Piedmont Pedestrian and Bicycle Master Plan, 2015–2024

City of Piedmont

Adopted November 3, 2014

Piedmont Pedestrian and Bicycle Master Plan, 2015–2024

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Acronyms

(A)CTC: (Alameda) County Transportation Commission
MTC: Metropolitan Transportation Commission
PBMP: [Piedmont] Pedestrian and Bicycle Master Plan
PUSD: Piedmont Unified School District
SR2S: Safe Routes to School(s)

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Introduction

1 | Overview of the PBMP

Interest in safer and more convenient walking and bicycling—for both recreation and transportation—has increased in Piedmont in recent years. In response to this interest, the City applied for a grant from the Alameda County Transportation Commission in the spring of 2013 to prepare a Pedestrian and Bicycle Master Plan (PBMP) for improving conditions for pedestrians and cyclists throughout the city. Given that much of the walking and biking activity in Piedmont consists of children going to and coming from school, the PBMP also pays special attention to the needs of school children (see the end of this chapter for more information about this component of the planning process).

The PBMP process was meant to provide a comprehensive framework for assessing and responding to the community's needs related to walking and biking. The main objectives were to (i) determine Piedmonters' critical needs and concerns and (ii) identify a realistic, affordable and effective set of improvements for the next ten years that will make walking and biking in Piedmont safer, easier and more popular.

The planning process consisted of three initial tasks:

- An inventory of **existing conditions,** to establish the objective state of walking and biking in Piedmont (see page 7 for more information about this task).
- A **needs assessment** process, to learn about the concerns and needs of local pedestrians and cyclists, and the obstacles and challenges to walking and biking in Piedmont (page 27).
- Formulation of a range of **improvement options**—or preliminary ideas to improve conditions—for the community to consider and prioritize (page 53).

These background tasks were followed by development of the "action plan" for the PBMP (see page 71), which consists of several elements related to implementation and represents the "actionable" parts of the PBMP:

- A list of **high-priority projects,** which are the most important and promising physical improvements for improving conditions.
- A list of **lower-priority projects,** which may be implemented if the City obtains additional funding.
- **Recommended programs** in the areas of safety, education, enforcement and encouragement or promotion.
- **Recommended policies,** or changes to City practices.
- **Other implementation actions,** or smaller-scale recommendations to further advance walking and biking in Piedmont.
- **Funding and phasing** considerations, particularly related to the high-priority projects.

The PBMP builds on other local planning efforts, particularly the City's General Plan, American with Disabilities Act Right-of-Way Transition Plan, Climate Action Plan and Complete Streets policy. The Complete Streets policy, adopted in November 2012, spells out the City's commitment to develop its transportation system so that it is safe and convenient for all users and modes, including pedestrians, bicyclists, drivers, transit riders, emergency responders, persons with disabilities, seniors and children, among others.

2 | Public outreach

Meaningful public outreach and engagement is essential for a planning effort to enjoy community buy-in and acceptance. This is especially true in a community as involved and engaged as Piedmont. With this in mind, the planning process for the PBMP included extensive outreach to members of the broader public and in-depth review by the Planning Commission and other decision-makers.

While the day-to-day work on the PBMP was conducted by City staff and consultants, the process was overseen by the **Piedmont Planning Commission.** In particular, the Commission, through hearings at key points throughout the process, heard input and feedback from the public and provided its own opinions; also, it hosted two well-attended public workshops.

The public outreach strategy for the PBMP included, among other activities: hearings, workshops, online surveys, and updates and announcements on the City's website and to the project's email distribution list. Below is a detailed list of outreach efforts carried out as part of the PBMP (some occurred before the formal start of the planning process).

Public hearings

- Joint "study session" of the City Council and Planning Commission (September 2012).
- Two City Council hearings (August 2013 and scheduled for November 2014, to consider adoption of the PBMP).
- Nine Planning Commission hearings (February, September, November and December 2013, and March, July, August, September and October 2014).
- Two joint hearings of the Park and Recreation Commissions (May and July 2014).

Community involvement

- Two public workshops (October 2013 on the needs assessment and February 2014 on the improvement options).
- Two online surveys (on the needs assessment and on the improvement options).
- Outreach tables at the Ramona/Ronada Arbor Day event (April 2014) and on Bike to Work Day (May 2014).

School-related

- Meeting with representatives of the Alameda County Safe Routes to Schools program (October 2013).
- "Walk audits" of Piedmont's four public and two parochial elementary and middle schools (November 2013).
- Presentation to the Piedmont Unified School District (PUSD) principals (January 2014).
- Meeting with PUSD's Assistant Superintendent for Educational Services (February 2014).
- Hearing of the PUSD Board of Education (August 2014).

Notices

- Mailer to every household in the city about the improvement options being considered and ways to participate in the planning process (February 2014).
- Regular updates about the plan's progress on the City's website.
- Notices of all hearings and workshops to more than 350 people who have signed up to be on the project's email list.
- Articles about the PBMP at key stages of the process in the Piedmont Post, the Piedmonter, Piedmont Patch and the Piedmont Civic Association's website.

Safe Routes to School component

Much of the walking and biking activity in Piedmont consists of children going to and coming from school. At the same time, children are among the most vulnerable users of the transportation system. For these reasons, the PBMP process was planned from the beginning to include a Safe Routes to School (SR2S) component. The objective was to incorporate final recommendations in the PBMP for improvements that will encourage more young Piedmonters to walk and bike to school more often.

> SR2S is a movement to make it safer and easier for children to walk and bike to school. Creating safe routes typically involves both physical improvements (such as safer crosswalks) and non-physical ones (for example, assigning crossing guards or organizing children to walk together in "walking school buses").

Accordingly, SR2S have been carefully considered at each stage of the PBMP process. Below are the main ways in which SR2S considerations have been woven into the planning process:

- As part of the needs assessment process, "walk audits" were conducted in November 2013 of Piedmont's four public and two parochial elementary and middle schools. The audits, each lasting approximately 90 minutes, consisted of examining problem areas for walking and biking in the school site, on adjacent streets and on key nearby access routes. Parents and staff were invited to participate in the audit of their respective schools; the audit of Piedmont Middle School also involved students in an in-class exercise and a short field trip to inspect conditions.
- The two online surveys for the project—which drew more than 700 responses combined—were promoted among students. As a result, 20% of the respondents on the first survey and 25% on the second identified themselves as students at an elementary or middle school in Piedmont.
- A presentation on the PBMP planning process was given to PUSD principals in January 2014 and the process was discussed in more detail with PUSD's Assistant Superintendent for Educational Services in February 2014.
- The Draft PBMP was presented at a hearing of the PUSD Board of Education in August 2014.
- The high-priority projects recommended in the PBMP have a strong SR2S orientation. The most common concern expressed during the needs assessment process with regard to school access was drivers not yielding to pedestrians at crosswalks. Accordingly, one of the high-priority projects is enhanced street crossings, mostly at key intersections on school routes. Other high-priority projects that will improve travel safety to schools include the road diets on Grand and Highland Avenues and the sidewalk railings on the Oakland Avenue bridge.
- Similarly, most of the recommended programs relate closely to SR2S, including not only the activities to promote walking and biking to school but also many of the education and enforcement efforts.

Existing Conditions

1 | Overview of existing conditions

The first task in the PBMP process was to conduct an inventory of existing conditions. The purposes of this task were to establish the current, objective state of walking and bicycling in Piedmont and to provide initial insights into the walking and bicycling experience in Piedmont. The inventory of existing conditions was also meant to inform the next task in the planning process, the needs assessment. (This assessment, described in the next chapter, considered the needs and concerns of local pedestrians and cyclists, and evaluated barriers and challenges to walking and bicycling as well as opportunities to improve conditions.)

This chapter summarizes the findings of the existing conditions inventory. It outlines the local conditions and issues relevant to walking and biking in Piedmont, including the city's form, land uses, demographics, street network, facilities and infrastructure, collision statistics and community programs and activities. Key physical conditions, highlighted throughout the text below in **orange,** are illustrated in the map on page 9. A key source of information for the first several sections of this chapter is the Piedmont General Plan.

2 | Urban form

The city of Piedmont is located in northwest Alameda County, in the heart of the San Francisco Bay Area. It is the second smallest of the county's 14 cities, with a population of 11,000 and a land area of 1.7 square miles. The city straddles a low ridge west of the Berkeley–Oakland hills, and is built on rolling hills cut by numerous canyons. The city has the mild Mediterranean weather typical of the Bay Area. One of Piedmont's unique geographic features is that it is entirely surrounded by Oakland. Moraga and Dimond canyons provide strong edges on the city's northwest and southeast sides respectively.

Piedmont as a whole is hilly. Streets in the western half, defined roughly as west of Highland and Crocker, tend to be less steep. This side of the city has some streets that follow a roughly rectangular street grid (especially north of Oakland Avenue), along with a number of gently curving streets. Much of this part of Piedmont was developed during the streetcar era, a time when neighborhoods were designed for walking; the pedestrian-friendly feel of the streets here contributes to the city's charm and attractiveness. In the eastern half of the city, streets follow natural contours and steep grades, creating a more suburban pattern.

Most of Piedmont has been developed with single-family homes, along with complementary civic facilities such as schools and parks. While Piedmonters tend to rely on nearby shopping districts in Oakland, the city does have **two commercial areas,** both quite small: next to the Civic Center and along Grand Avenue south of Linda Avenue (the Grand Avenue area is the northern tip of a neighborhood shopping district that is located mostly in Oakland). There are no industrial facilities in the city. This land-use pattern is expected to remain essentially unchanged in the foreseeable future.

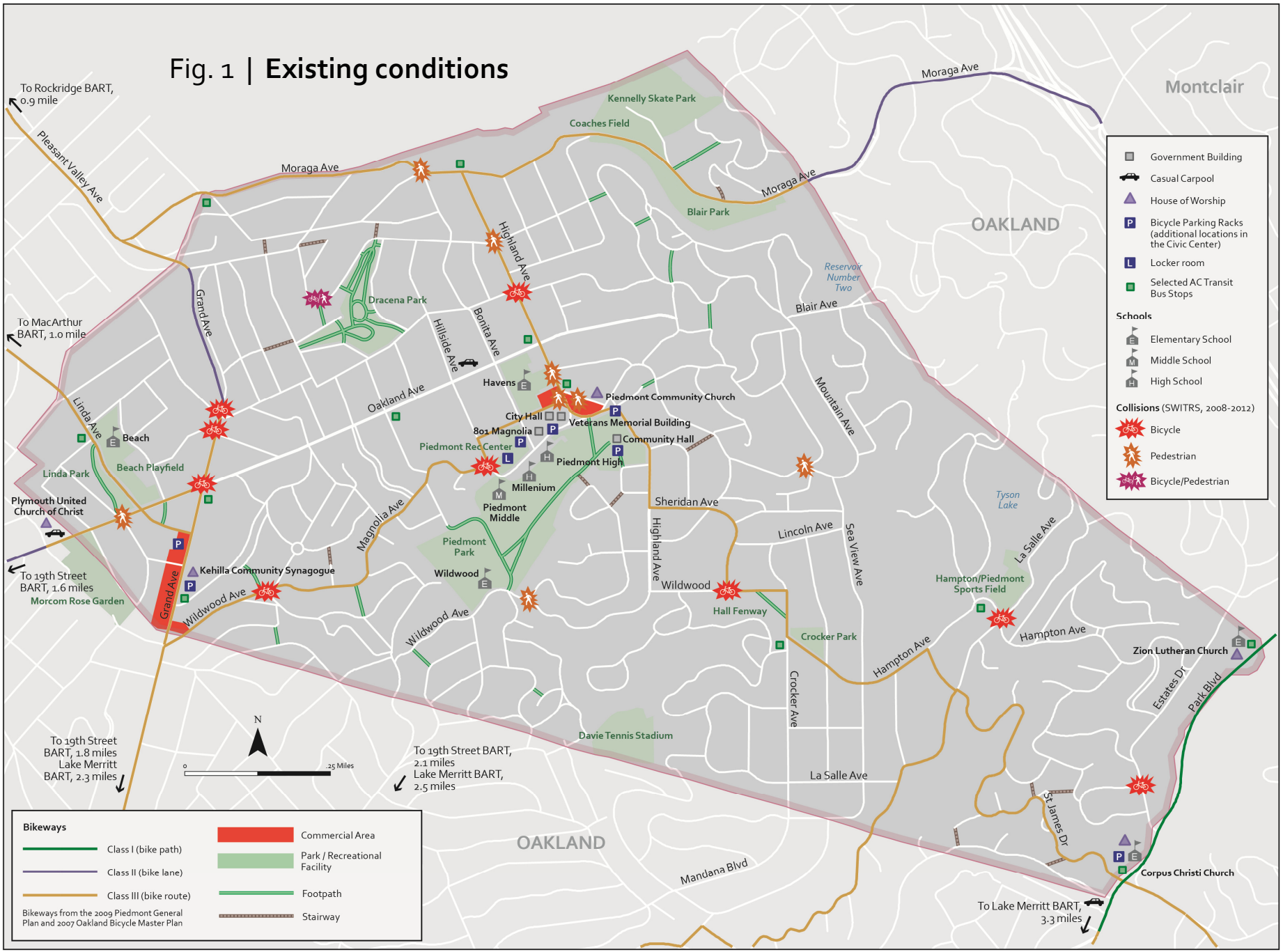


Fig. 1 | Existing conditions
To Rockridge BART, 0.9 mile
Pleasant Valley Ave
Moraga Ave
Kennelly Skate Park
Coaches Field
Blair Park
Montclair
OAKLAND
Reservoir Number Two
Blair Ave
Dracena Park
Grand Ave
Highland Ave
Bonita Ave
Hillside Ave
To MacArthur BART, 1.0 mile
Linda Ave
Beach
Beach Playfield
Linda Park
Oakland Ave
Havens
Piedmont Community Church
City Hall
Veterans Memorial Building
801 Magnolia
Community Hall
Piedmont Rec Center
Piedmont High
Millenium
Piedmont Middle
Mountain Ave
Plymouth United Church of Christ
Magnolia Ave
Sheridan Ave
Tyson Lake
Lincoln Ave
Sea View Ave
La Salle Ave
Piedmont Park
Kehilla Community Synagogue
Wildwood
Wildwood Ave
To 19th Street BART, 1.6 miles
Morcom Rose Garden
Hall Fenway
Hampton/Piedmont Sports Field
Hampton Ave
Crocker Park
Zion Lutheran Church
Estates Dr
Park Blvd
Crocker Ave
Davie Tennis Stadium
To 19th Street BART, 1.8 miles Lake Merritt BART, 2.3 miles
To 19th Street BART, 2.1 miles Lake Merritt BART, 2.5 miles
N
0
.25 Miles
St James Dr
Corpus Christi Church
Mandana Blvd
To Lake Merritt BART, 3.3 miles
Government Building
Casual Carpool
House of Worship
Bicycle Parking Racks (additional locations in the Civic Center)
Locker room
Selected AC Transit Bus Stops
Schools
Elementary School
Middle School
High School
Collisions (SWITRS, 2008-2012)
Bicycle
Pedestrian
Bicycle/Pedestrian
Bikeways
Class I (bike path)
Class II (bike lane)
Class III (bike route)
Bikeways from the 2009 Piedmont General Plan and 2007 Oakland Bicycle Master Plan
Commercial Area
Park / Recreational Facility
Footpath
Stairway

3 | Key destinations

Piedmont has five main **public schools,** two additional, smaller public schools, and one **private school:**

- Main public schools: Beach, Havens and Wildwood Elementary; Piedmont Middle; and Piedmont High
- Other public schools: Millennium High and Piedmont Adult School, which is co-located with Piedmont High
- Private/parochial: Corpus Christi Elementary, affiliated with Corpus Christi Church (see houses of worship below)

The city's **parks** are:

- Blair Park, the second largest park in Piedmont, used mainly by dog owners
- Crocker Park, a mini-park serving as passive open space
- Dracena Park, which has children's play equipment, footpaths and a newly built pedestrian bridge
- Hampton/Piedmont Sports Field, the only park in the eastern part of the city; it has a baseball field, two tennis courts and a recreation center which houses Piedmont Play School
- Linda Park, which has a footpath and fenced dog run
- Piedmont Park, the city's "flagship" park, which includes the popular Exedra Plaza, the Community Hall, a fountain, tot lot, dog-run area, two tennis courts and a creek-side trail

Other important **recreational facilities** include:

- Coaches Field/Kennelly Skate Park
- Davie Tennis Stadium (owned by the City of Oakland)
- Hall Fenway, a block-long linear park
- Beach Playfield, which includes two tennis courts, a soccer/baseball field and a tot lot
- Morcom Rose Garden, only a portion of which is in Piedmont
- Piedmont Recreation Center, which houses the City's Recreation Department, the Community Pool and four tennis courts

The main **government buildings** serving the walk-in public—all located in the Civic Center—are:

- City Hall and adjacent Fire Station
- Community Hall, located within Piedmont Park
- Veterans' Memorial Building, which houses the police station and the Veterans' Hall
- 801 Magnolia, home to the Piedmont Center for the Arts

Lastly, there are four **houses of worship** within Piedmont and one just over the city border:

- Piedmont Community Church
- Corpus Christi Church
- Kehilla Community Synagogue
- Zion Lutheran Church
- Plymouth United Church of Christ, in Oakland (the parking lot is in Piedmont)

4 | Demographics

According to the 2010 Census, Piedmont has the highest median age in Alameda County: 46.2 years, compared to the county median of 36.6 years. The high median age is partly due to the absence in the city of affordable starter homes for young adults and families. One in seven Piedmont residents, or 15%, is 65 years old or over; an additional 28% are between 50 and 64 years old. The number of older Piedmonters is expected to continue growing during the next decade, and the City expects increasing demand for senior services and activities. At the same time, children and teenagers represent 30% of the city's population. Given the excellent reputation of Piedmont's schools, the city is expected to continue to attract, and retain, parents with school-age children.

5 | Street network

The majority of Piedmont's streets existed by 1912, and with a few exceptions, the rest were constructed by 1929. The city has four street segments designated as "arterials." These are high-volume streets whose main purpose is to carry traffic between highways and other arterials or major "collectors." These four streets form the backbone of Piedmont's circulation system, and all of the city's traffic signals are located along these streets. These four arterials are:

- Grand Avenue for its entire length through the city
- Highland Avenue from Moraga Avenue to Oakland Avenue
- Moraga Avenue for its entire length through the city
- Oakland Avenue from the Oakland border to Highland Avenue

There is also a system of major and minor collectors. The main purpose of these lower-volume streets is to carry traffic from arterials to other collectors and "local" streets. The major collectors include a series of short, linked street segments that extends east and south from the Civic Center along Highland, Sheridan, Lincoln and Crocker Avenues; and also east and north along Hampton Road and La Salle Avenue to Oakland's Montclair neighborhood. Linda Avenue, which connects Grand Avenue to the Piedmont Avenue shopping district in Oakland, is also a major collector.

Minor collectors include several streets in and around the Civic Center, including Magnolia and Wildwood Avenues; a series of short segments connecting central Piedmont to Montclair; and another series of segments extending east to Park Boulevard. The rest of the network is made up of local streets, which are low-volume roadways whose main purpose is to provide access to abutting properties. There are no highways within Piedmont.

Grand Avenue is the busiest street in Piedmont, carrying about 15,000 cars per day as it exits the city to the south. Moraga Avenue carries about 12,000 cars daily. Oakland Avenue and Highland Avenue each carry between 7,000 and 10,000 cars per day. The volumes on the collector streets are substantially lower. Despite perceptions of worsening traffic, volumes on most Piedmont streets have remained relatively stable over the past 30 years.

According to the General Plan, the City considers streets with a curb-to-curb width of greater than 35 feet to be of "adequate" width; streets that are 20–35 feet wide to be "marginally adequate;" and streets narrower than 20 feet to be "inadequate." About two-thirds of Piedmont's streets are classified as marginally adequate, with a few streets classified as inadequate. On these streets, parked cars sometimes encroach on sidewalks or reduce the effective width of travel lanes to substandard dimensions and might impair access by emergency vehicles. However, widening of these streets is in most cases impractical due to steep topography or limited right-of-way.

Of the city's four arterials, Highland Avenue is flat; Grand Avenue has a gentle slope; Moraga Avenue is moderately steep; and Oakland Avenue has several steep blocks. Other key streets that are generally flat or only gently hilly include Linda, Vista and Sheridan Avenues, St. James Drive, La Salle Avenue south of Hampton Road and blocks of Magnolia, Wildwood and Crocker Avenues. Key streets that are at least moderately steep include Blair, Mountain, Lincoln, Hampton, and La Salle north of Hampton and Estates.

The Department of Public Works is responsible for maintaining the city's streets. It inspects all streets annually and identifies priorities for maintenance and repair, including periodic resurfacing,

6 | Pedestrian facilities

Piedmont, like most cities, does not have a comprehensive inventory of sidewalks and crosswalks (such inventories are very expensive and not essential for long-range planning purposes). From observation, it appears that almost all the arterials and collectors in the city have sidewalks and many have marked crosswalks at key intersections. Many of the local streets also have sidewalks, but few have marked crosswalks, except at crossings with arterials and collectors. In recent years, the City has been installing curb ramps at key crosswalks to improve access for persons with disabilities.

In 2008–09, the City, with the help of a consultant, completed field surveys of 16 streets or street segments as part of the City's Americans with Disabilities Act Right-of-Way Transition Plan. The purpose is to help plan improvements to the walking environment for persons with disabilities. The 16 stretches surveyed are listed below; many are in or near the Civic Center and all are arterials or collectors except those shown in italics:

- Grand Avenue from Wildwood to Rose Avenues
- Linda Avenue from Grand to Rose Avenues
- *Lake Avenue from Linda to Howard Avenues*
- Oakland Avenue from Olive to Highland Avenues
- Highland Avenue from Sheridan to Moraga Avenues
- Moraga Avenue from Red Rock Road to Pala Avenue
- Vista Avenue from Hillside to Highland Avenues
- Highland Way (entire length)
- Magnolia Avenue from Hillside to Highland Avenues
- Bonita Avenue from Magnolia to Oakland Avenues
- *Artuna Avenue (entire length)*
- *Dracena Avenue (entire length)*
- Wildwood Avenue from Portsmouth to Prospect Avenues
- Hampton Road from Crocker to King Avenues
- Hampton Road from Glen Alpine to La Salle Avenues
- La Salle Avenue from Hampton Road to the northern end of Hampton Field

The Transition Plan summarized the presence and condition of sidewalks (including width, evenness, cross slopes and obstructions), crossing driveways, curb ramps and planting strips and tree wells on each of the 16 segments. Moreover, it provided recommendations specific to each segment to address identified problems. The City hosted a workshop in December 2008 to solicit feedback from the public on the Transition Plan. Its findings and recommendations have been used to help develop the needs assessment of the Pedestrian and Bicycle Master Plan. The needs assessment has also relied on public input to identify problems and potential solutions on the many streets not surveyed by the City.

The City has two main tools to ensure sidewalks are maintained and repaired. First, the City requires a sidewalk inspection every time a home is sold or a building permit is issued for a project valued at more than $5,000; any deficiencies that are not caused by street trees must be repaired by the homeowner before the permit is issued. Second, the City uses its own funds to repair or replace sidewalks damaged by street trees. Funds are directed to streets where the need is most urgent—typically where tree roots have caused the sidewalk to buckle.

In addition to its sidewalks, Piedmont has a system of **footpaths and stairways** that run through city blocks, serving as shortcuts between streets, many of them in steep areas. These walkways are maintained by the Department of Public Works, although adjoining homeowners are responsible for clearing encroaching vegetation. Most range from 100 to 300 feet long. The walkways,

identified by the streets or locations they connect, are listed to the right. In addition, there are walking paths in Dracena, Linda and Piedmont parks, Beach Playfield and the Morcom Rose Garden.

Footpaths and stairways

- Ramona and Arroyo Avenues
- Ramona Avenue and Park Way
- Monticello and Lorita Avenues
- Monticello Avenue/Park Way and Artuna Avenue
- Ricardo and York Avenues
- Pala and Scenic Avenues
- Scenic (lower) and Scenic (upper) Avenues
- Blair and Scenic (upper) Avenues
- Blair and Pacific Avenues
- Moraga Avenue and Abbott Way
- Moraga Avenue and Echo Lane
- Mountain Avenue and Piedmont Court
- Mountain and Sierra Avenues
- Hazel Lane and Guilford Road
- Hazel Lane and Piedmont Park
- Fairview Avenue and Nova Drive
- Sylvan and Boulevard Ways
- Arbor Drive and MacKinnon Place
- Magnolia and Palm Avenues
- Wildwood Avenue and Ranleigh Way
- Harvard Road and alley off Oakmont Avenue
- Wildwood and Crocker Avenues (Hall Fenway)
- St. James Drive and Cambrian Avenue
- St. James Drive and Sandringham Road
- St. James Drive and Trestle Glen Road
- Trestle Glen Road and St. James Place

7 | Bicycle facilities

The Piedmont General Plan incorporates a "composite of mapped [bikeways] from existing bike plans," including the City of Oakland's. These bikeways have not been formally adopted by the City but, according to the General Plan, they "provide a starting point for further discussion." This network of **designated bikeways** includes the bicycle lanes on Grand Avenue as well as a series of "Class III" bike routes (signed streets without bicycle lanes). These bikeways—and how they continue into Oakland to connect to existing or proposed bikeways—are:

- The rest of Grand Avenue (continues on both the north and south ends as bike routes)
- Linda Avenue from Oakland Avenue to the city border (continues as a bike route)
- Oakland Avenue from Grand Avenue to the city border (continues as bike lanes)
- The entire length of Moraga Avenue through the city (continues on the west as a bike route and on the east as bike lanes)
- A connection from the Civic Center to Grand Avenue along Vista, Magnolia and Wildwood Avenues (continues as a bike route)
- Highland Avenue from Moraga to Sheridan Avenues, continuing to the southeast corner of the city along Sheridan, Wildwood and Crocker Avenues, Hampton Road and St. James Drive (continues as a bike route along Leimert Boulevard and links to a bike route on Park Boulevard south of Leimert and to a bike path on Park north of Leimert)
- A connection from St. James Drive to the city border along La Salle Avenue and Indian Road (continues as a bike route along Sunnyhills)

While bicyclists may use any street in Piedmont, consistent with State law, the only street with facilities specifically for bicycling is Grand Avenue, which has bike lanes from Greenbank Avenue/Cambridge Way to Arroyo Avenue. There are no off-street trails or paths. A related type of project deserves mention here: at several locations, the City has converted excess pavement into planted traffic medians and curb extensions in order to improve safety and aesthetics. These projects include three medians on lower Grand Avenue and "triangles" at the intersections of Ramona/Ronada Avenues, Indian/Hampton Roads and Highland/Mountain Avenues. By discouraging speeding while beautifying streets, these projects benefit cyclists, pedestrians and neighborhood residents.

In mid-2014, as the PMBP was being developed, 29 **bicycle-parking racks** were installed in the Civic Center, including in Piedmont Park, at the Recreation Center, outside the Veterans' Memorial Building, at the Center for the Arts and outside the Police Station. In addition, there are racks at the High and Middle Schools, Havens and Wildwood Elementary Schools, Corpus Christi School, Kehilla Synagogue and the office complex at 1345 Grand Avenue. Lastly, in terms of facilities for changing and for storing clothes, bikes and equipment, there are City-owned women's and men's **locker rooms** with lockers, restrooms and showers at the Recreation Center, for users of the Community Pool.

