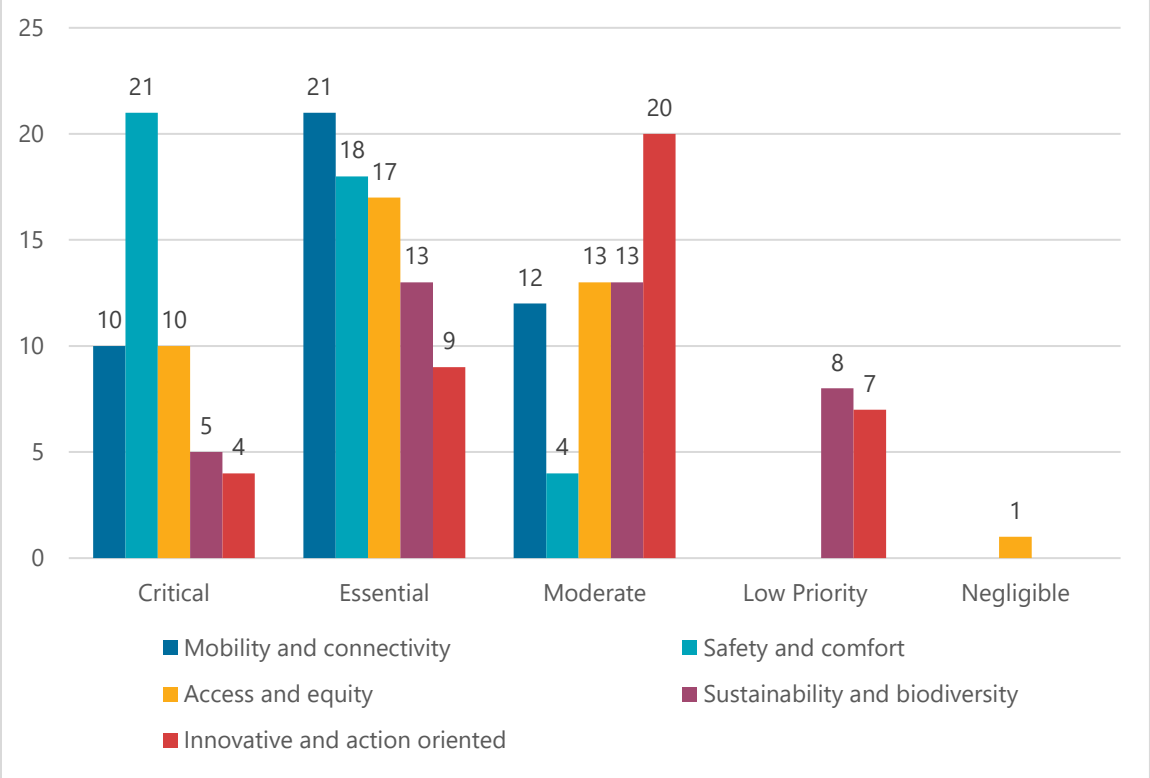
Top Priorities for Investment Decisions

Respondents indicated that their top investment priorities are:

- **Safety and Comfort** received the highest ratings as "critical" and second highest as "essential", reflecting strong community concern for well-being and security.
- **Mobility and Connectivity** were also highly prioritized, indicating a strong desire to improve network and transportation links.

Access and Equity were recognized as essential for ensuring fair opportunities for all. While Sustainability and Biodiversity and Innovative and Action-Oriented themes were also valued, they were rated lower in terms of critical importance.

Figure 8: Top priorities for investment decisions in Lakeport



Top Priorities for Improvements

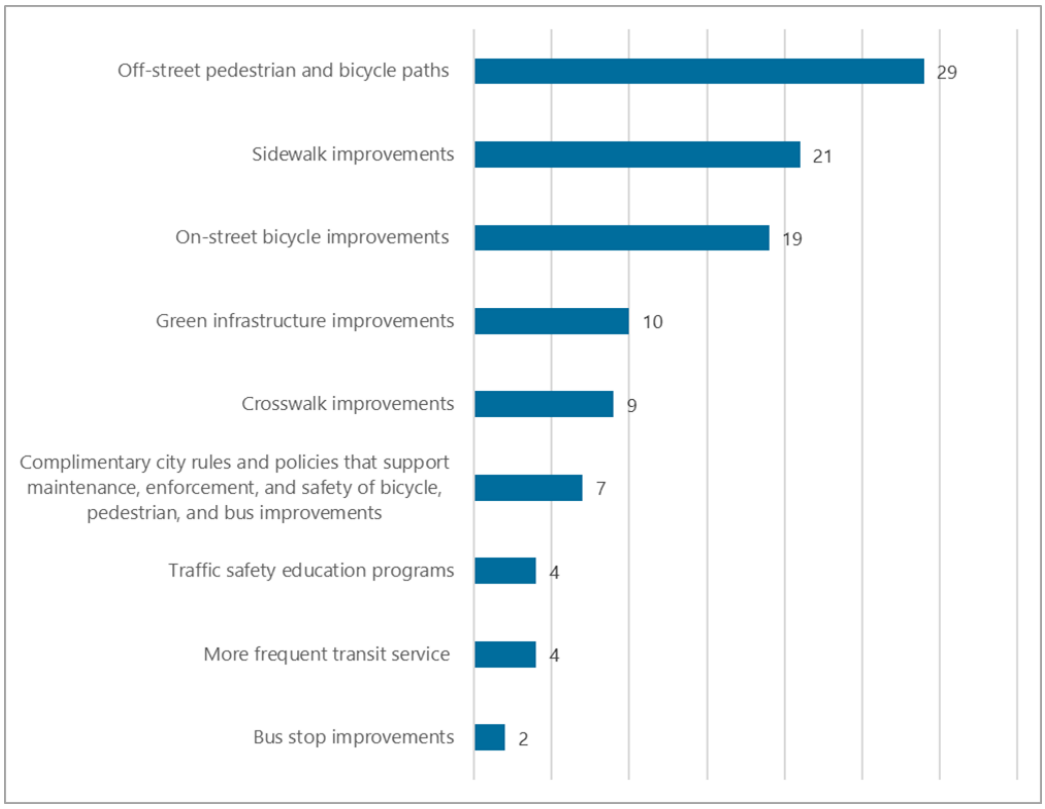
Based on the survey results, the top three focus areas selected by the community for infrastructure improvement for active transportation in Lakeport are:

- Off-street pedestrian and bicycle paths
- Sidewalk improvements

- On-street bicycle improvement, including designated bicycle routes and boulevards, lanes, and bike parking.

While other focus areas such as crosswalk improvements and green infrastructure also garnered interest, they were less emphasized compared to the top three priorities.

Figure 9: Top priorities for active transportation improvement



About 10 respondents also selected others as of the top three priorities which included priorities such as:

- Road conditions: Roads need full resurfacing, not patching.
- Bike lanes: Slow progress on bike lanes; improvement needed and show leadership in this improvement.
- Parking: Main Street businesses lack accessible parking making it difficult for those with mobility challenges.
- Street conditions: South Main and Martin Street need repaving.
- Accessibility: More support for seniors and mobility issues.
- 11th Street: Need for makeover with ensured bike and pedestrian facilities.

Encouraging Active Transportation in Lakeport

Walking

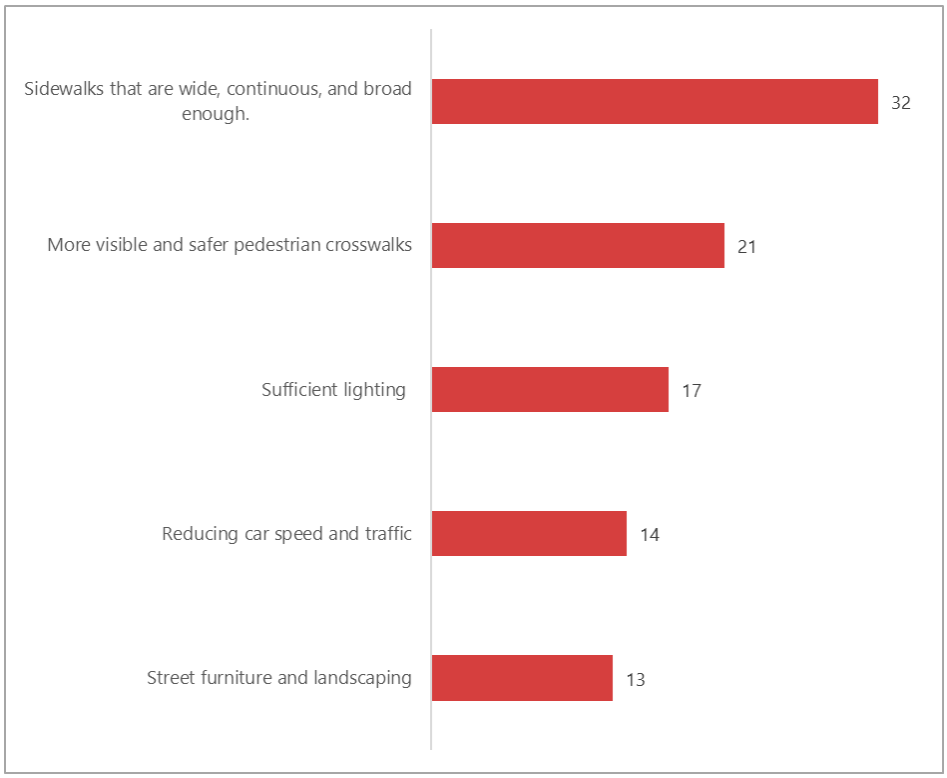
People emphasized the need for wide, continuous, setback sidewalks to encourage walking and enhance pedestrian safety. This is crucial for a safe, comfortable and accessible walking experience.

More visible and safe pedestrian crosswalks emerged as the second most important street element followed by well-lit streets to encourage walking. Lastly, traffic management (indicating a desire for traffic calming measures) and street furniture also played a vital role in creating a safer walking environment. A few other specific comments received are:

- Traffic safety concerns, homelessness, and lack of sidewalks and crossings are major issues in some areas, especially from 2nd to 11th streets.
- Shorter, lower speed, crossings and crossing distances or segmented crossings
- More sidewalks, better pedestrian access, and a Class I bike paths[9] near the water ending at Library Park.
- Scenic routes and areas that lack good pedestrian access, like 16th Street down to the Lake and Lakeshore Boulevards in the Terraces area.

[9] Class I Bikeways (Bike Paths) | UpCodes

Figure 10: Street elements which encourage walking

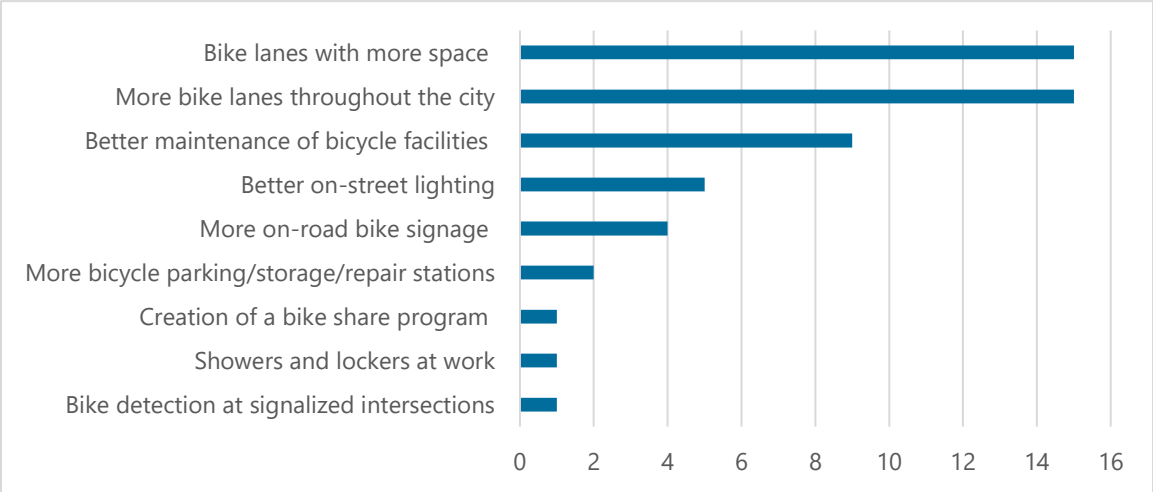


Bicycling

To create a more bike-friendly environment, it is crucial to address the needs and concerns of current and potential cyclists. The survey results highlight several key areas for enhancing bicycling in the city. The top priority for improvements is the addition of more bike lanes throughout the city and the provision of bike lanes with greater space between vehicles and cyclists on busy streets.

Better maintenance of bicycle facilities is considered a significant concern followed by better on-street lighting and wayfinding for cyclists. Other elements, such as bicycle parking and repair stations, a bike share program, showers and lockers at work, and bike detection at intersections, were seen as less critical but still important to some.

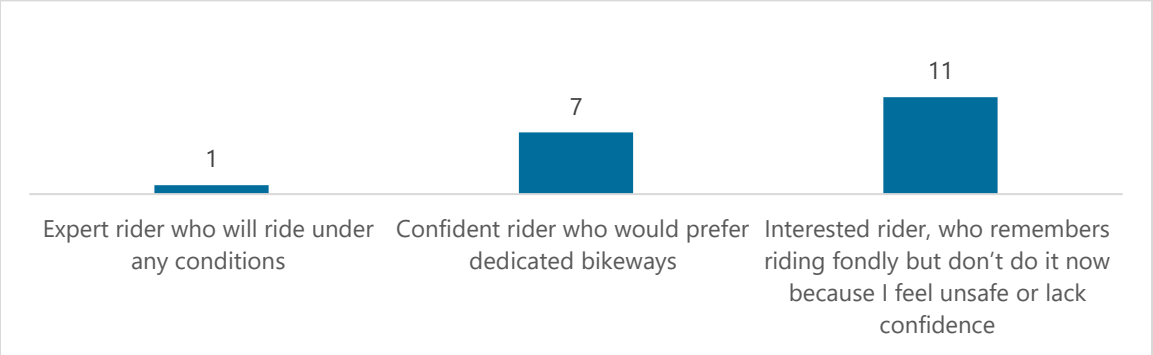
Figure 11: Street elements which encourage bicycling



Community Interest and Confidence in Bicycling

The survey asked respondents to describe their level of confidence and interest in bicycling. Importantly, the bulk of respondents are not expert, and instead people who might be more inclined to bicycle if there were places that felt safer and more comfortable.

Figure 12: Community Response on Level of Confidence and Interest in Bicycling



3 FIELD REVIEW

The field review process provides valuable insights into the existing conditions of key areas within Lakeport, focusing on the challenges and opportunities for improving safety and accessibility for all users.

Lakeport's major streets, such as Main Street and Eleventh, experience higher motor vehicle volumes and speeds. With some notable exceptions, these streets feel hostile to pedestrians and cyclists due to uncomfortable street crossings, which often include two-way left-turn lanes, excessively wide streets, and large vehicles. School zone pick-up and drop-off activities create potential conflicts in the northern part of the city, while the significant distance between higher-density student housing and the school complex further exacerbates accessibility challenges.

This plan seeks to explore opportunities to:

"Design for the most vulnerable street user rather than the largest possible vehicle. While designs must account for the challenges that larger vehicles, especially emergency vehicles, may face, these infrequent challenges must not dominate the safety or comfort of a site for the majority of daily users. The selection of the design vehicle influences the physical characteristics, safety, and operations of a roadway." - NACTO, Urban Street Design Guide, 2013

Primary Corridors

Primary corridors are higher volume streets that focus on the movement of vehicles. A safer and more comfortable experience for people walking or bicycling would require investments in buffered or separated bike lanes, sidewalks, and shade (Refer Figure 13).

Lakeshore/High/Clear Lake/Main & Forbes

The sequence of Lakeshore Boulevard, North High Street, Clear Lake Avenue, and Main Street make up the north/south corridor that is the axis of Lakeport. This corridor provides access to many of the most-visited destinations in the City, e.g. businesses, government offices, schools, parks, etc. These streets are configured with two travel lanes and a two-way left turn lane along most portions of the route. The posted speed limit is 30 MPH. Some sections of Class II bicycle paths [10]exist on this route. This corridor sees the bulk of non-motorist crashes in the City.

[10] Bikeway Design — Silicon Valley Bicycle Coalition

Forbes Street is a lower volume alternative to the Lakeshore/High/Clear Lake/Main corridor. Forbes Street provides connections further north via low-volume streets and to the south via potential new facilities at D Street.

Hartley

Hartley is an important north/south corridor running from Clear Lake Avenue to the northern city limits. The posted speed limit is 30 MPH. The portion from 20th to the city limits was recently improved with ADA-compliant sidewalks on the east side and crossings to serve the school complex at its northern end. No bicycle facilities exist on Hartley. This is one of the two primary access routes to the public school complex from the south.

Eleventh & Tenth

Eleventh Street is an important east/west corridor connecting Main/Forbes Street to SR 29 and the county beyond. It hosts a busy shopping center and the post office at its western end. Residential uses can be found along the entire length of this corridor. The posted speed limit is 30 MPH. It includes Class II bicycle lanes between Pool Street and SR 29. It features discontinuous sidewalk fragments, mostly in poor condition. Eleventh is one of the three connections to SR 29 within Lakeport for people traveling to and from the City. Eleventh faces a challenge with a narrow right-of-way at its eastern end. Tenth Street is a low-volume alternative to the Eleventh Street corridor. Tenth includes a recently completed shared use trail at its western end but few sidewalk segments and no bicycle facilities for the remainder of its length.

Bevins

Bevins is a well-used north/south street connecting Martin Street and Lakeport Boulevard. It hosts a senior living facility, businesses, and a new tribal health office complex being established in the old mall site at Lakeport and Bevins. The posted speed limit is 30 MPH. It features discontinuous sidewalk fragments and no bicycle facilities.

With the exception of Smith Street and an informal route along Estep Street and Forbes Creek both of which provide poor or only partial coverage, a low-volume alternative to Bevins for safe walking or riding does not exist.

Martin & Armstrong

Martin Street is an important east/west corridor connecting to Main Street at its east end and extending to the County in the west. It travels under SR 29 but does not provide ramps to the highway. Martin does not currently connect to Parallel Drive on the west side of SR 29 but the possibility of that connection exists. Martin provides access to the fairgrounds, County

Sheriff facilities, some new apartment complexes and residential areas. The posted speed limit is 30 MPH. It has no bicycle facilities and discontinuous sidewalk fragments in poor condition. Armstrong Street is a low-volume alternative to Martin Street. Armstrong features discontinuous sidewalk fragments and no bicycle facilities.

Parallel Drive

Parallel Drive is the only north/south corridor on the west side of SR 29. The posted speed limit is 45 MPH on its southern segment and 30 MPH on its northern segment. It is divided into two segments by Lakeport Boulevard, the primary connection across SR 29. Parallel Drive is a frontage road running along the west side of the SR 29 right-of-way and provides connections to Westside Community Park, Mendocino Community College, various commercial uses, areas slated for new residential development, and a tribal preschool on the southern segment. Parallel Drive has a few sidewalk segments with most at the Lakeport Blvd roundabout, but no bicycle facilities. Parallel Drive holds the potential for a shared use path, unbroken by driveways or intersections, on its east side lying next to, or partially on, Caltrans right-of-way.

