The Walk Bike Daly City plan seeks to make walking and biking in Daly City safer, more convenient and more popular than ever before.
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# Table of contents

Acknowledgements ...................................................... i

Chapters

01. Introduction ........................................................... 1
02. Planning context ................................................... 4  
   - Setting and urban form ............................................ 4  
   - Demographics ........................................................ 6  
   - Key destinations .................................................... 6  
   - Commuting ............................................................ 7  
   - Traffic collisions ................................................... 8  
   - Street network ...................................................... 12  
   - Pedestrian facilities ................................................. 13  
   - Bicycle facilities .................................................... 14  
   - Events and activities ............................................... 16  
   - Integration with other modes .................................... 17  
   - Related plans ........................................................ 18  
   - Equity analysis ....................................................... 24  

03. Community needs assessment .......................... 25  
   - Online survey .......................................................... 25  
   - Interactive pinnable map ....................................... 31  
   - Comment cards and other channels ..................... 32  
   - Publicizing the opportunities for participation ... 33  
   - Key themes ............................................................... 35  

04. Goal, policies and tasks ...................................... 38  

05. Priority improvements ....................................... 43  
   - Priority pedestrian projects .................................... 43  
   - Citywide bikeway network ....................................... 46  
   - Priority bikeway projects ........................................ 49  

06. Conceptual designs ............................................ 52  
   - John Daly Blvd.: Sheffield to I-280 ramps ............ 53  
   - John Daly Blvd.: I-280 ramps to Junipero Serra .... 55  
   - John Daly Blvd.: Junipero Serra to De Long ....... 55  
   - John Daly Boulevard / Skyline Boulevard .......... 58  
   - Mission Str. / Market St. / San Pedro Rd. ........... 58  
   - Junipero Serra Boulevard / San Pedro Road ....... 61  
   - Serramonte Boulevard at Highway 1 ................. 61  

07. Design toolkit ...................................................... 64  
   - Pedestrian facilities ................................................ 64  
   - Design treatments for pedestrian facilities ......... 69  
   - Bicycle facilities .................................................... 73  
   - Design treatments for bicycle facilities .......... 76  
   - Pedestrian- and bicycle-friendly roadways ........ 84  

08. Supporting actions .............................................. 88  
   - Parklets ................................................................. 88  
   - Bicycle parking ordinance ..................................... 89  
   - Community-led traffic safety initiatives ............ 90  
   - Neighborhood traffic calming ......................... 90  
   - Coordination with private development .......... 91  

Appendices

A. Equity analysis .................................................... 93  
B. Public health analysis ........................................ 101  
C. Online survey ..................................................... 106  
   - C-1: Question #3 ...................................................... 106  
   - C-2: Question #4 ...................................................... 109  
   - C-3: Question #6 ...................................................... 117  
   - C-4: Question #7 ...................................................... 118  
   - C-5: Question #8 ...................................................... 122  
D. Pinnable map ...................................................... 123  
   - D-1: Concerns about walking ......................... 123  
   - D-2: Concerns about biking ................................. 135  
   - D-3: Suggestions or ideas ..................................... 140  
   - D-4: Concerns about general traffic safety .......... 144  
   - D-5: More general comments ............................ 147  
E. Comments received through other channels .... 149  
F. Caltrans’ comments on the conceptual designs ............................................ 152  
G. Planning-level cost estimates for the conceptual designs ............................................ 158
01 | Introduction

Why this plan?

Walking and bicycling are sometimes-overlooked parts of the transportation system. However, they have many valuable benefits in terms of mobility, public health, environmental protection and neighborhood livability. Perhaps most importantly, walking and bicycling are healthy, sociable, inexpensive and environmentally friendly ways for some people to meet their everyday transportation needs.

In recognition of these benefits, the City of Daly City prepared, and in 2004 adopted, the City’s first Bicycle Master Plan. In 2013, the City updated and broadened that plan to incorporate proposed improvements for pedestrians, acknowledging the importance of walking to Daly City’s transportation system. Since its adoption, the 2013 Bicycle and Pedestrian Master Plan has helped the City plan its Capital Improvement Program (CIP) to emphasize bicycle and pedestrian infrastructure improvements. The City has been successful in obtaining grant funds, which along with local funds, have allowed it to implement many of the projects recommended in the 2013 plan.