8 | Other transportation

Bus service in Piedmont is provided by AC Transit. The agency runs several bus lines with stops in the city. The main lines, and their endpoints, are:

- C and P (transbay lines): From Highland Avenue and Highland Way to the Transbay Temporary Terminal in San Francisco. The two lines have the same endpoints but follow different routes: within Piedmont, Line C stops along Highland and Moraga Avenues; Line P stops along Highland and Oakland Avenues.
- 11: From Oakland's Dimond District to Estates Drive and Inverleith Terrace in Piedmont. This line has stops along Oakland Avenue, at Highland Avenue/Highland Way and, during weekday peak periods, on several streets heading east from the Civic Center toward its endpoint at Estates Drive/Inverleith Terrace.
- 12: From the Berkeley BART station to downtown Oakland. There are stops on Linda and Grand Avenues.
- 606: From Highland Avenue and Highland Way to Head Royce High School in Oakland. There are stops on Highland, Sheridan and Crocker Avenues. This line is timed to match school hours; it is open to all passengers but it operates only when school is in session.

In addition, four lines stop along Park Boulevard, on the city's eastern edge: V, a transbay line; 18, which runs from Albany to Montclair; 618, from downtown Oakland to Oakland's Piedmont Pines neighborhood; and 688, from near Oakland's Lake Merritt to north Berkeley. Line 26, which runs along Lakeshore Avenue in Oakland, stops within two blocks of the Piedmont border. The main bus stop in Piedmont is at Highland Avenue and Highland Way. This stop serves lines C, P, 11 and 606 and is equipped with a shelter. All AC Transit buses are outfitted with wheelchair lifts or ramps and with front-mounted racks for two bicycles.

There are five **BART stations** within three miles of Piedmont's borders. The stations (and their approximate distance from Piedmont City Hall) are:

- MacArthur (2.2 miles)
- Rockridge (2.5 miles)
- Oakland 19th Street (2.7 miles)
- Oakland 12th Street (3.0 miles)
- Lake Merritt (3.4 miles)

Bikes are allowed on all BART trains and in all stations at all times; however, they are never allowed in the first car or in any crowded car, and during commute hours they are not allowed in the first three cars. Folded bikes are allowed on any car at any time.

Lastly, there are three **casual-carpool locations** in Piedmont or just over the border for people wishing to travel to San Francisco over the Bay Bridge:

- On Oakland Avenue just east of Hillside Avenue (Piedmont)
- On Oakland Avenue at Monte Vista Avenue (Oakland)
- On Park Boulevard between Trestle Glen Road and Hollywood Avenue (Oakland)

9 | Number of commuters

According to the 2000 Census, approximately 1.5% of Piedmont residents commuted to work primarily by walking while another 0.7% commuted by bike. By comparison, 62% drove to work alone, 17% carpooled, 10% rode public transit, 8% worked from home and 1% used other means.

More recent figures, also from the U.S. Census Bureau, show significant increases in walking and biking (although numbers and percentages remain quite small). According to the Census Bureau's 2007–2011 American Community Survey, the percentage of pedestrian commuters in Piedmont was 3.4% while bike commuters represented 3.7%. (Comparable figures for Oakland are 4.3% and 2.7% respectively and for Alameda County as a whole they are 4.0% and 1.9% respectively.) The majority, 57%, drove to work alone, 15% carpooled, 10% rode public transit, 8% worked from home and 2% used other means.

In a separate effort, the Alameda County Transportation Commission has been conducting manual counts of pedestrians and bicyclists annually at various locations throughout the county. The program includes one count location in Piedmont, at the intersection of Grand and Oakland Avenues. At this location, counts have been performed at the end of the school day (2–4 pm) and in the afternoon (4–6 pm), and in 2012 also in the morning (7–9 am); for 2010 and 2011, the counts were carried out in September–October, and in September–November for 2012. (Counts also exist for this location for earlier years but it would not be advisable to compare them across time because they were performed at varying times of the day and even of the week.) While firm conclusions cannot be drawn from such limited data, the counts show that the number of pedestrians and bicyclists at Grand and Oakland Avenues has increased markedly between 2010 and 2012 during the times surveyed (see Table 1, below).

Table 1 | Pedestrian and bicycle counts

	Pedestrians			*Bicyclists*		
	Morning	*End of school*	*Afternoon*	*Morning*	*End of school*	*Afternoon*
2010	no data	123	45	no data	16	29
2011	no data	78	54	no data	19	51
2012	212	165	163	174	93	92

10 | Traffic safety

The data in this section comes from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS), a database of traffic collisions as reported to and collected by local police departments and other law enforcement agencies. This section examines data for 2008–2012, the most recent five-year period for which data is available. Because SWITRS consists only of reports taken by officers in the field, the incidents in the database represent only a portion of all collisions. This also means that the incidents in SWITRS are more likely to be serious ones: minor pedestrian and bike collisions—often involving each other or stationary objects but not cars—are less likely to be reported to a police officer and lead to police response.

For the 2008–2012 period, SWITRS reports eight collisions in Piedmont involving pedestrians and cars; nine involving bicyclists and cars; and one involving a bicyclist and pedestrians. These 18 collisions caused no deaths but did result in eight injured pedestrians and nine injured bicyclists (or an average of almost two each a year; see Table 2, below).

Table 2 | Pedestrians and bicyclists injured

	Pedestrians injured	*Bicyclists injured*	*Total*
2008	2	3	5
2009	2	1	3
2010	4	2	6
2011	0	2	2
2012	0	1	1
	8	*9*	*17*

Only two of the **18 collisions** occurred in the eastern third of Piedmont, while another three collisions took place in the central part. This does not necessarily mean that these parts of the city are safer for walking and bicycling; instead, it more likely means that there are fewer pedestrians and bicyclists there, due to the lack of key destinations and the steep, narrow streets. The remaining 13 collisions occurred in the western part of Piedmont, including four in the Civic Center, two further north on Highland Avenue and four near the intersection of Grand and Oakland Avenues. These areas are not necessarily more dangerous for walking and bicycling; rather, these areas are where most walking and bicycling occurs because it encompasses most of the city's key destinations, including the Civic Center, Piedmont Park and Dracena Park.

Table 3, below, shows the party at fault for the collisions. Drivers were the party at fault roughly half the time, while pedestrians and bicyclists were at fault the other half. Of the eight collisions involving a pedestrian and a car, three resulted from the driver not yielding the right-of-way to the pedestrian at a crosswalk while another three were the result of the pedestrian walking or running into the car's path. Among the nine bicycle–car collisions, there was no dominant cause of collision or associated violation of the California Vehicle Code. The primary cause of collision behind the lone pedestrian–bicycle collision was the bicyclist riding under the influence.

Table 3 | Collisions by party at fault

	Ped–car collisions	*Bike–car collisions*	*Ped–bike collisions*
Driver	4	5	--
Pedestrian	4	--	0
Bicyclist	--	4	1
	8	*9*	*1*

The tables below categorize the collisions by time of day (Table 4) and the pedestrians and bicyclists injured in collisions by age (Table 5). Half of the collisions took place in the evening, while one quarter occurred in the morning and one quarter in the afternoon.

Table 4 | Collisions by time of day

Morning (6:00–11:59 am)	4
Afternoon (12:00–4:59 pm)	5
Evening (5:00–9:59 pm)	9
Night (10:00 pm–5:59 am)	0
	18

Table 5 | Pedestrians and bicyclists injured, by age group

Child (0–12)	3
Teenager (13–17)	2
Young adult (18–34)	4
Middle-aged (35–64)	7
Senior (65 and older)	1
	17

The Piedmont Police Department monitors speeds to establish safe driving limits, and enforces traffic laws to minimize speeding and unsafe driving. The posted speed limit on most Piedmont streets is 25 miles per hour (mph), although a few segments have 15 mph limits due to being narrow or being in school zones.

11 | Programs and activities

The Piedmont Police Explorers is a program sponsored by the Boy Scouts and supported by the Piedmont Police Department that exposes young adults, aged 14–21, to careers in law enforcement.

For the past 15 years, the Police Explorers have hosted a one-day annual "bike rodeo" in the city. The purpose of the rodeo, held on varying dates and at varying schools, is to encourage bicycling among schoolchildren and teach them how to ride safely. At the rodeo, Police Explorers set up, and help kids maneuver, a bicycling obstacle course with simulated streets, intersections, stop signs, traffic lights and crosswalks. They also inspect and repair kids' bikes for free, give away helmets and raffle prizes, distribute literature and provide food, games and entertainment.

Piedmont CONNECT is a community group dedicated to creating a more environmentally sustainable Piedmont. For the past two years, the group has hosted an "energizer station" at the Grand Lake Ace Hardware store for Bike to Work Day, held in May. At the station, group members give away coffee, pastries, fruit, bike-commuting information—and, of course, encouragement—to bicyclists. Another Piedmont CONNECT activity is to showcase green transportation in the city's Fourth of July parade. At the 2012 parade, the group was awarded "Best Community Organization" for its contingent of bikes, push scooters, go-karts and electric cars, along with people marching on foot.

More recently, the Alameda County Safe Routes to School (SRTS) program accepted the city's three elementary schools (Beach, Havens and Wildwood) and its middle school (Piedmont) into the program. The program works with schools across the county on a range of activities to facilitate and encourage walking and biking to school. Activities include walk and bike "audits" to uncover obstacles; walk- and bike-to-school days; walking school "buses" and bike "trains;" safe-bicycling clinics; workshops for parents and educators; free bike repairs; and carpooling promotion. In the 2013–14 school year, Beach was expected to receive the full complement of the program's services, while the other three schools will be incorporated into the program gradually.

12 | Related plans

The Piedmont Pedestrian and Bicycle Master Plan is the main document addressing walking and bicycling issues in the city. However, there are several other planning documents and efforts, both by the City and by other agencies, that have a strong bearing on non-motorized transportation in Piedmont. One example is the City's Americans with Disabilities Act Right-of-Way Transition Plan, whose main provisions were summarized in the section above on "Pedestrian facilities." Other influential planning documents are summarized below.

Piedmont General Plan

The Piedmont General Plan sets the overall long-term planning direction for the city. The plan, adopted by the City in 2009, does not propose specific projects to improve walking and bicycling. However, it incorporates a citywide network of bikeways and generally expresses strong support for walking and bicycling. The section on walking states:

> ...Piedmont aspires to remain a safe, convenient, and attractive place to walk. Over the next 20 years, the City will work to increase the percentage of trips made by walking by improving the design and maintenance of pedestrian facilities, ensuring the safety of pedestrians, and providing connectivity between pedestrian routes.
>
> The City will continue to look for ways to make Piedmont safer and more comfortable for pedestrians. Median islands, new types of crosswalk paving, activated pavement lights, flashers, and other design changes have been explored on Oakland Avenue and may be explored elsewhere during the coming years. The city is particularly interested in changes which make it easier for Piedmont students to walk to school, and for residents to walk to local bus routes.

Similarly, the section on bicycling states:

> Although, there are no officially designated bike routes in the city, Piedmont will take measures to accommodate bicycling to a greater degree in the coming years. ...[T]he City will consider designation of bicycle routes, installation of signs, and requirements for bicycle parking at commercial and public buildings. Piedmont will also take steps to promote bicycle education and bicycle safety.

One of the goals of the General Plan is to "Encourage walking and bicycling as viable modes of transportation for traveling within Piedmont" (Goal 10). More-specific policies and actions under this goal call for:

- Maintaining a system of well-maintained sidewalks.
- Improving Piedmont's mid-block footpaths.
- Making it safer and easier to cross the city's arterials.
- Designating bike routes and accommodating bikes where feasible.
- Expanding bike parking in parks, at schools and at other public buildings.
- Minimizing damage to sidewalks from street trees.
- Continuing the City's sidewalk maintenance and repair program.
- Closing gaps in the city's sidewalk network.
- Updating the inventory and condition ranking of the footpaths.
- Considering naming paths after notable Piedmonters as a way of encouraging community stewardship of this resource.
- Working with the Piedmont Unified School District to determine the feasibility of a Safe Routes to School program.
- Developing a bicycle plan that incorporates the route alignments described in the General Plan (outlined in the "Bicycle facilities" section above) and that identifies capital improvements and safety, maintenance and education programs.

- Improving crossings at key intersections through pavement changes, restriping, curb redesign, landscaping and other measures and continuing to comply with the Americans with Disabilities Act.

There are policies and actions to promote walking and bicycling scattered throughout other sections of the General Plan. The main ones include:

- Review the development standards for commercial uses to ensure that they promote pedestrian-oriented development and attractive streetscapes (Action 2B).
- Encourage changes that transform the Piedmont Civic Center into a more cohesive pedestrian-oriented gathering place to enhance social interaction (Policy 4.1).
- Consider streets not only as circulation routes but also as public spaces that define the character of the city (Policy 7.2).
- Consider pedestrian and bicycle access in the design of parks, schools and other public facilities (Policy 7.5).
- With the City of Oakland, address projected increases in congestion on Grand, Moraga and Oakland Avenues and coordinate planned changes to these streets (Policy 8.8).
- Slow or calm traffic on Piedmont streets through such measures as signage, turning restrictions, lane restriping, median islands and enforcement of traffic laws (Policy 12.4).
- Subject to traffic-safety studies and cost estimates, improve walking access to Blair Park (Action 23.E).

Because the General Plan is a broad policy document, it cannot be considered the final word on every issue. To supplement it, the General Plan recommends the development of a number of focused plans to address narrower topics more specifically. Among the focused plans recommended are a bicycle master plan; a pedestrian safety plan for Oakland Avenue; master plans for individual parks; and parking-management and implementation strategies for the Civic Center. Lastly, the General Plan includes an implementation matrix—Table 11.1—that lists, for each of the 134 actions recommended in the General Plan, the responsible parties and timeframe for implementation.

Piedmont Climate Action Plan

The Climate Action Plan, adopted in 2010, is the City's strategy for reducing emissions of greenhouse gases (GHG). The plan includes seven measures to facilitate or promote walking and biking. The plan estimates that, combined, these measures would achieve approximately 7% of the City's GHG reduction target. The measures, including their implementation actions, are:

- TL 1.1: Consider expanding and enhancing bicycling and pedestrian infrastructure throughout the community if financially feasible and practical.

  The description of this measure calls for more crosswalks and curb cuts; bike lanes and "cycle tracks" (on-street bikeways separated from cars by a physical barrier) on busier streets; and traffic-calming elements and bike signage on streets with lower traffic volumes.

  - Prepare and adopt a Bicycle Master Plan that coordinates with City of Oakland bicycle planning initiatives.
  - Construct bicycle infrastructure improvements.
  - Conduct a pedestrian obstacle study.
  - Prepare and adopt a Pedestrian Master Plan.
  - Construct pedestrian improvements identified in the pedestrian obstacle study and Pedestrian Master Plan.

- TL 1.2: Install bike racks in commercial and civic areas of the City where racks do not currently exist if financially feasible and practical.

- Conduct bicycle parking analysis in City's commercial and civic areas.
- Install bicycle parking facilities in underserved areas (20% of total to be Class I or II bicycle parking facilities).
- Adopt an ordinance that requires new development to provide adequate bicycle parking for tenants and customers; and requires businesses with more than 30 employees to provide end-of trip facilities including showers, lockers, and Class I bicycle storage facilities.

- TL 1.3: Consider incorporating pedestrian-friendly design features into the City's civic/commercial centers.

  No associated implementation actions, but this measure calls for the City to develop streetscape designs for the Civic Center and the commercial area on Grand that increase pedestrian safety by reducing street-lane widths and by incorporating median islands, special paving, bulb-outs and additional signage and landscaping.

- TL 1.4: Evaluate the potential for mixed-use development in Piedmont's existing commercial center.
  - Identify the potential for high-quality, pedestrian-oriented, mixed-use development within the Civic Center Master Plan.
  - Prepare a Specific Plan for the Grand Avenue commercial area that identifies the potential for high-quality, pedestrian-oriented, mixed-use development.
  - Develop small-business incentive programs to encourage new neighborhood-serving uses in the Civic Center and Grand Avenue commercial areas.
  - Conduct audit of land use, zoning, development standards, and other regulations that may act as barriers to neighborhood serving businesses and mixed-use development.

- TL 2.1: Work with AC Transit to conduct a public transit gap study and provide bus stops with safe and convenient bicycle and pedestrian access and essential improvements.
  - Consult with AC Transit to ensure Piedmont bus stops provide shade, weather protection, seating, lighting, and route information.
  - Conduct a study of bicycle and pedestrian access to transit stations.

- TL 3.4: Work with schools to improve/expand walking, school bus use, safe routes to school programs, and trip reduction programs.

  No associated implementation actions but this measure calls for the City to make essential infrastructure improvements that enable safe routes to school; and to work with schools to create trip-reduction programs, with special attention placed on expanding "walking school buses."

- TL 3.5: Provide public education regarding reducing motor vehicle-related greenhouse gas emissions [including targeted advertisement programs … to encourage walking and bicycling …].

  No associated implementation actions but this measure calls for the City to conduct a variety of education and outreach programs aimed at reducing residents' transportation-related emissions, with targeted advertisement programs to encourage walking and bicycling.

PASSENGER
LOADING &
UNLOADING
ONLY

Piedmont Complete Streets Policy

In November 2012, the City adopted a policy on "complete streets." Complete streets are meant to be safe, attractive, and convenient for all users, including pedestrians, bicyclists, transit riders, emergency responders, drivers, persons with disabilities, seniors and children, among others. The adopted policy spells out the City's commitment to "fund, design, construct, operate, and maintain its transportation system and facilities so that they are safe and convenient for all users and modes, as appropriate to the function and context of each facility, and in ways that reflect local conditions and community values." The City intends to implement the policy by training staff; reviewing and, as necessary, updating street-design standards and other practices; developing implementation tools (for example, by designating a network of bicycle routes); monitoring progress; and engaging the public and other stakeholders.

Oakland Bicycle Master Plan

It is not only Piedmont plans that affect walking and bicycling in the city. Because Piedmont is entirely surrounded by Oakland and is used to connect between Oakland destinations, the plans of this neighboring jurisdiction are also important. The Oakland Bicycle Master Plan, dated December 2007, proposes several bikeways through Piedmont which would connect to bicycle facilities in Oakland. City of Piedmont staff was represented on the technical advisory committee for the plan, and the bikeways through Piedmont were vetted with City staff. As mentioned earlier, the Piedmont General Plan states that these bikeways should be considered a "starting point for further discussion."

Oakland Pedestrian Master Plan

Similarly, the Oakland Pedestrian Master Plan, dated November 2002, designates a network of walking routes throughout Oakland. Generally, the network identifies popular walking routes to schools, transit, neighborhood shopping and other key destinations and that are in greatest need of improvement. Only a small handful of these extend into Piedmont or connect to Piedmont streets. They include Linda, Pleasant Valley and Moraga Avenues on the northwest side of the city; Boulevard Way, Mandana Boulevard (which turns into Crocker Avenue in Piedmont) and Sunnyhills Road (which turns into Indian Road) on the southwest side; and Trestle Glen Road, Estates Drive and Park Boulevard on the southeast side. The plan proposes improvements for these routes only within Oakland.

Alameda Countywide Pedestrian Plan and Bicycle Plan

Lastly, in October 2012, the Alameda County Transportation Commission (ACTC) adopted both a Countywide Pedestrian Plan and a Countywide Bicycle Plan. ACTC is primarily a funding agency rather than an implementing agency. For this reason, the plans define the types of pedestrian and bicycle projects and programs that ACTC will prioritize in its funding decisions, rather than identifying specific improvements. ACTC's priority is on projects considered to be of countywide importance or significance. Priority projects are those that improve major inter-jurisdictional trails and bikeways (as defined by the plans); access to key transit hubs and within central business districts (also as defined by the plans); and access to "communities of concern" (as defined by the Metropolitan Transportation Commission). The major inter-jurisdictional bikeways through Piedmont are on Moraga, Highland and Grand Avenues.

Needs Assessment

1 | Overview of the needs assessment

The second task in the development of the PBMP—following the inventory of existing conditions—was the assessment of needs. This task consisted of gathering information on the needs and concerns of local pedestrians and cyclists; on the barriers, obstacles and challenges to walking and biking in Piedmont; on specific problem areas and locations; and on opportunities and possible ways to improve conditions.

There are obvious aspects that facilitate walking and biking in Piedmont but there are also strong constraints. On the down side, Piedmont has many hilly, narrow, winding streets or streets with blind curves or fast traffic; also, driving is the norm for most errands around town and a large majority of Piedmonters drive to work alone. On the positive side, the opportunities are numerous, even if they do not always outweigh the constraints:

- The climate allows for year-round outdoor activity.
- Most Piedmont streets have sidewalks and many streets have low traffic volumes.
- Walking is already one of the most popular recreational pastimes in the city.
- Residents live close to schools and parks, while shopping and jobs in Oakland are nearby.
- The city's street network is well connected to Oakland's.
- There are five BART stations within convenient cycling distance.
- Both BART trains and AC Transit buses accommodate bikes.

The needs assessment process sought to gather more-specific information on needs, concerns and opportunities. Information was collected in many ways, including through the inventory on existing conditions, field visits and discussions with City staff. However, the most important source of information was formal input from the community. The formal channels through which community input was gathered were:

- The letters of support for the grant application that resulted in a grant from the Alameda County Transportation Commission to prepare the PBMP.
- A community workshop held on Wednesday, October 30, 2013, at Piedmont Community Hall.
- An online community survey, which ran for just over five weeks, from October 16 until November 23, 2013.
- A series of Safe Routes to School "walk audits" during the week of November 4, 2013 of the six elementary and middle schools in Piedmont (the four public ones and two private/parochial ones).
- Other comments submitted in writing to City staff or orally at public hearings held on the PBMP, most recently at a Planning Commission hearing on November 12, 2013.

Approximately 1,600 comments were received from over 500 individuals through these various channels. This chapter describes these opportunities for public input in more detail and summarizes the comments received through each of them. In addition, **Appendix A** includes all the comments received through the online survey. (The comments presented in the chapter have been edited for clarity and brevity. The comments in the appendix appear as they were submitted through the survey; they have been edited only to remove individuals' names and street and email addresses, in order to address privacy concerns)

Overall, the following general themes emerged as especially strong areas of concern for walking and biking in Piedmont:

- A disproportionate number of comments and concerns involve just four streets: Grand, Oakland, Highland and Moraga Avenues.

- Many other comments relate to what could be considered a "second tier" of streets of concern. These streets include Blair, Linda, Magnolia and Wildwood Avenues, Hampton Road and St. James Drive.
- A large majority of the concerns regarding the streets mentioned above stem from driver behavior:
  - Not stopping, yielding or slowing down (an issue of greatest concern to pedestrians, especially kids, at crosswalks); and
  - Speeding (of concern to everyone but perhaps especially to cyclists, who feel "squeezed out" by fast-moving traffic).
- A large number of comments related to walking concern the need to improve intersections, crossings and crosswalks. Also, many pedestrian-related comments concern the Civic Center, not surprising since that area has the bulk of key community destinations.
- Many of the comments related to biking mention the need for bike lanes or marked and signed bike routes.
- The program or activity most often cited is the need to promote walking—and, to a much lesser extent, biking—to school, particularly as ways of reducing traffic congestion and pollution.

The information gathered through the needs assessment process—particularly through the formal channels for community input—informed the next task in the PBMP process, the presentation of improvement options or ideas. That task, described in the next chapter, consisted of developing a set of potential physical improvements, programmatic activities and suggested changes to City policies and practices to improve walking and biking in Piedmont.

For clarification, below are definitions for some of the improvements mentioned in the comments:

- **Bike box:** Painted area at a signalized intersection that permits cyclists to pull in front of waiting cars.
- **Cycle track:** On-street bike lane or path that is physically separated from moving cars (by bollards, landscaping or parked cars, for example).
- **Road diet:** Technique involving the replacement of one or more travel lanes with some or all of the following: wider sidewalks, median, center turn lane, bike lanes, pedestrian refuge islands and other improvements.
- **Sharrows:** A series of bike stencils in the middle of a travel lane, indicating that a cyclist may use the full lane.
- **Super sharrows:** Sharrows embedded in a painted strip or within dashed lines, to give the feel of a bike lane within a regular travel lane. They also indicate that a cyclist may use the full lane but are used for greater effect than sharrows, to call more attention and alertness from drivers.

2 | Letters of support

In developing the application that resulted in a grant from the Alameda County Transportation Commission to prepare the PBMP, City staff received 120 letters of support for the application. These came from local residents, organizations and businesses, and included 55 letters from middle-school students. Beyond documenting the general support for walking and biking improvements, many of the letters cited specific needs or concerns:

Walking

- Uneven, cracked sidewalks and streets (streets specifically cited were: Abbott Way, Blair Avenue, Cambridge Way, Estates Drive, Highland Avenue, Oakland Avenue, Pacific Avenue, Ramona Avenue and St. James Drive).
- New or better-designed sidewalks (specific streets cited: La Salle Avenue, Scenic Avenue, St. James Drive, Wildwood Gardens, Woodland Way).
- Sidewalk obstacles restricting disabled access (library drop box on Highland Way, lamp posts in the Piedmont Hills Undergrounding District, trees and foliage, trash cans, mailboxes, construction port-a-potties).
- Parked cars blocking the sidewalk.
- New or safer pedestrian crossings (marked crosswalks, pedestrian-activated signals, lighting, lighted crosswalks, bulb-outs, pedestrian islands, crossing guards; specific locations cited: Civic Center, Grand Avenue, Highland Avenue, Hillside Avenue, Linda Avenue, Oakland Avenue, Moraga Avenue and intersections of Moraga/Bonita/Estrella Avenues, Blair/Highland Avenues and El Cerrito/Oakland Avenues).
- More or better mid-block cut-through footpaths and stairways (lighting, cleaning).
- Railing for the sidewalks on the Oakland Avenue bridge over Linda.
- Educational efforts to promote safer walking and biking for school children.
- Organized walking school buses.

Biking

- Lack of designated bikeways (poor bike access within Piedmont).
- Need for uphill/downhill bike routes with gradual inclines and suitable bike routes for children.
- New bike lanes (all over and specifically Grand Avenue, Highland Avenue, La Salle Avenue, Moraga Avenue and St. James Drive; bike lanes could be installed by narrowing overly wide streets or restricting parking on one side of certain streets; one person was “doubtful” that painting bike lanes would be much help).
- Bicycling improvements on, or alternative routes to, Grand Avenue (discontinuous bike lanes, diagonal parking, other hazards), La Salle Avenue (steep, heavy traffic), Moraga Avenue (fast traffic, curvy road with a single lane going uphill; should have roundabouts), Oakland Avenue (heavy traffic, parked cars) and Park Boulevard (fast traffic).
- Oakland bike routes do not continue into Piedmont; poor bike access from Piedmont to Lakeshore, Piedmont Avenue or Montclair; also, bike routes in Oakland have discontinuous bike lanes.
- Off-road bike paths or trails, if possible.
- Sharrows on Moraga Avenue, St. James Drive and Wildwood Avenue.
- Resurfaced pavement on bike routes.
- Improved lighting will not help much unless it is bright and intensive along an entire route.

- Bike box at the intersection of Grand/Oakland Avenues.
- "Share the road" and other bike signage.
- Bike-parking racks (all over and specifically in the Civic Center and at Piedmont Middle and Piedmont High schools).
- Bike-safety classes (remind cyclists to obey "Stop" signs).
- Raising awareness of the individual and community benefits of biking (bicycling presence on the City's website; regular bike column in local papers; bike fairs).
- Educational efforts to promote safer walking and biking for school children.