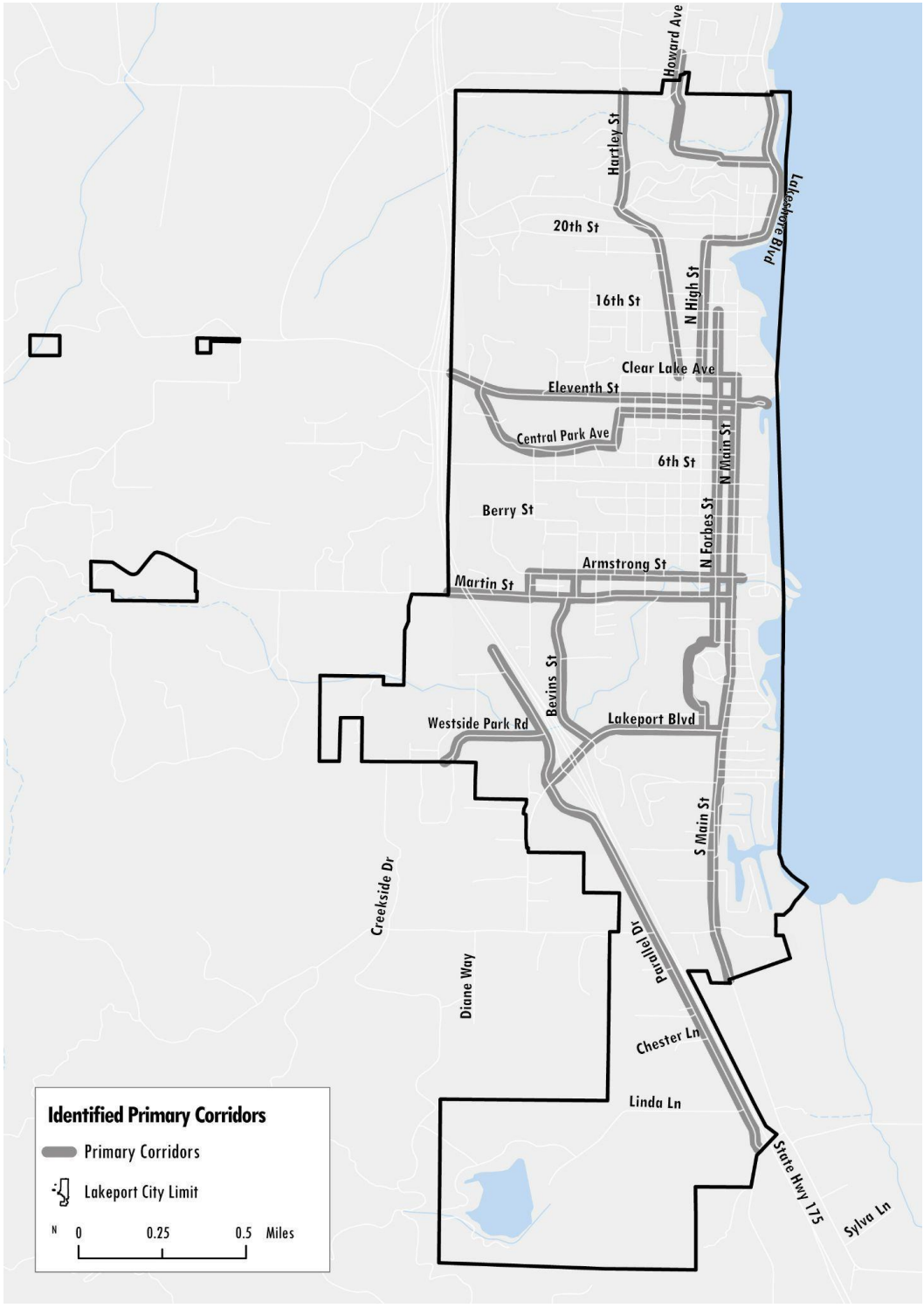
Westside Park Road

Westside Park Road connects the Westside Community Park and the residential areas around it to Parallel Drive. The posted speed limit is 25 MPH. The residential areas have a small number of existing homes but are targeted for future development. Westside Park Road has a good sidewalk on one side and no bicycle facilities. A shared use path runs along the outside border of the park and the park includes a BMX pump track. With recreational bicycle facilities at the park but no bicycle facilities providing a connection, one can reasonably expect either lower usage or bicyclists riding on the street or sidewalk.

Lakeport Boulevard

Lakeport Boulevard is an important east/west corridor connecting Parallel Drive and many west-of-SR-29 destinations to Main Street. The SR 29 overpass hosts a full interchange, a primary access point for the City. The posted speed limit is 30 MPH. Lakeport serves only commercial uses. It provides vehicular access to the future courthouse complex on Bevins Street but no sidewalks or bicycle facilities exist on the south side where courthouse access is needed. Lakeport contains segments of sidewalk but no bicycle facilities.

Figure 13: Map of Identified Primary Corridor



Secondary Corridors

Secondary corridors are low speed and volume streets and pathways that provide high quality alternative routes to primary corridors. With low-cost changes, these streets become safe, comfortable routes that are equitably shared by all road users (Refer Figure 14).

Twentieth Street

Twentieth Street runs east/west from SR 29 (no connection) to Lakeshore Boulevard at its eastern end. The posted speed limit is 30 MPH. It is dominated by residential use; much of that development is newer and has consistent runs of sidewalk on both sides. There are no bicycle facilities. It is not a high volume connector; its importance lies in providing connection between the two major routes leading to the school complex, i.e. Giselman Street and Hartley Street.

Sixteenth/Mellor/Page

The Sixteenth/Mellor/Page sequence of streets is an east/west connector that extends from SR 29 (no connection) to the Clear Lake shoreline. There is no posted speed limit. This connector is dominated by residential use but sees commercial uses, e.g. church, senior facility, a PG&E yard, etc. around Hartley and High Streets. It has some long runs of sidewalk where residential development is more recent and a short stretch of Class II bicycle lanes east of High Street. Page connects to 20th Street via a dirt road that prohibits motor vehicle use but supports non-motorized travel. This provides access along low-volume streets to central Lakeport for the Boggs Lane/20th Street neighborhood.

Fifth & Sixth

Sixth Street is a lower volume east/west connector that extends from SR 29 (no connection) to Main Street and the Xabatin Community Park. The posted speed limit is 25 MPH. Sixth Street runs through older neighborhoods with fewer segments of sidewalk and has no bicycle facilities. The street is so narrow that parking is prohibited on one side of the street for most of its eastern portion.

Fifth is a lower volume alternative corridor to Sixth. Fifth has more sidewalks installed than Sixth. Fifth crosses Main and extends to the lakeshore and the boat launching ramp at the end of Fifth. This portion of Fifth is dominated by vehicular activity at the launch ramp and attached parking lots with ambiguous direction for non-motorists. There is no posted speed limit. Both Fifth and Sixth have good crossing treatments at Main that could be improved further.

Second/Compton/Berry

The Second/Compton/Berry sequence of streets is an east/west connector that extends from SR 29 (no connection) to the heart of downtown, the lakeshore, and Library Park. There is no posted speed limit. To the east of Brush Street, Second hosts office and commercial uses including county facilities. This creates more traffic on Second than equivalent street segments elsewhere. To the west of Brush, these streets are dominated by older residential developments with few segments of sidewalk and no bicycle facilities. Compton has more recent development and substantially more sidewalk. Berry Street features little residential development and is in poor condition, and has no sidewalk nor bicycle facilities.

Esplanade Street

Esplanade Street is a short street that connects the eastern end of 8 short streets next to the lakeshore. This neighborhood features short block faces on the Main Street frontage, on the order of 200 feet long. Closely-spaced intersections like these on busy streets have the potential to create safety issues for all road users. A connection from Royale Avenue to the Esplanade neighborhood would provide a low-volume alternative to Main Street for the students at the Royale Shores Condominiums.

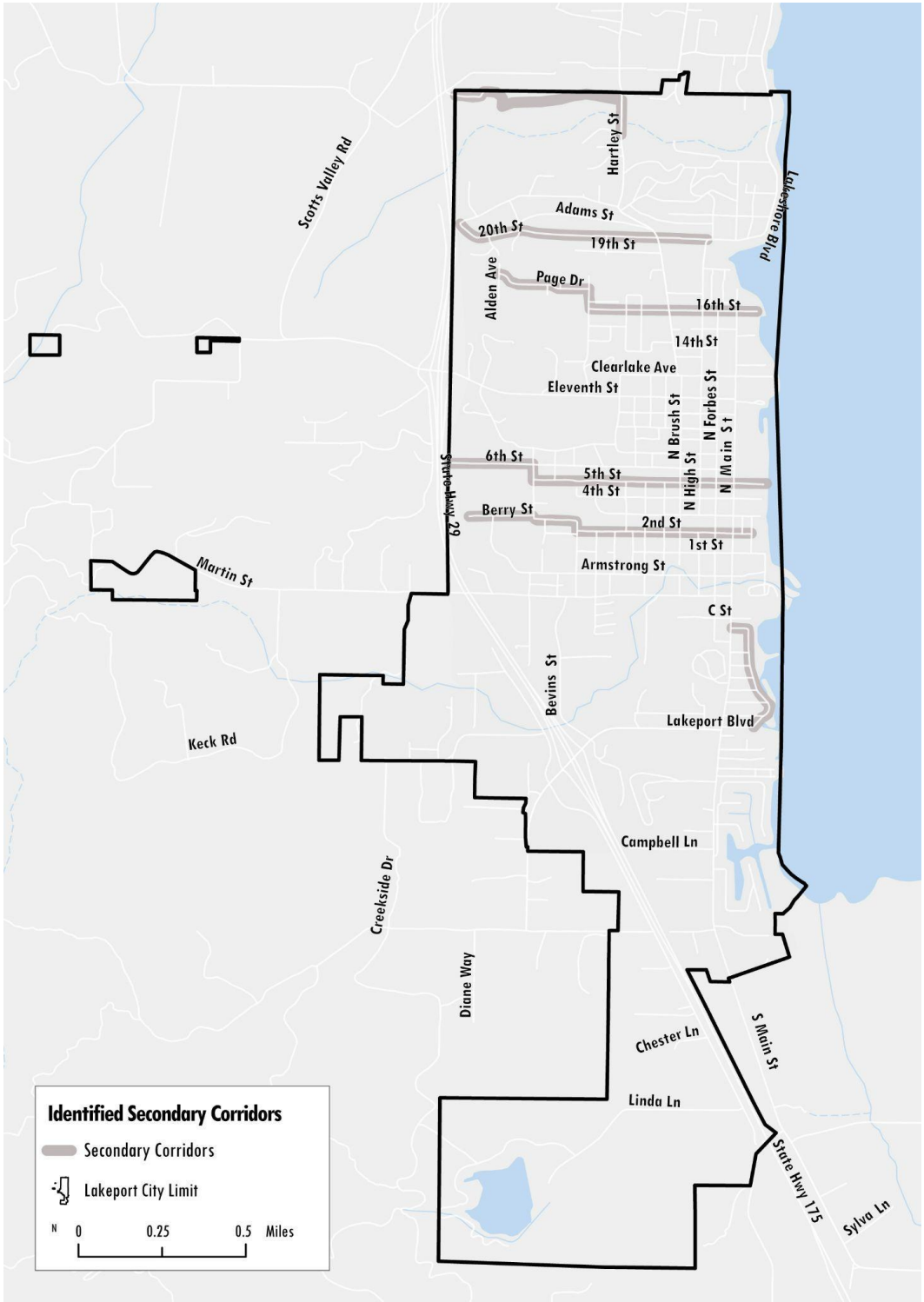
School Campus to Shady Lane

This is a potential corridor connecting the public school complex to Shady Lane, a frontage road on the east side of SR 29 that connects to County neighborhoods north of the City limits and Hill Road. Hill Road provides access to low density residential areas on the west side of SR 29. A dirt road is visible that connects Hartley to an area near the Hartley Cemetery and a private home. More investigation is needed but the potential for a corridor appears to exist. This would provide a non-motorized route for students that now have little option but to be driven.

Potential North/South Corridor

A previous study for the City of Lakeport identified a corridor that ran along the eastern side of SR 29. It consisted of the following sequence of streets running from north to south: Boggs Lane/Alden Avenue/Central Park Avenue/Spurr Street/Berry Street/Armstrong Street/S. Smith Street. It may be possible to extend this corridor to Lakeport Boulevard. This corridor presents the possibility of a path with zero or low-volume traffic for most of the length of the City. The primary question is what use it would support. If more development is planned by the City in those areas immediately east of SR 29, this corridor could provide a useful, low-stress connection for non-motorists. This corridor presents topographical challenges as well as some right-of-way issues. To preserve the potential of this corridor, the city may wish to acquire the needed rights of way as development occurs in this area.

Figure 14: Map of Identified Secondary Corridor



Public Transit

Public transit plays an important role in active transportation in small towns and rural areas. Transit provides crucial connections to destinations that are too distant for pedestrians and bicyclists.

In Lakeport, public transit is provided by the county agency, Lake Transit Authority. As the county seat, Lakeport benefits from excellent connectivity to other communities. Regional routes travel in both directions around the lake and provide a connection to Ukiah. Routes serving Lakeport include three regional routes and one route focused on city destinations.

The Lake Transit website currently displays only a portion of the bus stops within its system. A complete inventory of bus stops can be found in the 2019 Lake Transit Authority Bus Passenger Facility Plan. Incorporating and displaying the full list of bus stops on the website would help passengers and ensure their inclusion on Google Maps.

Recommendations regarding the support of bicycling by public transit are captured in the 2011 Lake County Regional Transportation Bikeway Plan: "*The Lake County Transit Development Plan was updated in 2008. The TDP recommends bicycle parking and storage to be located near bus shelter/passenger loading areas, especially at bus stops near educational facilities. Lake Transit Authority buses are all equipped with a bicycle rack on the front of the bus which can hold two bicycles. Lake Transit provides an important connection for bicycle commuters traveling between communities linked primarily by two-lane state highways. Lake Transit provides service to the public schools and some private schools located in the County.*"

Regional routes that serve Lakeport include the following:

Route 1

Route 1 is a regional route that stops at the Lake County Jail and Sutter Lakeside Hospital with connections to the communities at the northern and eastern sides of the Lake such as Upper Lake, Lucerne, Nice, and Clearlake. It runs hourly throughout most of the day.

Routes 4 and 4A

Routes 4 and 4A are regional routes that make a number of stops in the southern half of Lakeport with connections to Kelseyville, Konocti Casino, Soda Bay, Lower Lake, and Clearlake. These routes are less frequent and primarily provide service in the morning and evening hours.

Route 7

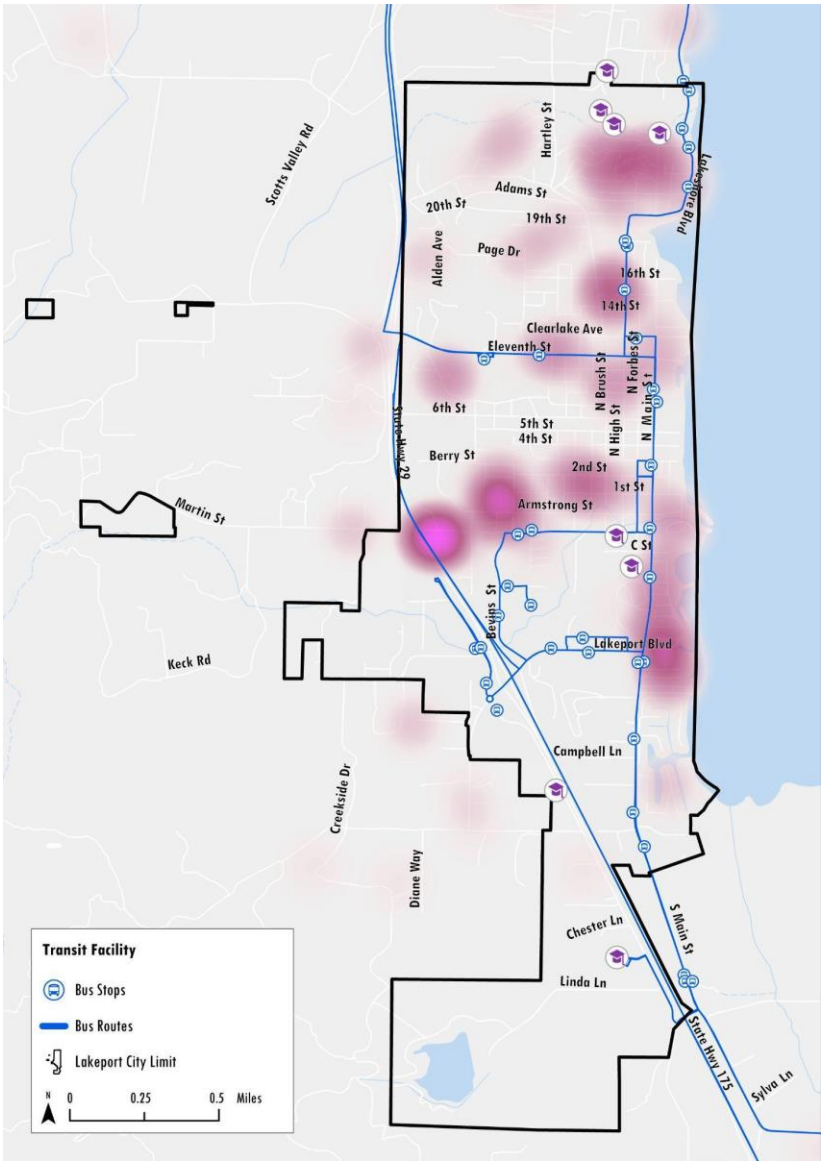
Route 7 is a regional route that has a stop in Lakeport and provides a connection to Ukiah and the main Mendocino College campus. Four buses ply this route and are spread throughout the day.

Route 8

Route 8 serves much of the city. It includes a stop at the Mendocino Community College campus but does not stop at the high/middle/elementary school campus.

Transportation Challenges for Lakeport Students

Figure 15: Student Location Heat Map and Transit Facilities



Geographic and Transit Accessibility: The distribution of students' residential locations, schools, and Lake Transit routes, shown in Figure 15 underscores accessibility challenges in Lakeport. The clustering of Clear Lake High School, Terrace Middle School, and Lakeport Elementary School in the northeast benefits nearby residents but presents obstacles for students living in southern and western parts of the city. For instance, students near Armstrong Street, Campbell Lane, or Chester Lane face significantly longer commutes to the school clusters.