This document replaces the 2013 plan. This new, “2020” plan is intended to create a roadmap for the next generation of pedestrian and bicycle improvements, particularly as the City experiences new development and as its population continues to increase. The 2020 plan, called Walk Bike Daly City, aims to expand the City’s network of pedestrian and bicycle facilities; close gaps in the existing system; enhance connections to key destinations; and, more generally, make walking and biking in Daly City safer, easier and more popular than ever. The title of the new plan places “Walk” before “Bike” as an acknowledgement that walking is the most fundamental form of transportation and that many more people walk than bike in Daly City.

Contents of the plan

The Walk Bike Daly City planning process took place in 2018–2019. The process began with an initial round of outreach to the community to introduce the project and encourage the public to get involved in the process. A description of that outreach is provided later in this chapter.

The initial outreach was followed by a review and analysis of existing local issues and conditions relevant to walking and biking in Daly City (see Chapter 2 of this plan). This task looked at, among other topics, the main destinations for pedestrians and cyclists; data on commuting and on traffic collisions; the City’s street network, including existing pedestrian and bicycle facilities; integration
of walking and biking with transit; and other relevant planning efforts.

After these preliminary activities, the project team conducted a community needs assessment to learn about the concerns and needs of local pedestrians and cyclists; the obstacles and challenges to walking and biking in Daly City; and residents’ ideas and suggestions for improving conditions. Chapter 3 contains a description of this process and a summary of the nearly 800 comments received from the public (a series of appendices to this document lists all the comments received). Following the needs assessment, the team developed a policy framework for the plan. The policy framework (see Chapter 4) consists of a long-term goal for walking and biking in Daly City, and specific policies and tasks to help achieve that goal.

Based in large part on the community’s input, the project team formulated a series of proposed pedestrian and bicycle improvements, including ones that would respond to the main concerns raised by the public. Chapter 5 outlines the priority recommendations and includes a segment-by-segment description of the designated Citywide bicycle network. Chapter 6 proposes concepts for the redesign of several priority street segment and intersections around the City. Chapter 7 contains a design toolkit to help city staff plan and design appropriate pedestrian and bicycle facilities. Chapter 8 lists five supporting actions for the City to pursue in order to maximize the potential of walking and biking in Daly City. Lastly, this document contains six appendices, which include, among other contents, equity and public health analyses conducted for the Walk Bike Daly City plan and all the public comments received as part of the community needs assessment.

Public engagement

Public outreach efforts for the Walk Bike Daly City planning process were focused on two phases of the project: the project launch and the community needs assessment.

Project launch

The City began inviting the public to learn more about the Walk Bike Daly City project even before the planning process was fully underway. The goals of this early, initial outreach were to introduce the project to the community, describe the upcoming work and encourage the public to sign up for updates and announcements for when more substantial tasks were in progress. During this period, project staff conducted a number of activities to engage the public:

- Created a project logo and ordered walking- and biking-related giveaway items. Many of the items featured the logo; had a safety angle or message; were available in English and Spanish; and/or were geared toward children. These items included coloring and activity books, refector lights, stickers, paint sheets and temporary tattoos.
- Launched the project website, www.WalkBikeDalyCity.org. The website included a form that people could use to sign up for the project email list and submit questions. (The website was active only through the duration of the project.)
- Posted announcements on the City’s website and Facebook and Twitter feeds; in the City’s monthly “Daly Wire” e-newsletter; and on Nextdoor, a social-media platform for neighborhoods.
- Sent announcements to civic, advocacy and other stakeholder groups and organizations including the Silicon Valley Bicycle Coalition and San Francisco Bicycle Coalition (advocacy groups), Daly City Partnership (a community services nonprofit), and Republic Services (the City’s garbage and recycling collection company).
- Presented at a meeting of the City’s Bicycle/Pedestrian Advisory Committee.
• Staffed an outreach table at the National Night Out event at Serramonte Center on August 7, 2018 (see photo below).