Other

- Car traffic has increased over the years, particularly at certain times of the day.
- Speeding traffic (all over and specifically on Grand Avenue, Moraga Avenue and Park Boulevard; lack of enforcement).
- Traffic-calming and other speed-reduction measures (speed bumps, speed readers, traffic circles/roundabouts such as the Ramona/Ronada Triangle; all over and specifically at Grand/Wildwood Avenues and at the Wildwood/Warfield/Winsor Avenues intersection).
- Busy or very wide main streets (excess width encourages speeding; could be narrowed for bike lanes and safer crosswalks; Highland Avenue has two "unnecessary" lanes; Grand Avenue has four lanes with no median or traffic-calming measures).
- Overly wide intersections (facilitate right turns without stopping).
- Unsafe intersections (drivers going around corners too fast; Grand Avenue at Cambridge Way/Greenbank Avenue; bicyclist hit by a car at Highland/Mountain Avenues).
- Side streets are narrow, winding or steep.
- Blind curves (mirror at the hairpin curve on Scenic Avenue).
- Wildwood Avenue is unsafe from Wildwood Elementary to Requa Road (narrow street; poor sight lines at the intersection with Prospect Road, with several dogs having been run over; needs curb extensions, pavement marking, 15 mph traffic speeds).
- Street greening/beautification through landscaped bulb-outs and medians (use low-water plantings).
- Blind corners and curves (mirrors, hedge trimming; specific streets cited: Hazel Lane, Scenic Avenue, St. James Drive, Wildwood Avenue).
- More street lights (including motion sensors; all over and also these specific locations: Civic Center, Blair Avenue, Bell Avenue, Woodland Way).
- More or better traffic signs and markings (when wet, the round metal markers that separate traffic lanes are dangerous for cyclists).
- Drivers not paying attention, speeding, cutting off cyclists, opening car doors without looking.
- Better public transportation.
- Increased cooperation with emergency services in Oakland.

HILLSIDE AV

3 | Community workshop

A public workshop was held on Wednesday, October 30, 2013, at Piedmont Community Hall. The workshop, attended by approximately 35 people, began with a slide presentation providing background on the PBMP process and illustrating types of potential pedestrian and bicycle improvements. Following the presentation, attendees were broken up into three groups, which rotated among three facilitated "discussion stations." The stations focused on needs and concerns related to (i) pedestrian infrastructure, (ii) bicycling infrastructure and (iii) programs, activities and policies. Participants had their comments captured on flipcharts and were able to mark up large-scale maps of the city. Below is a summary of the comments heard at each of the three discussion stations.

Pedestrian infrastructure

- Citywide: fill in sidewalk gaps, improve crosswalks, better lighting.
- Improve connections to Grand Avenue and Montclair; wayfinding signage; consider Moraga and La Salle as connections.
- Adopt a policy that no street be more than two lanes. Grand and Highland Avenues should be narrowed.
- Focus improvements on key intersections, especially on Grand Avenue.
- Dangerous intersections for pedestrians: Kingston/Linda/Rose Avenues; Cambridge Way/Greenbank/Grand Avenues (excess pavement at the monument); El Cerrito/Magnolia Avenues; Highland/Magnolia Avenues; Oakland Avenue between Grand and Highland Avenues.
- The area near Piedmont Sports Field has many blind intersections. Kids run across the street to the park without being able to see oncoming traffic. Need traffic calming or pedestrian improvements on Hampton Road (at St. James Drive, Glen Alpine Road, La Salle Avenue). Parked cars also create problems here.
- Unsafe to walk on Moraga Avenue. Improve crossing between Coaches Field and Blair Park and slow down traffic.
- Moraga/Mesa Avenues: dark, dangerous intersection; need more lighting; there was a car crash there last week; blind spot for pedestrians; crosswalk is in the wrong place.
- Footpath through the PG&E substation from Oakland/Howard Avenues (near Beach School) is popular with kids; it does not show up on the workshop map.
- Linda needs pedestrian improvements leading up to Grand Avenue; crosswalk on both sides not just one.
- Improve conditions for kids who walk through the high school and Piedmont Park.
- Highland/Blair Avenues needs bulb-outs; very wide and difficult to cross.
- Wildwood/Highland Avenues is dangerous for joggers.
- Comments about the Civic Center:
  - Focus improvements in the Civic Center: bulb-outs on Highland Avenue; lighted crosswalks; traffic calming for the curve by Wells Fargo; around Magnolia and Highland Avenues; crossing Vista Avenue from Mulberry's to City Hall.
  - Resurrect the Civic Center Master Plan recommendations for Highland/Magnolia Avenues. The plan was controversial but had good ideas. Need better crosswalks and pedestrian islands/refuges.
  - Make Highland Avenue and Highland Way paired one-way streets.
  - Highlight the new Mission-style bus shelter by the Community Church.

  - Magnolia Avenue needs improvements, especially between Hillside and Highland Avenues.
  - Landscaping by the gas station on Highland Avenue is too high, obscures lines of sight.
  - Need traffic calming on Highland Avenue; it is hard to cross between Wells Fargo and City Hall.
- Comments about Oakland Avenue:
  - Dangerous to cross; downhill speeds are a problem at Bonita and at Latham Street/Jerome Avenue.
  - Revisit plan from a few years ago to put pedestrian islands between Hillside and San Carlos Avenues.
  - Need traffic calming.
  - Railing for the sidewalks on the Oakland Avenue bridge, to prevent kids from falling into traffic.
- Comments about Grand Avenue:
  - Very wide, speeding, sight distance issues at the curve.
  - Should be a priority for improvements. Needs a road diet, crossing guards at key points for school kids, traffic calming and other tools to slow down vehicles, green path similar to 40th St in Oakland.
  - Fairview Avenue at Grand Avenue flares out, making for a long crossing distance.
  - Traffic island at Grand Avenue/Cambridge Way; lighted crosswalk at Grand/Wildwood Avenues; pedestrian countdown signals at Moraga.
  - Grand/Wildwood Avenues is very wide and difficult to cross; consider bulb-outs.
- Comments about the footpaths and stairways:
  - Weave them into an integrated system or network; right now they function independently. They are inadequately marked and publicized. The League of Women Voters has done a guide but most people do not know about it. All should have signs and names. Create a map and website. Promote "Piedmont Walks." Promote them as routes to school.
  - One person said the stairways provide good shortcuts, another that they are not very practical.
  - The stairways are very dark due to overgrown foliage. Some are slippery and have a lot of debris. Maintenance is an issue. A footpath has been gated off by a property owner.
  - The Fairview to Nova Drive/Magnolia Avenue path is nice but dumps you into a dangerous intersection; need a crosswalk to the triangle.
  - Sylvan/Boulevard Ways path is hard to find.
  - Open the footpaths to bikes as Class I bike paths.
  - Take back the paths that were quit-claimed to adjacent properties.

Next steps / project timeline
2011
Existing conditions (September – October)
Needs assessment (October – November)
Recommended improvements (Nov. – Jan.)
2012
Implementation strategy (February – March)
Draft plan document (March – May)
Environmental review (April – June)
Final plan document (June)
Plan adoption (July)
10 of 10
TEAM USA
2010 World Championships

Bicycling infrastructure

- New bike routes on:
  - Blair Avenue (full length of street through Piedmont)
  - Estates Drive (Park Boulevard to city border)
  - Hampton Road/La Salle Avenue (spur to Hampton Field)
  - Highland Avemie (Sheridan to Wildwood Avenues)
  - Linda Avenue (bike lane from Grand to Oakland Avenues)
  - Mountain Avenue
  - Rose/Ronada Avenues (Linda to Moraga Avenue)
  - "Wiggle" route to Montclair along Mountain, Dormidera, Pacific/Hagar, Blair Avenues
  - Wildwood Avenue (Magnolia to Sheridan Avenue)
  - Winsor Avenue (Wildwood to Lakeshore Avenue)
- Convert bike routes on Grand Avenue, Highland Avenue/Sheridan Avenue/Wildwood Avenue /Crocker Avenue /Hampton Road, Linda and Moraga Avenues to bike lanes.
- Find a "wiggle" from Grand Avenue to the Civic Center that avoids Oakland Avenue.
- Bike connections to Montclair along Blair Avenue, La Salle Avenue, Moraga Avenue.
- Grand Avenue: Road diet; sharrows/super sharrows from Cambridge Way to Sunnyside Avenue; bike path or route between Grand and Lower Grand Avenues; green bike boxes at Oakland Avenue (both directions).
- Road diet for Highland Avenue through the Civic Center.
- Moraga Avenue: Uphill bike lane; super sharrows; tree-limb hazards north of Red Rock Road.
- Unsafe spots: Hampton Road/St. James Drive intersection, Highland Avenue/Highland Way triangle intersection, Oakland Avenue bridge.
- Explore connections through Piedmont Park.
- Switchback bike path through Dracena Park.
- Repave bike routes, specifically Magnolia Avenue.
- Try out colored bike lanes.
- Bike sensors and stencils (showing where cyclists should position themselves to trigger the light) at all traffic lights.
- Overwatering at Crocker Park pools water on the street.
- Comments about bike parking:
  - Install sidewalk bike-parking racks.
  - Bike racks at all the schools, parks, public recreational facilities.
  - All businesses should have bike racks.
  - Need a highly visible area for bike racks in the Civic Center; turn a car-parking space into a bike-parking corral.
  - Explore opportunities for valet bike parking, bike corrals.
  - Surveillance cameras over bike racks.

Programs and policies

- Policy to prioritize repavement and sidewalk repair/construction projects. Make road funds do double duty. Prioritize repaving the part of the street where cyclists ride.
- Lower speed limits citywide to 20 mph (15 mph near schools).
- Need high-visibility/lighted crosswalks; buckets of flags (people can pick up a flag, wave it when crossing, then put it back on the other side of the street).
- Paint is cheap: prioritize projects that rely on (re)painting lanes, crosswalks, etc.
- Pilot projects using chalk.
- Wayfinding signage for pedestrians and cyclists.
- Support Bike to Work Day, bike fairs (include bike-powered activities).
- Prioritize safe routes to school.

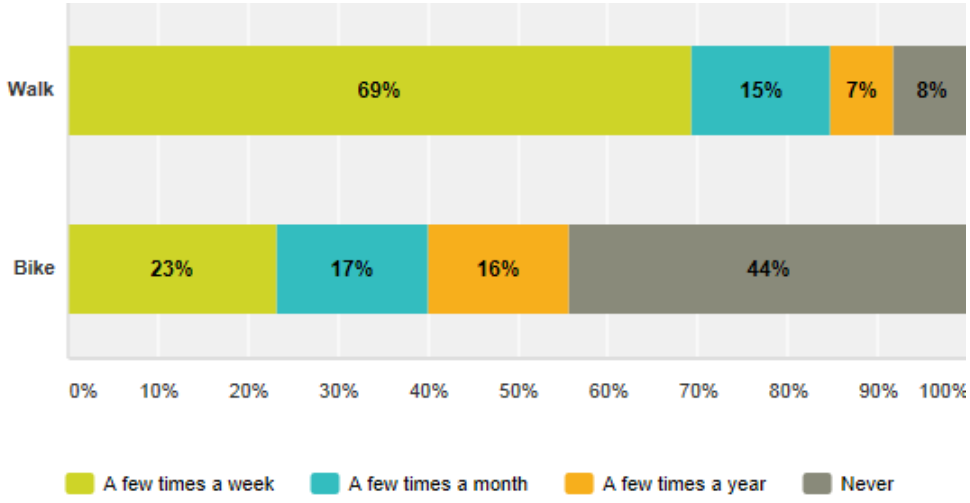
- Promote Bike/Walk to School Day, "Walk & Roll" Day, "bike buddies," bike trains.
- Ensure back-ups for crossing guards.
- Give points redeemable for prizes to kids for walking/biking to school.
- Safety and education on:
  - Traffic rules, rights and responsibilities
  - Safe riding (start class at Piedmont High)
  - Anti-bike theft
  - Innovative bike facilities/signage/markings
  - New statewide law that drivers stay at least three feet away when passing
  - Demystifying biking through Piedmont.
- Adopt bike-parking standards.
- Civic Center bike-parking program.
- Bring bike sharing to Piedmont.
- Is there a policy on skateboard riding on the street?
- Cooperate with Oakland on pedestrian/bike infrastructure projects.
- Devote 80-90% to infrastructure and 10-20% to programs.
- Encourage decision-makers to ride a bike.
- Space downtown for volunteer/free bike repairs.
- Fundraising ride, including street closures (Tour de Piedmont?), for bike racks, other improvements.
- Get Police Department more involved.
- Make sure bike voices are heard in City transportation decisions.

4 | Community survey

An online community survey ran from October 16 until November 23, 2013 (just over five weeks) on SurveyMonkey.com. During that time, 453 people responded to the survey (though not everyone responded to every question). Respondents were eligible to win one of three $25 gift certificates for Mulberry's Market, courtesy of the PBMP consultant, as long as they provided an email address for this purpose. The survey contained 14 questions, all of which were optional. Below is a summary of the responses given under each question.

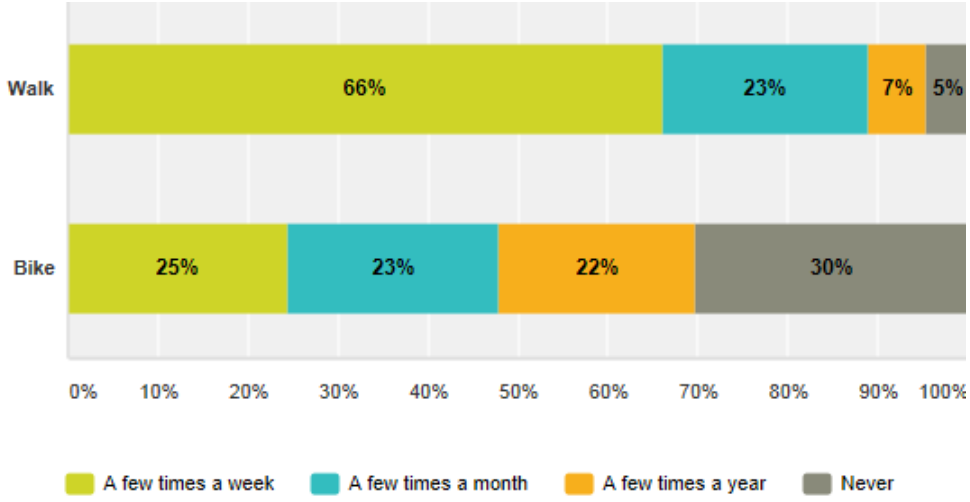
1. Walking or biking for transportation

The first question asked, *How often do you walk or bike in Piedmont for transportation (to go to school, to work, to the store, to the bus, to practice, etc.)?* Almost 70% of respondents said they walk, and 23% bike, for transportation a few times a week. At the other end of the spectrum, 8% never walk, and almost half (44%) never bike, for transportation.



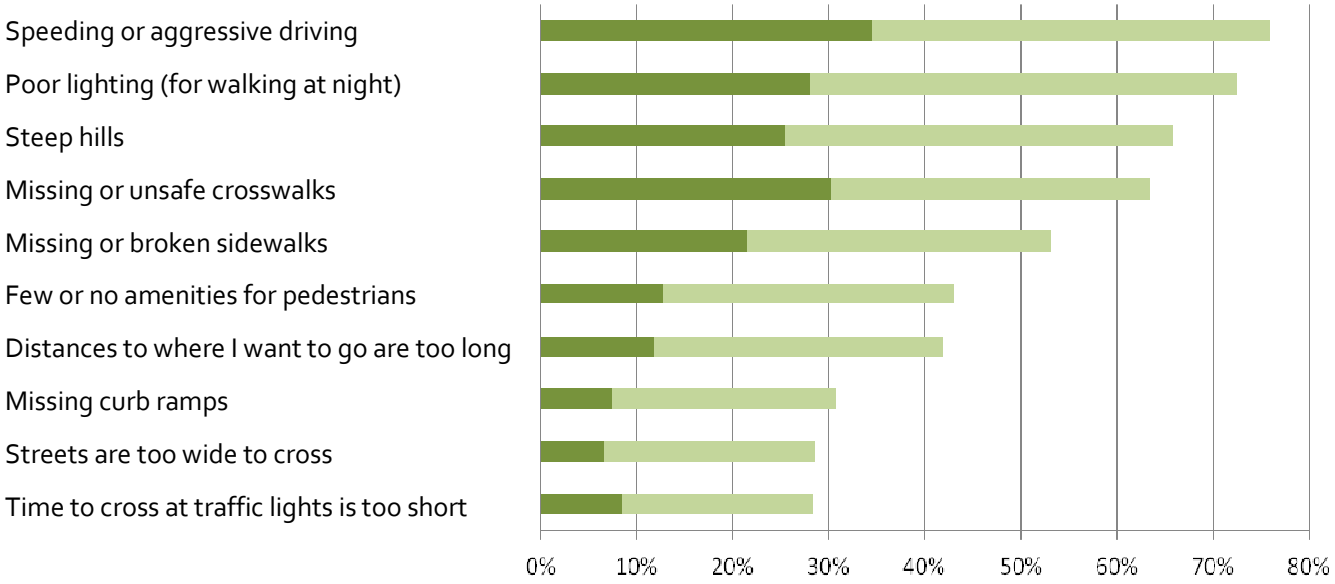
2. Walking or biking for fun or exercise

The second question asked, *How often do you walk or bike in Piedmont for fun or exercise (to go around the park, around the neighborhood, etc.)?* Two thirds (66%) of people said they walk, and 25% bike, for recreation a few times a week. On the other hand, 4% never walk, and almost one third (30%) never bike, for recreation.



3. Challenges and obstacles to walking

This question listed ten potential challenges and obstacles to walking and asked respondents, *In your opinion, how much do they discourage people from walking in Piedmont?* The choices were "a lot," "somewhat" and "not too much." The chart below shows how many people responded **"a lot" (in dark green)** or "somewhat" (in light green) for each item.



- As the bar chart shows, four challenges were seen by more than 60% of respondents as discouraging people "a lot" or "somewhat" from walking in Piedmont. These can be interpreted as being the most important obstacles to pedestrians in Piedmont:
  - Speeding or aggressive drivers
  - Poor lighting
  - Steep hills
  - Unsafe crossings
- On the other hand, three challenges were seen by less than a third of respondents as discouraging people "a lot" or "somewhat" from walking in Piedmont. These can be interpreted as being the least important obstacles to pedestrians in Piedmont: lack of curb ramps, streets too wide to cross and insufficient crossing time at traffic lights. (It should be noted that curb ramps, while they might not essential to pedestrians in general, are critical to people in wheelchairs and with certain physical disabilities.)

Also, the question allowed respondents to submit a comment in response to the following sub-question: *Have we forgotten any major general challenges to walking? If so, list them here.* 125 people submitted responses to this sub-question. Most people did not mention additional challenges or obstacles but rather echoed those listed above, particularly unsafe crosswalks and speeding drivers. Other common themes in the responses are listed below while the full list of responses appears in **Appendix A-1.**

- Not enough crossing guards, or spotty coverage.
- Parked cars blocking the sidewalk.
- Sidewalks obstructed by overgrown vegetation.
- Crime, concerns over personal security.
- Blind corners; sightlines obstructed by overgrown vegetation, large trees, parked cars.
- Need more traffic lights, stop signs.

- Use of sidewalks by kids on bikes, skateboards, scooters.
- No / none.

4. Intersections for pedestrian improvements

This open-ended question asked, *[A]re there particular intersections where you would like to see improvements for pedestrians such as new or better-marked crosswalks; curb ramps; or sidewalk extensions (to shorten the crossing distance)?* The most common themes in the responses are listed below while the full list of responses is in **Appendix A-2.**

- Various Grand Avenue intersections, particularly at Oakland Avenue, Linda Avenue, Cambridge Way/Greenbank Avenue/Lower Grand Avenue; also at Wildwood Avenue, which is in Oakland.
- Various Oakland Avenue intersections, particularly at Grand Avenue, Jerome Avenue, San Carlos Avenue, El Cerrito Avenue, Highland Avenue.
- Moraga Avenue at Red Rock Road (crossing from Coaches Field to Blair Park), Highland Avenue and Mesa Avenue.
- All along Highland Avenue, particularly at Vista Avenue/Highland Way, Craig Avenue and Oakland Avenue.
- Wildwood: 7W's intersection; Wildwood Avenue /Prospect Road and Wildwood/Nova/Magnolia Avenues intersections; long stretches without crosswalks.
- Linda/Kingston/Rose Avenues, Grand/Ronada/Rose Avenues, Greenbank/Lake Avenues, Magnolia/Park View Avenues, Hampton Road/St. James Drive, Hampton Road/Sea View Avenue among others.

5. Streets for sidewalk repairs or construction

This open-ended question asked, *[A]re there particular streets where you would like to see new or fixed-up sidewalks?* The most common themes in the responses are listed below while the full list of responses is in **Appendix A-3.**

- All over town (cracked, broken, uplifted by tree roots; overgrown foliage).
- Sidewalks in need of repair on stretches of Grand Avenue, Oakland Avenue, Highland Avenue, Wildwood Avenue, Blair Avenue, Harvard Road, Mountain Avenue, Pacific Avenue, Hampton Road, Indian Road, La Salle Avenue, St. James Drive, among others.
- Missing sidewalks on south side of Moraga Avenue, upper Dudley Avenue, upper La Salle Avenue, Wildwood Gardens.
- Narrow sidewalks on stretches of Magnolia and Wildwood Avenues.
- Walkways in Dracena Park.
- None / cannot think of any / not a problem / sidewalks are fine.

6. Other walking-related problems or opportunities

This open-ended question asked, *[A]re there other specific problems related to walking or opportunities for improving conditions? You could mention, for example, the location for a new footpath or staircase; promoting Walk-to-School days; or posting crossing guards near schools.* The most common themes in the responses are listed below while the full list of responses appears in **Appendix A-4.**

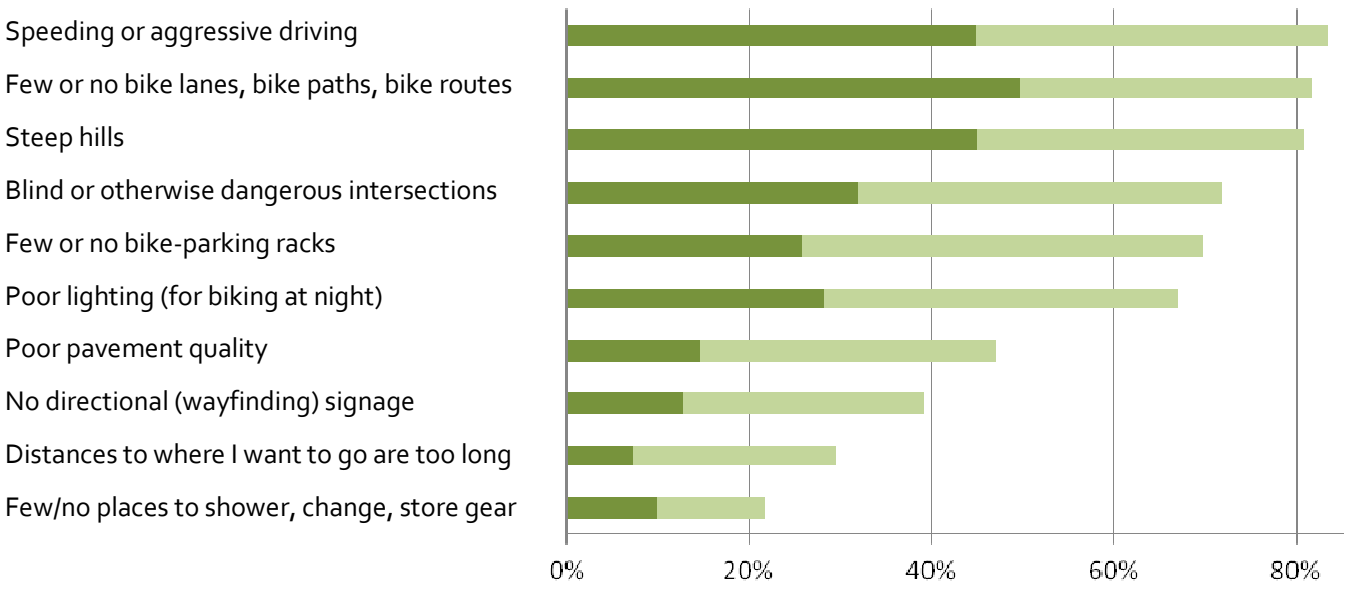
- More crossing guards / for longer times.
- Speeding traffic, drivers who do not stop or yield; need more enforcement.
- Promote walking to school.
- More or brighter street lighting.
- Maintenance/repairs/improvements to the footpaths and stairways: lighting, cleaning/sweeping, foliage trimming, handrails, signage.
- Map of walking routes, highlighting the footpaths and stairways.
- Walkway improvements to "P.E. Hill."

- Improved/more effective crosswalks.
- Cars parked on/across the sidewalk.
- Railings for the sidewalks on the Oakland Ave bridge.
- Overgrown foliage encroach on sidewalks.
- Need trash cans (litter, dog waste).

7. Challenges and obstacles to biking

This question listed ten potential challenges and obstacles to biking and asked respondents, *In your opinion, how much do they discourage people from biking in Piedmont?* The choices were "a lot," "somewhat" and "not too much." The chart below shows how many people responded **"a lot" (in dark green)** or "somewhat" (in light green) for each item.

- As the bar chart shows, six challenges were seen by more than two thirds of respondents as discouraging people "a lot" or "somewhat" from biking in Piedmont. These can be interpreted as being the most important obstacles to cyclists in Piedmont:
  - Speeding or aggressive drivers
  - Few or no bikeways
  - Steep hills
  - Dangerous intersections
- On the other hand, two challenges were seen by less than a third of respondents as discouraging people "a lot" or "somewhat" from biking: long distances to destinations and few or no places to shower, change or store gear. These can be interpreted as being the least important obstacles to cyclists in Piedmont.



Also, the question allowed respondents to submit a comment in response to the following: *Have we forgotten any major general challenges to biking? If so, list them here.* 70 people responded. Most people did not mention additional challenges but rather echoed those listed above, particularly hilly or narrow streets; fast, aggressive or distracted drivers; and lack of bike lanes and other bikeways. Other common themes in the responses are listed below while the full list of responses appears in **Appendix A-5.**

- Lack of driver awareness, understanding or acceptance of cyclists.
- Misunderstanding of traffic rules by both cyclists and drivers.
- No / none / do not bike.

8. Streets for bicycling improvements

This open-ended question asked, *[A]re there particular streets where you would like to see improvements for bicyclists such as bike lanes, traffic calming or bike-route signs and markings?* The most common themes in the responses are listed below while the full list of responses appears in **Appendix A-6.**

- Grand Avenue (road diet, continuous bike lanes).
- Moraga Avenue (climbing bike lane, signage, sharrows).
- Oakland Avenue (climbing bike lane, signage, sharrows, traffic calming).
- Highland Avenue (road diet, bike lanes).
- Linked streets from Civic Center to Park Boulevard: Highland, Sheridan, Wildwood and Crocker Avenues, Hampton Road, St. James Drive.
- Magnolia, Wildwood Avenues (school routes, lead to Civic Center).
- "Switchback" or "wiggle" route between lower and upper Piedmont.
- No / do not bike / streets are fine / not much that can be done because of the hills, narrow streets.

9. Locations for bike-parking racks

This open-ended question asked, *[A]re there particular locations where you would like to see bike-parking racks?* The most common themes in the responses are listed below while the full list of responses is in **Appendix A-7.**

- Various Civic Center locations, especially Mulberry's, City Hall, the Police Department and the banks.
- The public schools.
- The parks and other recreational facilities, especially Piedmont Park.
- Businesses on Grand, especially at the Ace Hardware store.
- At the casual carpool spots and near bus stops.
- No / do not know.