The lakeside geography and dispersed student population emphasize the need for safe walking and biking routes, reliable school buses, and accessible public transit. However, a lack of detailed data on specific student-to-school commute patterns limits the analysis. Further research into sidewalk conditions, bike lanes, and crosswalks would greatly enhance planning efforts.

Out of the eight schools, three (Lake County Tribal Health Preschool, Clear Lake High School, and Head Start Child Development) are located more than a quarter mile from a transit route. This distance will pose a challenge to school access by transit.

Recent upgrades, such as a marked crosswalk with signage at the Winter Avenue and Rainbow Road intersection, offer a starting point. This crosswalk connects to an informal trail (a "paper road") extending northward.

School Traffic and Bus System Safety Concerns: School traffic is a concern for the superintendent for at least two reasons: safety and expense. The district is currently evaluating options for another parking lot at the southwestern corner of the campus because of the traffic they experience. Concerns heard about using the bus system to transport students centered on witnessed drug abuse practices and student safety challenges in general. The extent of these problems at the times students will be using the system is unknown.

Route 8 challenges and potential: Route 8 is of interest because it has the potential to provide travel between home and school for many of the city's students. Lakeshore Boulevard and Lange Street is the closest bus stop for students shown on the Lake Transit Authority website[11]. That intersection is located quarter miles from the high school campus (estimated 15-minute walking time). No bus stop signage or shelter was seen near this intersection for the northbound route; the bus stop for the southbound route consists only of a sign and is approximately 300 feet north of that intersection. People traveling to the campus on the northbound bus are required to cross 3 lanes of Lakeshore Boulevard posted at 35 MPH without a marked crosswalk. There are no sidewalks on either Lakeshore Boulevard or Lange Street at this intersection.

The stopping sight distance available to motorists approaching this intersection needs to be evaluated. There may be insufficient distance to meet the recommended stopping sight distance for motorists needing to stop for pedestrians crossing the street at that location. Remedial measures may be needed to ensure that motorists can stop safely.

Schedule and Accessibility Challenges: The earliest northbound Route 8 bus stops there at 8:10 AM and sees a bus every hour until the last bus at 7:10 PM. This earliest bus arrives too late for middle and elementary school students (see Table 1). This earliest bus is tight for high school students and is too late if they need to be there at 7:30 AM for Period 0. The southbound Route 8 bus stops there beginning at 7:40 AM and sees a bus every hour until 7:40 PM resulting in buses arriving at 1:40 PM, 2:40 PM, 3:40 PM, and 4:40 PM. The southbound schedule arrives a bit early for students traveling south to the campus but the

[11] Lake Transit Authority

northbound bus needs to arrive 15 minutes earlier to be useful for students coming from the City's interior.

4 DATA ANALYSIS

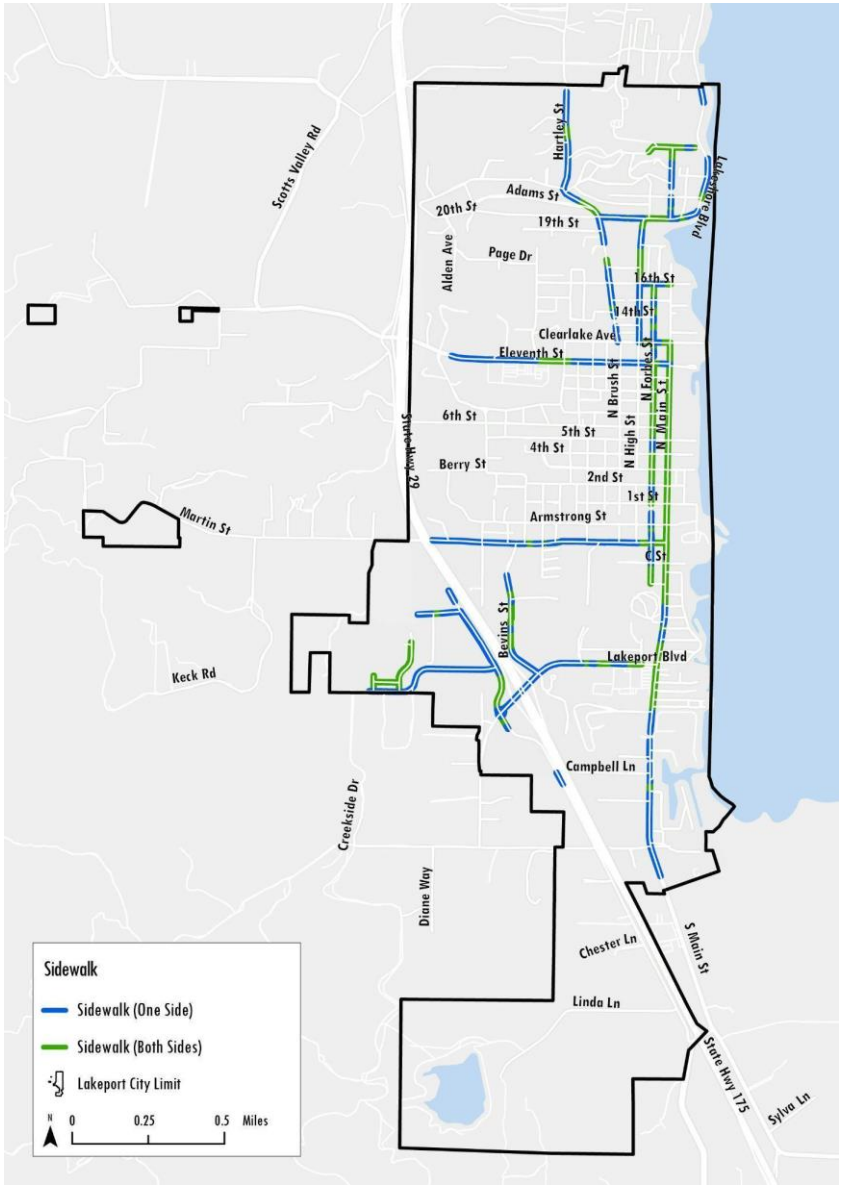
Sidewalk and Bicycle Network Coverage

Lakeport's sidewalk and bike lane network is limited, with many streets lacking sidewalks entirely on one or both sides, resulting in significant gaps and missing segments (Refer Figure 16 and Figure 17). The absence of continuous sidewalks and bike lanes creates safety and accessibility challenges, making walking and cycling less practical.

Survey respondents highlighted that on-street improvements, such as bike lanes and sidewalks, are a priority for enhancing active transportation. Addressing these gaps is critical to improving connectivity and encouraging active transportation within the city.

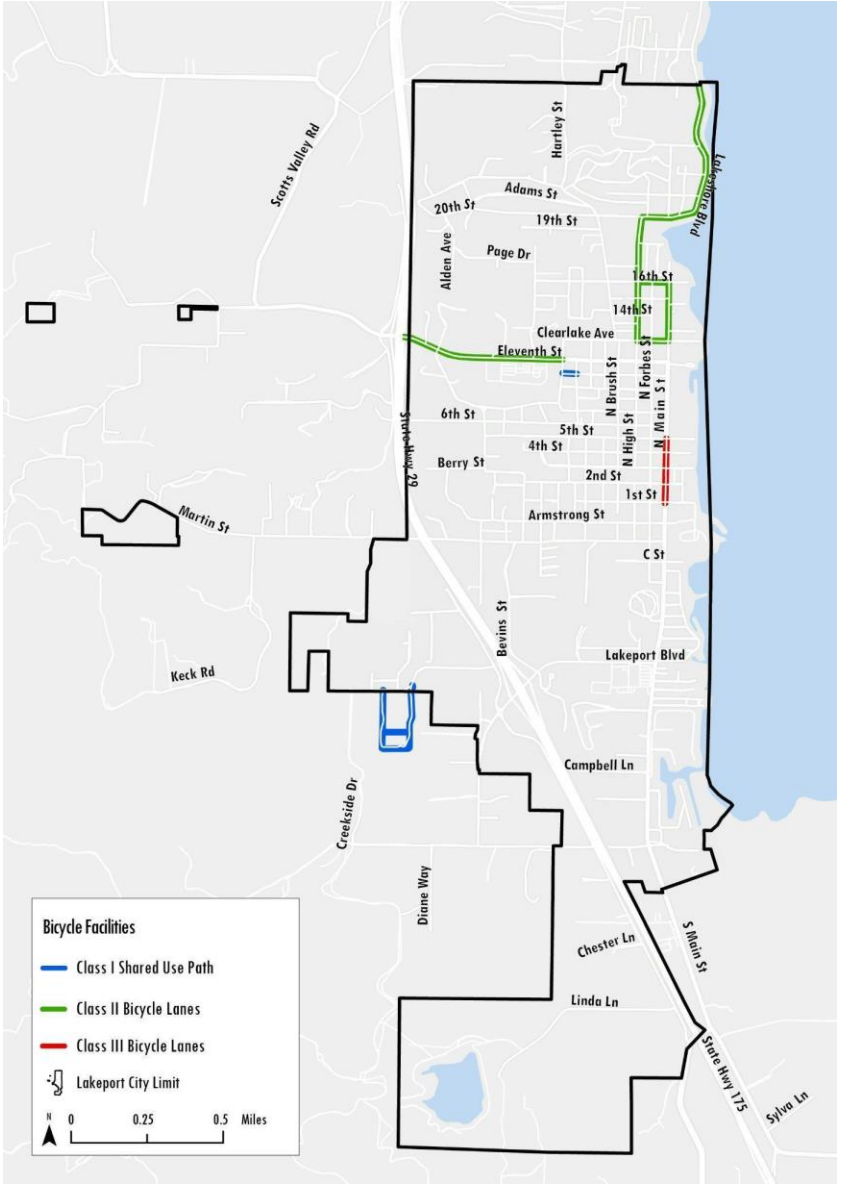
Sidewalks on key roads—such as Main Street, Forbes, Lakeport Boulevard, Armstrong Street, High Street, and 11th Street—require even higher standards, including adequate setbacks, shade, continuity, width, and proper maintenance.

Figure 17: Existing Sidewalk in Lakeport



Source: City of Lakeport

Figure 16: Existing Bicycle Facility in Lakeport

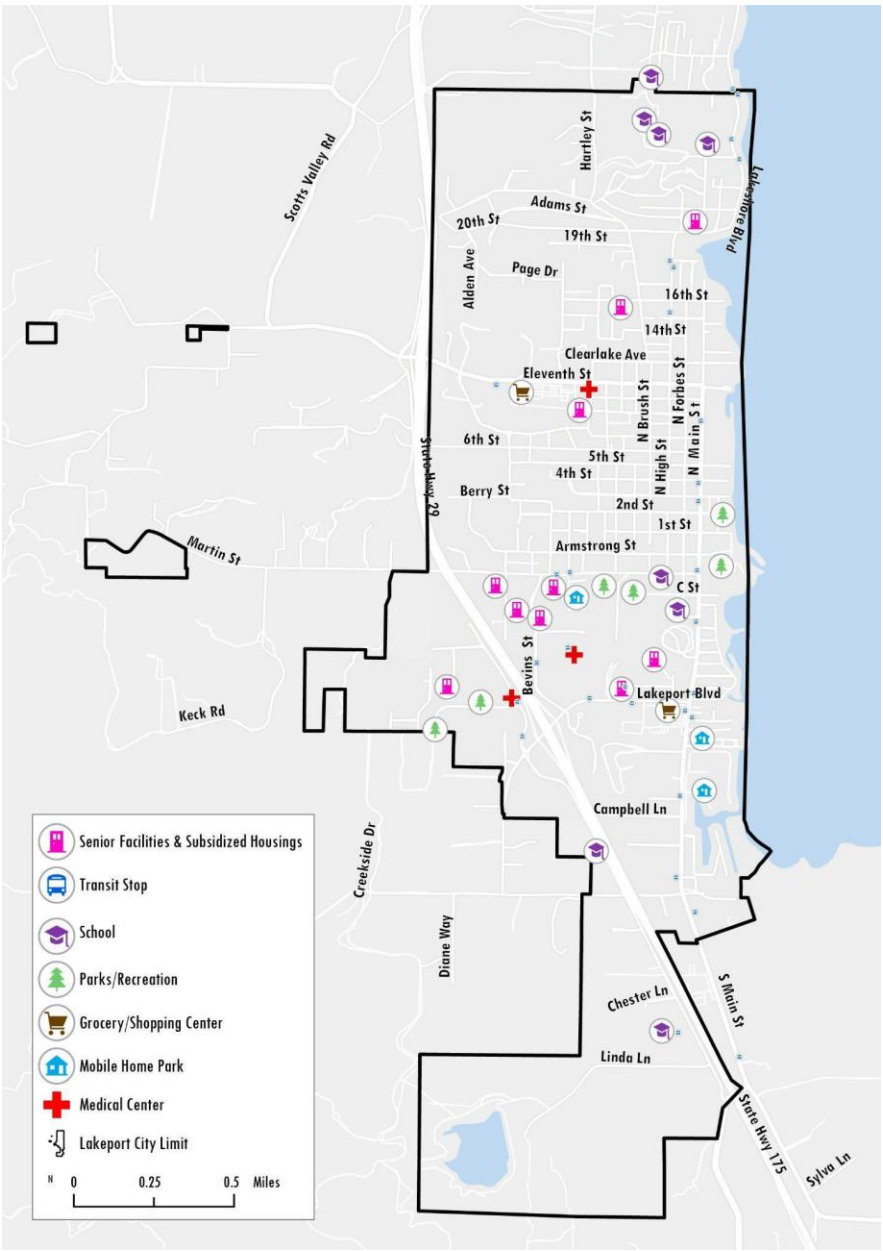


Source: City of Lakeport

Points of Interest

This plan's recommendations aim to enhance connections between key destinations, including schools, parks, senior and subsidized housing, transit stops, grocery stores, and the lake.

Figure 18: Key Destinations in Lakeport

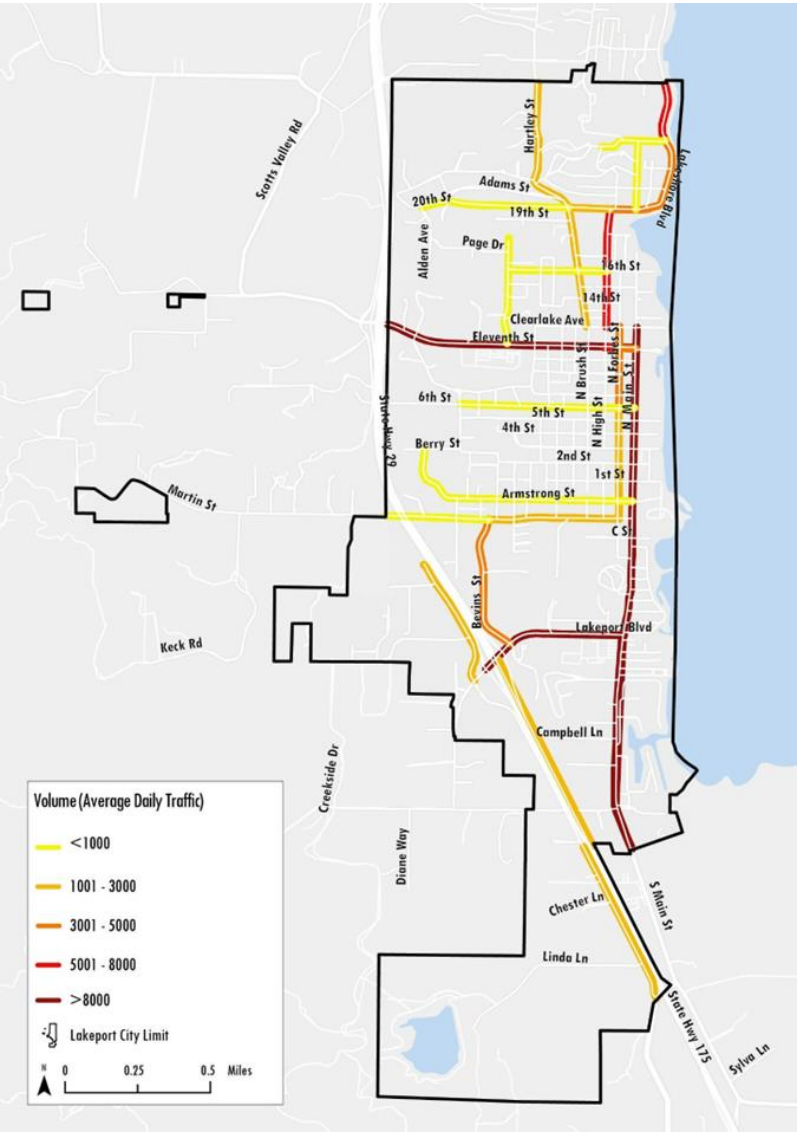


Traffic Volume

Key corridors with over 5,000 vehicles per day are more comfortable with formal sidewalks separated with curb and gutter, enhanced marked crosswalks, improved lighting, or dedicated bike lanes. Corridors meeting or surpassing these traffic volumes include High Street, Eleventh Street, Lakeport Boulevard, and Main Street (Refer Figure 19)

A resident survey revealed that many of these high-traffic corridors are perceived as unsafe. Respondents frequently identified South Main Street, 11th Street, Lakeport Boulevard, and High Street as areas of particular concern, citing issues such as inadequate pedestrian infrastructure, insufficient bike lanes, and reckless driving.

Figure 19: Average Daily Traffic Count of Lakeport



Source: City of Lakeport

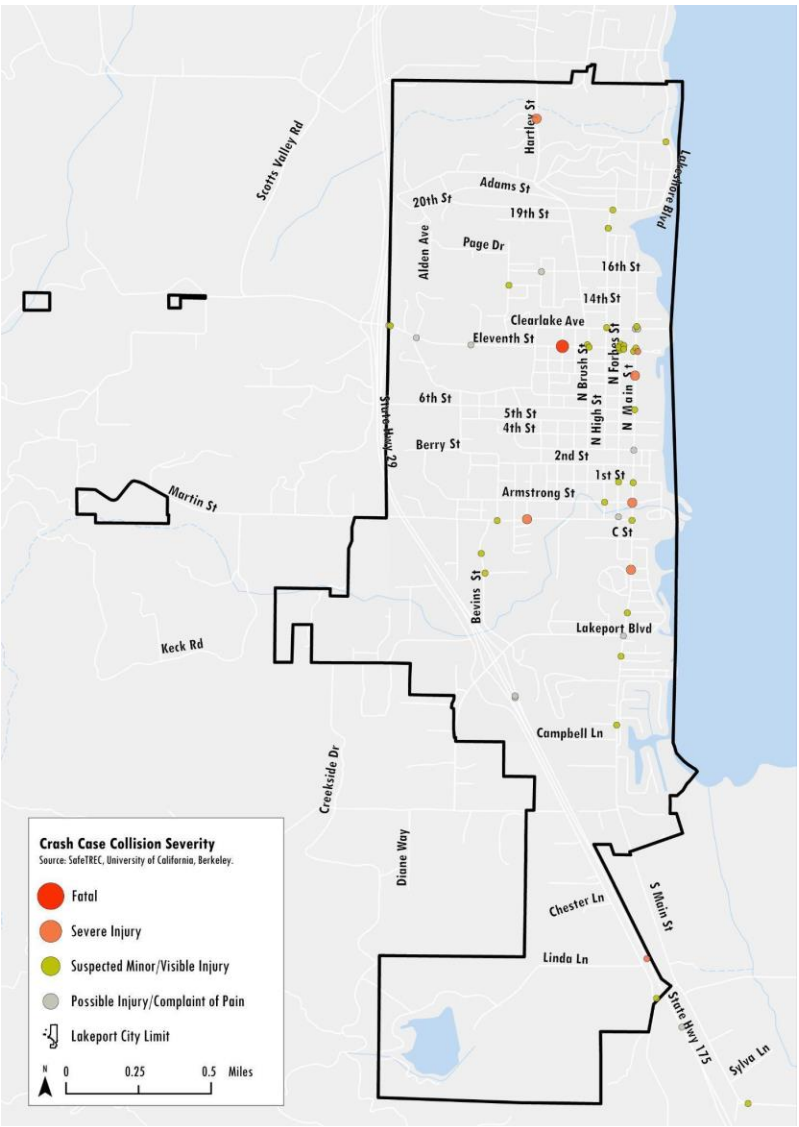
Addressing these concerns is essential for Lakeport to create a safer and more accommodating environment for all road users.