Outreach table at the National Night Out event.

Community needs assessment
The community needs assessment was a crucial component of the planning process, since it directly informed the recommendations for improvements. To maximize public participation, the City offered a number of different ways to provide comments. The various channels for public participation are described in more detail in Chapter 3; they included an online survey, an interactive “pinnable” map, and comment cards distributed at community centers around the City and at a series of events and presentations. These opportunities for participation were announced and publicized in numerous ways, also described in Chapter 3. The extensive public outreach effort for the community needs assessment yielded almost 800 comments.
This chapter presents local issues and conditions relevant to walking and biking organized under the following thirteen topics:

1. Setting and urban form  
2. Demographics  
3. Key destinations  
4. Commuting  
5. Traffic collisions  
6. Street network  
7. Pedestrian facilities  
8. Bicycle facilities  
9. Events and activities  
10. Integration with other modes  
11. Related plans  
12. Equity analysis  
13. Public health analysis

### Setting and urban form

Daly City is located at the northern edge of San Mateo County—hence its nickname as the “Gateway to the Peninsula.” It has an area of 7.7 square miles, characterized by somewhat consistently hilly terrain. The City stretches from the Pacific Ocean on the west to nearly San Francisco Bay on the east and borders a number of other jurisdictions. Clockwise from the north, the City shares borders with San Francisco, Brisbane, San Bruno Mountain State and County Park, Colma, South San Francisco, Pacifica and the Pacific Ocean (see Figure 2.1). Also, the City completely surrounds the unincorporated community of Broadmoor, a residential enclave of county land located between the Westlake and St Francis Heights neighborhoods.

The City is bisected in the north–south direction by Interstate 280 (I-280), with notable differences in land use patterns between the eastern and western sides of the City. While a majority of the City’s land area is made up of residential development, the area east of I-280 consists of mostly older neighborhoods developed with medium-density detached single-family residences. In contrast, the area west of I-280 is newer (developed mostly after 1949) and consists of lower-density single-family homes and higher-density apartment complexes.

Commercial areas, and civic and community facilities such as schools, parks and government buildings are scattered throughout the City (see “Key destinations” section). Large swaths of land are taken up by Lake Merced Golf Club (a private facility) and Mussel Rock Open Space Preserve (public open space), both of which are located west of I-280. Other large land uses include Serramonte Center (a shopping mall), the Cow Palace (an arena and events center) and several cemeteries in the Serramonte neighborhood.

Daly City enjoys the mild Mediterranean climate typical of the San Francisco Bay area: cool, dry summers and chilly, wet winters. However, parts of the City experience frequent periods of fog or low clouds due to their location along the ocean.
Figure 2.1 | Key destinations

- Doelger Sr. Center
- SKYLINE PLAZA
- DMV
- Kaiser Permanente
- GELLERT MARKETPLACE
- MISSION PLAZA
- O RIGINAL D ALY C ITY
- 1000 KING DRIVE
Demographics

Daly City is the largest city in San Mateo County by population (105,543 people in 31,595 households) and also the most densely populated (almost 14,000 people per square mile). Of the City’s residents, 13,197 people, or approximately 13%, are children between the ages of 5 and 17. Another 16,427 people (approximately 16%) are seniors ages 65 and older. Just about a third of the households include children under the age of 18. The data in this section comes from the American Community Survey, or ACS, an ongoing demographic survey conducted by the U.S. Census Bureau. The data covers 2012–2016, the most recent five-year period for which ACS data is available.

In comparison, children’s share of the population is lower in Daly City (13%) compared with San Mateo County as a whole (16%) and with California (17%). In contrast, seniors’ share of the population is slightly higher in the City (16%) than in the county (15%) and in the state (13%). (In other words, Daly City’s age profile is somewhat older than both the county’s and the state’s.)