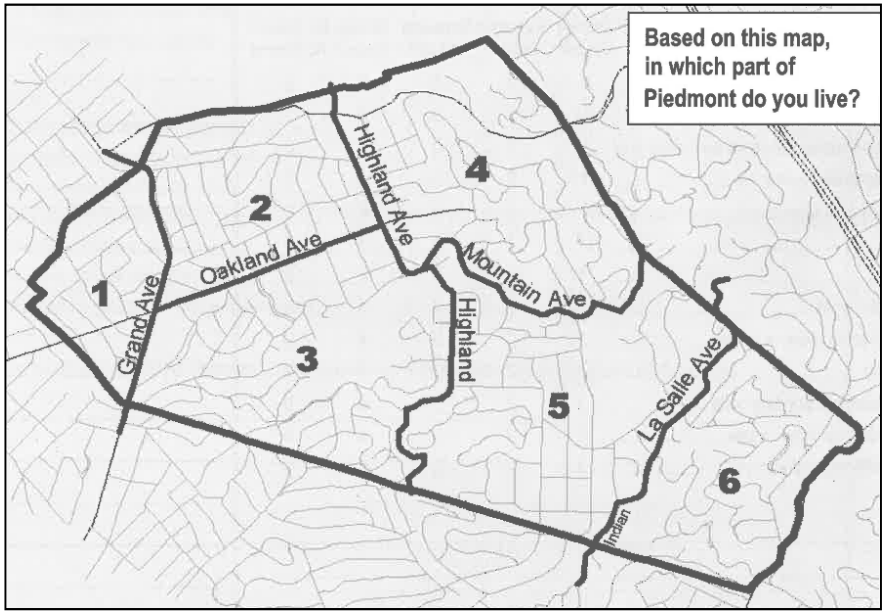
10. Other biking-related problems or opportunities

This open-ended question asked, *[A]re there other specific problems related to biking or opportunities for improving conditions? You could mention, for example, an intersection where there are safety concerns; promoting Bike-to-School days; or stepped-up traffic-enforcement efforts.* The most common themes in the responses are listed below while the full list of responses appears in **Appendix A-8.**

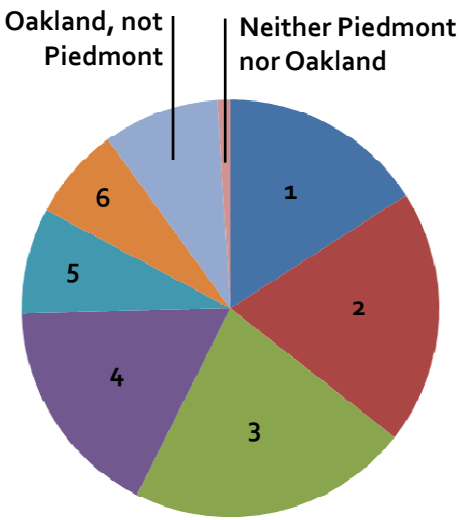
- Unsafe traffic conditions on particular streets, especially Grand, Highland, Moraga and Oakland Avenues.
- Stepped-up traffic enforcement, especially against drivers who speed, do not stop at crosswalks or "Stop" signs or endanger cyclists.
- Lack of bike lanes, other bikeways.
- Promote biking to school (but some said it should not be promoted until it is made safer).
- Cyclists do not obey traffic laws.
- Steep, narrow streets.
- Poor pavement quality, dangerous street surfaces.
- None / cannot think of any / do not bike.

11. Home

This question asked people in what part of Piedmont they live, based on the map below. As the table to the right shows, 75% of respondents live in areas 1–4 (roughly the western half of the city), 15% live in areas 5–6 and 10% live outside Piedmont.



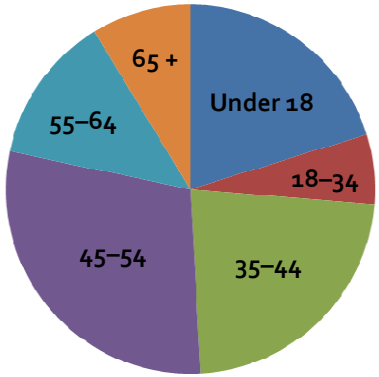
	Response percent	*Response count*
1	**16%**	62
2	**20%**	77
3	**22%**	85
4	**17%**	67
5	**8%**	32
6	**7%**	28
I live in Oakland, not Piedmont	**9%**	35
I don't live in Piedmont or Oakland	**1%**	4
	100%	390



12. Age

This question asked people how old they are. As the table below shows, one fifth said they are under the age of 18 while almost 10% were seniors.

	Response percent	*Response count*
Under 18	**20%**	79
18–34	**6%**	24
35–44	**23%**	89
45–54	**29%**	114
55–64	**13%**	51
65 and older	**9%**	34
	100%	391



13. Student, parent or neither

This question asked people if they were a student, a parent or neither. As the table below shows, one fifth said they are a Piedmont elementary or middle school student while 43% said they are a parent or guardian.

	Response percent	*Response count*
Student at an elementary or middle school in Piedmont	**20%**	78
Parent or guardian of a student at an elementary or middle school in Piedmont	**43%**	169
Neither	**37%**	143
	100%	390

14. Drawing for gift certificates / PBMP announcements and updates

- 270 people indicated that they would like to be entered in the drawing for one of three $25 gift cards for Mulberry's Market (the drawing was held using an online service for this purpose called Random.org; three winners were selected and all entrants were notified of the result).
- 173 people indicated that they would like to receive updates and announcements about the PBMP.

5 | School walk audits

To solicit input on needs and concerns specific to walking and biking to school, "walk audits" were conducted during the week of November 4, 2013 of the six elementary and middle schools in Piedmont (the four public ones and two private/parochial ones; one of these schools, Zion Lutheran, has closed since this time). The audits, each lasting approximately 90 minutes, consisted of examining problem areas for walking and biking in the school site, on adjacent streets and on key nearby access routes, and also brainstorming possible solutions. Parents and administrators were invited to participate in the audit of their respective school, while the audit of Piedmont Middle School also involved a class of students. Below are the needs and concerns mentioned at each of the audits.

Beach Elementary

- Oakland Avenue bridge sidewalks need guard rails; also, consider removing the small triangular buttresses at the base of the bridge walls to widen the travel path.
- Need crosswalk on Greenbank Avenue at the south side of Lake Avenue.
- Cars speed down Grand Avenue and encroach on the southbound bike lane at the turn above Greenbank Avenue; install soft posts.
- Road diet for Grand Avenue to make room to continue the bike lanes and to slow down traffic.
- Speeding on Oakland Avenue, especially in the downhill direction.
- Crossing guard for the Grand/Oakland Avenues intersection—probably the city's busiest—often does not show up.
- Intersection of Grand/Greenbank/Cambridge Avenues is scary because cars speeding down Grand Avenue cannot see pedestrians on the crosswalk at Greenbank Avenue well enough in advance.
- Cars on Grand Avenue at Linda Avenue do not stop for kids; there are no signs or crossing guards there.
- Despite recent changes (new crosswalks, signs, speed-limit stencils) cars still speed on Linda Avenue.

Corpus Christi and Zion Lutheran

- Speeding traffic on Park Boulevard (up to 50 mph), including through the school zone.
- Barrier or bollards on the sidewalk in front of the main Corpus Christi School entrance, to prevent a runaway car from coming onto the sidewalk (there is a sharp turn just uphill from the school) or a child being pushed into the street.
- Dangerous crosswalk at the bottom of the Zion School (no lights, no guards, cars speeding downhill do not stop and have little time to see pedestrians in the crosswalk).
- Uphill from the Zion School there is a caution light for traffic but there is no "school zone" sign—though there is a mounting bracket, indicating that there used to be a sign.

Wildwood Elementary

- Illegal U-turns at Requa Road by parents picking up or dropping off kids.
- Crosswalks needed across both streets at the Wildwood Avenue/Requa Road intersection.
- Kids on bikes or skateboards pick up a lot of speed when coming down Wildwood Avenue near the school.
- The east side of the crosswalk across Prospect Road at Wildwood Avenue needs to be reconfigured (no sidewalk; crosswalk practically ends at a driveway).
- There is no crosswalk across Wildwood Avenue to the path entrance in Piedmont Park that is across from Prospect Road.

- Move the chain-link fence across Portsmouth Road at Wildwood Avenue a few inches back to create more room on the sidewalk.
- Speeding and not enough traffic-control signage on Wildwood Avenue around the school.
- Cars half parked on the sidewalk on Wildwood Avenue downhill from the school.
- Sidewalk on the lower part of Wildwood Avenue (east of Winsor Avenue) is very narrow; install a sign warning drivers to expect pedestrians/kids in the middle of the street.
- The Wildwood/Winsor/Warfield Avenues intersection is confusing.
- No crosswalks across Wildwood Avenue from Nova Avenue to Winsor/Warfield Avenues; one is needed at Palm Drive, on the west side of the intersection (for school-bound kids coming from the west).
- Sell the naming rights to the Wildwood Avenue/Sylvan Way Triangle.
- Magnolia Avenue/Nova Drive intersection is too wide.
- Speeding on Magnolia Avenue.
- Make Winsor Avenue cul-de-sac leading to Witter Field resident-parking only (and give residents permits); this would reduce conflicts between kids in the street and cars looking for parking.
- Cars parked on the sidewalk on Park View Avenue near Palm Drive. Enforce no sidewalk parking on routes to school.
- Crosswalk across Magnolia Avenue at Park View Avenue is unsafe because it is on a curve and at the top of a climb; ideas for making the intersection safer: lighted crosswalk, bulb-outs, crossing guard, "Stop" sign on Magnolia Avenue, refuge island, soft posts.
- Install crosswalks across Magnolia Avenue at both legs of Jerome.

Havens Elementary

- Traffic around Havens (Highland/Vista/Bonita/Oakland Avenues) is a disaster. Cars are often double-parked. Move parking spaces to open up that block and allow for better traffic flow.
- The Highland/Craig Avenues intersection needs attention; install a lighted crosswalk across Highland Avenue.
- Blocked sightline on the southwest corner of the Oakland/Highland Avenues intersection.
- Timing of the lights on Highland Avenue encourages speeding.
- Close Vista Avenue to cars; at least, prevent left turns out of Mulberry's.
- Oakland/Bonita Avenues crossing is not visible enough (needs lighted crosswalk, crossing guard).
- Lighted crosswalk across Highland Avenue at Vista Avenue/Highland Way.
- Divert traffic from Highland Avenue to Highland Way.
- Traffic flow from Highland/Magnolia Avenues to Highland Avenue/Piedmont Court is confusing (two traffic triangles, four crosswalks).
- Post speed-limit signs on the stretch of Highland Avenue between Piedmont Court and Sierra Avenue.
- To relieve school-related traffic in the Civic Center, create spots for school carpool pick-ups on Highland Avenue south of Sierra Avenue and encourage the middle-school students to walk through Piedmont Park.
- Havens draws from the largest geographic area; there needs to be at least one designated safe route from upper Piedmont to central Piedmont. From the area east of Sheridan/Sierra Avenues there is no route to school that avoids an extremely busy street (Highland Avenue, Sheridan Avenue, Crocker Avenue, Hampton Road). Some streets have crosswalks but there are no

intersections with a four-way stop. Children must wait on the corner for cars to notice them.

- Need crossing guard at Highland/Moraga Avenues.
- Create crosswalks leading to the entrance of footpaths and stairways.
- Install signs to warn drivers coming into Piedmont about school children and local speed limits.

Piedmont Middle School

- Kids from lower Piedmont walk to PMS and PHS through Witter Field (from the stub of Windsor Avenue into the Wildwood Elementary playground, up the wooden walkways around the PHS football field, through the stands, up the steep, paved driveway to the bottom of the PMS campus, and uphill from there to the PHS campus). The portion from the stadium to PMS is nicknamed "PE Hill." It is a steep service road not designed for pedestrians. Not a lot of cars, but also not very pedestrian friendly and may have some safety issues.
- Kids getting dropped off mid-block, rather than at "Stop" signs.
- Sprinklers get pedestrians and sidewalks wet, specifically on Hillside Court.
- Magnolia Avenue is bad for biking: busy, with speeding traffic, and too hilly and winding.
- Put in "Stop" sign on Magnolia Avenue at Jerome Avenue; also at El Cerrito Avenue, where there is an unmarked crosswalk (cars turn quickly off El Cerrito Avenue).
- No curb cuts at Magnolia/El Cerrito Avenues, Magnolia Avenue /Larmer Court, Magnolia/Park View Avenues.
- Cracked or uneven sidewalks on Magnolia Avenue around San Carlos Avenue.
- Create crosswalks leading to the entrance of footpaths and stairways, specifically at Mountain/Sharon Avenues for the path leading down to Sierra Avenue.
- Pedestrian stairways need lighting.
- Oakland/El Cerrito Avenues intersection: no stop/light, missing crossing guard some afternoons.
- Oakland Avenue: Busy, noisy, narrow sidewalk.
- No crosswalk or "Stop" sign on Oakland Avenue at San Carlos Avenue.
- Restricted visibility on the southwest corner of the Oakland/Highland Avenues intersection.
- Broad curve at Oakland/Greenbank Avenues. Install bulb-out to prevent cars on southbound Oakland Avenue from making a fast right turn onto Greenbank Avenue; also, uneven sidewalk.
- Cars do not stop at the Oakland Avenue crosswalk at Latham Street.
- Faded crosswalks at Grand/Oakland Avenues. Needs lighted or high-visibility ladder crosswalks. Long waits to cross at the stoplight. Install pedestrian countdown signals.
- Oakland Avenue/Arbor Drive: Big radius, unmarked crosswalk.
- Narrow sidewalk with overgrown vegetation on Oakland Avenue between San Carlos and El Cerrito Avenues.
- Hillside/Oakland Avenues: no crossing guard. Why is no crossing allowed on the east side?
- Vista/Hillside Avenues: Busy intersection, cars do not always stop, need crosswalk on Hillside Avenue.
- Magnolia/Hillside Avenues: Ladder crosswalk needed at Hillside Avenue.

6 | Other comments

Since the City began to consider preparing a pedestrian and bicycle plan approximately two years ago, community members have sent emails to City staff and spoken at several public hearings—most recently at the November 12 meeting of the Planning Commission—to express needs and concerns related to walking and biking in Piedmont. Below is a summary of their comments.

Walking

- Uneven sidewalks are a challenge, especially for seniors.
- Uneven sidewalks or cracked curbs on Hampton Road between Indian Road and King Avenue; on Requa Road north of the giant redwood tree; and on Highland Avenue bordering the parking area for the Community Hall.
- No sidewalks on some of the streets in lower Montclair for kids who live just outside the Piedmont border but are still close enough to walk (or bike) to school (a specific concern is Harbord Drive just as it comes into Blair Avenue at the reservoir, because of the blind curves).
- Pedestrian crossing across Moraga Avenue at Red Rock Road so that people can go between Blair Park and Coaches Field.
- Railing or barrier on the Oakland Avenue bridge to keep pedestrians, especially kids, from venturing into traffic accidentally.
- "Arguably" the most dangerous intersection in Piedmont is Oakland/Grand Avenues. The intersection also has a history of crossing guards who change frequently or do not always show up for work.
- Bulb-outs at Grand/Linda Avenues for safer pedestrian crossing.
- More, better-trained or longer-duration crossing guards.
- Parents should report missing crossing guards to the school district, the Police Department or the crossing guard company.
- Mountain bikers are using the off-leash dog path in Piedmont Park; it's dangerous for walkers.

Biking

- Heavy traffic and lack of bike facilities make Piedmont's major streets forbidding for cyclists. Need road diets, bike lanes, cycle tracks, bike boxes, sharrows and colored paving.
- The network of bikeways should serve all the public schools and major parks, and should connect to Oakland routes linking Piedmont to shopping districts and BART stations.
- Grand Avenue, Park Boulevard and portions of Moraga Avenue are dangerous bike routes.
- Improvements for Moraga Avenue: uphill/climbing bike lanes east of Highland Avenue, super sharrows downhill; widen sidewalk if possible; bike lanes west of Highland Avenue; opportunities for cycle track along Blair Park and Mountain View Cemetery; look at the old plan for roundabouts at Red Rock and Maxwelton Roads.
- Alternative to the bike route on the western end of Moraga Avenue: Moraga/Monticello/Ronada Avenues in the downhill direction and Ronada/Ramona/Moraga Avenues in the uphill.
- Improvements for Oakland Avenue: Bike lanes west of the Linda Avenue overcrossing, in both directions; permit cyclists to use the bridge sidewalk in the uphill direction.
- Improvements for Grand Avenue: two-way cycle track in the middle through the commercial area; road diet south of Cambridge Way/Greenbank Avenue; soft posts or other buffer for the southbound bike lane near the turn; bike box at Oakland Avenue; a higher-priority bike route than Linda Avenue.
- Improvements for Highland Avenue: road diet south of Oakland Avenue; bike box at Moraga Avenue; roundabout at Magnolia/Highland Avenues and at Highland/Mountain Avenues; no median; bike lanes south of Piedmont Park.

- Bike lanes on Linda Avenue between Grand and Lake Avenues; allow parking only for school events.
- Zigzagging route to connect Grand Avenue and the Civic Center that avoids Oakland Avenue: Cambridge Way/Ricardo Avenue /Dracena Park path/Hillside Avenue/Vista Avenue.
- Safety improvements for cars turning left off St. James Drive onto Hampton Road.
- Bike spur on La Salle Avenue to reach Hampton Field.
- Improvements for St. James Drive: strategic traffic-calming measures; parking restrictions in the daytime.
- Pursue small-scale "early win" projects even before the plan is adopted: sharrows and "Bikes allowed use of full lane" signs on streets with bike traffic and narrow travel lanes, including on Grand Avenue between Cambridge Way and Sunnyside Avenue and on Linda Avenue between Rose and Grand Avenues; also sidewalk bike-parking racks in the Civic Center.
- Bike sensors and stencils at all traffic lights, particularly for the left turn from Ronada Avenue onto Grand Avenue.
- Pavement in poor condition makes it dangerous to ride downhill on Magnolia Avenue.
- Make designated bike routes a high priority for repaving.
- Lack of bike-specific safety features on Park Boulevard.
- Include residents along the proposed bike routes in the public discussion.
- Collaborate with Oakland staff and citizens on bike planning issues across boundaries.
- Visible and useful bike parking particularly in and around the Civic Center and at the schools.
- Outline in the plan potential locations for bike parking and include standards for the development of bike parking, including near bus stops and at casual carpool locations.
- Include in the plan measurable targets for things such as bike mode share or the percentage of people biking to work/school and also a process for monitoring progress toward the targets.

Other

- Consider redesigning the Grand/Lower Grand Avenues triangle to make it safer (many collisions, discontinuous bike lane, the curve of the main road is not well marked).
- Collaborate with PUSD, other agencies and non-profits to pursue funding for Safe Routes to School improvements.
- Include in the plan conceptual street designs for some of the major roads (Highland Avenue, Wildwood Avenue, Hampton Road, etc.) that have excess right-of-way.
- History of collisions and traffic concerns at Moraga/Mesa Avenues due to speeding cars and bikes on Moraga Avenue (blind bend, cars speed through the crosswalk, difficult to parallel park or get in and out of the driver's side of a car, cannot hear oncoming bikes); need a speed bump, flashing lights or other device to slow down traffic.
- The Hampton Road/Sea View Avenue intersection is not safe (drivers speed on Hampton Road and the street curves on either side of the intersection, restricting visibility). Make it a 4-way stop. Speed bumps/humps would not slow down cars much lower than the speed limit and do not fit in with the neighborhood feel.
- El Cerrito Avenue entrance to Witter Field: many cars do not stop at the stop sign or observe the speed limit; no crosswalk and bottlenecks at the Jerome Avenues intersection; congestion on Sundays when the gate is closed; Witter Field access road "understood" to not have been designed for public use but now cars are allowed to drive, park and drop off. In the area of the walled ramp between Witter Field and the Middle School, cars speed around the blind corners and there are no sidewalks.

Improvement Options

1 | Overview of the improvement options task

The previous chapter outlined the needs and concerns of Piedmonters regarding walking and biking in their city. The needs and concerns expressed by the community were used to formulate a preliminary set of concrete ideas or options for improving conditions that residents could review, comment on and help refine and prioritize.

The main criteria used to develop the options presented at this stage of the planning process were that they (i) had the strong potential to make walking and biking in Piedmont safer, easier and more popular and (ii) responded directly and closely to the main needs and concerns expressed by residents through the needs assessment process. The improvement options presented to the community fell under three categories (while many people tend to focus on physical improvements, infrastructure is not the only way to improve conditions related to walking and biking):

- Physical on-street projects, which were further divided into projects mostly benefitting pedestrians or benefitting cyclists.
- Programmatic activities, events and other non-physical improvements.
- Changes to City policies and practices.

This chapter summarizes the improvement options that were presented to the public and decision-makers. (A briefing paper prepared earlier in the process and which describes the improvement options in more detail is available at http://tiny.cc/66b1jx.) The chapter concludes by describing the need to winnow and refine the list of options and by summarizing feedback from the public on the options.

2 | Pedestrian projects

The list of improvement options suggested nine projects benefitting mostly pedestrians:

1. Enhanced street crossings

A high and disproportionate number of comments expressed by Piedmonters during the needs assessment process concerned unsafe conditions at crosswalks resulting from drivers failing to see pedestrians or to yield the right-of-way. This project would install more-visible crosswalks at high-priority locations.

The crosswalks could feature a range of enhancements, including:

- In-pavement flashers (see top image at right)
- Sidewalk bulb-outs or neck-downs, to decrease the crossing distance and make pedestrians more visible to drivers (middle image)
- Refuge islands in the center of the street (also top image)
- Flashing speed signs on the approaches (bottom image)

- "Speed tables" (raised intersections or crosswalks; top image at right)
- Specially colored and textured pavement (bottom image at right).

2. Additional sidewalk and curb-ramp work

The City currently spends approximately $200,000 annually on sidewalks and curb ramps, primarily to repair sidewalks that have buckled from tree roots and to install new ramps. (In addition, the City requires homeowners under certain conditions to make needed sidewalk repairs). Some of the funds that the City can expect to receive in grants over the next ten years could be used to build or maintain additional sidewalks and curb ramps. Highest priority would be given to projects in the Civic Center and Grand Avenue commercial district and near schools. Prioritization would be coordinated with the City's Right-of-Way Transition Plan, being prepared to comply with the Americans with Disabilities Act, to ensure that the needs of disabled individuals are taken into account.

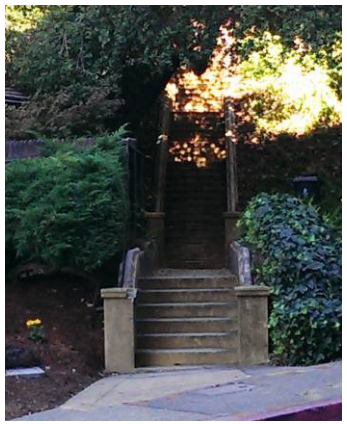
3. New street lights

The City currently spends approximately $100,000 annually on new street lights and repairs. This is sufficient to keep up with maintenance and repair needs and for very limited installation of new lights. Similarly to the previous item, some of the funds that the City can expect to receive in grants could be used to install additional street lights. The highest priority would be areas with a history of complaints about inadequate lighting levels or unsafe traffic conditions, particularly for pedestrians and cyclists, due to insufficient lighting. One programmatic action the City could take to supplement existing street lighting is to encourage residents to leave their porch lights on in the evening hours; this could be organized on specific streets through neighborhood watch programs coordinated by the Police Department.

4. Footpath and stairway enhancements

In addition to its sidewalks, Piedmont has a system of footpaths and stairways that run through city blocks, serving as shortcuts between streets, many of them in steep areas. These paths and stairways are much-loved community amenities but which some people feel are under-maintained. The City could use grant funds to improve their condition by:

- Reconstructing steps and broken pavement.
- Building ramps, where feasible, to provide access to people in wheelchairs and people with strollers.
- Installing motion-detector lighting along the paths and stairs.
- Installing handrails.
- Clearing overgrown foliage.



5. Reconfiguration of the Highland Avenue bend

Arguably the most confusing stretch of road in Piedmont is Highland Avenue roughly from Vista Avenue to Piedmont Court. At this location, Highland Avenue transitions between two and four lanes, and the area has ten crosswalks and two small traffic islands, as well as the large island formed by Highland Way. Following a detailed traffic study, this segment could be reconfigured—primarily through restriping, crosswalk improvements and reshaping of the islands—to rationalize pedestrian and car traffic in the area.

6. Sidewalk railings on the Oakland Avenue bridge

The Oakland Avenue bridge, crossing over Linda Avenue, was built in 1911. It is in good working condition but is a busy stretch with narrow lanes and lacks modern-day safety features. This project would install an attractive, decorative and historically compatible railing to separate the sidewalk from the travel lane on either side of the bridge.

7. Accessible pedestrian countdown signals

Pedestrian countdown signals (see image at right) show on the display the number of seconds left before the light changes and cars begin crossing again; the hand goes from steady white to flashing red to solid red as the time approaches, then reaches zero. These signals exist at one intersection in Piedmont: Oakland Avenue / Highland Avenue. New signals (which also would be accessible to pedestrians with visual disabilities) would be installed at the remaining signalized intersections in the city:

- Moraga Avenue / Highland Avenue.
- Grand Avenue / Rose Avenue.
- Grand Avenue / Oakland Avenue.

8. Alternative school drop-off and pick-up location

One of the main congestion hotspots in Piedmont happens in the Civic Center, particularly on Magnolia and Highland Avenues, during school start and end times. The congestion creates potentially unsafe conditions for pedestrians, particularly for the many school children in the area. To address this issue, a dedicated location for student drop-offs and pick-ups, with special signage and striping, would be created farther south on Highland Ave. From here, students of the middle school and high school would walk through Piedmont Park to reach school. This would improve pedestrian safety by reducing the number of cars in the Civic Center core.

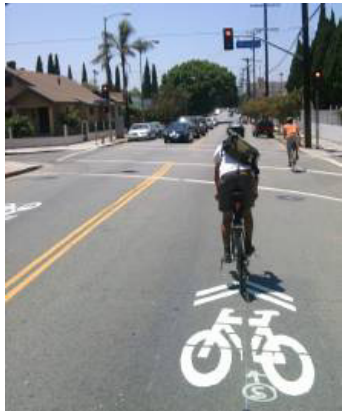
9. Pedestrian spot improvement program

This would be a City program to respond to complaint-driven requests for small-scale pedestrian improvements. Improvements could include installing trash cans, benches and other pedestrian amenities; installing bollards or railings to prevent cars from parking on the sidewalk; making small-scale, strategic changes to parking and traffic patterns; installing safety signs; and trimming back overgrown vegetation. This program could be supported by an online form for requesting improvements.

3 | Bicycle projects

While bicycling still represents a small percentage of trips made in Piedmont, the demand to accommodate cyclists in the city has increased greatly in recent years. The list of improvement options suggested four projects benefitting mostly cyclists:

1. Designated bikeway network



Cyclists are allowed to use any street in Piedmont. However, a designated bikeway is intended to provide a higher level of service for cyclists than other streets, in terms of safety and convenience. This project proposed a designated citywide network of streets on which various improvements would be made to improve bicycling.

The network would be a combination of signed routes (featuring various types of standard bike signs); signed routes supplemented with "sharrows" (stencils that encourage shared use of traffic lanes by drivers and cyclists; see middle image at right); bike lanes; and traffic-calmed "neighborhood routes." To create room for bike lanes, (i) Grand Avenue north of the city border to Greenbank Avenue and (ii) Highland Avenue from Park Way to Magnolia Avenue would be put on "road diets:" each side of the street would be restriped from two general-travel lanes to one car lane and one bike lane, with a turn lane in the middle (bottom image).

2. Bike racks and lockers

Attractive, high-quality racks for parking bikes would be installed at all main public and private destinations around Piedmont. Key destinations are schools; parks and other recreation facilities; government buildings; houses of worship; banks; Mulberry's Market; the Grand Avenue commercial district; bus stops; and casual carpool spots. Also, the City would consider ways to provide showers, storage lockers and bike-parking lockers for City staff, and possibly also PUSD staff, who commute by bike.