Streets with traffic volumes under 3,000 vehicles per day are well-suited for neighborhood greenways and shared street designs.

Traffic Safety

Between 2019 and 2023, 59 collisions occurred in Lakeport, with the highest concentration in the downtown area, particularly on N Main Street, N Forbes Street, Clearlake Avenue, and Eleventh Street (Refer Figure 20)

Figure 20: Collision Severity in Lakeport



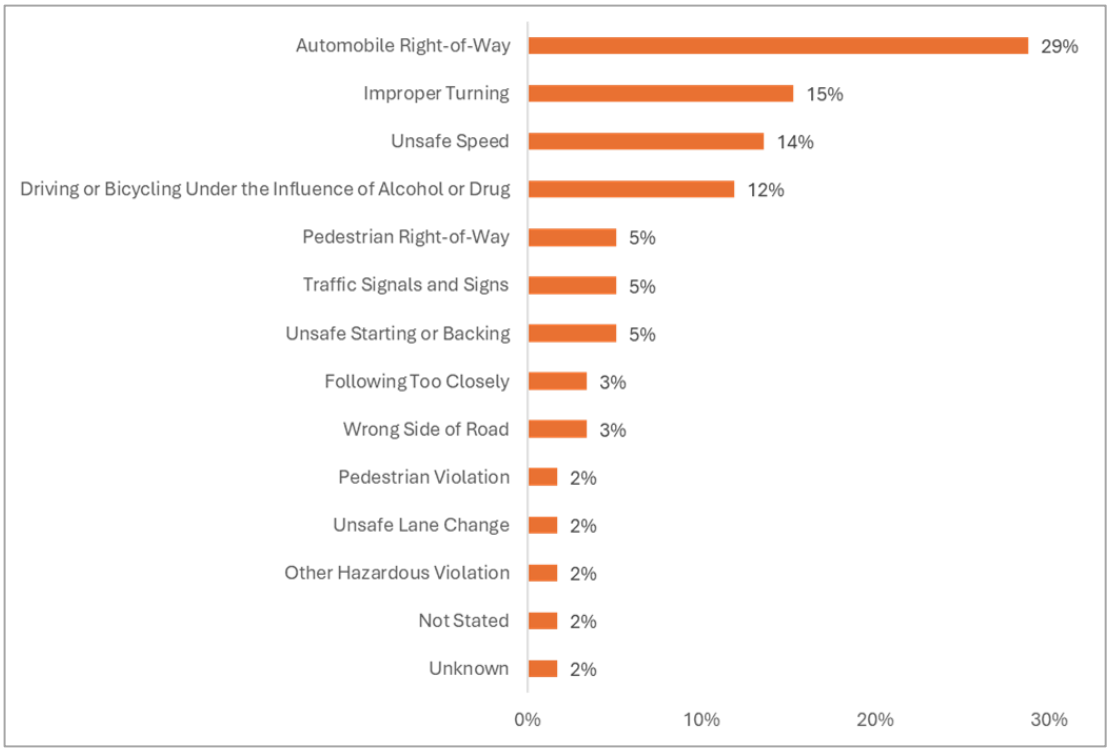
Source: SafeTREC, University of California

Crash data reveals that automobile right-of-way violations are the leading cause of accidents, accounting for 29% of incidents. These are followed by improper turning (15%), unsafe speed (14%), and alcohol-related impairments (12%). These factors pose significant risks to

pedestrians and cyclists, who are especially vulnerable in traffic environments where vehicles fail to yield or navigate properly.

For example, when drivers disregard the right of way, pedestrians crossing streets and cyclists in bike lanes face a heightened risk of serious injury. Additionally, unsafe speeds reduce reaction times and increase the severity of collisions, further endangering non-motorized road users.

Figure 21: Primary Collision Factor Violation category for crash case



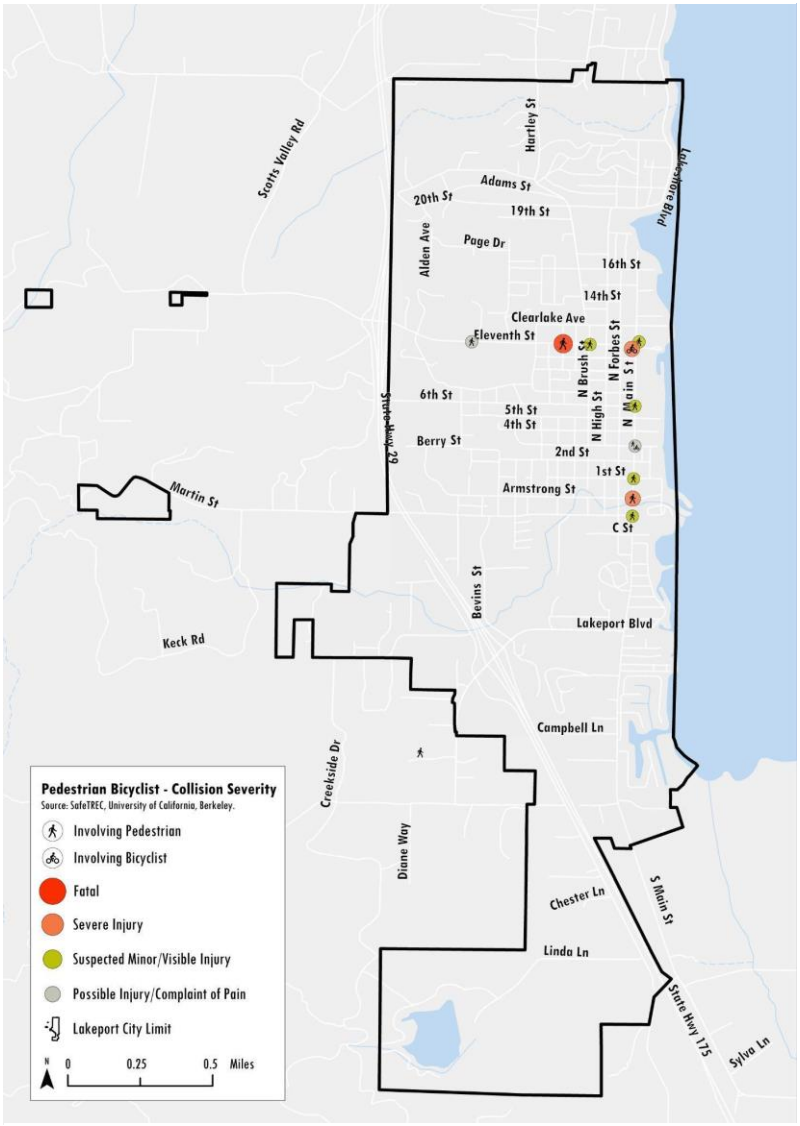
Pedestrian and Bicycle Involved Collisions

Ten of the 59 collisions between 2019 and 2023 involved people walking (8) and or people bicycling (1) or both (1). These collisions occurred primarily on N Main Street and Eleventh Street. The primary crash factor in these collisions was failure to yield the right of way. Automobile right of way violations were reported in two pedestrian involved collisions, and pedestrian right of way violations were reported in two. Right of way violations can be caused by poor visibility or excessive speed.

Adults over 61 were most disproportionately involved in these crashes (13) but with parity between being the victim or being the party at-fault, indicating heightened risk or exposure

for this age group in both causing and experiencing collisions. People between 21 and 40 years of age constitute the next highest group, mainly as victims, as opposed to being the party at fault.

Figure 22: Pedestrian Bicyclist Collision Severity in Lakeport



Source: SafeTREC, University of California

Key Takeaways

- Speeds are excessive in many places, making street crossings and walking and bicycling feel unsafe
- Generally, road dimensions favor speed over walkability and safety

- School zone pick up drop off generates potential conflicts
- There is a need for separated spaces where students / people are not sharing the driving lane
- There are low volume streets that would be suitable for prioritizing walking and bicycling, but they may not be the shortest path

Given these key findings, this plan's recommendations focus on changing conditions at key locations to make walking and bicycling viable and safe options for people of all ages and abilities.

5 KEY FINDINGS

This section presents the findings from extensive stakeholder engagement, field reviews, and data analysis conducted for the Lakeport Active Transportation Plan. It introduces the concept plan recommendations, the rationale behind them, and the proposed next steps to enhance conditions for active transportation users.

Key projects and locations have been identified for further review, which will include prioritization, phasing, and the development of planning-level cost estimates. Subsequent steps involve drafting the plan for public review, finalizing it, and ensuring compliance with the Caltrans Active Transportation Program funding checklist.

Challenges

The assessment of Lakeport's transportation infrastructure highlights challenges in providing safe and accessible routes for pedestrians and cyclists.

- Major corridors, including Main Street, Eleventh Street, and Lakeport Boulevard, currently prioritize vehicular traffic at the expense of other modes.
- Field reviews identified discontinuous sidewalk networks, limited bicycle facilities, and deteriorating road conditions, particularly on Bevins Street, Armstrong Street, and the stretch from 2nd to 6th Street.
- Safety data analysis revealed 59 collisions between 2019 and 2023, with 10 involving pedestrians or cyclists. The downtown area, particularly N Main Street and N Forbes Street, emerged as collision hotspots.
- Right-of-way violations were identified as the primary cause, accounting for 29% of incidents. Adults over 61 were disproportionately involved in these crashes, indicating a need for infrastructure improvements that better serve vulnerable populations.

Strategic Opportunities

Several opportunities exist to enhance active transportation in Lakeport, for example:

- Forbes Street presents an immediate opportunity as a lower traffic alternative to Main Street, with potential for further development. Additionally, identifying quick-build projects present opportunities for immediate improvements such as enhanced crossings with RRFBs along Main Street.
- The proposed Forbes Creek trail could provide a crucial connection from Martin Street to the highway's west side, serving both recreational and commuter needs.
- Transit integration offers another significant opportunity. A potential partnership between Lake Transit Authority and the School District could address current

transportation gaps while maximizing existing resources. Route 8 modifications could better serve school access needs, complemented by a student transit pass program modeled after successful implementations in other jurisdictions.

- The existing 15-20% community awareness of Blue Zones initiatives provides a foundation for building support for active transportation improvements.

Concept Plan

Many low-volume streets in Lakeport are already conducive to walking and biking. With targeted, network-wide investments in traffic calming, these streets could provide the connected and continuous experience that residents are seeking. This plan aims to divert bicycle and pedestrian traffic off the main streets to avoid right-of-way conflicts and design challenges that could hinder large vehicle access. This approach is rooted in the concepts of network decoupling and neighborhood greenways.

Network Decoupling and Neighborhood Greenway

Network decoupling is a broader strategic approach which involves creating a separate network for non-motorized users, often on low-traffic streets that parallel busier roads. This helps to reduce conflicts between motor vehicles and non-motorized travelers, ensuring safer, more comfortable routes.

On the other hand, Neighborhood greenways are designed to prioritize walking and biking on local (and specific) streets by implementing traffic calming measures, clear signage, and pavement markings. Together, these strategies create a safer, more cohesive transportation network that encourages active travel, reduces vehicle speeds, and improves overall safety.

Complementary large-scale trail and intersection projects will further enhance connectivity, and additional safety and connectivity improvements are also identified across the city, even if they are not directly part of the neighborhood greenway network.

Proposed Lakeport Neighborhood Greenway Network

The Neighborhood Network is designed to prioritize bicycle and pedestrian traffic on selected streets, while still allowing access for local motorists. Through-traveling motorists would be routed to other streets and local traffic would be slowed to 15-20 MPH. This allows bicyclists and pedestrians to use the streets safely and comfortably. The aim is to create a street so calm that people enjoy walking or rolling there despite the absence of sidewalks or bicycle facilities. These streets add value by creating calmer, quieter neighborhoods for the residents.

Key Assumptions and Considerations

- **Low-Traffic North/South Streets:** It is assumed that the north/south streets in the central neighborhoods already have low traffic volumes and will require minimal improvements. However, streets with higher traffic volumes that provide important north/south connections should be considered for upgrades.
- **Street Segments Needing Enhanced Facilities:** Some street segments, such as Twentieth and Hartley Streets, may not be ideal for diverting motor vehicle traffic. These streets will require a combination of standard bicycle and pedestrian facilities and traffic calming measures to ensure they are safe and comfortable for all users.

Network Connectivity and Expansion

- **Connections to Key Destinations:** The Neighborhood Network does not cover every destination in Lakeport (e.g., the lower end of South Main Street). Instead, it is intended as a starting point to promote and expand active transportation in the city. The primary goal is to connect most homes to key destinations such as downtown and schools, ensuring convenient access for residents.
- **Gaps in the Network:** The Neighborhood Network map highlights areas that require higher-cost, higher-impact facilities to improve connectivity. These gaps should be prioritized for future upgrades, alongside other important facilities or those on busier roads. Dashed lines on the map represent connections that need further feasibility studies and alignment work.
- **Minimizing Out-of-Direction Travel:** One core goal of the Neighborhood Network is to minimize the additional travel distance required to use the network. In the central Lakeport area, east/west routes are approximately ¼ mile apart, meaning that home-to-network travel adds no more than ⅛ mile—about one minute by bicycle or three minutes walking. Limiting detours is crucial to the network's success.

Specific Streets and Routes

- **Lange Street & Campus Routes:** Lange Street, the road through the campus, and routes north of the campus experience high volumes of students and vulnerable road users. These streets should be a unique part of the network, with improvements requiring collaboration between the school district and the City. Priorities for these routes should include physical separation, off-street facilities, or very low traffic volumes to enhance safety.
- **Royale Avenue to K/Esplanade Connection:** A potential connection between Royale Avenue and K/Esplanade Streets should be explored. This would provide students around Royale Avenue with a safer route to access Forbes Street without

traveling along Main Street. Given that Esplanade is prone to flooding, this connection could serve as an important alternative route.

- **Parallel Drive Shared-Use Path:** A bi-directional, shared-use path on the east side of Parallel Drive could provide a safe, uninterrupted route for vulnerable road users. This path would have no driveways and minimal intersections, making it an ideal facility to connect to destinations on the west side of SR 29. Key crossings (e.g., at Mendocino College, Lakeport Boulevard, Westside Park Road) would need enhancements to maintain high safety standards.
- **Lakeport Boulevard Improvements:** Lakeport Boulevard is a critical connection within the Neighborhood Network but currently remains an obvious gap. It links important destinations such as Parallel Drive, the Lake County Tribal Health Clinic, and the future county courthouse. Though basic connections exist, this street will require more comprehensive treatment to integrate fully into the network.
- **Traffic Calming:** Input was provided from the community survey related to traffic calming measures for Russell, Armstrong, and Second Streets.

Long-Term Connectivity Goals

- **SR 29 Parallel Route:** We recommend the City pursue rights-of-way for a route running parallel to SR 29 just east of the highway. This lightly developed corridor already has several existing connections, and a path through this area would provide a city-spanning route from Shady Lane to a potential terminus at the future Forbes Creek Trail or a connection near Bevins Street close to Lakeport Boulevard.
- **Low-Traffic Streets:** Some streets, such as Hillcrest/Forest Drive, already have very low traffic volumes, making them naturally attractive to active transportation users. While these streets are not currently marked on the Neighborhood Network map, they could be improved in the future if needed to further support the active transportation network.

Neighborhood Greenway Tools

This section outlines tools for building the neighborhood greenway which some of the current lakeport projects are already supporting include:

- **Traffic Calming:** Traffic calming measures (e.g., speed bumps, curb extensions, chicanes) are necessary to make principal streets safer, more comfortable, inviting and accessible. Traffic calming is especially critical in commercial and mixed-use areas, and for SRTS corridors.
  - Lakeport currently lacks a comprehensive traffic calming manual. The city should prioritize adopting a traffic calming manual and program.

- **Enhanced Crossings:** Rectangular Rapid Flashing Beacons (RRFBs) are currently being added along Main Street at Martin, Oak Knoll, D Street, and Helena. These enhanced crossings on D street or Helena could serve to connect a future neighborhood greenway to Main Street if a connection through the fairgrounds is not possible. Other crossing enhancements such as pedestrian refuge islands and raised crosswalks are vital for making intersections safer and easier to navigate for pedestrians and cyclists, especially on busy streets.
- **Trails and Protected Bike Lanes:** These facilities provide a physical barrier or separation between cyclists and motor vehicles, reducing the level of stress for cyclists and enhancing safety on high-speed or high-volume roads. Over time the bicycle network would be built out with a combination of facility types that decrease the level of traffic stress, with trails or increasing separation for on-street bikeways where motor vehicle speeds and volumes are higher.
- **Streetscapes:** These are improvements that enhance the aesthetic and functional aspects of the street, such as landscaping, trees, pedestrian-scale lighting, and benches. These elements make streets more inviting and comfortable for walking and cycling.
- **Diverters:** Diverters redirect motor vehicle traffic away from certain streets while still allowing pedestrian and bicycle movements. This helps to reduce thorough traffic and makes streets safer for non-motorized users.

Key Focus Areas and Initial Project Identification

The concept plan, along with the existing conditions analysis, helps identify key projects such as pedestrian and biking improvements, intersection upgrades, critical connector routes and trails, and overall network recommendations. This section outlines the initial projects and their respective locations, which are essential for Lakeport's Active Transportation Plan. As noted above, these projects will be further reviewed and analyzed in the next steps to inform the final plan.