Key destinations

Typically, the most important destinations in a city are residential neighborhoods, commercial areas, employment sites and community facilities such as schools, parks, libraries and transit hubs. The main destinations in Daly City are listed below and are shown in Figure 2.1.

The City’s neighborhoods east of Interstate 280 (I-280) include Original Daly City, Hillside, Crocker, Southern Hills and Bayshore. Neighborhoods west of I-280 include Westlake, Broadmoor (not a neighborhood of Daly City proper but rather an enclave of unincorporated County land), St. Francis Heights and Serramonte.

Key commercial areas in Daly City include the Geneva Avenue and Mission Street commercial corridors; Westlake Shopping Center; Serramonte Center; and commercial clusters around the intersection of San Pedro Road, E. Market Street and Mission Street and along Gellert Boulevard between Serramonte and Hickey Boulevards. Large employment centers include City Hall; Seton Medical Center (the largest employer in Daly City), in St. Francis Heights; and the Kaiser Permanente medical offices on Hickey Boulevard.

Of the City’s population ages 5 and older, 70% speak English only or speak English “very well” while 30% speak English less than very well. The most common languages spoken in Daly City other than English are Tagalog (spoken by 24% of the population), Spanish (18%) and Chinese (including Mandarin and Cantonese; 16%).
club houses and other event spaces, many of them located in City parks; Giammona Pool, at Westmoor High School; two private golf and country clubs, both in the Westlake neighborhood; and Westlake School for the Performing Arts, a dance school.

The main civic and government facilities serving visitors are City Hall and, across the street, the Community Service Center; four public libraries; four post offices; a Department of Motor Vehicles office; and the North County Mental Health Center. Other important destinations worthy of note include Daly City BART station, the Cow Palace and several large cemeteries in the Serramonte neighborhood. In addition, just outside the City limits are the Colma BART station, Bayshore Caltrain station and Muni Metro’s Sunnydale light-rail station.

### 4 Commuting

This section looks at the number of pedestrian and bicycle commuters in Daly City. According to the Census Bureau’s 2012–2016 American Community Survey, 2.0% of Daly City workers commute primarily on foot; this might seem low but given Daly City’s population, it still represents 1,151 people. At the same time, 0.2%, or 128 people, commute primarily by bike (see Table 2.1, below). The City’s pedestrian and bicycle commute shares (2.0% and 0.2%) are lower than San Mateo County’s as a whole (2.5% and 1.3%) and also lower than California’s (2.7% and 1.1%). Because Daly City is largely residential, most people work outside of the City and are therefore less likely to commute primarily on foot or by bike. At the same time, Daly City does have a high percentage of people who commute primarily by public transportation (20.0%) and many of these riders access transit by walking and, to a lesser extent, by biking.

The ACS is our best source of comprehensive travel data for Daly City. However, the data has two significant limitations. First, it provides information on work-related travel only, which in most communities makes up a relatively small share of trips. Second, because the numbers of pedestrian and bicycle commuters in Daly City are small, the margin of error for these estimates is quite large. (Margin of error is a measure of the variability or range of an estimate. The larger the margin of error, the lower the accuracy of the estimate and the less likely it is to be close to the true value). Based on the margins of error for the data, the likely true range of pedestrian commuters in Daly City is between 790 and 1,512 people (1.4% – 2.7% of all commuters) while the likely true range of bicycle commuters is between 9 and 247 people (0.0% – 0.4% of all commuters; again, see Table 2.1).

<table>
<thead>
<tr>
<th>Commuter Mode</th>
<th>Daly City Commuters</th>
<th>Likely true range</th>
<th>San Mateo County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>34,931</td>
<td>62.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpool</td>
<td>7,039</td>
<td>12.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public transportation</td>
<td>11,269</td>
<td>20.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walked</td>
<td>1,151</td>
<td>2.0%</td>
<td>790 – 1,512</td>
<td>1.4% – 2.7%</td>
</tr>
<tr>
<td>Bicycled</td>
<td>128</td>
<td>0.2%</td>
<td>9 – 247</td>
<td>0.0% – 0.4%</td>
</tr>
<tr>
<td>Worked from home</td>
<td>1,312</td>
<td>2.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other**</td>
<td>394</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56,224</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Numbers might not add up due to rounding.
** Includes taxicab, motorcycle and other means.
Traffic collisions