3. Bicycle spot improvement program

Similar to the analogous pedestrian program, this program would respond to complaint-driven requests for small-scale bicycle improvements. Improvements could include repairing potholes and pavement cracks; replacing damaged or missing bike-route signs; repainting pavement markings; trimming back overgrown vegetation; fixing causes of water puddling on streets; and installing traffic mirrors to address blind spots on streets. This program could be supported by an online form for requesting improvements.

4. Bike-detecting traffic signals

The four intersections in Piedmont with traffic signals would be equipped with bicycle-detection technology. This technology recognizes when cyclists are present at the intersection, triggering the green light sooner and providing sufficient time in the signal phase for cyclists to clear the intersection. There are several detection technologies available, including video cameras, radar, microwave, infrared and in-pavement sensors and inductive loops, each with advantages and disadvantages.

4 | Programs

Infrastructure and facilities, while critical, are only one of several ways to improve conditions for pedestrians and cyclists. Also important are safety, education, encouragement and enforcement efforts that invite more people to walk and bike and that make it safer and more convenient to do so. With this in mind, the list of implementation options suggested five "programs" of activities, events and other non-physical improvements; they are listed below. Like the physical projects, the programs were designed to responded to key concerns heard through the needs assessment process.

1. Walk- and bike-to-school encouragement

The previous sections outlined a number of capital projects for improving the safety of streets and intersections. This program would complement those projects through activities that encouraged students to walk and bike to school and that made it safer to do so. Activities would include walking school buses and bike trains (see top image at right); "Walk and Roll to School" days; and clinics, classes and other safe-biking instruction, such as "bike rodeos" (bottom image). Because the activities are so strongly schools-focused, they would need to be carried out by the Alameda County SR2S program or the PUSD.

2. General walking and biking promotion

To maximize the City's investments in physical, on-street walking and biking improvements, this program would encourage the general population, especially adults, to walk and bike more frequently, for both transportation and recreation. Activities under this program would include annual or seasonal street closures in the Civic Center for recreation (see top image at right), celebration of Bike to Work Day (bottom image) and a dedicated section on the City's website for news, announcements and resources related to walking and biking.

3. Traffic safety education

A very large share of the concerns expressed by Piedmonters through the needs assessment process stemmed from unsafe or illegal driver behavior: speeding, distracted driving, not obeying stop signs and traffic lights, and failing to yield to pedestrians at crosswalks. In addition, some concerns were expressed about unsafe riding on the part of cyclists and "distracted walking" by pedestrians. This program would begin to address these concerns through such activities as use by the Police Department of a speed trailer on streets with a history of speeding complaints; posters and bumper stickers with different Piedmont-specific traffic safety messages; and rotating traffic safety messages on the City's website and public service announcements on KCOM and other local media.

4. Traffic law enforcement

This program would complement the previous one on traffic safety education through enhanced enforcement of traffic laws. The most important action is for the Police Department to maintain at least two full-time enforcement officers on staff at all times. Other efforts would include an online complaint and request form for traffic enforcement; "pedestrian stings" at high-priority locations, in which plainclothes officers cross the street and uniformed officers warn or ticket drivers who fail to yield; and a refresher training course for officers who wish to use the Police Department's patrol bikes.

5. Promotion of the footpaths and stairways

The City's system of footpaths and stairways is a somewhat underutilized civic resource. Beyond maintaining and repairing these facilities, the City could raise awareness of them by adopting an official name for each path and stairway; installing plaques, signs or markers with the City logo (see image at right) at the entrances; and providing a map or guide on the City's website.

5 | Policies

The list of improvement options also suggested a number of new City policies and practices, or modifications to existing ones in ways that could benefit walking and cycling. The suggestions, which addressed seventeen separate topics, included:

1. Develop a formal process for considering requests for **lower speed limits;** also under this topic, update the City's Engineering and Traffic Speed Zone Survey.
2. Develop a written policy to guide the installation of marked **crosswalks and of stop signs.**

3. Develop a prioritization policy for the installation or repair of **sidewalks, curb ramps and street lights.**
4. With the PUSD, analyze requested locations to determine if they meet criteria for the assignment of **school crossing guards;** also, post online the location and schedule of crossing guards.
5. Increase enforcement against parked cars that **block the sidewalk or crosswalk.**
6. Improve visibility at intersections with **poor or obstructed sightlines** by, for example, restricting parking and installing street traffic mirrors.

7. With the Piedmont Beautification Foundation, encourage and facilitate **private donations** for traffic-calming and street beautification projects.
8. Research the status of potentially **forgotten or abandoned right-of-ways** of footpaths and stairways.
9. Continue current practices on **street trees,** particularly to prevent further deterioration of sidewalks from tree roots.
10. Have the PUSD install a gate to **restrict access on "PE Hill"** to cars for service staff.
11. Pursue **public access to EBMUD's reservoir** at Blair and Scenic Avenues for passive recreation as part of any redevelopment proposals for the site.

12. Revise the City's **park policies** to clarify that biking in off-leash dog runs or other parts of the parks is prohibited and post improved signage to that effect.
13. **Consolidate parking and institute one-way traffic** on certain streets in order to make room for bike lanes.
14. Give greater consideration to sealing, resurfacing and repavement projects on streets that are designated bikeways, and follow the City's **policy on complete streets** as part of these projects.
15. Develop **street-design guidelines** for the use of non-slip or less slippery alternatives to street surfaces (including "Bott's dots"—see image at right).

16. **Coordinate with Oakland** on the development of bikeways that connect the two cities, particularly on Moraga and Grand Avenues and on Park Boulevard.
17. Lobby for a **Bay Area Bike Share station** in Piedmont.

CITY
EMPLOYEE
PARKING
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6 | Refining the options

The improvement options presented certain trade-offs that needed to be resolved by the community. First, some of the options or ideas—bike lanes, for example—would entail changes to how the city's streets look and function, something that community members could be expected to have differing opinions on. Second, City staff have only limited capacity to take on and carry out new projects and initiatives, on top of their existing workload. Third, and perhaps most importantly, the improvement options had an estimated price tag well in excess of the amount of outside funding that the City can expect to have available over the next ten years—the PBMP's time horizon—for pedestrian and bicycle improvements.

Given the above trade-offs, it was necessary to winnow and refine the list of improvement options into a feasible and affordable set of recommended projects, programs and policies. The recommended improvements are outlined in the next chapter, which is the "action plan," or implementation strategy for the PBMP. To enlist the public's help in selecting and prioritizing improvements, the list of options was presented at a hearing of the Planning Commission, a joint hearing of the Park and Recreation Commissions and a public workshop, and was the subject of an online survey.

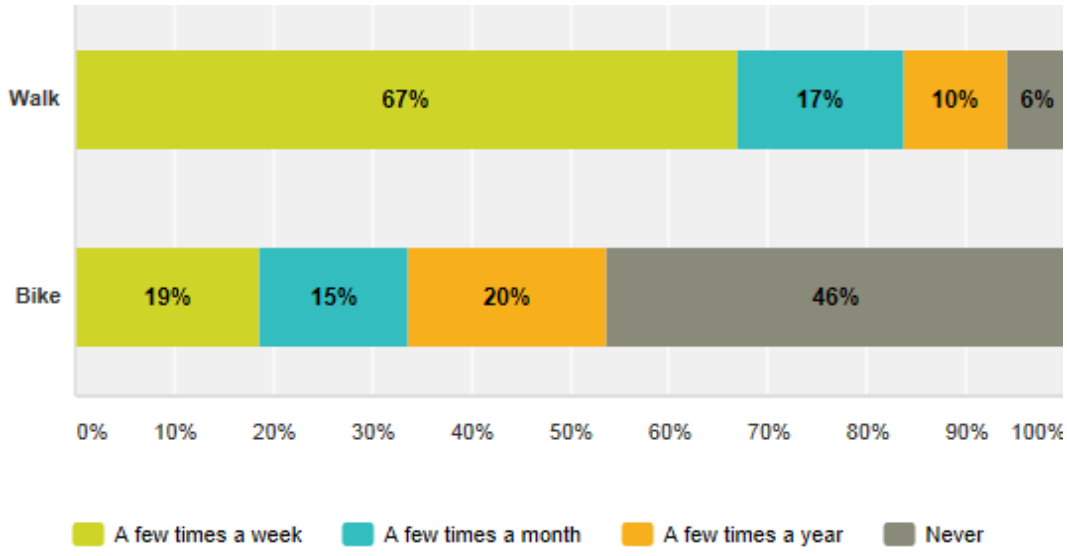
7 | Public outreach

The public workshop on the improvement options was held on Monday, February 24, 2014 at Piedmont Community Hall; it was attended by 70–80 people. The workshop began with a slide presentation outlining the improvement options. This was followed by a group exercise that asked people a series of questions on policy trade-offs inherent in some of the improvement options. Following the exercise, the attendees were broken up into three groups, which rotated among three facilitated "discussion stations." The stations focused on the (i) pedestrian projects, (ii) bicycle projects and (iii) programs and policies suggested as part of the improvement options. Participants' comments were captured on posters and flipcharts.

The online survey ran on SurveyMonkey.com for slightly longer than a month, from February 19 to March 23, 2014. During that time, 263 people responded to the survey (though not everyone responded to every question). Respondents were eligible to win one of three $25 gift certificates for Mulberry's Market, courtesy of the PBMP consultant. The survey contained 32 questions, nine of which related to various policy trade-offs. Below is a summary of the responses given under each question.

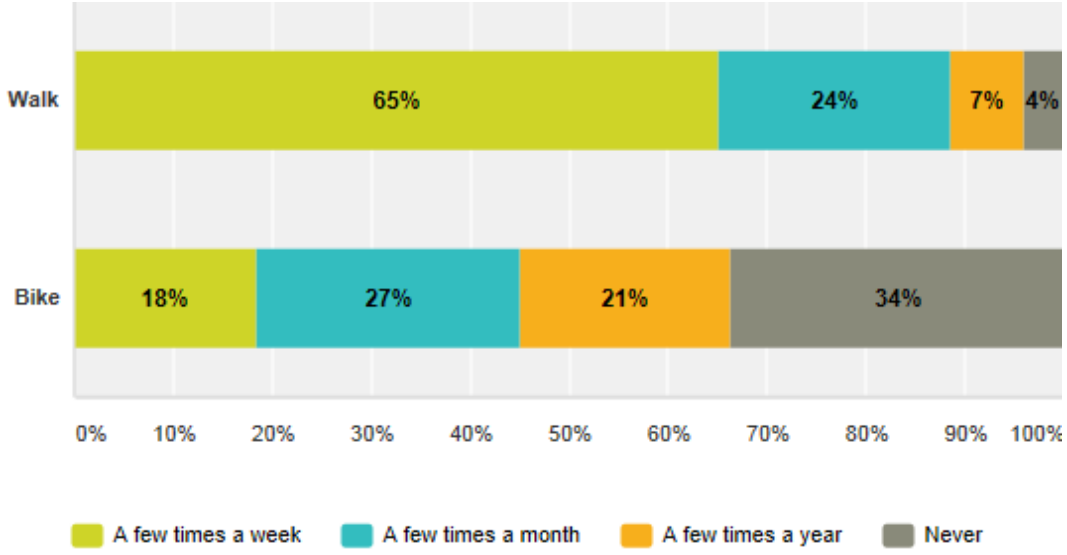
1. Walking or biking for transportation

The first question asked, *[H]ow often do you walk or bike in Piedmont for transportation?* Almost 70% of respondents said they walk, and almost 20% bike, for transportation a few times a week. At the other end of the spectrum, 6% said they never walk, and almost half (46%) never bike, for transportation.



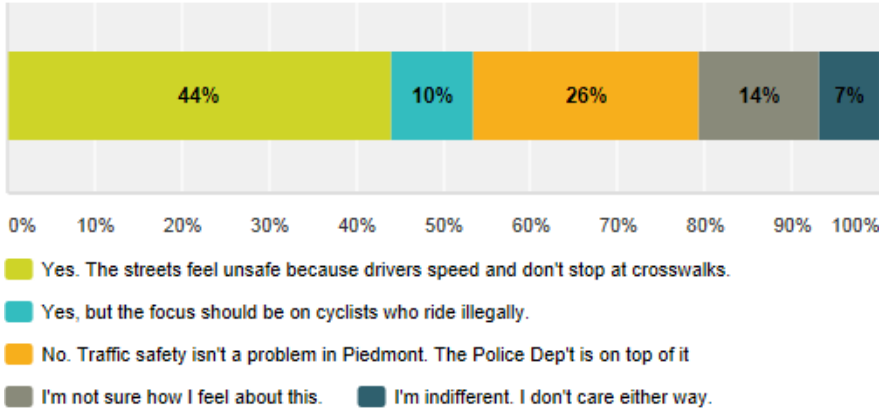
2. Walking or biking for fun or exercise

The second question asked, *[H]ow often do you walk or bike in Piedmont for fun or exercise?* Two thirds (65%) of respondents said they walk, and 18% bike, for recreation a few times a week. On the other hand, 4% said they never walk, and one third (34%) never bike, for recreation.



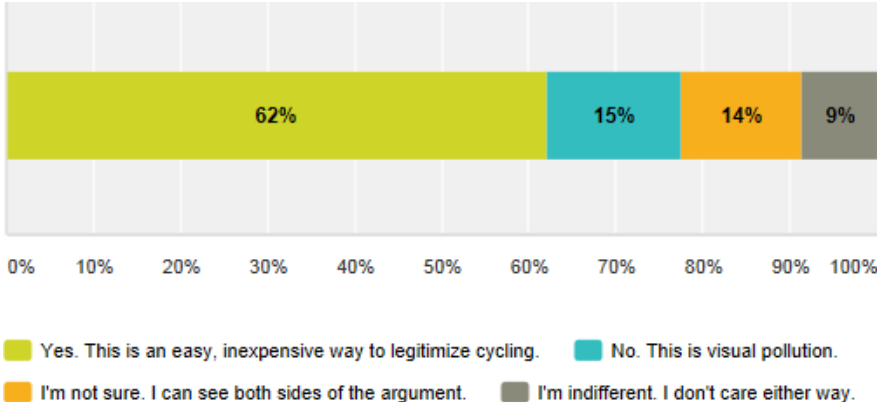
3. Trade-off question on enforcement of traffic laws

This question asked what people thought about increasing enforcement of traffic laws in Piedmont. Almost half (44%) of respondents said yes, to respond to unsafe driving behavior. A quarter said no, because traffic safety is not a problem.



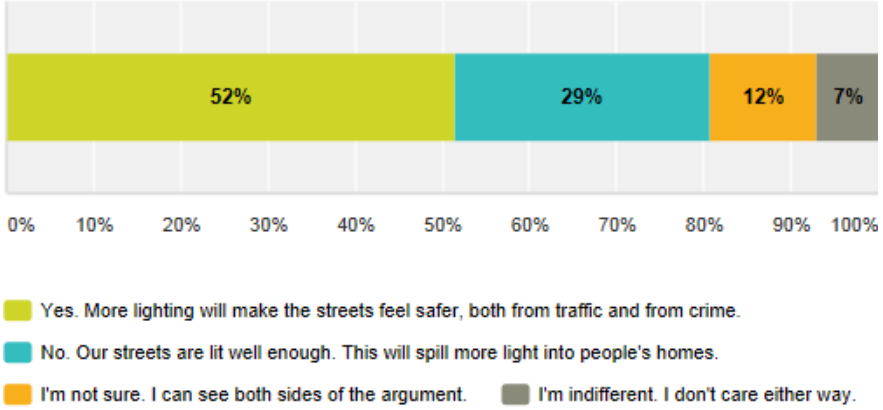
4. Trade-off question on bike-route signage

This question asked what people thought about installing signs to indicate the bike routes. Almost two thirds (62%) said this would be an easy, inexpensive way to legitimize cycling.



5. Trade-off question on street lighting

This question asked people what they thought about having the City install more street lights or encourage homeowners to keep their porch lights on in the evening. More than half (52%) said yes, that it would make the streets feel safer.

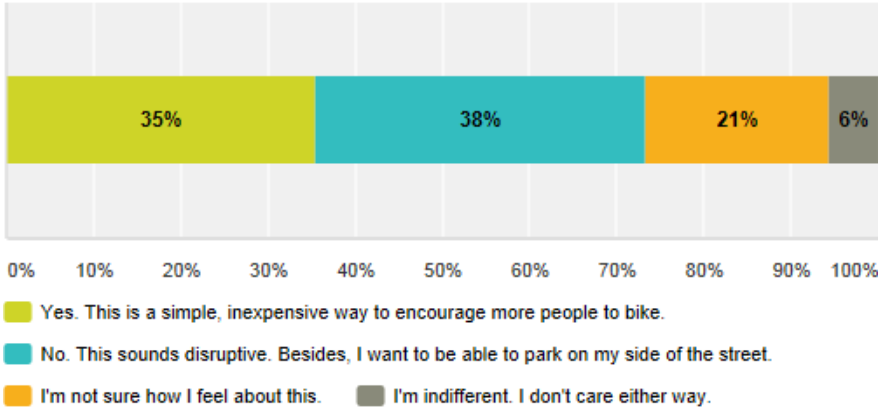


6. Comments on these three questions

An open-ended question asked if people had any comments about the issues addressed in these first three questions on trade-offs (questions 3–5). 121 comments were submitted. These appear in Appendix B-1.

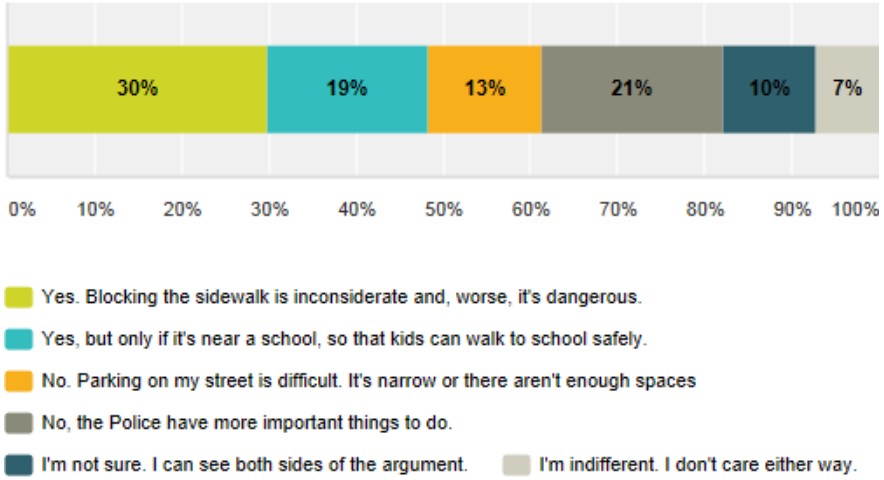
7. Trade-off question on restricting parking on certain streets

This question asked what people thought about restricting parking to one side of the street to make room for bike lanes, where few cars park on the street. A slightly higher number said no than yes.



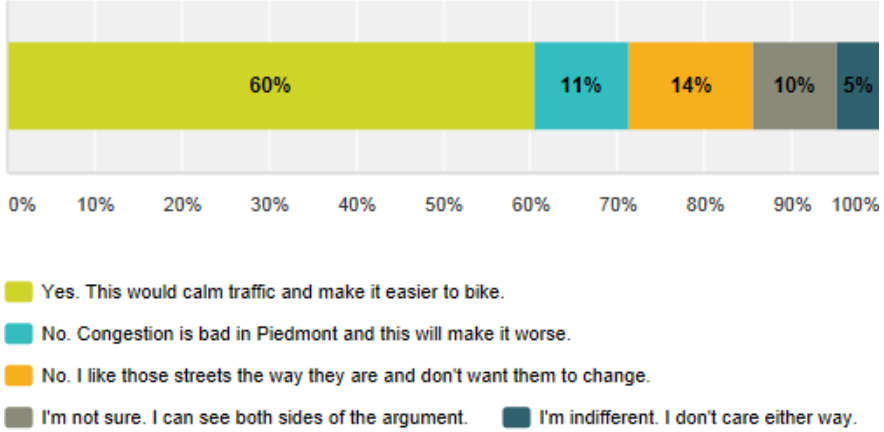
8. Trade-off question on ticketing cars that block the sidewalk

This question asked what people thought about ticketing cars more often when they block the sidewalk. Almost half (49%) said yes, under certain conditions, while (34%) said no, for different reasons.



9. Trade-off question on road diets

This question asked people what they thought about road diets on Grand and Highland Avenues (restriping the streets from four lanes to two and adding bike lanes and a center lane for turning). A relatively large majority (60%) said yes while a quarter said no.

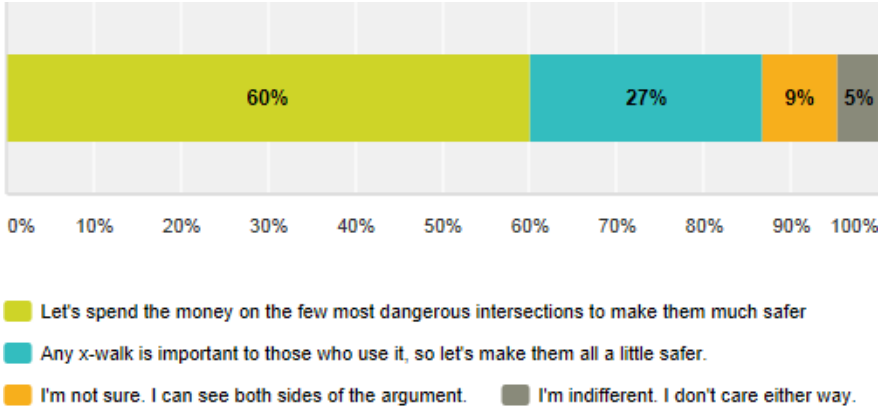


10. Comments on the questions on this page

An open-ended question asked if people had any comments about the issues addressed in the three questions on this page (questions 7–9). 120 comments were submitted. These appear in **Appendix B-2**.

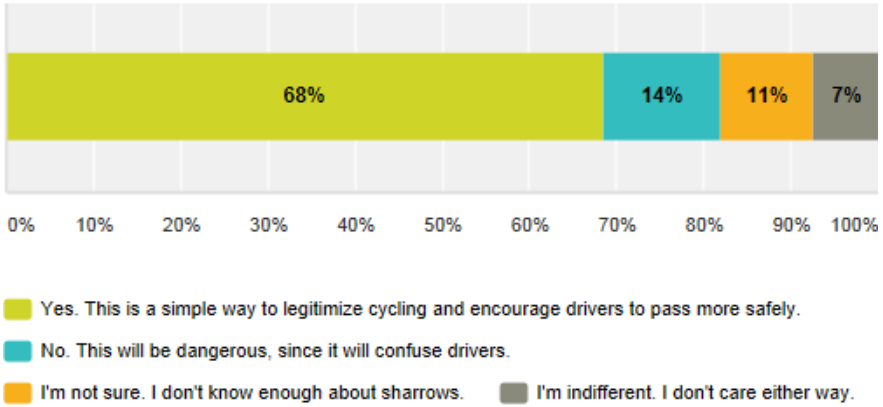
11. Trade-off question on enhanced street crossings

This question asked whether people preferred focusing resources on the busiest intersections or making smaller improvements at many more intersections. A majority (60%) preferred the former.



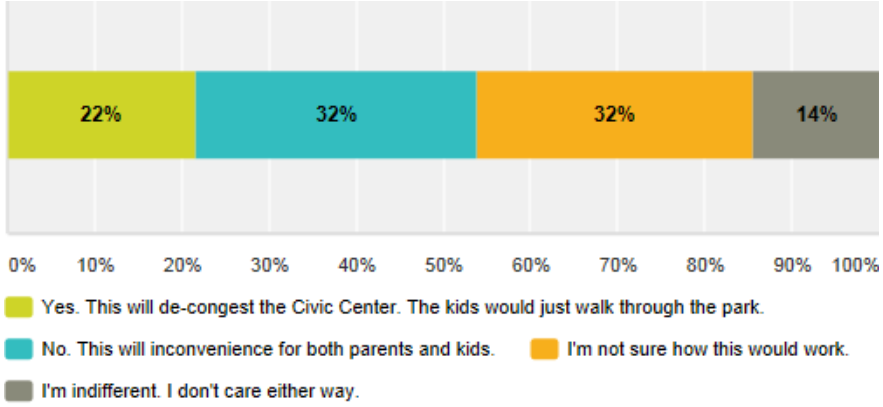
12. Trade-off question on sharrows

This question asked what people thought about striping sharrows on some of the designated bikeways. More than two thirds (68%) said this would be a simple, inexpensive way to legitimize cycling.



13. Trade-off question on relocating school pick-up spots

This question asked people what they thought about relocating most of the school pick-up and drop-off parking spaces on Magnolia Avenue to the other side of Piedmont Park, near Highland and Sierra Avenues. About a third said no while another third were not sure how this scheme would work.



14. Comments on the questions on this page

An open-ended question asked if people had any comments about the issues addressed in the three questions on this page (questions 11–13). 97 comments were submitted. These appear in Appendix B-3.

15. Outside funding for walk/bike improvements

This question asked what people thought about using outside funding for pedestrian/bike improvements. A large majority (78%) said the City should take advantage of any such funding available.

We should take advantage of any outside funding available to improve walking and biking. 78%

Walking and biking are already in fine condition in Piedmont. Those funds should go to other cities. 9%

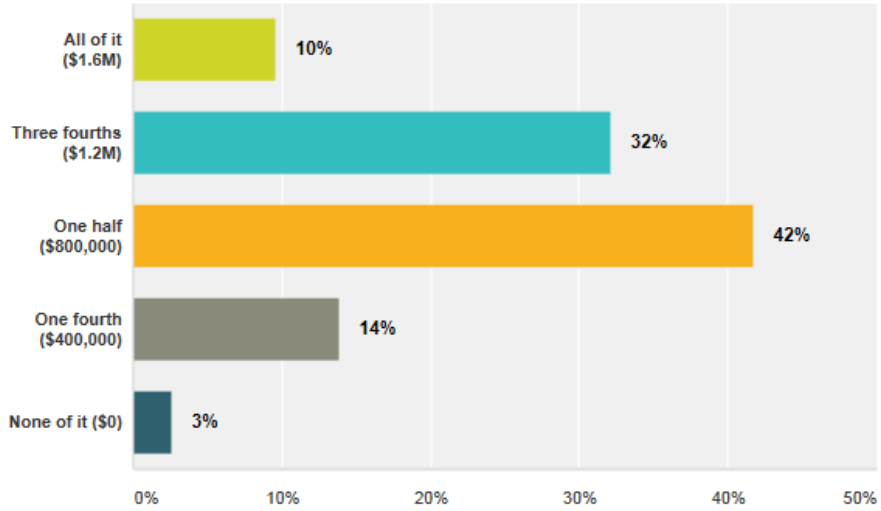
Walking is fine but the City should not encourage biking, even if it's with outside funds. 4%

I'm not sure what I think about this. 6%

I'm indifferent. I don't care either way. 3%

16. Funding for pedestrian versus bike improvements

This question asked, *Of the $1.6 million expected to be available, roughly how much would you devote to projects benefitting mostly pedestrians, as opposed to cyclists?* A plurality, more than 40%, would split the funds equally between the two categories.



17. Suggested pedestrian projects

This question asked people to pick, from the pedestrian projects on the list of improvement options, the five most important to them, in order of importance. Below are the projects in order of average importance rating, where 1 is "most important," 2 is "second most important," and so on. With the exception of greatly improved crosswalks at the busiest intersections (by far the most popular project) and the spot improvement project (the least popular), the projects clustered around a fairly narrow range of ratings.

Greatly improved crosswalks at the busiest intersections 1.7

New street lights at high-need locations 3.0

Somewhat improved crosswalks at other, less critical locations 3.0

Safety railings on the Oakland Ave bridge sidewalks 3.1

More sidewalk repairs and curb ramps 3.2

Reconfigure Highland Ave from Vista to Piedmont Court, to make traffic around the bend less confusing 3.3

Improvements to the mid-block paths and stairs 3.3

Ped countdown signals at all of the city's traffic lights 3.4

Move school drop-off parking spaces from Magnolia to Highland near Sierra 3.5

"Spot improvement program" for minor fixes and repairs 3.9

18. Other pedestrian projects

This was an open-ended question asking, *Are there other major, "big ticket" pedestrian projects that should be included in the walk/bike plan?* 73 comments were submitted. These appear in **Appendix B-4**.