Key Connection Projects

- South Main/Lakeport Boulevard Protected Bike Lanes
- Forbes Creek Trail or Estep/Larrecou
- Forbes Street Connector Intersection Project
- Bevins area Trail
- Parallel Drive Trail

Pedestrian Infrastructure

- Sidewalks on Twentieth from Hartley to Lakeshore to the city limits would connect the sidewalks on Hartley to the other side of the school on Lakeshore.
- Eleventh Street
- Lakeport Blvd from Bevins to Main St
- Main/High/Lakeshore Infill
- Howard/Rainbow/Winter/Beach/Lakeshore Area
- Twentieth/Lakeshore to Lange

Bicycle Infrastructure

- Eleventh Street
- Bevins Street
- Martin Street
- Westside Park Road
- County Courthouse Access
- Lakeport Blvd from Bevins to Main St

Intersection Improvements

- Esplanade to Forbes
- NG Network Crossings (16th, 10th, 2nd, etc.)
- Lakeport & Main
- Lakeport & Forbes (if the connector goes through)
- Lakeport & Bevins

Improving Access to Schools: Infrastructure, Partnerships, and Transit Programs

Enhancing Pedestrian Infrastructure

Improved pedestrian infrastructure is critical for students living north of the main school campus. Proposed solutions include:

- **Sidewalks**: Adding sidewalks along Lakeshore, Rainbow, and Howard streets.
- **Trails**: Creating separate trails that connect the campus to Winter Avenue and Beach Lane. Winter Avenue and Beach Lane are low-traffic streets that already function well as shared spaces, providing connections to Rainbow Road
- **Intersection Enhancements**: Improving the Beach Lane/Rainbow Road intersection to offer safer alternatives for students from high-density housing areas, reducing the need to walk along busy Lakeshore Boulevard.

Exploring a Partnership with Lake Transit Authority

A partnership between Lake Transit Authority and the Lakeport Unified School District could address the school district's chronic bus driver shortage, reduce school-area traffic, and increase bus ridership. This type of collaboration has proven successful in other regions, including larger cities where student safety challenges are even more pronounced.

To enhance safety, one option is the use of chaperones on student-specific bus routes. Such measures could reassure parents and encourage greater adoption of public transit by students.

Recommendations for improvement to make the bus system a viable option for student transportation:

- Adjust **route timing** to align better with school schedules.
- Install **shelters** at bus stops to protect students from the weather.
- Introduce **student passes** and consider additional safety enhancements to build trust and encourage parents to switch from driving to using public transit.

Learning from Successful Programs

Statewide school transit pass programs demonstrate the potential benefits of well-designed public transportation systems for students:

- **Sacramento: RydeFreeRT (RFRT)**: The RydeFreeRT[12] program, provides free transit passes to K-12 students. An evaluation conducted after 1–2 years of implementation highlighted several positive outcomes, including:
  - A reduction in automobile trips for students.
  - Increased bus use for non-school destinations, potentially reducing car trips for these purposes as well.
  - Higher participation rates among non-white students.
- **San Mateo County: SamTrans Youth/Student Rider Program**
  San Mateo County offers a youth and student rider program through SamTrans[13]. A prospective study with suggested strategies for improving this program is available.

By combining improved infrastructure, strategic partnerships, and lessons from successful transit programs, the district can significantly enhance student access to schools while addressing safety, traffic, and equity concerns.

[12] https://www.sacrt.com/rydefreert/

[13] https://www.samtrans.com/rider-info/youth-riders

CITY OF LAKEPORT

ANNEXURE B: PROPOSED STREET SECTION

April 17, 2025

Prepared for

CITY OF Lakeport CALIFORNIA

Prepared by

CIVICWELL BLUE ZONES® NELSON NYGAARD

List of Proposed Cross Section

1. Lakeshore Boulevard
2. Downtown Main Street
3. North and South Main Street
4. Lakeport Boulevard
5. Tenth Street
6. Eleventh Street (Commercial)
7. Eleventh Street (Residential)
8. North High Street
9. Forbes Street
10. Martin Street
11. Armstrong Street
12. Hartley Street

1. Lakeshore Boulevard

City Limits to 20th

Lakeshore Boulevard

Rationale: This project is essential for improving pedestrian and bicycle safety along Lakeshore Boulevard, a key route that connects to the recently completed Safe Routes to School project. It serves as a scenic and critical connector to numerous city and county destinations. In addition to enhancing safety, the project has the potential to extend beyond city limits to Rainbow Street and Howard Street, creating a fully connected route to local schools.

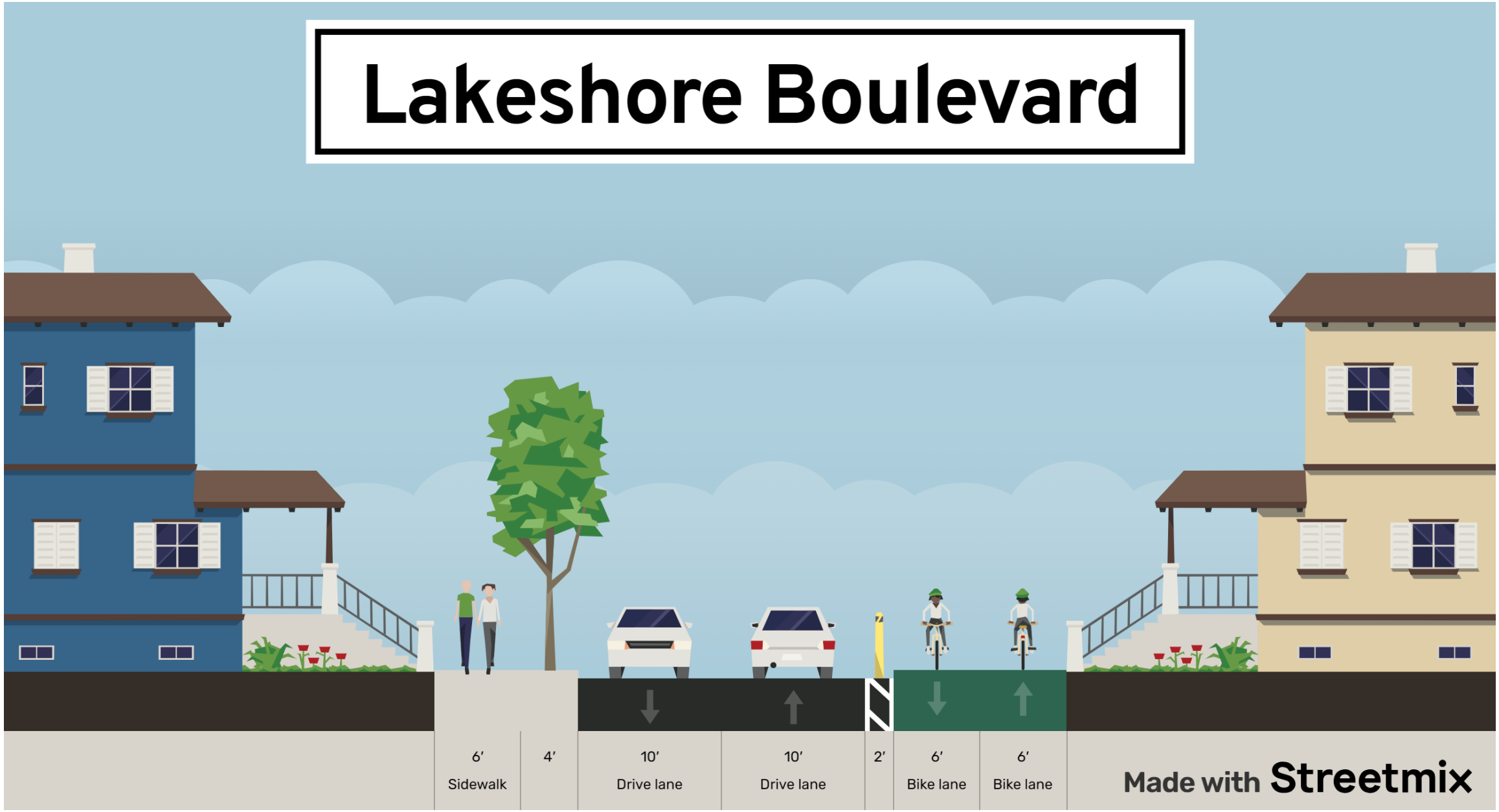
Challenges: There are right-of-way and environmental challenges, particularly in constructing continuous sidewalks on both sides of Lakeshore Boulevard, including the lake-adjacent section. Additionally, the undeveloped lot just north of Lange Street is slated for future development, which will require the installation of curb, gutter, and sidewalks—factors that should be integrated into project planning.

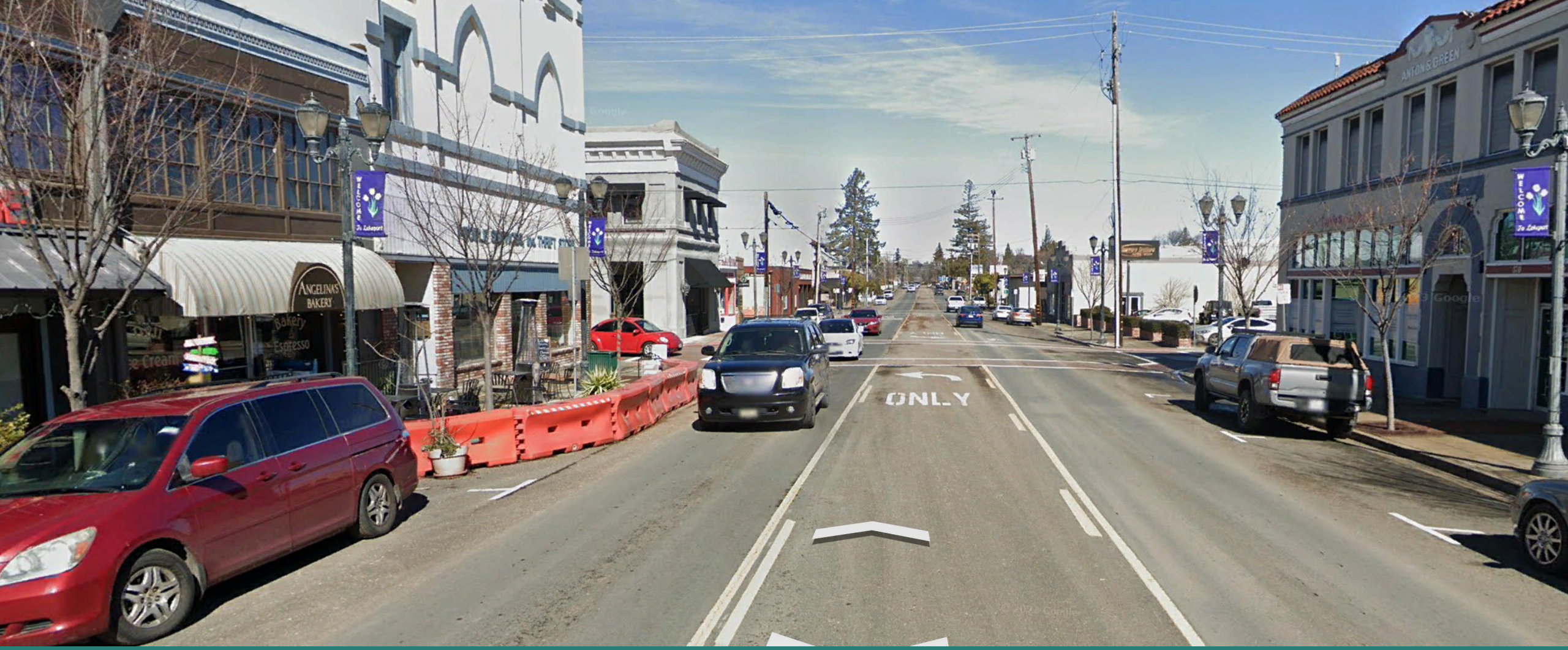
Proposed Safety Enhancements: To achieve a target speed of **25 mph** (currently **35 mph**), the following measures are proposed:

- **Lane Narrowing:** Travel lanes will be reduced to **10 feet in width**, and turn lanes will be eliminated.
- **Multimodal Infrastructure:** A **lakeside, two-way protected raised path** will be installed for pedestrians and cyclists.
- **Sidewalk & Buffer:** A **6-foot-wide sidewalk** with a **4-foot buffer** will be added on the west side, enhancing pedestrian safety.

Additional Opportunity: Informal trails connecting the school campus to Winter Avenue and Beach Lane should be upgraded to **formal, off-street trails**, improving student access to nearby homes and further enhancing connectivity.

Lakeshore Boulevard

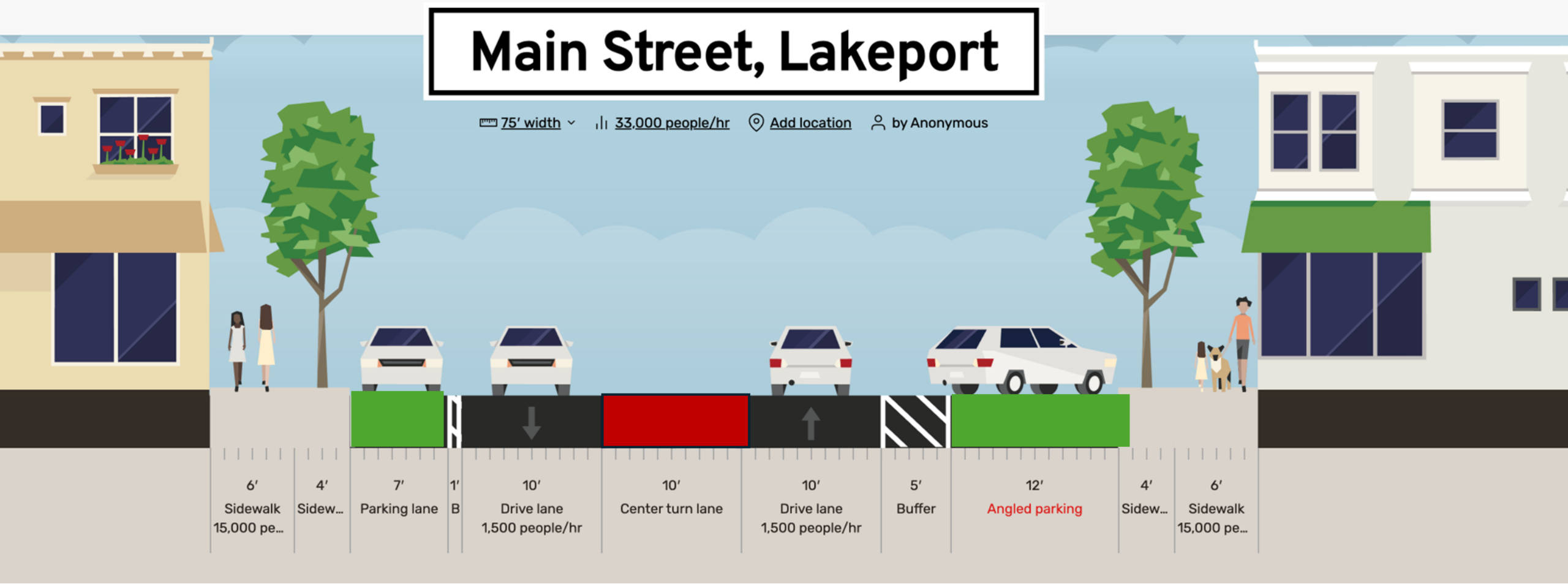




2. Downtown Main Street

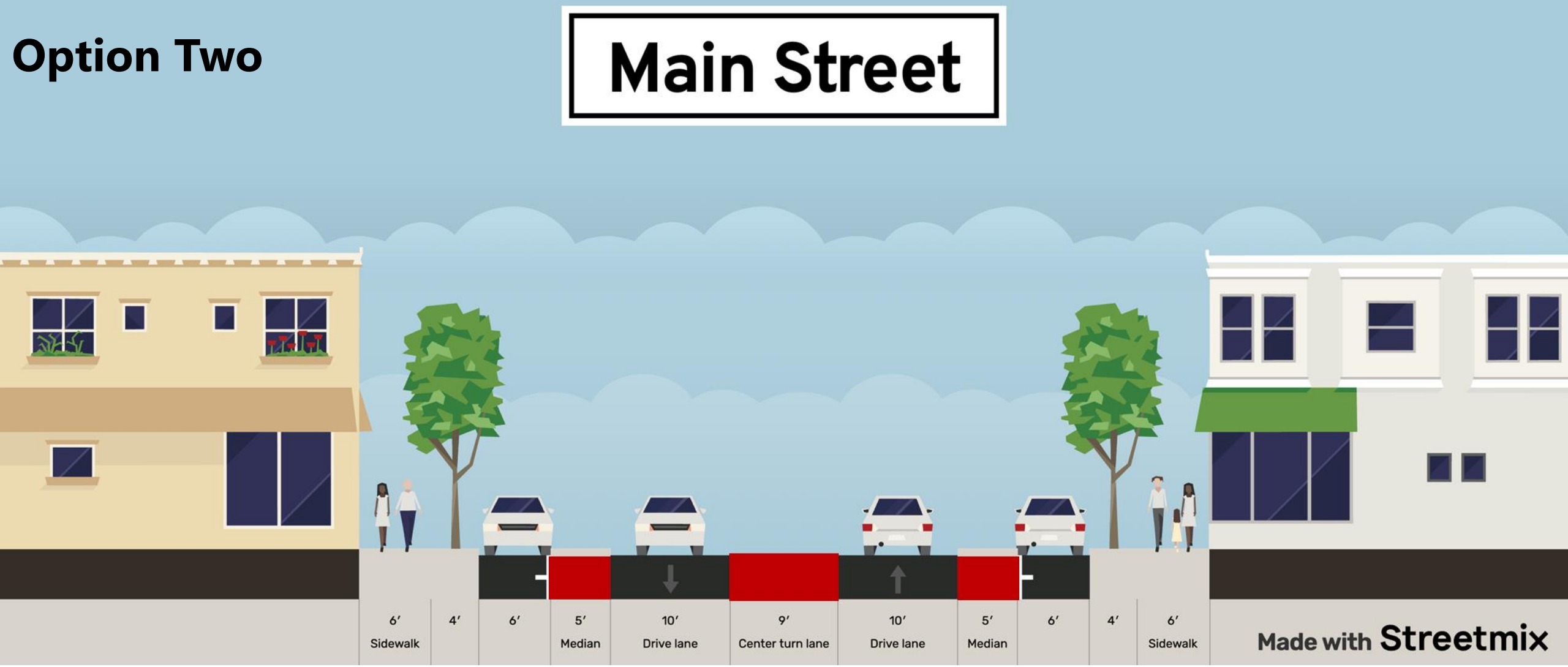
This portion of Main Street (Assumes a 51-foot curb-to-curb width) currently has an overly wide TWLTL (two-way left turn lane) and wide travel lanes, leading to higher speeds. The proper target speed for the placemaking, business and social uses of this street is 15-20 mph. Proposed option includes elimination of TWLTL for improved safety. Block lengths are only 300 feet, so midblock crossings are not provided.

Option One



- **This design applies an 18-20 mph target speed.** It also increases parking and visually narrows the street.
- The TWLTL is retained and colorized red for visual narrowing.
- Curb extensions are added to visually narrow the street. Angled 60-degree parking is switched every other block to provide a chicane slowing effect. Angled parking may be either head-in or head-out.
- Raised or colorized crossing islands are used in some or most crosswalks. No bicycle facilities in this option.