This section analyzes traffic collisions in Daly City involving pedestrians or cyclists. The data for the first part of this section comes from the California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS), a database of collisions as reported to and collected by local police departments and other law enforcement agencies. The analysis covers the period from 2013 through 2017, the most recent five-calendar-year period, as of this writing, for which SWITRS data is available. It should be noted that minor collisions, especially those involving property damage only, are less likely to be reported to a police officer and lead to police response. For this reason, the incidents in SWITRS represent only a portion of all traffic collisions and are more likely to be serious ones.

Collisions involving pedestrians

According to SWITRS, there were 235 traffic collisions in Daly City from 2013 through 2017 that involved a motor vehicle and a pedestrian. These collisions resulted in 242 casualties: seven pedestrian fatalities (including four on Mission Street alone), 37 pedestrians severely injured and 198 pedestrians suffering lesser injuries (see Table 2.2).

The 242 pedestrian casualties identified above equate to an average of almost 50 casualties annually. Pedestrians represented almost 13% of the almost 1,900 people injured or, much less frequently, killed as a result of traffic collisions in Daly City during 2013–2017.

Table 2.2: Pedestrians killed or injured

<table>
<thead>
<tr>
<th>Year</th>
<th>Killed</th>
<th>Severely injured</th>
<th>Other injured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1</td>
<td>3</td>
<td>46</td>
<td>50</td>
</tr>
<tr>
<td>2014</td>
<td>2</td>
<td>4</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>2015</td>
<td>1</td>
<td>8</td>
<td>39</td>
<td>48</td>
</tr>
<tr>
<td>2016</td>
<td>2</td>
<td>14</td>
<td>48</td>
<td>64</td>
</tr>
<tr>
<td>2017</td>
<td>1</td>
<td>8</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>37</td>
<td>198</td>
<td>242</td>
</tr>
</tbody>
</table>

Annual average of pedestrian casualties: 48.4. Pedestrians as percentage of all traffic casualties: 12.8%.

Figure 2.2, on the next page, shows the locations of collisions that involved pedestrians. A large percentage of these collisions happened on Mission Street. This might not be surprising since Mission Street is flat, central and connects many key destinations and, as such, is Daly City’s most popular pedestrian route. As shown on the map, noticeable strings or clusters of collisions occurred along Geneva Avenue, San Jose Avenue/Mission Street, Hillside Boulevard near Mission Street, Southgate Avenue between St. Francis Boulevard and I-280, E. Market Street, San Pedro Road and Serramonte Boulevard; around Westlake Shopping Center and along the adjacent commercial strip on Southgate Avenue; on John Daly Boulevard as it crosses I-280; around Jefferson High School; and at the intersections of John Daly and Skyline Boulevards and of Hickey and Gellert Boulevards. These clusters indicate collision hotspots, or areas of concern.

Table 2.3, below, categorizes by age group the pedestrians injured or killed in collisions. Of the 227 casualties whose age was recorded (out of 242 casualties total), 17% were school-age children or teenagers of school age; this is higher than their 13% share of Daly City’s population (see “Demographics” section). Fourteen percent were seniors, slightly less than their 16% share of the City’s population.
Figure 2.2  |  Collisions involving pedestrians
Table 2.3: Pedestrian casualties by age group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school (0–4)</td>
<td>6</td>
<td>3%</td>
</tr>
<tr>
<td>School-age (5–17)</td>
<td>38</td>
<td>17%</td>
</tr>
<tr>
<td>Young adult (18–34)</td>
<td>72</td>
<td>32%</td>
</tr>
<tr>
<td>Middle-aged (35–64)</td>
<td>80</td>
<td>35%</td>
</tr>
<tr>
<td>Senior (65 and older)</td>
<td>31</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>227</td>
<td>100%</td>
</tr>
</tbody>
</table>

In collisions for which the party at fault is known, the driver was at fault approximately 80% of the time while the pedestrian was at fault approximately 20% of the time. By far the most common violation behind collisions involving pedestrians was failure by the driver to yield the right-of-way to a pedestrian at a crosswalk. This violation occurred in just under half of the collisions. The times of day with the most pedestrian collisions were 8–9 am, which corresponds to the morning commute, and 5–8 pm, which corresponds to the afternoon/evening commute and when daylight fades during the winter months.