19. Suggested bike projects

This question asked people to indicate how important each of the bike projects on the list of improvement options was to them. Below are the projects in order of the number of responses indicating "very important."

"Premium" bikeway network: some traffic-calming; also, road diets on Grand and Highland 89

"Enhanced" bikeway network: bike lanes, sharrows (stencils in narrow lanes encouraging sharing of the lane) 75

"Basic" bikeway network: bike-route signs, "Bikes may use the full lane" signs, destination/directional signs 71

Ample bike parking at high-need locations 53

"Spot improvement program" for minor fixes and repairs along bikeways as requested by the public 39

Bike-detection technology at the city's four traffic lights 38

20. Other bike projects

This was an open-ended question asking, *Are there other major, "big ticket" bike projects that should be included in the walk/bike plan?* 53 comments were submitted. These appear in **Appendix B-5**.

21. Other bikeways

This was an open-ended question in reference to the proposed citywide network of designated bikeway. It asked, *Are there any streets that should be added to, or removed from, the network? Name the street(s) and tell us why.* 79 comments were submitted. These appear in **Appendix B-6**.

22. Types of bikeways

This was another open-ended question in reference to the proposed citywide network of designated bikeway. It asked, *What do you think about the types of bikeways being suggested? Are there any specific streets you have concerns about? What are your concerns?* 94 comments were submitted. These appear in **Appendix B-7**.

23. Suggested programs

This question asked, *Of the five programs we're considering, are there any that you don't support?* Below are the programs in order of the number of responses received. It should be noted that even the most unpopular program, enhanced traffic enforcement, was picked by fewer than 15% of all survey respondents.

Enhanced traffic enforcement (online complaint form, "pedestrian stings" at crosswalks, training course for cops on bikes) 38

Promoting the mid-block paths and stairs (names for them, plaques/signs, online guide/map) 29

Traffic safety education (safe-driving events for teens, speed trailers, public announcements, posters/stickers, "Take the pledge" campaign to drive safely) 19

General walking and biking promotion (street fair in the Civic Center, Bike to Work Day, community bike ride, information on the City's website) 14

Promoting walking and biking to school (walking buses and bike trains, "Walk and Roll to School" days, traffic-smarts training for kids, workshops for parents) 10

24. Programs not supported

This was an open-ended question asking, *If there are any programs or activities that you don't support, why not?* 47 comments were submitted. These appear in **Appendix B-8**.

25. Other programs

This was an open-ended question asking, *Are there any other programs or activities that should be included in the walk/bike plan?* 47 comments were submitted. These appear in **Appendix B-9**.

26. Suggested policies

This question asked, *Below are some policies we're considering for the walk/bike plan that might be controversial. Are there any that you don't support?* Below are the policies in order of the number of responses received.

Prohibit biking anywhere in the city's parks	67
In the longer term, make room for bike lanes by making some streets one way or by restricting parking to one side of the street	65
More ticketing of cars blocking the sidewalk	54
Ask the school district to close the PE Hill service road to the public, to improve it for kids walking to school	38
Increase enforcement of traffic laws; also, lower speed limits when warranted	23
Encourage private donations for improvements (mid-block paths and stairs, street triangles, traffic-calming, landscaping)	22
Pursue public access to the reservoir at Blair and Scenic Avenues if the site is redeveloped by EBMUD	12
Restrict parking near street corners with poor sightlines or blind	11

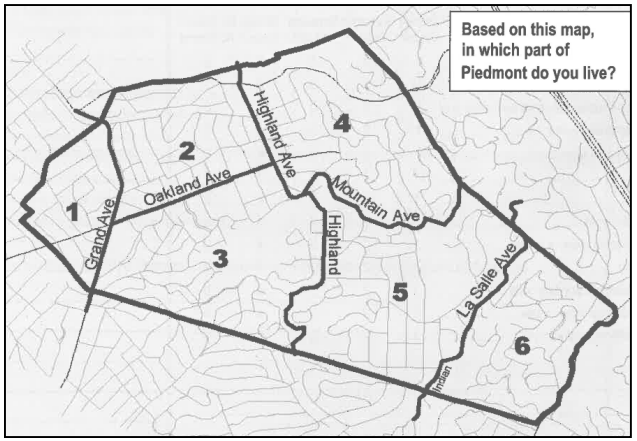
27. Policies not supported

This was an open-ended question asking, *If there are any policies that you don't support, why not?* 67 comments were submitted. These appear in Appendix B-10.

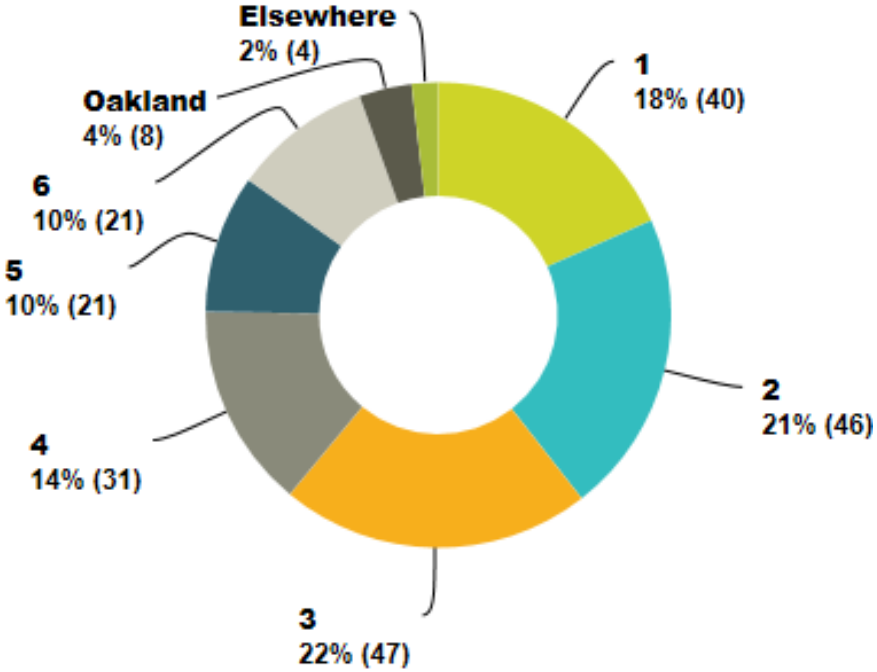
28. Other policies

This was an open-ended question asking, *Are there any other policies that should be included in the walk/bike plan?* 29 comments were submitted. These appear in Appendix B-11.

29. Home

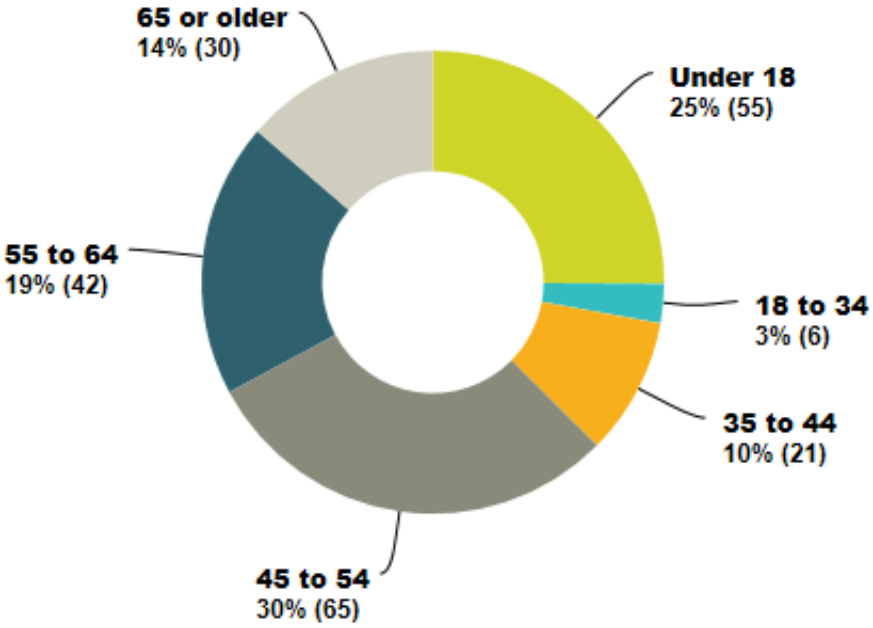


People were asked where they live, based on the map to the right. 218 people responded. 75% said they live in areas 1–4 of the city (roughly the western half), 20% in areas 5–6 and 6% outside of Piedmont (the percentages do not add up to 100% due to rounding).



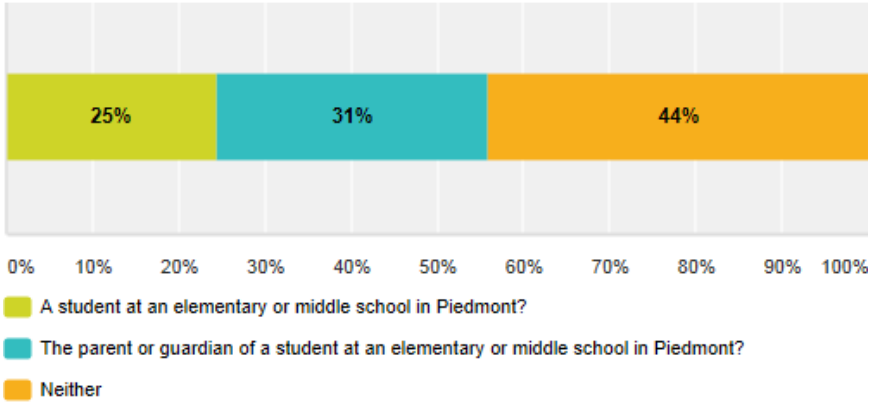
30. Age

People were asked how old they are. 219 people responded. A quarter said they are under 18 while 14% said they are 65 or older.



31. Student, parent or neither

This question asked people if they are a student, a parent/guardian or neither. A quarter said they are a Piedmont elementary or middle school student while 31% said they are a parent or guardian.



32. Drawing for gift certificates / PBMP announcements and updates

152 people indicated that they would like to be entered in the drawing for one of three $50 gift cards for Mulberry's Market (the drawing was held using an online service for this purpose called Random.org). 99 people indicated that they would like to receive updates and announcements about the PBMP.

Action Plan

1 | Overview of the action plan

As described in the introduction, one of the objectives of the PBMP was to identify a realistic, affordable and effective set of improvements that will make walking and biking in Piedmont safer, easier and more popular. This chapter describes an "action plan," or implementation strategy, for the PBMP. It essentially defines a work program of pedestrian and bicycle improvements for City staff and decision-makers for the PBMP's ten-year time horizon, from 2015 to 2024. The action plan consists of:

- **High-priority projects,** which are the most important and promising physical improvements for improving conditions.
- **Lower-priority projects,** which are other important projects to be implemented if additional funding becomes available.
- **Recommended programs** in the areas of safety, education, enforcement and encouragement or promotion.
- **Recommended policies,** or changes to City practices.
- **Other implementation actions,** or smaller-scale recommendations to further advance walking and biking in Piedmont.

The priority projects and recommended programs and policies were arrived at by winnowing the list of improvement options described in the previous chapter. The resulting action plan takes into consideration the constraints and trade-offs mentioned in the previous section: limited outside funding; the differing—even conflicting—opinions of community members; and limitations on City staff capacity. The action plan is intended to be a mix of pedestrian and bicycle improvements, though with a stronger emphasis on the pedestrian side (reflecting public input and the fact that many more Piedmonters walk than bike for both recreation and transportation and will very likely continue to do so in the future).

The improvement options were narrowed down and prioritized using the following considerations:

- Potential to encourage walking and biking;
- Potential to improve pedestrian and cycling safety;
- Extent of public support;
- Technical and logistical feasibility; and
- General cost-effectiveness.

In particular, the high-priority projects emphasize improvements in the areas and on streets of highest need, demand and urgency. These are the Civic Center, the City's four arterials—Grand, Highland, Moraga and Oakland Avenues—and the most common school routes.

2 | High-priority projects

Perhaps of greatest interest to the community is the list of recommended high-priority projects. These are the most important physical improvements—with the most community support and the greatest potential to promote safety and encourage walking and biking in a cost-effective manner—that the City can reasonably expect to afford with outside funds over the next ten years.

As described later in this chapter (under section 7, "Funding considerations"), it is projected that over the ten-year lifespan of the PBMP, there will be approximately $1.62 million available in outside funds for pedestrian and bicycle improvements in Piedmont. The PBMP assumes that 10% of this will be spent over the ten years on programs and policies (see sections 4 and 5 of this chapter). The rest, approximately $1.46 million, would be devoted to high-priority projects. The recommended high-priority projects are listed below, with approximate, planning-level cost estimates

for their planning, design and construction. The projects are shown on the map on page 74—with the exception of the designated bikeway network, which is shown on its own map, on page 84.

- Enhanced street crossings at key locations ($780,000, at $30,000 each for 26 of them)
- Road diets on Grand and Highland Avenues ($100,000, at $50,000 for each)
- Sidewalk railings on the Oakland Avenue bridge ($50,000)
- Reconfiguration of the Highland Avenue bend ($120,000 for the study and some physical modifications)
- Designated bikeway network ($400,000 for bike lanes, sharrows and signage, at $40,000 per mile)

The projects are listed in no particular order. The order in which they are implemented should be at the discretion of the Public Works Director and determined mainly by the availability of grant funds for particular purposes.

Enhanced street crossings at key locations

Enhanced street crossings are considered a high-priority project because they address the most common need, by far, expressed through the needs assessment process: unsafe conditions at crosswalks—especially for children—resulting from drivers failing to see or yield to pedestrians. To address this concern, a range of crosswalk enhancements would be installed at priority locations. These crossings would feature a range of improvements, including striped crosswalks, sidewalk bulb-outs or extensions (which reduce the curb radius, making drivers slow down as they turn the corner), advanced yield or stop lines (which encourage drivers to stop further back from the crossing), flashing crossing signs, pedestrian refuges or islands in the middle of the street, flashing radar speed signs on the approaches, and specially colored and textured pavement. Page 76 shows a visual "toolkit" of crossing treatments to improve pedestrian safety. The design of a particular crossing would be determined in consultation with affected neighbors. However, to minimize planning, design, construction and maintenance costs, the City should aim for a standardized design. Sidewalk bulb-outs provide opportunities to incorporate landscaping, pervious pavement and other measures which reduce stormwater runoff.

The crossings recommended for enhancement are listed below (along with the considerations for why they were selected) and are shown on the map of the high-priority projects. They are shown in rough geographic order, not in order of importance. They were selected based on public demand during the needs assessment process and winnowed further by giving particular consideration to the city's four arterials—Grand, Highland, Moraga and Oakland Avenues—and to large, busy or confusing intersections near a school or on key school-access streets, namely Magnolia and Wildwood Avenues. Most of the locations on the list, though not all, already have marked crosswalks. The last six locations on the list (#21–26), while not having particularly high foot traffic, were selected to create a safer route for students who live east of the Civic Center to walk to school.

Depending on the intersection, street crossings would be improved on one or more of the cross streets, and on one or both approaches of the street. The enhanced crossings may be installed one or more at a time in their entirety or by making the same type of enhancement (for example, bulb-outs) at many locations. Crosswalks in the area of the Highland Avenue bend should be evaluated as part of the Highland Avenue reconfiguration project mentioned later in this section.

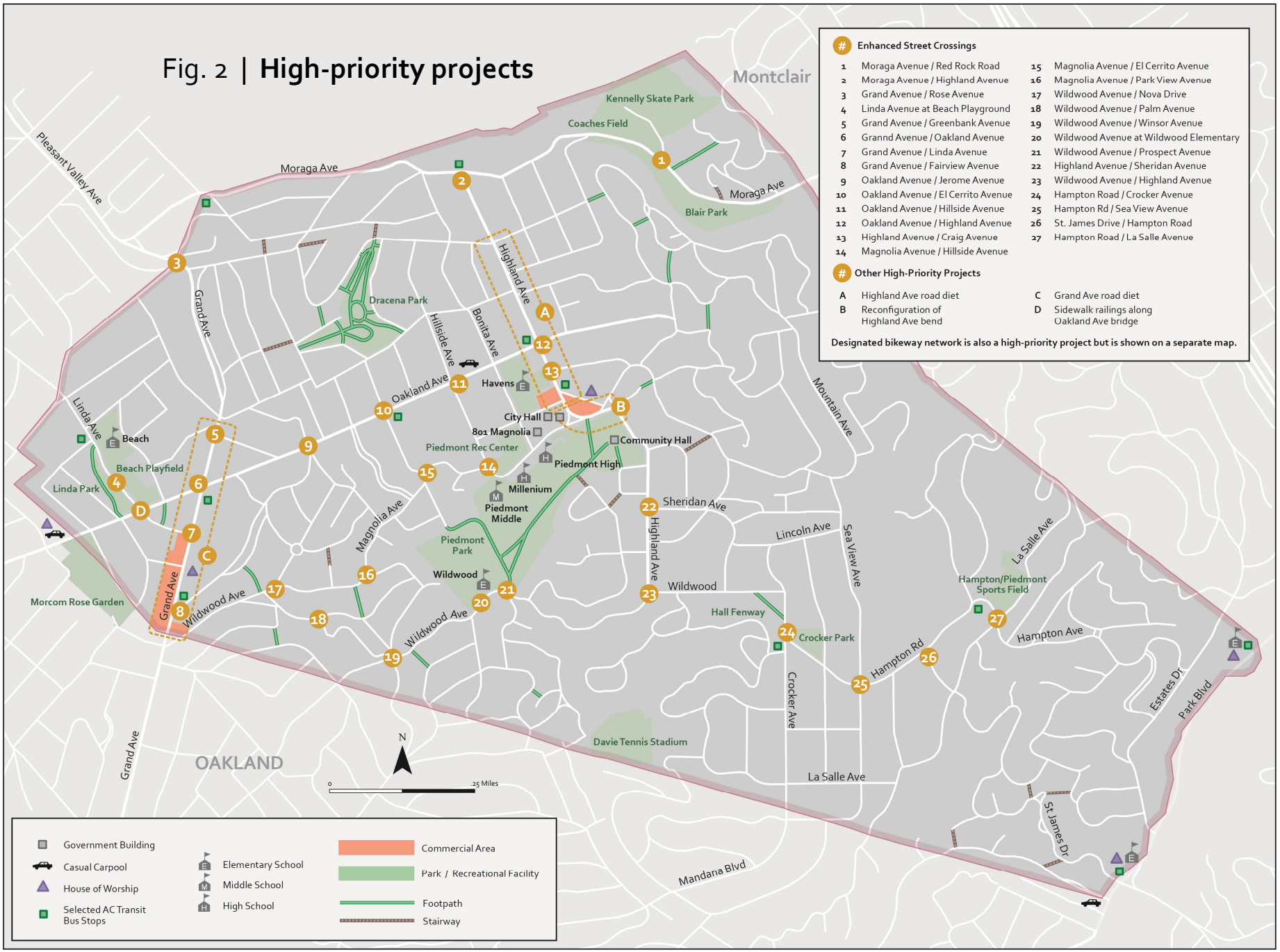


Fig. 2 | High-priority projects
Montclair
OAKLAND
Pleasant Valley Ave
Moraga Ave
Kennelly Skate Park
Coaches Field
Blair Park
Dracena Park
Grand Ave
Linda Ave
Beach
Beach Playfield
Linda Park
Morcom Rose Garden
Wildwood Ave
Hillside Ave
Bonita Ave
Highland Ave
Oakland Ave
Havens
City Hall
801 Magnolia
Piedmont Rec Center
Piedmont High
Millenium
Piedmont Middle
Community Hall
Magnolia Ave
Piedmont Park
Wildwood
Sheridan Ave
Mountain Ave
Lincoln Ave
Sea View Ave
La Salle Ave
Hampton/Piedmont Sports Field
Hall Fenway
Crocker Park
Hampton Rd
Hampton Ave
Crocker Ave
Estates Dr
Park Blvd
Davie Tennis Stadium
St James Dr
Mandana Blvd
N
0
.25 Miles
Enhanced Street Crossings
1 Moraga Avenue / Red Rock Road
2 Moraga Avenue / Highland Avenue
3 Grand Avenue / Rose Avenue
4 Linda Avenue at Beach Playground
5 Grand Avenue / Greenbank Avenue
6 Grannd Avenue / Oakland Avenue
7 Grand Avenue / Linda Avenue
8 Grand Avenue / Fairview Avenue
9 Oakland Avenue / Jerome Avenue
10 Oakland Avenue / El Cerrito Avenue
11 Oakland Avenue / Hillside Avenue
12 Oakland Avenue / Highland Avenue
13 Highland Avenue / Craig Avenue
14 Magnolia Avenue / Hillside Avenue
15 Magnolia Avenue / El Cerrito Avenue
16 Magnolia Avenue / Park View Avenue
17 Wildwood Avenue / Nova Drive
18 Wildwood Avenue / Palm Avenue
19 Wildwood Avenue / Winsor Avenue
20 Wildwood Avenue at Wildwood Elementary
21 Wildwood Avenue / Prospect Avenue
22 Highland Avenue / Sheridan Avenue
23 Wildwood Avenue / Highland Avenue
24 Hampton Road / Crocker Avenue
25 Hampton Rd / Sea View Avenue
26 St. James Drive / Hampton Road
27 Hampton Road / La Salle Avenue
Other High-Priority Projects
A Highland Ave road diet
B Reconfiguration of Highland Ave bend
C Grand Ave road diet
D Sidewalk railings along Oakland Ave bridge
Designated bikeway network is also a high-priority project but is shown on a separate map.
Government Building
Casual Carpool
House of Worship
Selected AC Transit Bus Stops
Elementary School
Middle School
High School
Commercial Area
Park / Recreational Facility
Footpath
Stairway

Locations for enhanced street crossings

Map key	*Cross street 1*	*Cross street 2*	*Consideration(s)*
1	Moraga Avenue	Red Rock Road	Many requests for crossing between Coaches Field and Blair Park; traffic-calming needed on Moraga
2	Moraga Avenue	Highland Avenue	Intersection of two of the city's four arterials; Moraga has high-priority need for traffic-calming
3	Grand Avenue	Rose Avenue	Particularly busy and confusing intersection
4	Linda Avenue	at Beach Playground	Many requests from the public; existing mid-block crosswalk frequently used by school children
5	Grand Avenue	Greenbank Avenue	Poor sightlines; used by many school children
6	Grand Avenue	Oakland Avenue	Intersection of two of the city's four arterials; used by many school children
7	Grand Avenue	Linda Avenue	Intersection of two routes to school
8	Grand Avenue	Fairview Avenue	Many requests from the public; creates sense of gateway into the city
9	Oakland Avenue	Jerome Avenue	Oakland Avenue is a popular school route and a direct access route from lower to central Piedmont; along with Moraga Avenue, it is in particular need of traffic-calming and would benefit greatly from several safer crossings spaced at reasonable intervals along its length from Highland Avenue to Grand Avenue
10	Oakland Avenue	El Cerrito Avenue	
11	Oakland Avenue	Hillside Avenue	
12	Oakland Avenue	Highland Avenue	
13	Highland Avenue	Craig Avenue	Popular crossing in the Civic Center for children walking to Havens School
14	Magnolia Avenue	Hillside Avenue	A disproportionate amount of foot traffic on Magnolia (as on with Wildwood Avenue) consists of children walking to school; it would benefit from several safer crossings spaced at reasonable intervals along its length from Nova Drive to the Civic Center
15	Magnolia Avenue	El Cerrito Avenue	
16	Magnolia Avenue	Park View Avenue	
17	Wildwood Avenue	Nova Drive	As on Magnolia Avenue, a large percentage of pedestrians on Wildwood are children walking to school and this street also would benefit from several safer crossings spaced at reasonable intervals along its length from Grand Avenue to Highland Avenue. Particular issues of concern include: a long segment without crosswalks on the western stretch of the street; an especially confusing intersection at Winsor Avenue and Wallace Road; busy crossings in front of Wildwood Elementary and into Piedmont Park; and an unconventional crosswalk design at Prospect.
18	Wildwood Avenue	Palm Avenue	
19	Wildwood Avenue	Winsor Avenue	
20	Wildwood Avenue	at Wildwood Elementary	
21	Wildwood Avenue	Prospect Avenue	
22	Highland Avenue	Sheridan Avenue	These crossings would create a safer route to school for students who live east of the Civic Center
23	Wildwood Avenue	Highland Avenue	
24	Hampton Road	Crocker Avenue	
25	Hampton Rd	Sea View Avenue	
26	St. James Drive	Hampton Road	
27	Hampton Road	La Salle Avenue	

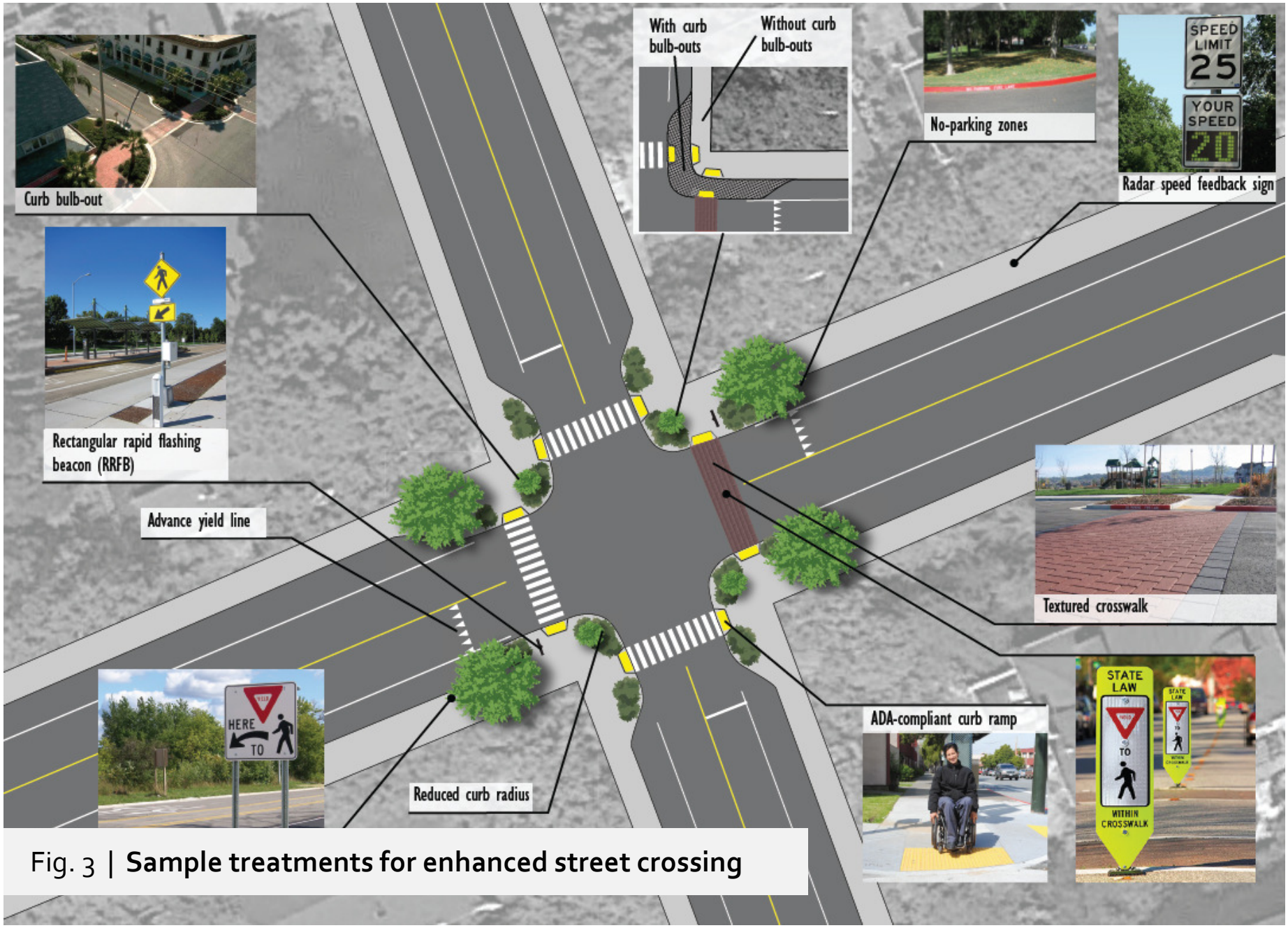


Fig. 3 | **Sample treatments for enhanced street crossing**

Road diets on Grand and Highland Avenues

To make it safer and easier for pedestrians to cross and to create room for bike lanes, portions of Grand Avenue (north of the city border to Greenbank Avenue) and Highland Avenue (between Park Way and Magnolia Avenue) would be put on "road diets." The streets would remain the same width, but they would be restriped from two lanes in each direction to one car lane and one bike lane in each direction, with a turn lane in the middle The parking lanes would remain as they are. By making intersections simpler to navigate, road diets have the added benefit of significantly reducing traffic accidents.