Option Two

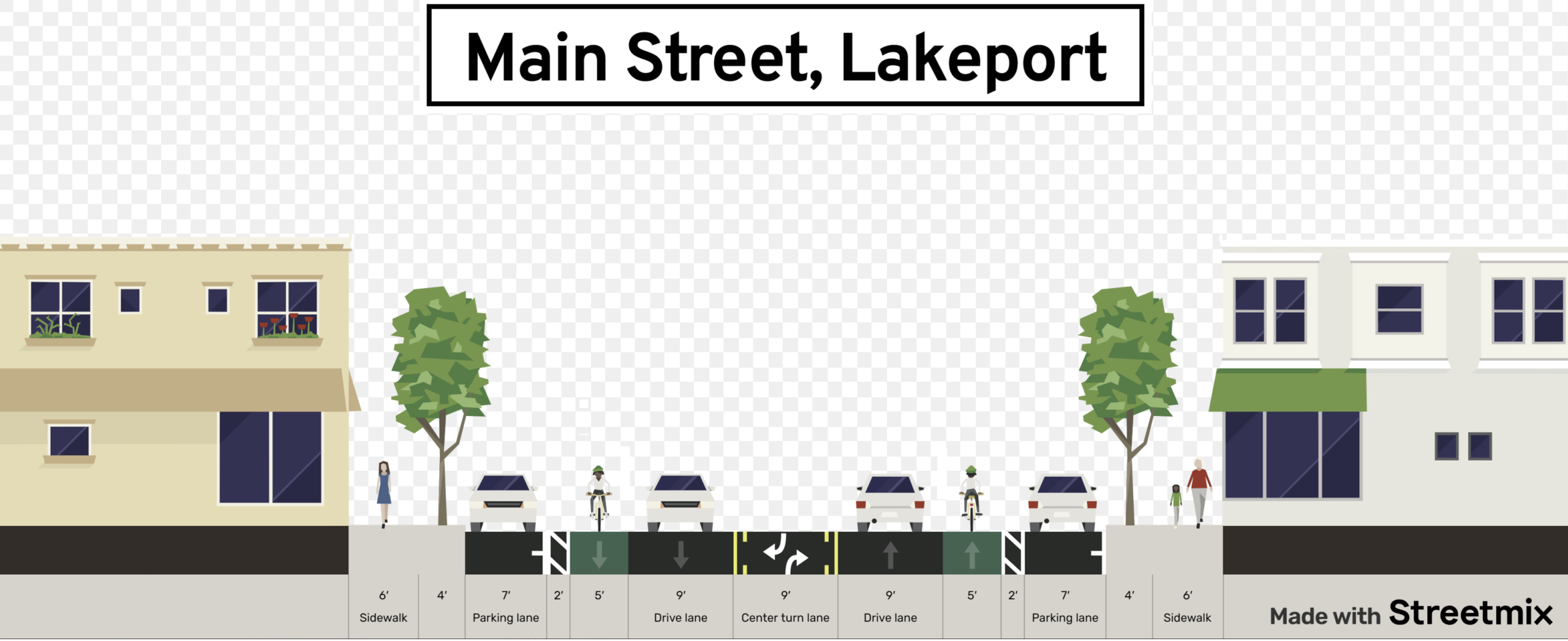


- **This design applies an 18-20 mph target speed.** It also retains parking and visually narrows the street.
- The TWLTL is retained and colorized red for visual narrowing.
- Curb extensions are also added to visually narrow the street. Angled 60-degree parking is switched every other block to provide a chicane slowing effect.
- Raised or colorized crossing islands are used in some or most crosswalks. No bicycle facilities in this option.

This unique design applies an 18-20 mph target speed. It also increases parking and visually narrows the street. Parking lanes are 6 feet wide, and the parking assist lane is 5 feet wide. Curb extensions are added to further visually narrow the street. Raised or colorized crossing islands are applied in some or most crosswalks.

Colorized Center Turn Lane (TWLTL)

Option Three

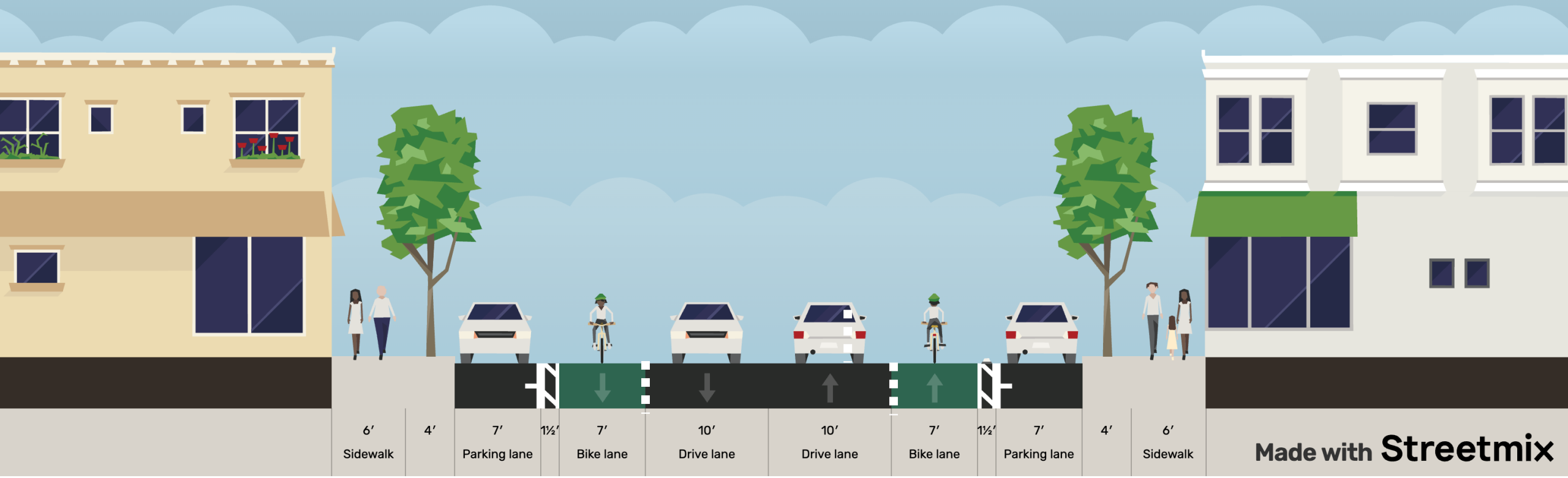


- **This design applies an 18-20 mph target speed.**
- The narrower lanes help reduce driving speeds.
- Curb extensions are added to further visually narrow the street. Raised or colorized crossing islands are applied in some or most crosswalks.

Head-out angled parking in Pottstown, Pennsylvania

Option Four

Main Street



- **This Edge Lane Road** design achieves an 18-20 mph target speed**.**
- This design allows for up to 6,000 VPD. It visually narrows the street. Curb extensions or quick-builds are added to visually narrow the street and reduce crosswalk exposure. Raised or colorized crossing islands are applied in some or most crosswalks. (Water Street in Port Townsend, Washington uses this design and photos follow)

Water Street with an Edge Lane Road (ELR) treatment, Port Townsend, WA

This shared street approach supports low speeds and allows the street to be shared by delivery vehicles parked in the center, bicyclists in the edge lanes, and motor vehicles that need to maneuver past delivery vehicles.

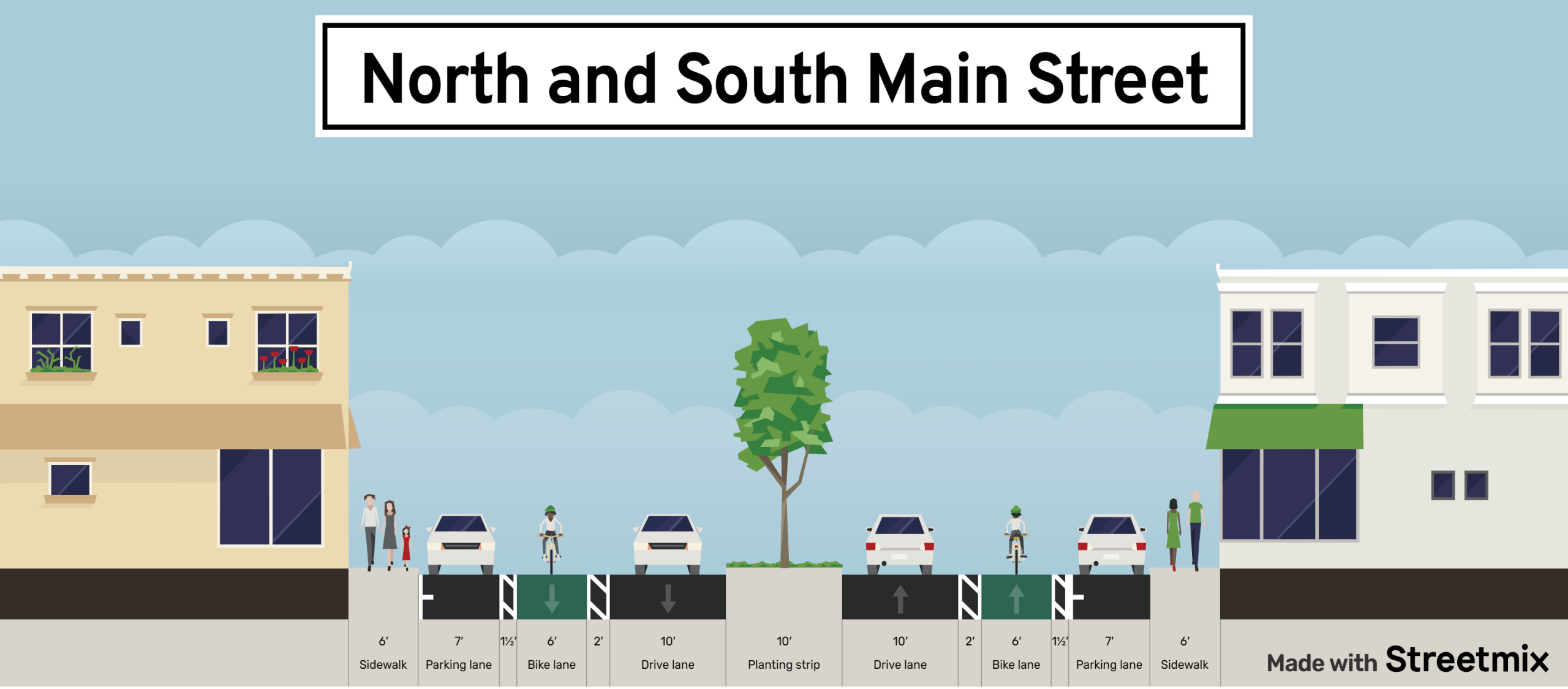
Water Street with an Edge Lane Road (ELR) treatment, Port Townsend, WA

The shared street approach works well on lower volume streets (up to 6,000 ADT). Lower volumes provide gaps in traffic that can be used by all road users. Lower speeds provide the time and margin for negotiation between drivers, bicyclists, and delivery people needed to share the road safely.

3. North & South Main Street

This portion of Main Street is 74 feet wide. **A safe and inviting target speed is 25 mph**, achieved by buffered, colorized bike lanes.

North and South Main Street



- These portions of Main Street are approximately 74 feet wide.
- A much safer and inviting target speed of 25 mph is achieved with a new cross section that includes buffered, colorized bike lanes.
- Left turn pockets can be added at busy intersections.

4. Lakeport Boulevard

From Main Street to the Highway

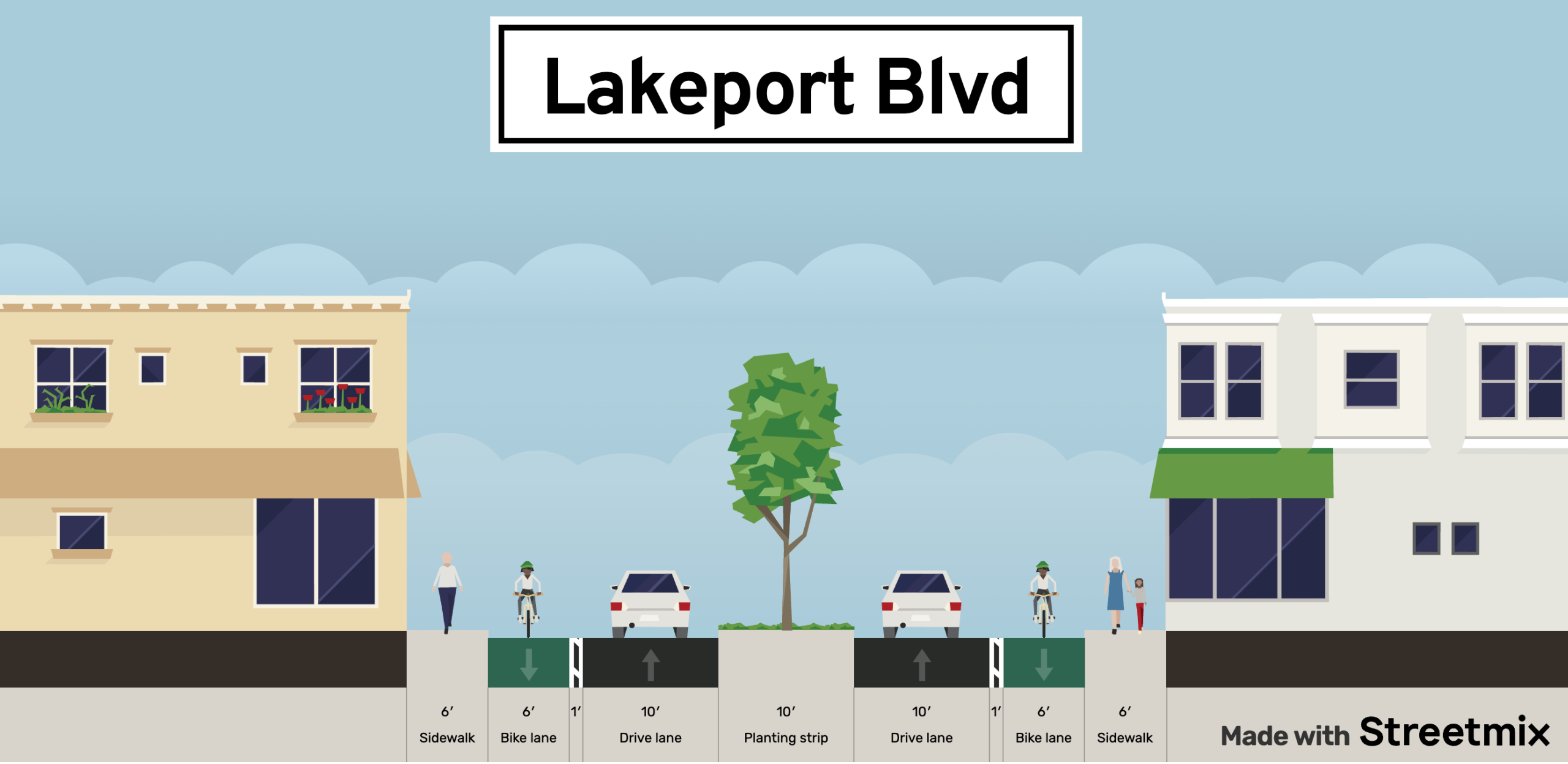
Lakeport Boulevard

Rationale: This project has been in development for over a decade. Initially aimed at constructing a roundabout at Lakeport Blvd and South Main Street, the project has evolved due to financial and right-of-way challenges. The City has secured $900,000 in funding, and the project is currently in the design phase, with construction scheduled for FY 26/27.

Phase 1 will fill in the missing sidewalk on the north side, include a mid-block protected crosswalk with a Rectangular Rapid Flashing Beacon (RRFB), and incorporate Full Depth Recycling (FDR) for road reconstruction.

Speed & Safety Enhancements: Lakeport Boulevard from Main Street to the highway is posted at 30 mph. Applying a 25-mph target speed is achieved by building a 10-foot wide median, adding colorized buffered bike lanes and widening sidewalks to 6 feet. Medians often reduce crashes 70-75%.

Lakeport Blvd



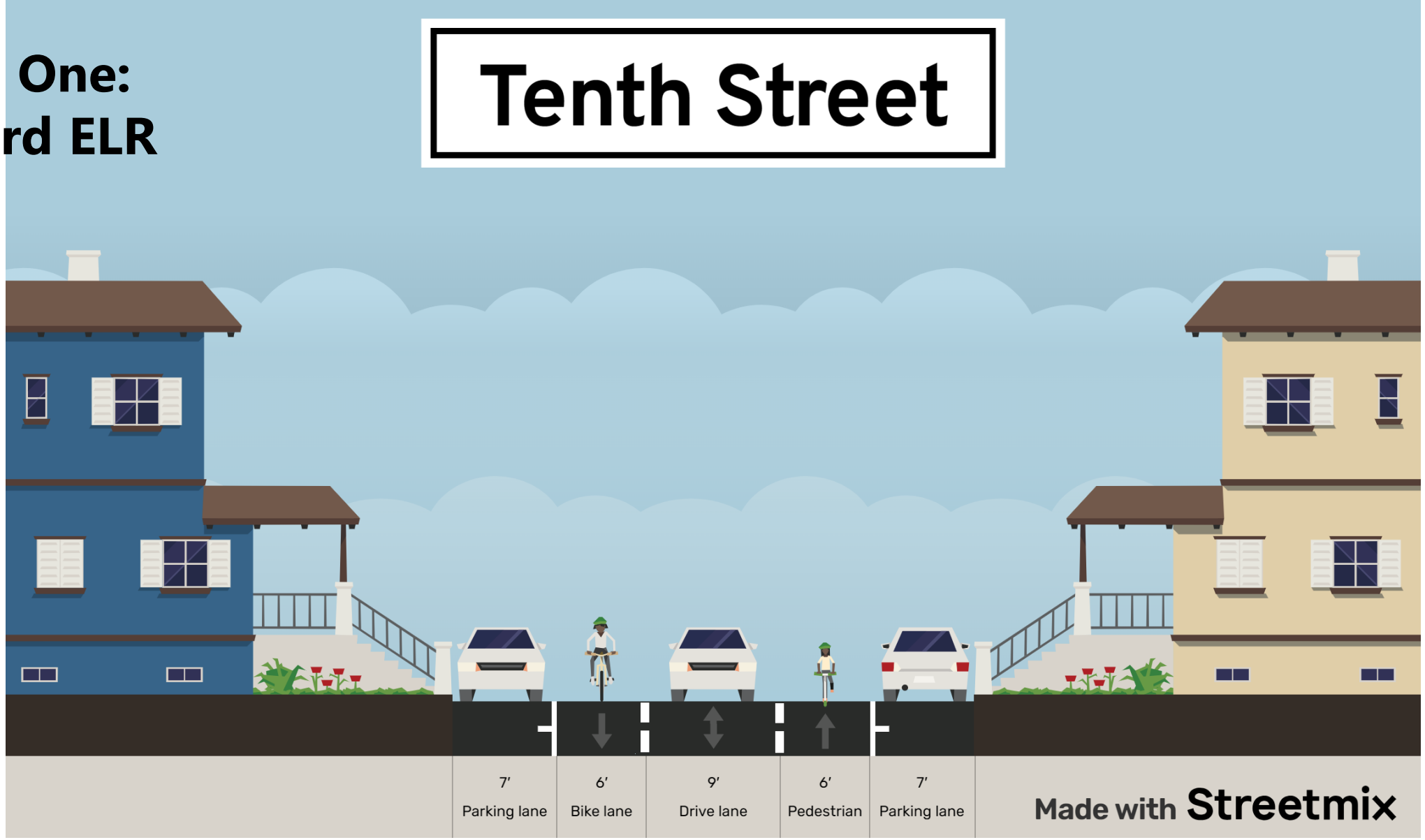
- Lakeport Boulevard from Main Street to the highway is posted at 30 mph.
- Applying a 25-mph target speed is achieved by building a 10-foot wide median with turning pockets, adding colorized buffered bike lanes and widening sidewalks.