**Collisions involving bicyclists**

During the five-year period from 2013 through 2017, collisions in Daly City that involved a motor vehicle and a bicyclist resulted in 57 casualties: one bicyclist fatality (in 2015, on Skyline Boulevard at Highway 1), seven bicyclists severely injured and 49 bicyclists suffering lesser injuries (see Table 2.4).

These 57 casualties equate to an average of over 11 casualties annually. Also, despite making up only 0.2% of commuters (see previous section), bicyclists represented 3% of the almost 1,900 people injured or, much less frequently, killed as a result of traffic collisions in Daly City during 2013–2017.

Table 2.4: Bicyclists killed or injured

<table>
<thead>
<tr>
<th></th>
<th>Killed</th>
<th>Severely injured</th>
<th>Other injured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>2015</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1</td>
<td>7</td>
<td>49</td>
<td>57</td>
</tr>
</tbody>
</table>

Annual average of bicyclist casualties: 11.4.
Bicyclists as percentage of all traffic casualties: 3.0%.

Figure 2.3, on the next page, shows the location of collisions that involved bicyclists. Noticeable strings or clusters of collisions occurred at the following locations: along Geneva Avenue, at the junction of John Daly and Skyline Boulevards; along Mission Street around Jefferson High School; along E. Market Street; along Eastmoor Avenue; and on King Drive around Gellert Boulevard.
Figure 2.3 | Collisions involving bicyclists
Table 2.5 categorizes by age group the bicyclists injured or killed in collisions. Of the 56 casualties whose age was recorded, almost a quarter were school-age children, even though they represent only 13% of the City’s population.

**Table 2.5: Bicyclist casualties by age group**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school (0–4)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>School-age (5–17)</td>
<td>13</td>
<td>23%</td>
</tr>
<tr>
<td>Young adult (18–34)</td>
<td>19</td>
<td>34%</td>
</tr>
<tr>
<td>Middle-aged (35–64)</td>
<td>22</td>
<td>39%</td>
</tr>
<tr>
<td>Senior (65 and older)</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

In collisions for which the party at fault is known, the driver was at fault approximately half of the time, with the bicyclist being at fault approximately the other half. The times of day with the most bicycle collisions were 7–8 am, which corresponds to the morning commute; and 3–7 pm, which corresponds to the afternoon/evening commute and when daylight fades during the winter months.

**OTS rankings**

Each year, the California Office of Traffic Safety (OTS) ranks the state’s cities against other cities with similar-sized populations on various types of traffic safety statistics. The rankings give varying weights to such factors as population, daily vehicle-miles traveled, crash records and crash trends, and are based on data from several sources, including SWITRS.

In 2016—the latest year for which OTS had published rankings as of this writing—Daly City generally ranked in the middle of the pack in terms of traffic hazards. In its group of cities with a population between 100,001 and 250,000, Daly City’s composite, or overall, ranking was 37th out of 58 cities (see Table 2.6). A ranking of 1 is considered the lowest, or “worst” in terms of traffic safety while a ranking of 58th would be the highest, or “best,” for this group of cities. In other words, Daly City ranked better than 62% of other cities in its peer group. It ranked 9th in terms of traffic safety for pedestrians as a whole (better than 14% of other cities), 14th for pedestrians under 15 years old and 5th for pedestrians 65 and older. In terms of traffic safety for bicyclists as a whole, it ranked 48th (better than 81%) and 35th for bicyclists under 15 years old.