While the PBMP includes general concept drawings for the road diets (on pages 79 and 81), detailed design and traffic-engineering drawings will need to be made before the projects are implemented and shall be reviewed by the Planning Commission and the Bicycle and Pedestrian Advisory Committee. The design for Highland Avenue could consider the possibility of landscaped islands and it will need to ensure that the turn lane accommodates left-turning AC Transit buses at Oakland Avenue.

The two streets have low-enough traffic volumes that the road diets should not cause traffic back-ups, . This was confirmed by a traffic study conducted as part of the environmental review for the PBMP of the three signalized intersections that would be affected (Highland Avenue/Oakland Avenue, Oakland Avenue/Grand Avenue and Grand Avenue/Wildwood Avenue/Jean Street). A rule-of-thumb rule is that four-lane streets are good candidates for road diets if their average daily traffic count is below 15,000–20,000 cars. Traffic counts on Highland Avenue are significantly below that, while counts on Grand Avenue are on the very low end of that range. The road diets are a high-priority project because they would improve conditions for both pedestrians and cyclists on two arterials and common school routes and because they have very strong community support.

Sidewalk railings on the Oakland Avenue bridge

This project is described in the previous chapter. Essentially, it would entail installing historically compatible decorative railings along the sidewalk on both sides of the bridge. The railings would prevent a pedestrian from accidentally falling into the roadway and could also have the effect of slowing traffic down moderately by visually narrowing the width of the roadway. This is considered a high-priority project for several reasons: it is on an arterial and on a frequently used school route, has the potential to prevent serious injury, is relatively low-cost and would serve as a attractive gateway into the city.

Reconfiguration of the Highland Avenue bend

This project is also described in the previous chapter. It would consist of a detailed, area-specific traffic study and subsequent reconfiguration of Highland Avenue roughly from Vista Avenue to Piedmont Court in order to rationalize pedestrian, car and bike traffic in the area. This project is high-priority because it would serve a very large majority of Piedmonters and because it addresses many concerns expressed by the community concerning pedestrian and general traffic safety in the Civic Center. Depending on the community's interest, the scope of the study could be expanded to explore strategies for alleviating congestion in the Civic Center associated with student drop-offs and pick-ups, particularly on Magnolia and Highland Avenues.

Fig. 4 | **Highland Avenue — existing conditions**

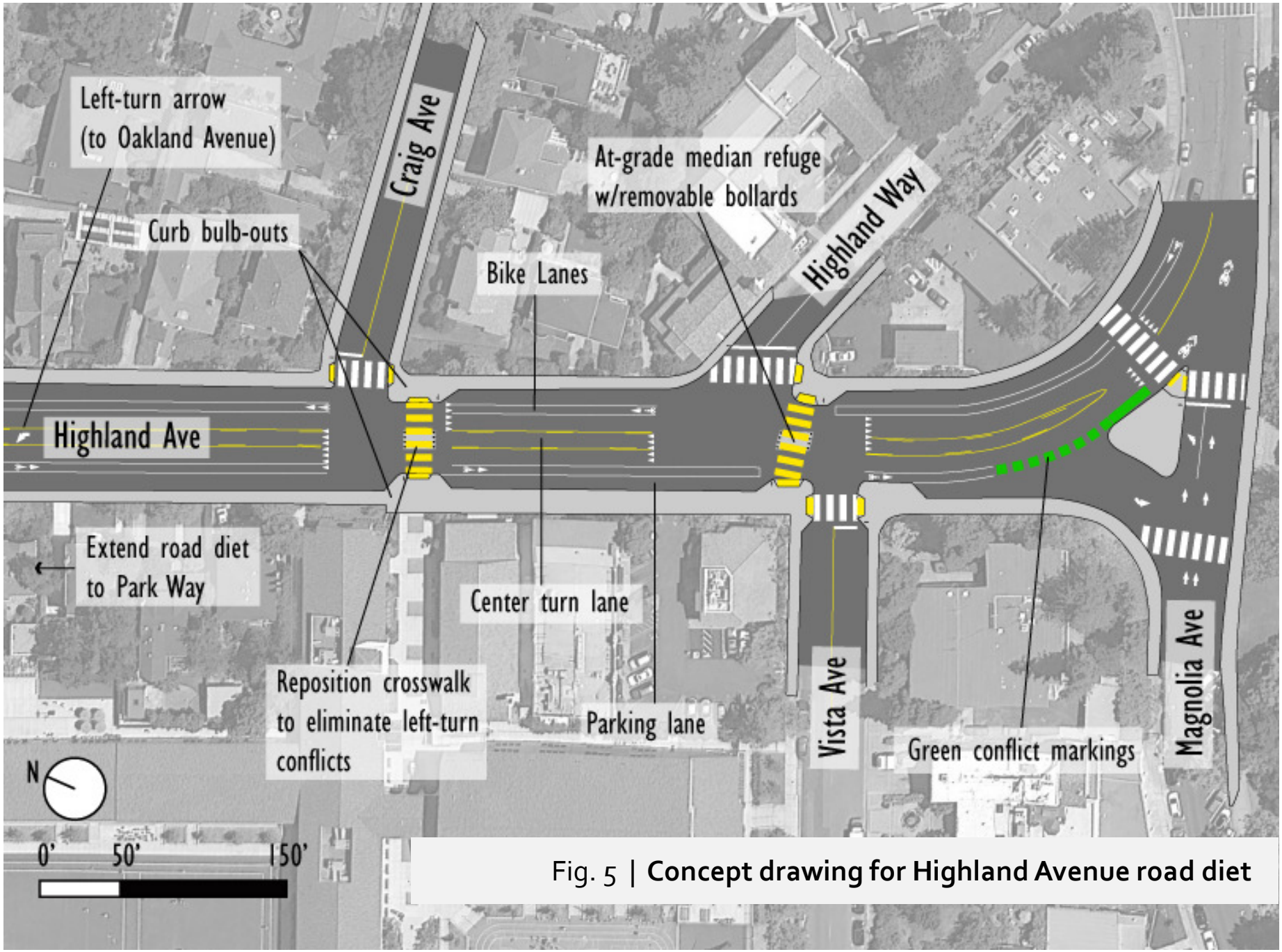


Fig. 5 | **Concept drawing for Highland Avenue road diet**

Fig. 6 | **Grand Avenue — existing conditions**

Fig. 7 | **Concept drawing for Grand Avenue road diet**

LANE
BIKE

Designated bikeway network

While cyclists will continue to be allowed on any street in Piedmont, it is recommended that the City designate a citywide network of bikeways providing a higher level of service for cyclists in terms of safety or convenience. The recommended network is shown on the map on the following page. Its starting point was the preliminary bikeway network shown in the 2009 Piedmont General Plan, which was then expanded and refined based on input from the public. In selecting streets to serve as bikeways, the following criteria were taken into consideration and balanced against each other: directness of access to key destinations; street grades; traffic speeds and volumes; existing bicycling patterns; and connection to Oakland's designated bikeways.

As illustrated on the map, the network—approximately 10 miles long—would be a combination of bike lanes and bike routes. **Bike lanes** are marked by parallel white stripes several feet apart, a stenciled bike symbol and signage; they would be used on streets that are sufficiently wide to accommodate them. **Bike routes** are suggested for streets with narrow travel lanes, on which there is no room for bike lanes. Bike routes would be marked with "Bike route" plaques (top image); signs reminding drivers and cyclists that bikes may use the full lane (middle image); and depending on the community's interest, guide/destination signs (bottom image); these would help cyclists find the better routes to their destination while indicating to drivers to especially be on the lookout for cyclists. **Enhanced bike routes** are suggested for streets with narrow travel lanes and where the speed differential between cars and cyclists is not significant (for example, on slower-speed streets or on downhills). These enhanced bike routes would have "sharrows" (stencils that encourage drivers and cyclists to share the road) and "Bikes may use full lane" signs.

The bikeway network is considered a high-priority project because it is a foundational building block of a transportation network that accommodates cyclists, an important goal of the PBMP. The table on page 85 lists all the street segments that would make up the bikeway network, along with the type of bikeway recommended for each segment. The network may be constructed one segment or more at a time, or by making a particular type of improvement (for example, sharrows or signage) at many locations. As appropriate, every segment of the network should be equipped with additional safety features. These include smoother pavement; non-slip surfaces; traffic mirrors; motion-activated flashing signs indicating the presence of a cyclist around a curve; flashing radar speed signs; center lines; and solid white lines demarcating the travel lane from the shoulder or parking lane (by visually narrowing the street, shoulder lines cause drivers to drive somewhat more slowly).

Because Moraga Avenue is particularly challenging for cyclists, the PBMP includes concept drawings for bikeway improvements on that street, on pages 87 and 89. The concepts will need a closer look and more detailed designs before improvements are approved and implemented and, particularly in the area of Blair Park, could change depending on the use of the park. Also, east of Highland Avenue, Moraga is a good candidate for motion-activated flashing bike signs, particularly in the uphill direction, due to its blind curves, narrow lanes and fast traffic.

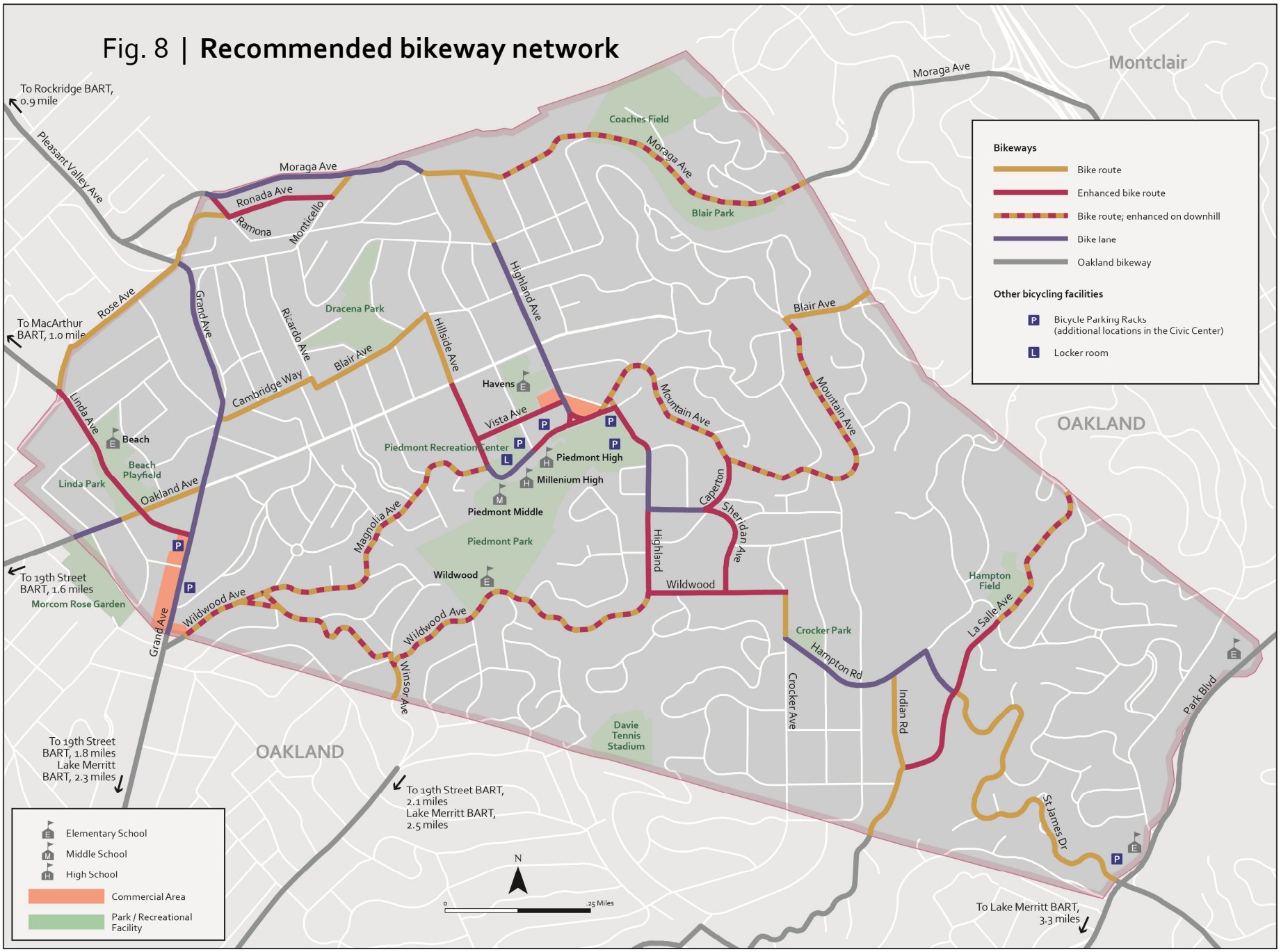


Fig. 8 | Recommended bikeway network
Bikeways
Bike route
Enhanced bike route
Bike route; enhanced on downhill
Bike lane
Oakland bikeway
Other bicycling facilities
Bicycle Parking Racks (additional locations in the Civic Center)
Locker room
Elementary School
Middle School
High School
Commercial Area
Park / Recreational Facility
To Rockridge BART, 0.9 mile
To MacArthur BART, 1.0 mile
To 19th Street BART, 1.6 miles
To 19th Street BART, 1.8 miles
Lake Merritt BART, 2.3 miles
To 19th Street BART, 2.1 miles
Lake Merritt BART, 2.5 miles
To Lake Merritt BART, 3.3 miles
Montclair
OAKLAND
OAKLAND
Pleasant Valley Ave
Moraga Ave
Ronada Ave
Ramona
Monticello
Rose Ave
Grand Ave
Ricardo Ave
Cambridge Way
Blair Ave
Hillside Ave
Highland Ave
Linda Ave
Oakland Ave
Vista Ave
Mountain Ave
Caperton
Sheridan Ave
Highland
Wildwood
Wildwood Ave
Magnolia Ave
Winsor Ave
Crocker Ave
Crocker Park
Hampton Rd
Indian Rd
La Salle Ave
Hampton Field
Park Blvd
St James Dr
Coaches Field
Blair Park
Dracena Park
Beach
Beach Playfield
Linda Park
Morcom Rose Garden
Havens
Piedmont Recreation Center
Piedmont High
Millenium High
Piedmont Middle
Piedmont Park
Wildwood
Davie Tennis Stadium
N
0
.25 Miles

Recommended bikeway network, by street segment

Street	*Segment*	*Bikeway type*
Moraga Ave	Ramona to Estrella	Bike lanes
	Estrella to Mesa	Bike route
	Mesa east to city border	Bike route, enhanced in the downhill direction
Ramona Ave	Moraga to Ronada	Enhanced bike route
Ronada Ave	Grand to Ramona	Bike route
	Ramona to Monticello	Enhanced bike route
Monticello Ave	Ronada to Moraga	Bike route
Rose Ave	Entire length: Linda to Grand	Bike route
Grand Ave	City border north to Greenbank/Cambridge	With road diet: bike lanes
	Greenbank/Cambridge north to city border	Bike lanes
Linda Ave	Entire length: City limit south to Grand	Enhanced bike route
Oakland Ave	City limit east to Sunnyside	Bike lanes
	Sunnyside to Grand	Bike route
Cambridge Way	Grand to Ricardo	Bike route
Ricardo Ave	Cambridge to Blair	Bike route
Blair Ave	Ricardo to Hillside	Bike route
Hillside Ave	Blair to Oakland Ave	Bike route
	Oakland Ave to Magnolia	Enhanced bike route
Magnolia Ave	Nova to Hillside	Bike route, enhanced in the downhill direction
	Hillside to Bonita	Bike lanes
	Bonita to Highland Ave	Enhanced bike route
Vista Ave	Entire length: Hillside to Highland	Enhanced bike route
Wildwood Ave	City limit east to Highland Ave	Bike route, enhanced in the downhill direction
	Highland to Crocker	Enhanced bike route
Winsor Ave	Wildwood south to city limit	Bike route
Highland Ave	Moraga to Park	Bike route
	Park to Magnolia	With road diet: bike lanes
	Magnolia to Sierra	Enhanced bike route
	Sierra to Sheridan	Bike lanes
	Sheridan to Wildwood	Enhanced bike route
Mountain Ave	Entire length: Highland Ave to Blair	Bike route, enhanced in the downhill direction
Blair Ave	Mountain east to city border	Bike route, enhanced in the downhill direction
Caperton Ave	Mountain to Sheridan	Enhanced bike route
Sheridan Ave	Highland to Caperton	Bike lanes
	Caperton to Wildwood	Enhanced bike route
Crocker Ave	Wildwood to Hampton	Bike route
Hampton Rd	Crocker to St. James	Bike lanes
Indian Rd	Entire length: Hampton south to city border	Bike route
La Salle Ave	Indian to Hampton	Enhanced bike route
	Hampton north to city border	Bike route, enhanced in the downhill direction
St. James Dr	Hampton to La Salle	Bike lanes
	La Salle east to city border	Bike route

Fig. 9 | **Moraga Avenue at Monticello Avenue — existing conditions**

Fig. 10 | **Concept drawing for Moraga Avenue at Monticello Avenue**

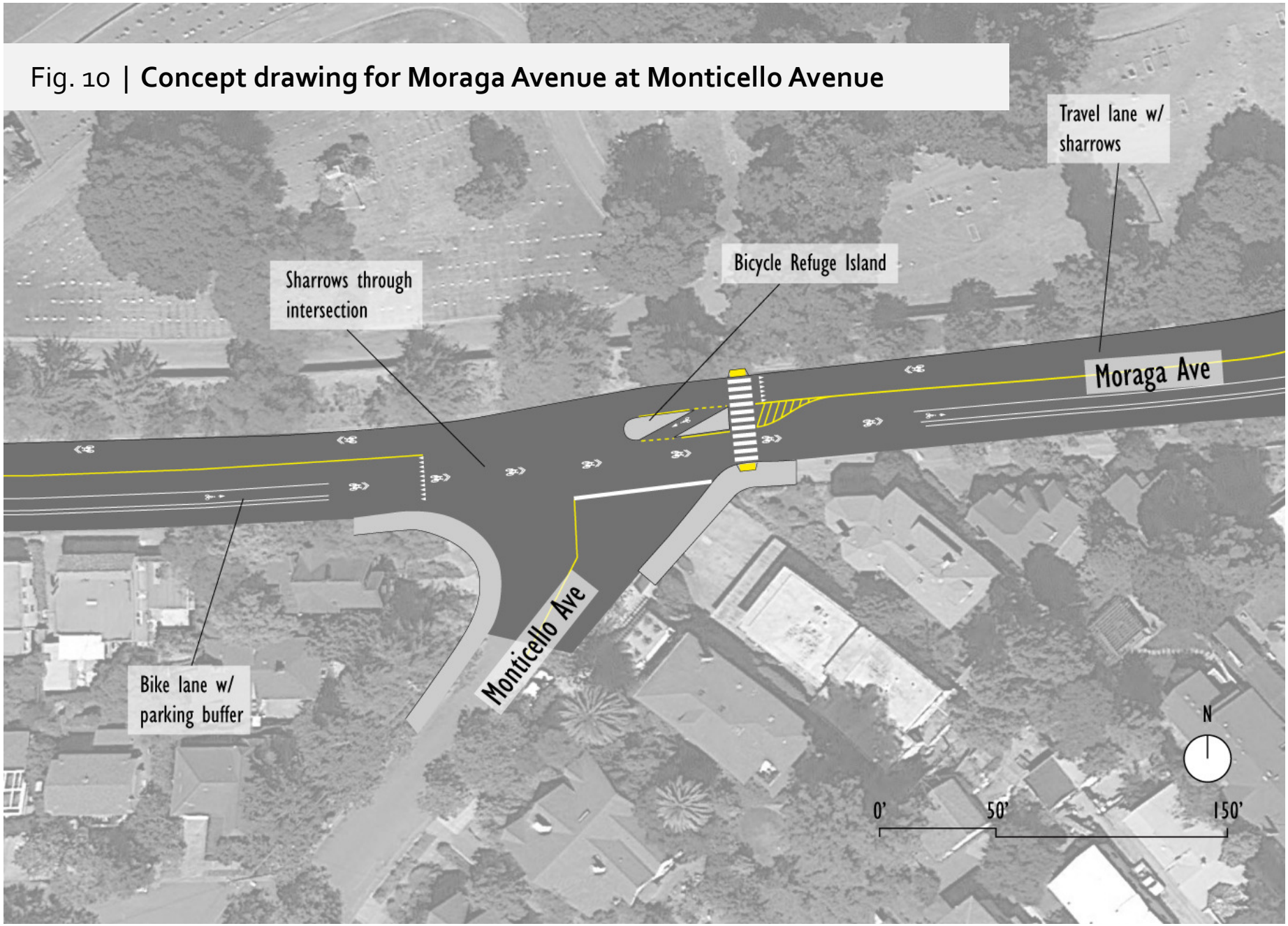


Fig. 11 | **Moraga Avenue at Red Rock Road — existing conditions**

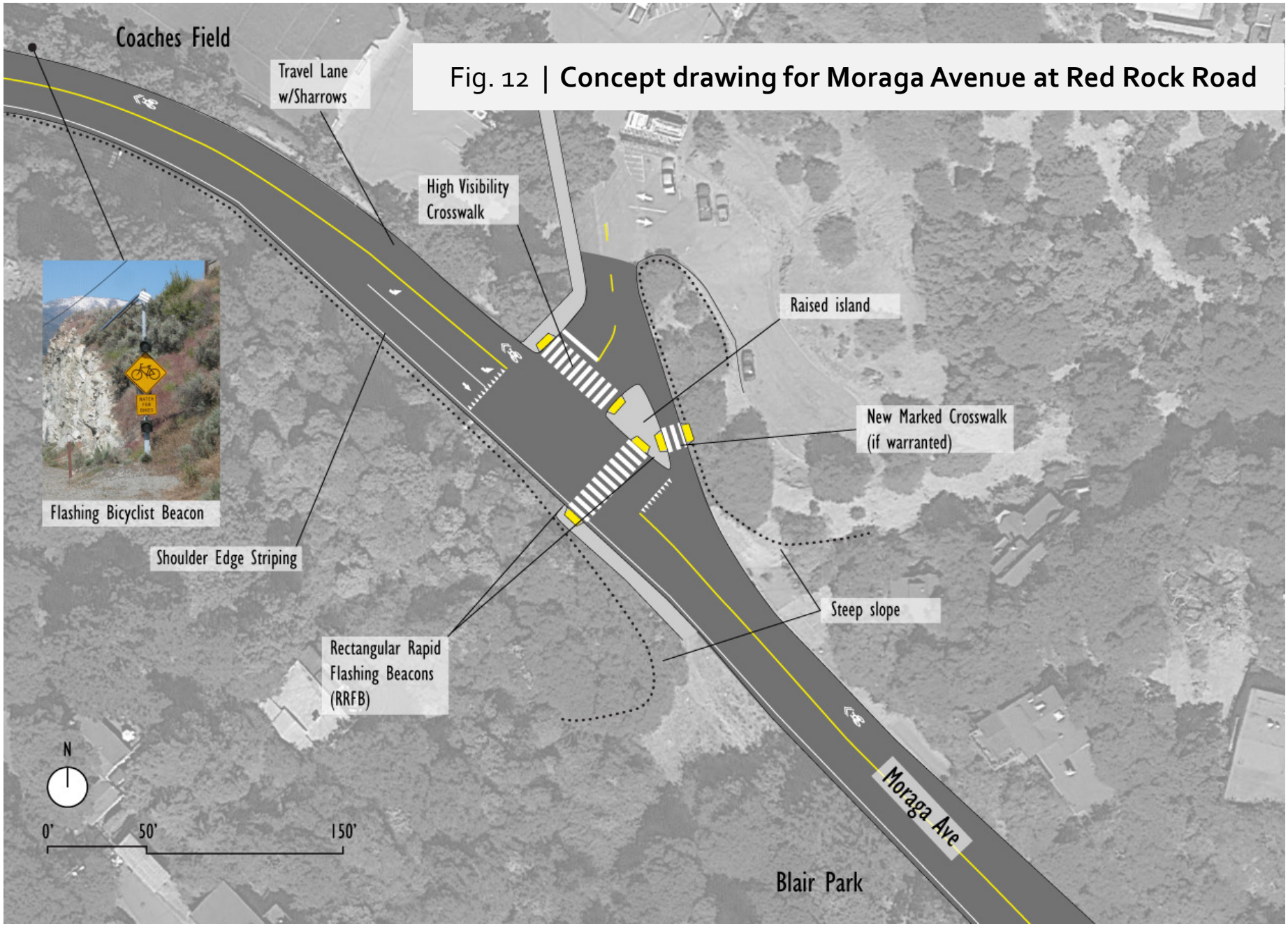


Fig. 12 | **Concept drawing for Moraga Avenue at Red Rock Road**

3 | Lower-priority projects

In addition to the projects listed in the previous section, Piedmonters identified many other important projects during the needs assessment process. Unfortunately, it is anticipated that over the next ten years, the City will obtain only enough outside funds for the high-priority projects. For this reason, the additional important projects identified by the community are considered lower-priority. These projects are listed below, in no particular order.

The lower-priority projects should generally be constructed after the high-priority projects have been built, if additional funding is found. (An exception is the City's customary level of effort to date on sidewalk and curb ramp maintenance, repair and construction.) Lower-priority projects may also be constructed using private donations, especially projects supported by particular neighborhoods or groups of residents. The PBMP should be used as an "advocacy" document to highlight the large unmet need for pedestrian and bicycle facilities in order to encourage private donations from Piedmont residents, particularly for traffic-calming and street-beautification projects.

Additional enhanced street crossings

This includes enhanced street crossings beyond those identified in the previous section, particularly near schools and along common school-access routes. Individuals in the community identified many additional locations as part of the needs assessment process. It should be noted that through the task on implementation options, community members expressed a very strong preference for fewer but more robust street crossings at key locations over a larger number of basic street crossings scattered throughout the city.

Sidewalks and curb ramps

This includes installing missing sidewalks and curb ramps, and critical sidewalk repairs, particularly in the Civic Center, the Grand Avenue commercial district, along arterials, near schools and along common school-access routes. (The gaps in the sidewalk network most commonly identified through the needs assessment process are on Wildwood Gardens and upper La Salle Avenue. However, constructing sidewalks along these stretches is most likely impractical because the roadways are not wide enough.) Additional sidewalk and curb-ramp work is considered lower-priority because the City already spends a significant amount of money every year for these types of improvements.