The eastern portion of Lakeport Boulevard appears have a narrower width. This design is an alternative.

5. Tenth Street

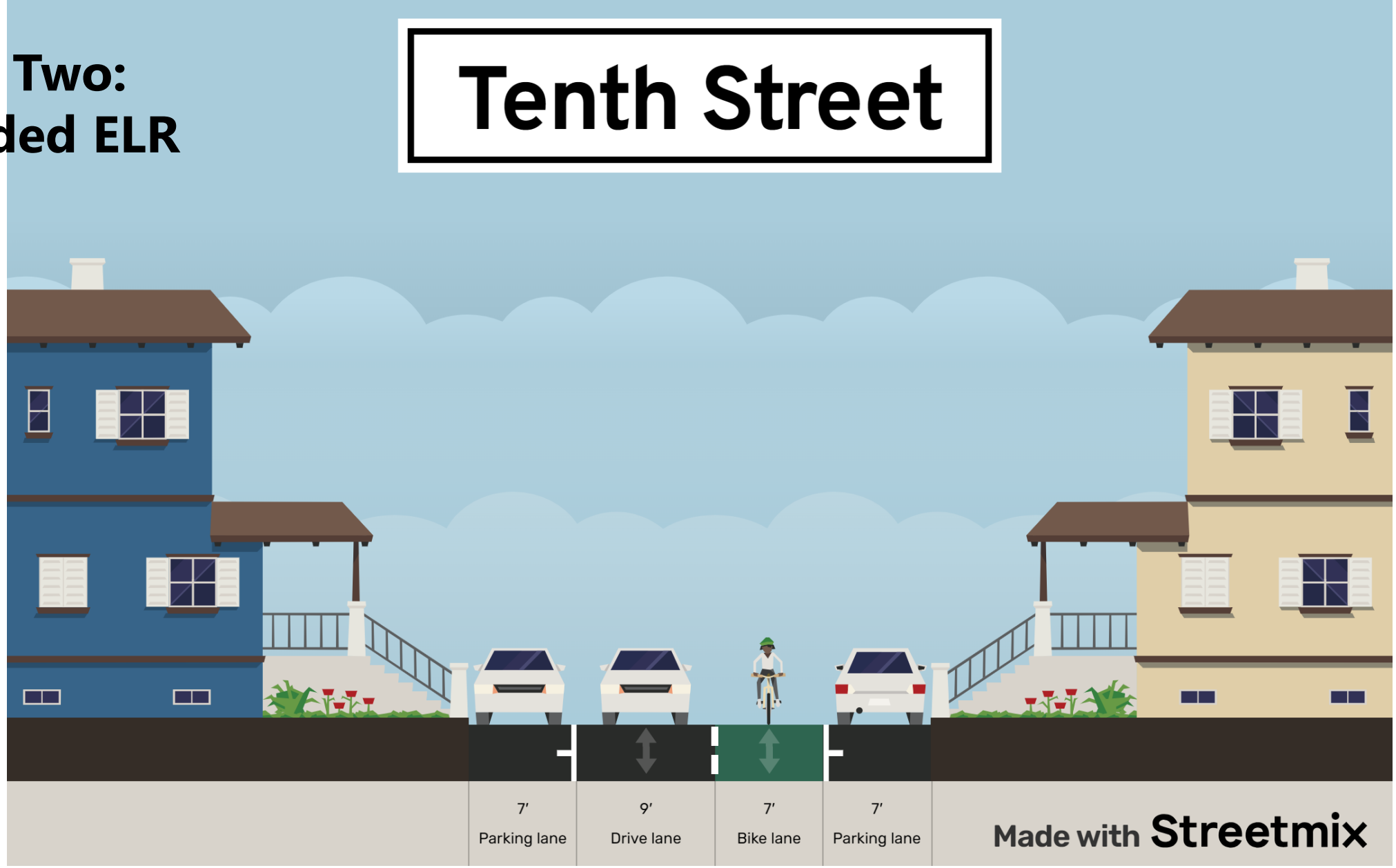
Tenth Street has a 25-foot curb-to-curb width with intermittent sidewalks and varying pavement quality. On-street parking provides friction to help slow traffic, and maintaining 25-foot sight lines at intersections is necessary for visibility.

Option One: Standard ELR



- 10th Street becomes a shared street using the Edge Lane Road treatment.
- Speeds are brought into the 15-mph range. Traffic calming measures, such as mini-circles, can be added to keep speeds low, if needed.
- Depending on pavement width available, a one-sided or standard ELR may be appropriate.

Option Two: One-sided ELR

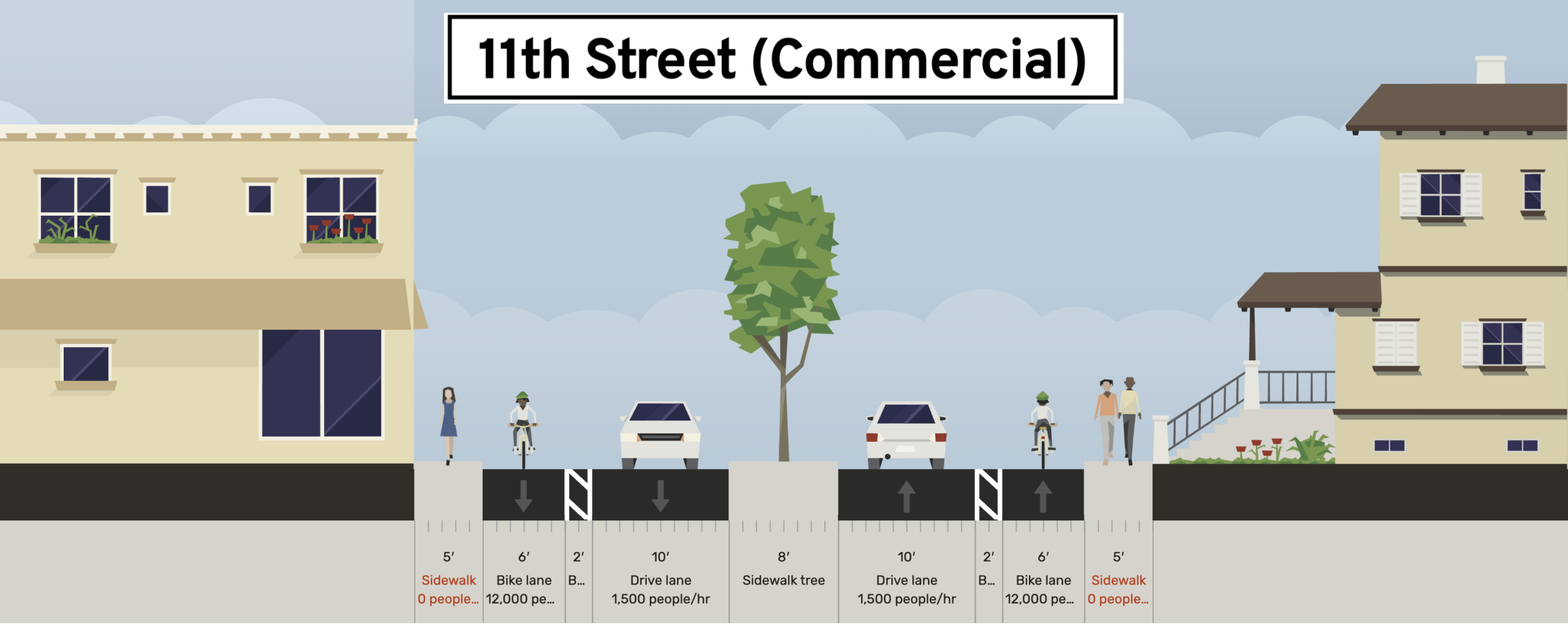


- 10th Street becomes a shared street using the Edge Lane Road treatment.
- Speeds are brought into the 15-mph range. Traffic calming measures can be added to keep speeds low, if needed.
- **A one-sided ELR is best used where street width is too narrow to accommodate a standard ELR.**

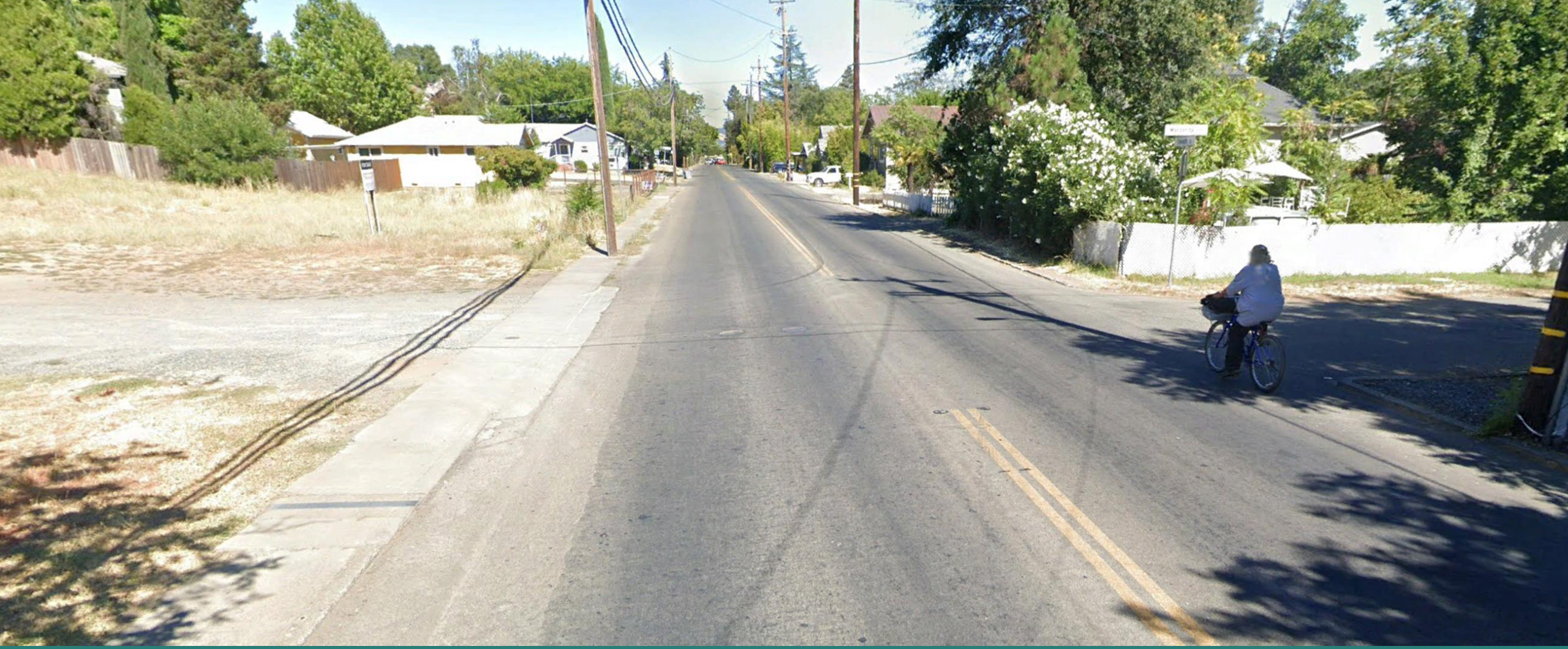
One-sided ELRs in Hawaii (left) and North Carolina (right).

6. Eleventh Street (Commercial)

11th Street (Commercial)

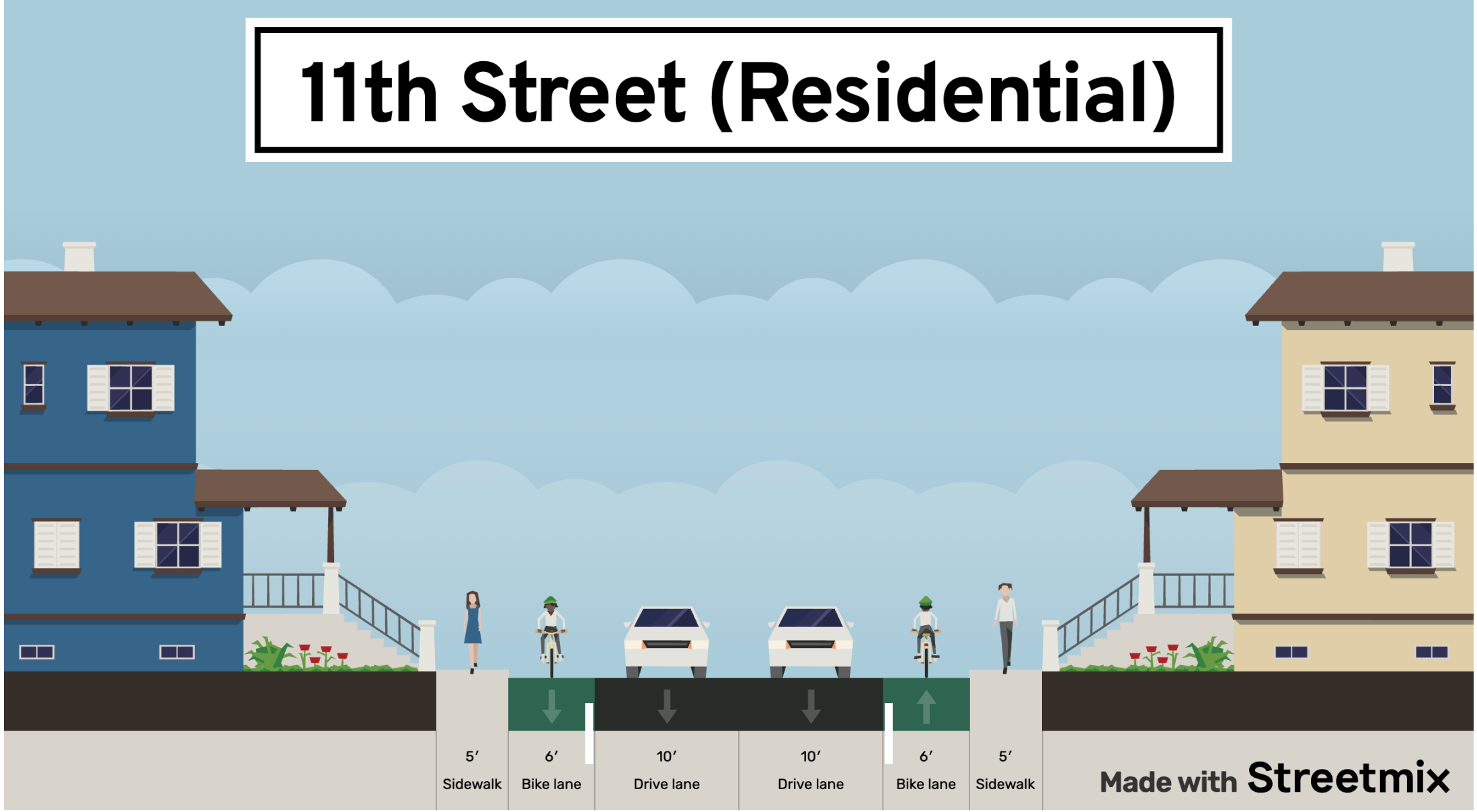


- This design requires a 54-foot-wide right-of-way.
- This approach removes left and right turn lanes and uses a target speed of 25 mph.
- Speeds are reduced through the use of raised crossings and narrower lane widths.
- Sidewalk gaps are filled.
- The terrain limits the ability to widen sidewalks. Consider a raised bike lane to increase separation from roadway.



7. Eleventh Street (Residential)

Sidewalks in the residential section of 11th Street are narrow, attached to the curb, and poorly maintained. The double yellow centerline may contribute to higher vehicle speeds.



- To achieve a target speed of 25 mph, 6-foot-wide colorized bike lanes would provide a buffer for sidewalks and help slow traffic.
- Removing the centerline could further reduce speeds by creating a shared street feel.
- A wider bike lane stripe and raised crosswalks would reinforce lower speeds.

8. North High Street

Clear Lake Avenue to 20th Street – Pedestrian Improvements | This project connects from Tenth Street to Twentieth Street, ensuring continuity for pedestrians and cyclists along North High Street. Addressing challenges such as right-of-way, utility relocation, and ADA upgrades is essential, this route is a vital connector for improving the network.

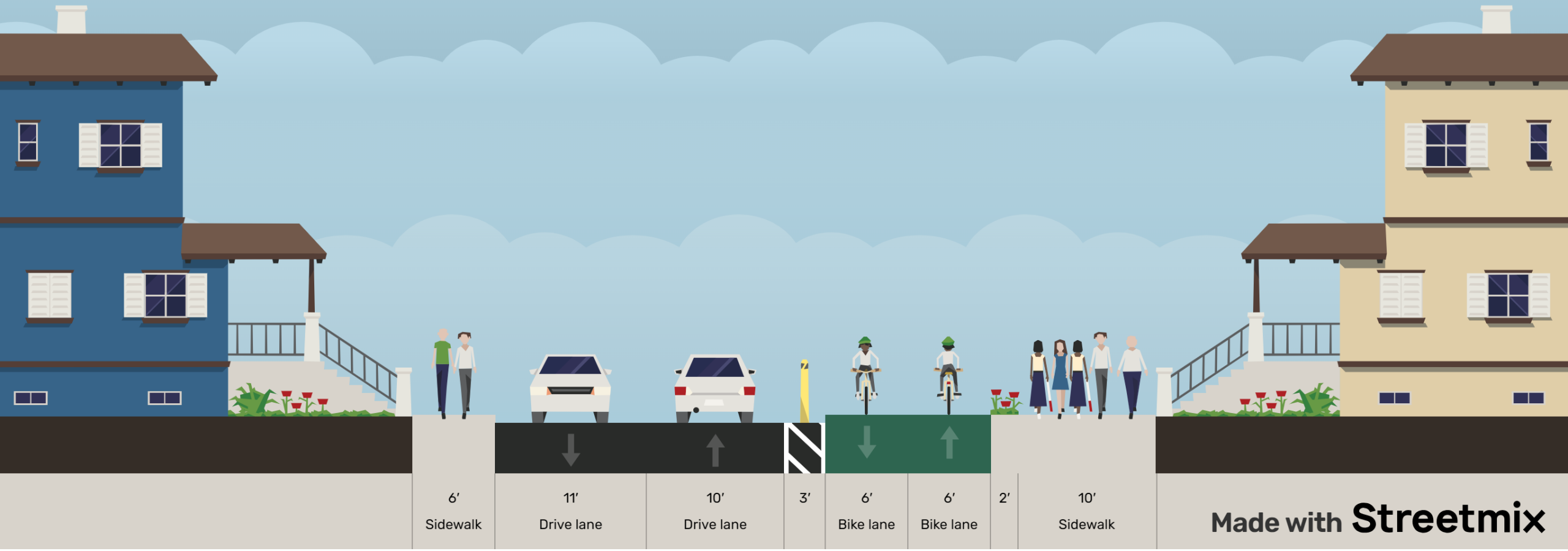
North High Street

Option One: Buffered Bike Lane

- North High Street currently has two 10-foot-wide travel lanes and an 11 foot-wide TWTL. Speeds are high.
- The target speed of 25 mph is achieved by eliminating the TWLTL and narrowing lanes to 10-feet width.