**Table 2.6: OTS rankings (2016)**

<table>
<thead>
<tr>
<th>Type of collision</th>
<th>Ranking (out of 58)</th>
<th>Better than … of peer cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>37th</td>
<td>62%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>9th</td>
<td>14%</td>
</tr>
<tr>
<td>Pedestrians &lt;15</td>
<td>14th</td>
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</tr>
<tr>
<td>Pedestrians 65+</td>
<td>5th</td>
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<tr>
<td>Bicyclists</td>
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<td>81%</td>
</tr>
<tr>
<td>Bicyclists &lt;15</td>
<td>35th</td>
<td>59%</td>
</tr>
</tbody>
</table>

OTS notes that its “rankings are only indicators of potential problems” and that “there are many factors that may either underestimate or overstate a city/county ranking that must be evaluated based on local circumstances.”

**6 Street network**

A city’s streets are most often classified by their function, which typically corresponds to the amount and speed of traffic on them. This functional classification includes, from busiest to least busy: freeways, highways, arterials, collectors and local streets.

Freeways are designed to carry large traffic volumes over long distances and are controlled-access routes, meaning that only high-speed motor-vehicle traffic is allowed on them. Two freeways run through Daly City. Both are owned and maintained by Caltrans, the California Department of Transportation:

- Interstate 280 (I-280), which bisects the City in a north–south direction.
- Highway 1, which splits off I-280 near Southgate Avenue, heading south toward Pacifica.

Highways carry heavy traffic volumes at moderately high speeds. Typically, but not always, cross traffic is at the same grade, access to fronting properties is
provided by frontage roads, intersections have traffic signals and parking is limited or not permitted. The highways in Daly City are Skyline Boulevard (Highway 35) and Mission Street/San Jose Avenue (Highway 82). Like the freeways, these two highways are also owned and maintained by Caltrans.

Arterials are designed to carry heavy traffic volumes at lower speeds than highways. They generally connect to freeways, highways and other arterials. Arterials typically have 4–6 lanes of traffic and posted speed limits of 25–40 miles per hour; they incorporate medians to control cross traffic, and provide separate turn lanes and traffic signals at major intersections. Examples of arterials in Daly City include Geneva Avenue, John Daly Boulevard, Lake Merced Boulevard, Junipero Serra Boulevard, Hillside Boulevard, E. Market Street, San Pedro Road, Hickey Boulevard and Serramonte Boulevard.

Collectors are lower-speed, lower-volume streets than arterials. They are intended to serve short trips within neighborhoods and to channel traffic from local, neighborhood-serving streets to the arterials. Collectors in Daly City include Crocker Avenue and Skyline Drive, among others. Along with arterials, collectors form the backbone of Daly City’s roadway system. The rest of the City’s street network is made up of local streets. These are low-speed, low-volume, neighborhood-serving streets, typically with on-street parking on both sides of the street. Their main purpose is to provide access to fronting properties.

Pedestrian facilities

The main facilities for walking are sidewalks, off-street paths and trails, and crosswalks. As an older, established and mostly built-out city, Daly City has an extensive system of sidewalks, marked crosswalks and pedestrian crossing signals, particularly on the arterials and collectors, and at main intersections. Also, many of the residential streets have sidewalks on at least one side and marked crosswalks, especially at crossings with major streets. In addition, in recent years the City has been installing or upgrading curb ramps at key locations to improve access for persons with disabilities.

Daly City has a number of paths and trails, including:

- A multi-use (pedestrian/bicycle) path on the south side of John Daly Boulevard between Ashland Drive (near Skyline Boulevard) and Sheffield Drive/Poncetta Drive (near I-280)—a distance of approximately one mile—with a gap in front of Westlake Shopping Center.
- Approximately a dozen walkway paths scattered around the City provide cut-throughs between blocks and through the street grid. Most but not all of these paths are found south of Hickey Boulevard.
- Paved recreational paths in the City parks, especially in the largest ones: Gellert, Hillside, Marchbank and Westlake.
- At Mussel Rock Open Space Preserve, a zigzagging series of unpaved recreational hiking trails with views of the coast.
- A complex of hiking trails crisscrossing San Bruno Mountain, which can be reached off trailheads.
and access points along Guadalupe Canyon Parkway, Alta Vista Way (in the Southern Hills neighborhood), Crocker Avenue (across from Village in the Park) and the Royce Way cul-de-sac (near Susan B. Anthony Elementary School).