Footpaths and stairways

Improvements related to the footpaths and stairways include:

- Critical repairs to maintain functionality
- Lighting to make it easier to see the path of travel while minimizing disturbance to neighbors
- Railings
- Ramps, where feasible, to provide access to people in wheelchairs and people with strollers
- Plaques marking the entrances

These improvements are considered lower-priority mostly because of their somewhat limited potential to encourage additional walking and because they do not address critical traffic safety concerns. Nevertheless, they have strong community support and for this reason might be good candidates for the use of private donations. It should be noted that the "Spring Path" stairway between Moraga Avenue and Abbott Way is in particular need of rehabilitation, as it is essentially unusable in its current condition.

Additional traffic calming

Some of the high-priority projects include or incorporate traffic-calming measures, including sidewalk bulb-outs as part of the high-visibility crosswalks and reduction of travel lanes as part of the road diets. There is unmet need for additional traffic calming measures along other streets and at other intersections, and also for more-involved measures that serve a particular neighborhood—similar to the landscaped street triangle at Ronada and Ramona Avenues or the triangle planned for the intersection of Linda and Kingston Avenues.

Like sidewalk bulb-outs, street triangles provide opportunities to incorporate environmentally sustainable stormwater management measures. Potential locations for new triangles include but are not limited to the following intersections:

- Moraga Avenue / Red Rock Road
- Grand Avenue / Lower Grand Avenue
- Magnolia Avenue / Nova Drive
- Highland Avenue / Sierra Avenue
- Blair Avenue / Blair Place / Calvert Court

4 | Programs

This section recommends a variety of efforts, grouped under five programs, that address the most common non-physical needs expressed by Piedmonters through the needs assessment process. The programs below essentially refine, consolidate and reorganize—based on feedback received from the public—the programmatic activities presented to the community earlier as part of the improvement options. The programs and activities within each program are listed in no particular order (they are not listed in order of importance or priority).

The programs would be led primarily by the Public Works Department (especially the spot improvement program) and the Police Department (namely activities related to enforcement, traffic safety and traffic education). Due to their nature, Safe Routes to School (SR2S) activities would be led by the Piedmont Unified School District (PUSD) or the Alameda County SR2S program, with support from the City (the City may choose to offer logistical or staff support or limited funding). Similarly, promotional and encouragement activities may be led by outside groups and organizations with support from the City.

It is intended that programmatic activities will occur throughout the duration of the PBMP's ten-year lifetime, rather than be one-time efforts. However, not all activities would necessarily be conducted at all times. The number and mix of activities offered or supported by the City will depend on the community's evolving needs and interests, on City staff resources and on available funding.

Safe Routes to School (led by the PUSD or Alameda County SR2S program)

- Sponsor monthly or seasonal Walk and Roll to School days, supported with special activities and incentives.
- Organize walking school buses and bike trains for children to walk or bike to school in a group, escorted by parents.
- With the Police Department, post online the location and schedule of all crossing guards and contact information to report missing guards; and analyze frequently requested locations to determine if they meet State of California criteria for crossing-guard assignments.
- Offer traffic safety education to students, including traffic-smarts training, "bike rodeos" and bike "skills drills" clinics.
- Offer activities aimed at high school students, including the California Highway Patrol's (CHP) "Every 15 minutes" program which has been conducted at Piedmont High every three years; CHP's "Start Smart" class for teen drivers and their parents; and walk- and bike-to-school competitions with prizes and incentives.
- Conduct workshops for parents on SR2S topics such as traffic safety and personal security for pedestrians and cyclists, and the logistics of walking and biking to school, to address objections or concerns.

Other safety and education (led by the Police or Public Works Department)

- Feature rotating traffic safety and educational messages on the City's website and KCOM, and work with other local media to post announcements. In particular, educate drivers and cyclists on sharing the road and on the proper use of newly installed bike facilities.
- Create posters and bumper stickers with Piedmont-specific traffic safety messages for use in City buildings and on City vehicles and make them available to the public for free.
- Install solar-powered digital speed signs, as an awareness and educational tool, on streets with a history of speeding complaints.
- As part of neighborhood watch programs, coordinate residents' use of porch lights in the evening on a street-by-street basis.

Enforcement (led by the Police Department)

- Continue maintaining on staff at least two full-time traffic-enforcement officers.
- Regularly organize enforcement campaigns aimed at speeding, not yielding to pedestrians, distracted driving, parked cars that block the sidewalk on school routes and unsafe bicycling; announce the campaigns publicly in advance to raise awareness and give residents an opportunity to modify their behavior.
- Create an online form to report chronic traffic problems and to request enforcement action.
- Update the Engineering and Traffic Speed Zone Survey for the city in 2015 and again 5-7 years after that.
- Provide a refresher training course for City officers who wish to use the department's patrol bicycles. Officers on bikes provide community-friendly policing, would be particularly appropriate in the Civic Center and can be especially effective in addressing unsafe traffic behavior by cyclists and pedestrians, especially school children.

Promotion and encouragement (led by the Public Works Department)

- Organize street-closure events in the Civic Center for unprogrammed congregation of residents and recreational activities (with the Recreation Department).

- Adopt official names for the footpaths and stairways and install a plaque or other marker, with the facility name, at the entrances to each one (with the Parks Division of the Public Works Department).
- Co-sponsor morning and evening "energizer stations" in Piedmont on Bike to Work Day (these provide free snacks, beverages and small promotional giveaways to cyclists).
- Create a dedicated section on the City's website for news, announcements and resources related to walking and biking in Piedmont; also, announce walking and bicycling events and activities on KCOM and other local media and make flyers and brochures available at City Hall.

Spot improvements (led by the Public Works Department)

Through this program the City would respond to complaint-driven requests for smaller-scale pedestrian and bike improvements, such as installing safety signage and traffic mirrors; restriping crosswalks and bike lanes; trimming back overgrown vegetation or restricting parking at corners to improve traffic sightlines; and installing signage indicating any unpaved paths and trails not open to cyclists. Through this program, the City would also:

- Create an online form to report physical hazards to walking and biking and to request spot improvements.
- As traffic signals are upgraded or replaced, install accessible pedestrian countdown signals and bike-detection technology at intersections (possibly beyond 2024).
- Continue the City's current practices on street trees, which include maintaining a list of species that are approved for use on or near public sidewalks (with the Parks Division of the Public Works Department).
- Research, adopt and begin implementing guidelines for the use of non-slip or less-slippery alternatives to street markings and other street surfaces.
- Adjust the City's pavement management system to give greater consideration for sealing, resurfacing and repavement project to streets that are designated bikeways.
- Modify or upgrade storm-drain covers as needed so that bike tires can pass safely over the drains, without getting caught.

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5 | Policies

As a way of addressing many requests voiced by the public through the needs assessment process, it is recommended that the City develop and adopt written policies to guide the installation of crosswalks and stop signs and the lowering of speed limits. (Most of the other potential policies discussed as part of the improvement options have been turned into additional implementation actions—see the next section—or incorporated into the recommended programs—see the previous section.)

The two recommended policies could be developed either in-house (by City staff) or with consultant help. They should be approved or otherwise formalized by the Public Works Director or by the Planning Commission. Such written policies would help educate and inform the public on the constraints and trade-offs involved in making changes to street operations and would reassure residents that the City gives due consideration to requests from the public in a fair and informed manner.

New crosswalks and stop signs

As part of the needs assessment process for the PBMP, many people requested new crosswalks and stop signs, to make it easier to cross the street and slow down traffic. However, crosswalks and stop signs are often not the right solution and can create more problems than they solve. "Unwarranted" crosswalks (at unexpected or unconventional locations) might be even more dangerous than unmarked crossings; they can give pedestrians a false sense of security, leading them to be less careful when they cross the street. Unwarranted stop signs can also lead to accidents if they are in unexpected locations and also can result in unnecessary traffic delays.

To address pedestrians' concerns, the PBMP recommends high-visibility crosswalks and enforcement efforts. At the same time, the City should develop a policy describing the process through which it reviews requests for new crosswalks and stop signs. The policy would describe the conditions under which new crosswalks and stop signs would be approved. Decisions would be informed by sound traffic engineering considerations such as traffic speeds and volumes on the streets involved; street grades, widths and other physical characteristics; amount of foot traffic; pedestrian travel paths and crossing patterns; and adequacy of sight lines and stopping sight distances.

Lowering speed limits

One of the main concerns expressed by both pedestrians and cyclists during the needs assessment process was speeding drivers, with many people requesting lower speed limits on specific streets or in general. While speeding is a valid concern, speed limits might not be the real issue. All streets in Piedmont already have a speed limit of 25 miles per hour (mph) or lower (St. James Drive and stretches of Linda, Magnolia and Scenic Avenues have 15 mph limits).

In this area, the City's focus should remain on enforcing existing speed limits rather than on lowering them. However, the City should also develop a policy—similar to the policy on crosswalks and stop signs—describing the process through which it reviews requests for lower speed limits. Policy decisions would be informed by the findings of an updated Engineering and Traffic Speed Zone Survey and by other factors and conditions such as accident history, proximity to schools and substandard street width, geometries or sight lines.

6 | Other implementation actions

In addition to the program and policy recommendations listed on previous pages, there are many smaller-scale actions that the City can take to advance walking and bicycling. The main ones are listed below, organized under three approximate timeframes recommended for implementation: near term (the first two years of the PBMP's lifetime: 2015 and 2016), medium term (the next three years: 2017–2019) and longer term (the last five years: 2020–2024). (However, an action's optimal implementation timeframe might change due to circumstances.) In addition, there are several actions that are meant to be continuous or recurring. The actions are not listed in order of importance or priority, and should be implemented as opportunities arise and City staff time and other resources permit. Unless indicated otherwise in parentheses, implementation of the actions would be led by the Public Works Department.

☑ Near term: Years 2015–2016

- ☐ Research the status of footpath and stairway alignments shown on old maps that do not correspond to existing public footpaths and stairways.
- ☐ Request that Bay Area Bike Share install a station in the Grand Avenue commercial district.
- ☐ Install a gate at the bottom of "PE Hill" to allow car access only for service staff with key cards. This action would have to be carried out by the PUSD.

☑ Medium term: Years 2017–2019

- ☐ Review, conduct minor revisions, estimate the increase in the number of bicycle commuters resulting from implementation of the plan, and re-adopt the PBMP in five years (in 2019) to maintain eligibility for Caltrans funding for bike projects.
- ☐ Install additional bike-parking racks at key destinations if needed to meet demand.
- ☐ Pursue public access for passive recreation on the site of the East Bay Municipal Utility District's reservoir at Blair and Scenic Avenues as part of any redevelopment proposals for the site (with the Parks Division of the Public Works Department).
- ☐ If demand justifies it, install bike-parking lockers and showers in the Civic Center for use by City and PUSD staff.

☑ Longer term: Years 2020–2024

- ☐ Conduct a comprehensive update of the PBMP within ten years, in 2023–2024.

☑ Continuous

- ☐ Provide annual reports to the Planning Commission, the City's Bicycle and Pedestrian Advisory Committee and the City Council outlining progress in implementing the PBMP. (The City Council established the Bicycle and Pedestrian Advisory Committee in March 2014 as a permanent standing committee to serve in an advisory capacity.)
- ☐ Use the City's "complete streets" checklist when planning transportation improvements, including the sealing, resurfacing or repavement of streets.
- ☐ Continue using the Piedmont Beautification Foundation as a conduit for private donations for new street triangles, improvements to the city's footpaths and stairways and other traffic-calming and street-beautification projects (with the Parks Division of the Public Works Department).

- ☐ Stay informed about and coordinate with Oakland staff on the funding, planning, design and implementation of bikeways connecting the two cities and other roadway improvements of importance to both cities, including the intersection of Wildwood and Grand Avenues.

7 | Funding considerations

It is projected that over the ten-year lifespan of the PBMP, there will be approximately $1.62 million available in outside funds for pedestrian and bicycle improvements in Piedmont (this is a rough, planning-level estimate). That amount includes $1.44 million that can be expected to result from various funding sources and programs commonly used to fund non-motorized transportation projects. It also includes $180,000 in existing, saved-up funds that the City has received in recent years from Alameda CTC expressly for pedestrian and bicycle projects: $150,000 from the Measure B bicycle and pedestrian program and $30,000 under the Transportation Development Act (TDA) Article 3 program.

It is expected that most, but not all, of the funding to implement the PBMP will come from Alameda CTC (either directly or indirectly). Funds under some of Alameda CTC's funding sources and programs are "pass-through," meaning that they are distributed to the various jurisdictions in the county, including the City of Piedmont, non-competitively. Other Alameda CTC sources, and all the funding sources from other agencies, are competitive. To take full advantage of available outside funding, City staff (possibly with help of consultants) will need to compete for these funds by preparing and submitting grant applications to various funding agencies. All grant applications from the City should be reviewed by Piedmont's Bicycle and Pedestrian Advisory Committee (such review is a requirement for projects to be funded by the TDA Article 3 program).

On the next two pages is a table of the most likely federal, state, regional and county sources of funding for pedestrian and bicycle improvements. The table is broken down into two types of funding sources: (i) those administered by Alameda CTC that may be used only for projects considered by that agency to be of "countywide priority," and (ii) a variety of sources that may also be used for local priorities. The table also lists the projects in this PBMP that would be potentially eligible under each source. The funding landscape changes frequently, with new programs being created and old ones ceasing to exist. While the table provides current information as of summer 2014, City staff will need to make an effort to stay up to date on news and announcements related to funding sources and programs.

> The funding sources in the table are described in some detail in Chapter 6 ("Revenue" section) of both the Alameda Countywide Pedestrian Plan and Bicycle Plan. The countywide plans are available at http://www.alamedactc.org/app_pages/view/5390.

Following the table on funding sources is an explanation of how the additional $1.44 million that the City can expect to obtain in outside funding was projected. It should be noted that Measure B (the county's half-cent sales tax for transportation) is by far the most important source of funding for pedestrian and bicycle improvements in Alameda. Of the $1.4 million in projected funding for Piedmont, approximately two thirds is expected to come from this source. If Measure B is not reauthorized by voters at a planned one-cent level, it is highly unlikely that the PBMP can be fully implemented within ten years.

Most Likely Outside Funding Sources for PBMP Implementation

Funding source	*Administering agency*	*Frequency of call for projects*	*Notes*	*Potentially eligible PBMP improvements*
For projects of countywide priority only				
Measure B bicycle/pedestrian safety—countywide discretionary *http://www.alamedactc.org/app_pages/view/8069*	Alameda CTC	Varies; inquire with ACTC	Ped/bike projects must serve Alameda CTC's countywide objectives: • Improving access within a central business district (a category that includes Piedmont's Civic Center) • Completing the county's network of inter-jurisdictional bikeways (which include Moraga Avenue and parts of Grand and Highland Avenues)	• High-visibility crosswalks in the Civic Center • Grand and Highland Avenue road diets • Reconfiguration of the Highland Avenue bend • Bike improvements on Moraga Avenue
Vehicle Registration Fee, bicycle/pedestrian grants subprogram *http://www.alamedactc.org/app_pages/view/8089*	Alameda CTC	Every two years		
Transportation Enhancements	Alameda CTC	Varies; inquire with ACTC		
OneBayArea grant program *http://www.alamedactc.org/app_pages/view/8495*	Alameda CTC	Varies; inquire with ACTC		
For projects of countywide or local priority				
Transportation Development Act Article 3	Alameda CTC	N / A	Non-competitive sources; funding is distributed annually by Alameda CTC to the cities and the county on a population basis	Any project and practically any programmatic activity (confirm eligibility of activities with ACTC)
Measure B bicycle/pedestrian safety—local pass-through *http://www.alamedactc.org/app_pages/view/4617*	Alameda CTC	N / A		
Measure B local streets and roads—local pass-through *http://www.alamedactc.org/app_pages/view/4617*	Alameda CTC	N / A		
Transportation Fund for Clean Air, Regional Fund *http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding-Sources/TFCA.aspx*	Bay Area Air Quality Management District	Annual (in recent years in April)	For projects and programs that reduce air pollution from motor vehicles (for example, by encouraging drivers to instead make trips on foot or by bike)	• High-visibility crosswalks • Grand and Highland Avenue road diets • Other bikeway-network improvements • Certain programmatic activities
Transportation Fund for Clean Air, County Program Manager Fund *http://www.alamedactc.org/app_pages/view/8076*	Alameda CTC			

California Office of Traffic Safety grants *http://www.ots.ca.gov/Grants/default.asp*	California OTS	Annual (in recent years in January)	For traffic-safety education, awareness and enforcement programs aimed at drivers, pedestrians and cyclists	• Certain activities under the SR2S, safety/education and enforcement programs
Highway Safety Improvement Program *http://www.dot.ca.gov/hq/LocalPrograms/hsip.html*	Caltrans	Varies; next expected in spring 2015	For projects and programs that reduce traffic fatalities and serious injuries by correcting or improving a specific problem; highly competitive	• High-visibility crosswalks • Grand and Highland avenue road diets • Other safety-related bikeway improvements • Reconfiguration of the Highland Avenue bend • Sidewalk railings on the Oakland Avenue bridge • Certain activities under the SR2S, safety/education and enforcement programs; also, certain spot improvements
State Active Transportation Program *http://www.dot.ca.gov/hq/LocalPrograms/atp/*	Caltrans	Varies; inquire with Caltrans	For a wide range of ped/bike programs and projects (the state program is a consolidation of several older grant programs, including State SR2S and Bicycle Transportation Account); both programs emphasize disadvantaged communities	• Almost any project and most programmatic activities
Regional Active Transportation Program *http://www.mtc.ca.gov/funding/ATP/*	MTC	Varies; inquire with MTC		
OneBayArea Climate Initiatives Program *http://www.onebayarea.org/regional-initiatives/climate-initiatives-program.html*	Metropolitan Transportation Commission	Varies; inquire with MTC	For certain types of projects and programs that reduce greenhouse-gas emissions	• Certain activities under the SR2S, safety/education and encouragement/promotion programs

Projected funding for pedestrian and bicycle improvements

The Alameda Countywide Pedestrian Plan and the Bicycle Plan estimated projected funding for pedestrian and bicycle improvements throughout the county as a whole over the plans' 28-year time horizon (2013–2040). The plans estimated funding from 23 likely federal, state, regional or county funding sources. These funding sources are described in some detail in Chapter 6 of both the Pedestrian Plan and the Bicycle Plan, under the section entitled "Revenue." Appendix CC of the plans summarizes the projected amount of funding from each source, while Appendix DD explains the assumptions behind each calculation. The countywide plans and appendices are available at http://www.alamedactc.org/app_pages/view/5390.

For purposes of projecting the expected funding available to the City for pedestrian and bicycle improvements, the 23 funding sources were divided into five groups:

I. Funding sources that may be used for local-priority projects (10 sources)
II. Funding sources that may be used only for countywide-priority projects (3 sources)
III. Funding sources that may be used either for countywide- or local-priority projects (2 sources)
IV. OneBayArea grant program (1 source)
V. Funding sources not available to Piedmont (7 sources)

Some of the funding under sources administered by the Alameda County Transportation Commission will be restricted to pedestrian and bicycle projects considered to be of countywide priority. As explained below, this distinction matters for the purpose of estimating projected funding. The types of projects considered to be of countywide-priority are described in Chapter 5 of both the Alameda Countywide Pedestrian Plan and the Bicycle Plan.

In manipulating the projected funding figures in the Countywide Pedestrian Plan and the Bicycle Plan to estimate projected funding for Piedmont, a number of recurring adjustments were made:

- **Adjustment A:** The countywide plans projected the amount of funding over 28 years. The countywide figures were prorated down to ten years, which is the PBMP's time horizon.
- **Adjustment B:** The Countywide Pedestrian Plan established four types of projects considered to be of countywide priority, while the Bicycle Plan established five types. Pedestrian improvements in Piedmont might qualify under only one of the four types: projects that improve access within a central business district—a category that includes Piedmont's Civic Center. Bike improvements might qualify under only two of five types: projects that improve access within a central business district and projects that help complete the county's network of inter-jurisdictional bikeways; within Piedmont, this network includes Moraga Avenue and parts of Grand and Highland Aves. For these reasons, it was assumed that Piedmont would be eligible for only 25% (1/4) of funds that Alameda CTC will dedicate to pedestrian projects of countywide priority and 40% (2/5) of funds for bike projects, assuming also that the projects meet other grant criteria.
- **Adjustment C:** It was assumed that available countywide funding will go toward projects in Piedmont in the same proportion as the city's share of the county's population, or 0.72%.

The table below summarizes the projected funding for pedestrian and bike projects in Piedmont in 2015–2024 under the five groups of funding sources listed at the beginning of this section. Further below is the explanation for each of the calculations. All funding figures are in 2012 dollars, as they were in the Countywide Pedestrian Plan and the Bicycle Plan. Except in Table 1, amounts in

the millions of dollars are rounded to the nearest $100,000 while amounts in the tens of thousands of dollars are rounded to the nearest $1,000. Numbers may not add up due to rounding.

Projected funding for pedestrian and bicycle projects in Piedmont, 2015–2024

I. Funding sources for local-priority projects (10 sources)	$ 1,200,000
II. Sources for countywide-priority projects (3 sources)	130,000
III. Sources for local- or countywide-priority projects (2 sources)	72,000
IV. OneBayArea grant program (1 source)	38,000
VI. Sources not available to Piedmont (7 sources)	--
	$ 1,440,000

I. Funding sources for local-priority projects (10 sources)

The countywide plans examined ten sources under which funding may go entirely toward projects of local, rather than countywide, priority. These funding sources, and in parentheses the agencies that administer them, are:

- Measure B bicycle/pedestrian safety—local pass-through (Alameda CTC), for pedestrian and bike projects of priority locally
- Measure B local streets and roads—local pass-through (Alameda CTC), for transportation projects (including pedestrian and bike improvements) of priority locally
- Transportation Development Act Article 3 (Alameda CTC), for pedestrian and bike facilities, safety programs and planning
- Two programs, one using federal funds and one using state funds, for Safe Routes to School projects (Caltrans)
- Bicycle Transportation Account (Caltrans), for projects that improve bike commuting; some projects funded under this program—multi-use paths, for example—have benefits for pedestrians or include pedestrian elements or components
- Highway Safety Improvement Program (Caltrans), for projects that reduce traffic fatalities and serious injuries
- Climate change initiatives (Metropolitan Transportation Commission, or MTC), for projects that reduce emissions of certain air pollutants
- Transportation Fund for Clean Air, Regional Fund (Bay Area Air Quality Management District), for projects that reduce air pollution from motor vehicles (based on grant awards in a recent three-year period, the countywide plans assumed that funding under this program would be available only for bike projects)
- California Office of Traffic Safety grants (OTS), for traffic safety education, awareness and enforcement programs aimed at drivers, pedestrians and cyclists

The countywide plans assumed that **$466.4 million** will be available for pedestrian and bike projects under these ten funding sources.

- After applying **adjustment A** to this amount, **$166.6 million** will be available for pedestrian and bike projects in 2015–2024.
- After applying **adjustment C** to the previous amount, it is estimated that **$1.2 million** will go toward pedestrian and bike projects in Piedmont from these ten sources.

II. Funding sources for countywide-priority projects (3 sources)

The countywide plans assumed that under three funding sources administered by Alameda CTC, funding for pedestrian and bike improvements will go entirely toward projects of countywide priority. These funding sources are:

- Measure B bicycle/pedestrian safety—countywide discretionary, for pedestrian and bike projects and programs that serve countywide objectives
- Vehicle Registration Fee, bicycle/pedestrian grants subprogram, for a variety of pedestrian and bike improvements
- Transportation Enhancements, for projects that enhance the compatibility of transportation facilities with their surroundings

The countywide plans assumed that under these sources **$78.6 million** will be available for countywide-priority pedestrian projects and **$77.0 million** for bike projects.

- After applying **adjustment A** to these amounts, **$28.1 million** will be available for countywide-priority pedestrian projects and **$27.5 million** for bike projects in 2015–2024.
- After applying **adjustment B** to the previous amounts, countywide-priority pedestrian and bike projects in Piedmont could be eligible for **$7.0 million** and **$11.0 million** respectively.
- After applying **adjustment C** to the previous amounts, it is estimated that approximately **$130,000** will go toward bicycle and pedestrian projects in Piedmont from these three sources.

III. Funding sources for either local- or countywide-priority projects (2 sources)

The countywide plans assumed that funding under two sources will go in equal amounts toward local-priority and countywide-priority projects. These funding sources, and in parentheses the agencies that administer them, are:

- Regional program for Safe Routes to School projects (MTC)
- Transportation Fund for Clean Air, County Program Manager Fund (Alameda CTC), for projects that reduce air pollution from motor vehicles

The countywide plans assumed that under these two funding sources, **$41.6 million** will be available for pedestrian and bike projects.

- After applying **adjustment A** to this amount, **$14.8 million** will be available for pedestrian and bike projects in 2015–2024.
- Half of the above amount, or **$7.4 million,** will be available for projects of local priority. After applying **adjustment C** to this amount, it is estimated that **$54,000** will go toward local-priority projects in Piedmont.
- Of the other half, the countywide plans assumed that **$2.8 million** will be available for pedestrian projects of countywide priority and **$4.6 million** for bike projects. After applying **adjustment B** to these amounts, pedestrian and bike projects in Piedmont would be eligible for **$0.7 million** and **$1.8 million** respectively.
- After applying **adjustment C** to the previous amounts, it is estimated that approximately **$18,000** will go toward projects of countywide priority in Piedmont.
- Combined, approximately **$72,000** ($54,000 for local-priority projects and $18,000 for countywide-priority projects) will go toward projects in Piedmont from these two sources.

IV. OneBayArea grant program (1 source)

This is an MTC program that seeks to better integrate the Bay Area's transportation investments with regional land use and housing policies. The countywide plans assumed that under this funding source, **$89.2 million** will be available for pedestrian projects and **$66.9 million** for bike projects, all of it for projects of countywide priority.

- After applying **adjustment A** to these amounts, **$31.9 million** will be available for countywide-priority pedestrian projects and **$23.9 million** for bike projects in 2015–2024.

- Of the above amounts, 70% will be dedicated to projects in Priority Development Areas (PDAs; these are parts of the Bay Area identified as most appropriate for infill development). Since no part of Piedmont lies within a PDA, pedestrian and bike projects in Piedmont would be eligible for only 30% of the above funds: **$9.6 million** for countywide-priority pedestrian projects and **$7.2 million** for countywide-priority bike projects.
- After applying **adjustment B** to the previous amounts, countywide-priority pedestrian and bike projects in Piedmont would be eligible for **$2.4 million** and **$2.9 million** respectively.
- After applying **adjustment C** to the previous amounts, it is estimated that approximately **$38,000** will go toward projects in Piedmont from this source.

V. Funding sources not available to Piedmont (7 sources)

It was assumed that the remaining seven funding sources listed in the countywide plans will not be available to Piedmont. These sources are for purposes that are not applicable to Piedmont, so any pedestrian or bike project in Piedmont would not compete well for funding under these sources. These funding sources, and in parentheses the agencies or organizations that administer them, are:

- Measure B, bicycle/pedestrian safety subprogram for major regional trails (Alameda CTC)
- Lifeline Transportation Program (Alameda CTC), to address the mobility and access needs of low-income communities
- PDA planning grants (MTC), to support local jurisdictions' planning efforts within PDAs
- Safe Routes to Transit (TransForm and Bike East Bay), to improve access to regional transit stations
- Bay Trail grant program (San Francisco Bay Trail Project), to implement segments of the trail alignment
- Transportation Planning grant program (Caltrans), for transit plans, community-based transportation plans and projects that address environmental-justice concerns
- Recreational Trails Program, non-motorized subprogram (California Department of Parks and Recreation), for recreational trails and trail-related projects