Option Two: Protected Bike Lane/Path

North High Street

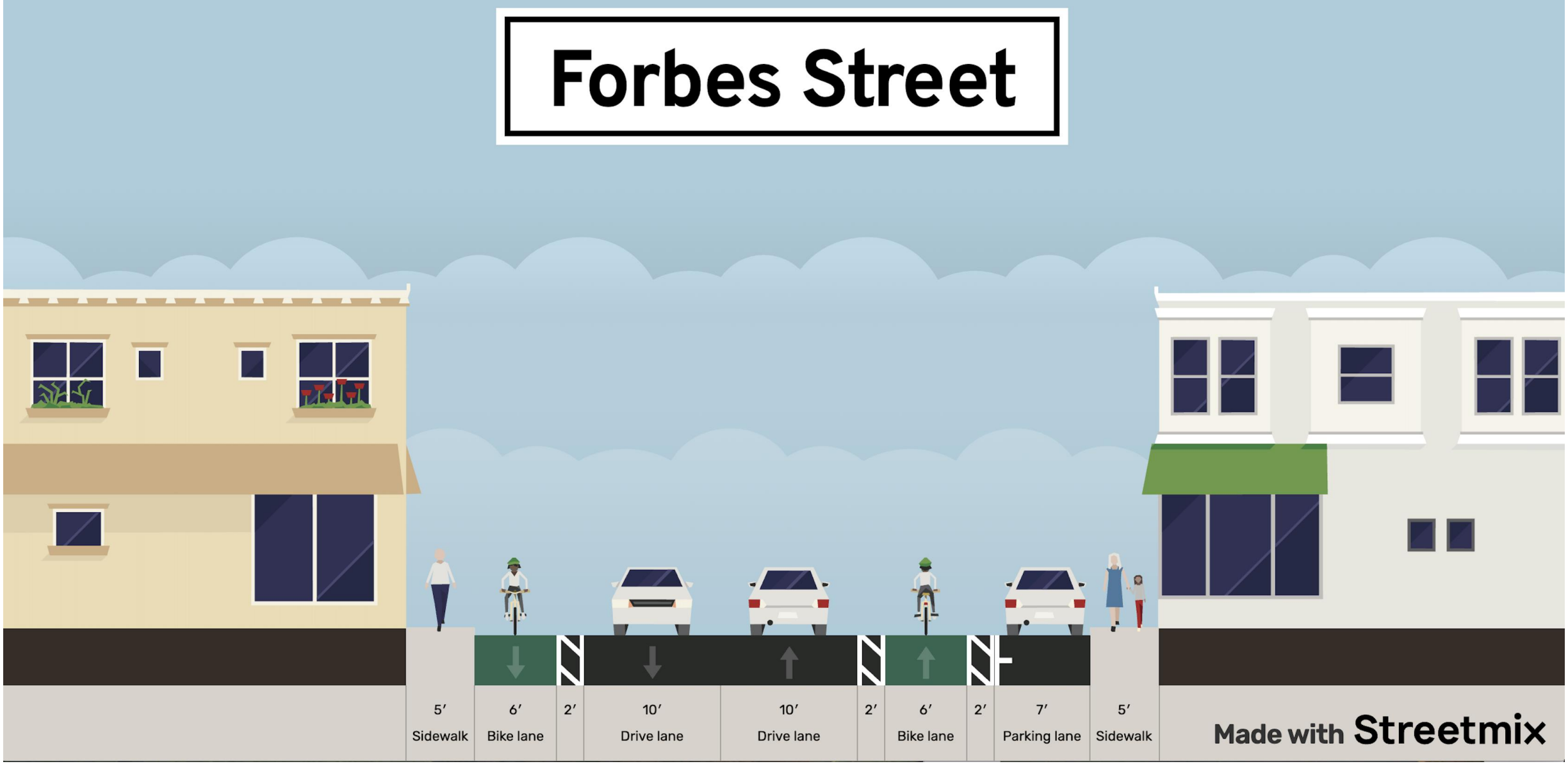


- This option continues the protected multi-use path recommended on Lakeshore Boulevard down High Street.
- This extends the concept of a protected trail along the lakeside further south.

9. Forbes Street

This is a primary alternate route for bike and pedestrian safety, forming the backbone of a network separate from the busy streets of Lakeport. Crucial to its success is the closure at Eleventh Street to divert through traffic to Main Street, alongside regular measures to restrict traffic to local access only. Additionally, a path connecting Forbes Street to Lakeport Boulevard is key to creating a low-speed, low-volume alternative to Main Street.

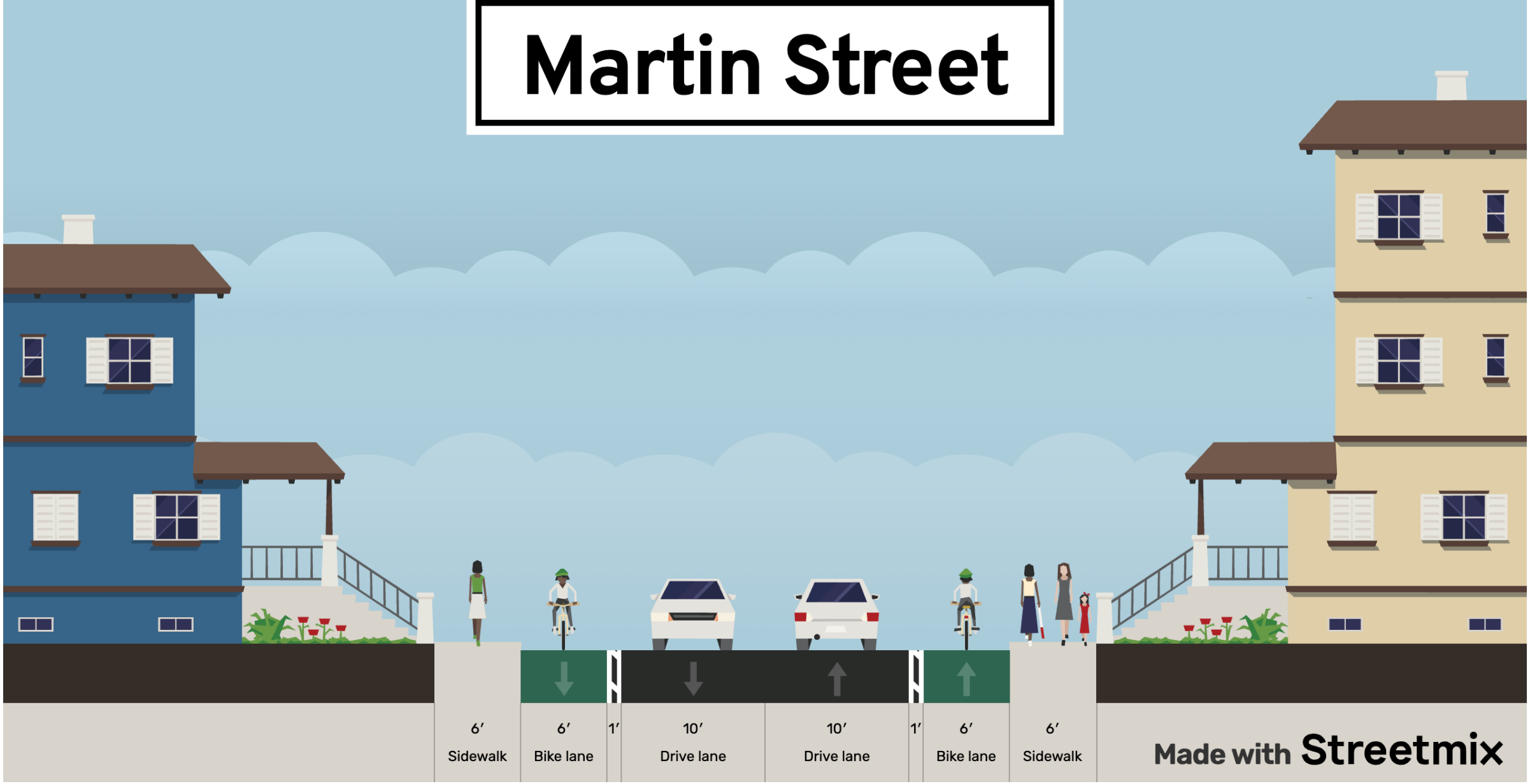
Forbes Street



- Reduce target speed to 15-25 MPH (currently posted at 30 MPH)by removing the double yellow stripe, add colorized bike lanes and buffers. This will narrow travel lanes to 10 feet.
- Reduce parking to one side of the street, and switch as appropriate each block. Block lengths of 250 feet allow for additional speed control at intersections.

10. Martin Street

Martin is an important connector, with a highway underpass. It has discontinuous and narrow sidewalk.



- Apply a 30-mph target speed along with providing 6-foot-wide sidewalks and a 6-foot-wide buffered bike lane.

11. Armstrong Street

Armstrong Street already functions as a shared street and is a low-speed, low-volume alternative route to Martin Street. The shared use patterns could be formalized with an Edge Lane Road treatment. Traffic diversion should be used to move through traffic to Martin Street. Traffic calming measures such as removal of the center stripes and a traffic calming divertor island may be needed to reduce speeders.

In any design, remove the centerlines, which tend to induce higher speeds. Centerlines are not needed on low volume streets.
Two options are:

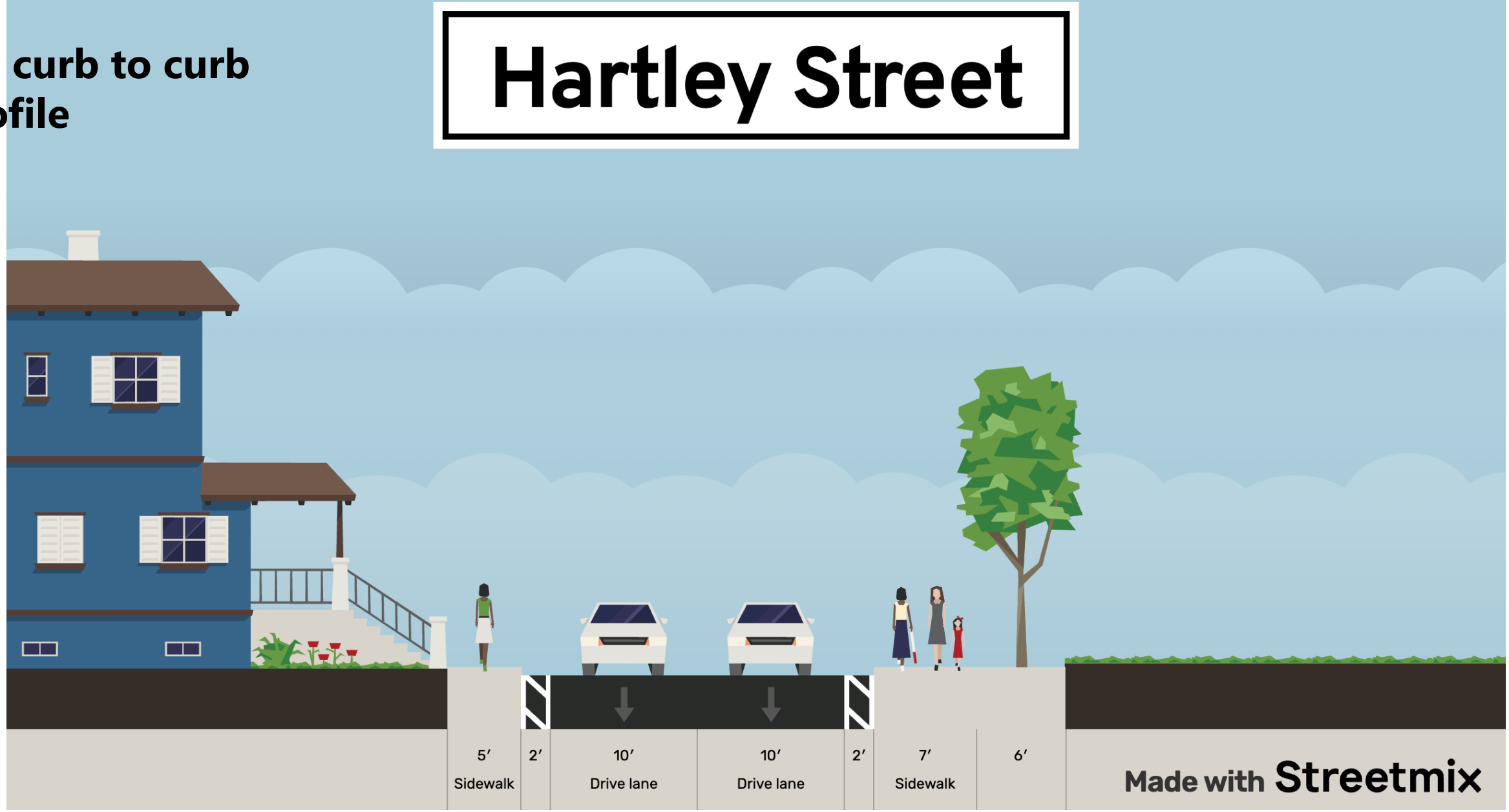
1. Armstrong Street is formalized as a shared street using an ELR treatment. Speeds are brought into the 15-mph range. Mini-Circles and chokers help keep speeds low. Parking lanes may be on gravel shoulders.
2. As an alternative, consider using a traffic diverter midway on Armstrong, granting pedestrian and bicycle access.

Marking showing the use of a **traffic divertor midway** on Armstrong, granting pedestrian and bicycle access, then keeping Armstrong as a low-speed 20 mph street.

12. Hartley Street

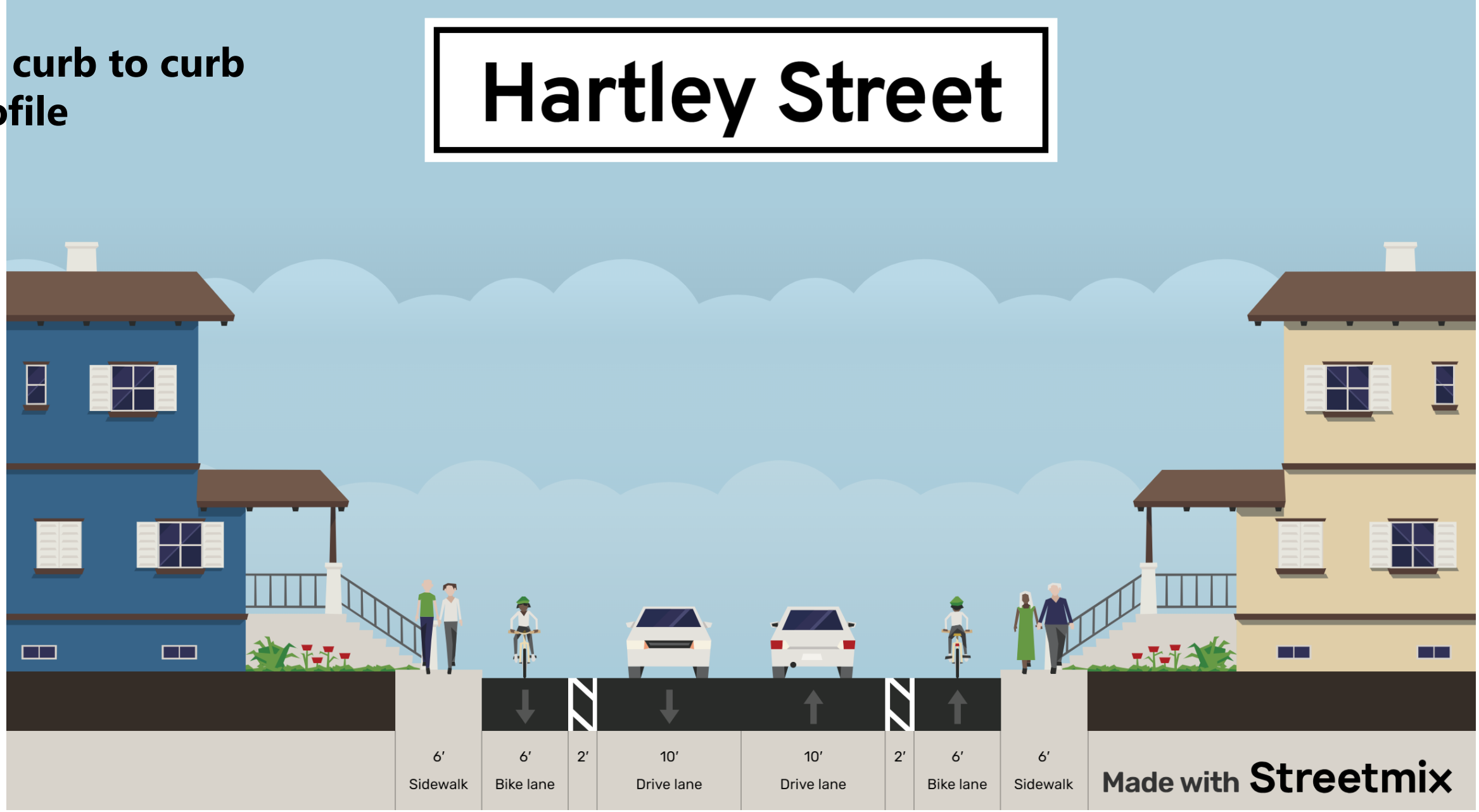
Hartley Street width varies. At this point, it measures 26 feet curb-to-curb. Narrow travel lanes to 9 feet, eliminate centerline except on vertical and horizontal curves then provide a 3-foot buffer to sidewalks.

26’ curb to curb profile



- Current travel lanes that are 13.5 feet wide induce higher speeds.
- By placing painted buffers anticipate lower, safer speeds and behavior.

36’ curb to curb profile



- The wider portions of Hartley Street provide room for buffered bike lanes.