- Short footpaths providing internal access between the apartment blocks on either side of Westlake Shopping Center; and within the Village in the Park residential complex off Crocker Avenue/S. Hill Boulevard.

The City, and in one case Caltrans, have completed a number of pedestrian improvements since adoption of the 2013 Bicycle and Pedestrian Master Plan and are in the process of implementing others. These completed or in-progress projects include:

- Crosswalk warning light systems on Geneva Avenue at Oriente Street; on San Pedro Road at Reiner Street; and on Southgate Avenue at Crestwood Drive.
- Streetscape and pedestrian safety project on Mission Street between Crocker and Templeton Avenues (includes a widened, landscaped median; high-visibility stamped crosswalks; and yield-to-pedestrians signs).
- Sidewalk bulb-outs, or extensions, at several crossing locations along Mission Street (Caltrans project).
- Streetscape improvement project on John Daly Boulevard from the Daly City BART station (De Long Street) to Mission Street.
- New sidewalk on the west side of Mission Street/El Camino Real between San Pedro Road and A Street.
- More than 50 accessible curb ramps at various locations along Junipero Serra Boulevard, E. Market Street and Eastmoor Avenue.
- Sidewalk on the east side of Junipero Serra Boulevard from San Pedro Road to D Street.
- Bulb-outs on Eastmoor Avenue at and across the street from Margaret P. Brown Elementary School.
- Sidewalk bulb-outs with stormwater bio-retention ponds at Westlawn Avenue and Fieldcrest Drive, next to Westlake Elementary School.
- Recreation trail improvements and amenities at Mussel Rock Open Space Preserve.

### Bicycle facilities

The greatest challenges to bicycling in Daly City include the hilly topography; wet, foggy weather; relatively long commutes (as a largely residential city, Daly City has many more residents than jobs); busy streets with high traffic volumes and speeding traffic; and north–south thoroughfares—especially I-280, Highway 1 and, to a lesser extent, Skyline Boulevard—that function as physical barriers. There are few flat or even relatively flat routes in the City, and cyclists must compete for space on these streets with cars, trucks and buses.

While bicyclists may use any public street in Daly City other than the two freeways, the City has nevertheless designated a set of streets as a Citywide bikeway network. These streets are intended to provide a higher level of comfort, convenience or connectivity for cyclists than other streets. The City’s existing network consists of three types of bikeways, known as Class I, Class II and Class III facilities, according to the California Department of Transportation’s (Caltrans) classification system. Some of these bikeways already exist while others are proposed or in the process of being designed and installed as of this writing.

Class I bikeways are paved paths separated from cars and for use exclusively by bicyclists and, in the case of multi-use paths, also by pedestrians. Class I paths are typically found in parks, through open space, on abandoned and converted railroad corridors, or along surplus easements and rights-of-way. While it does not fully meet industry standards for Class I bikeways, the multi-use path mentioned in the previous section that runs along the south side
of John Daly Boulevard (see photo above) may be considered the only existing Class I facility in Daly City. It consists of two 0.4 mile segments separated by a gap in front of Westlake Shopping Center.

Class II bikeways are conventional bike lanes, designated by painted white stripes, stenciled bike symbols and signage (see image above). Bike lanes are usually 4-7 feet wide and are placed next to car lanes. They are recommended only on certain streets that are sufficiently wide to accommodate them. Bike lanes exist on approximately a dozen streets, including Bayshore Boulevard, Geneva Avenue, Lake Merced Boulevard, Serramonte Boulevard and Southgate Avenue, among others.

Class III bikeways are designated bike routes on lanes shared with drivers. These are typically narrower streets on which there is no room for bike lanes unless parking or traffic lanes were removed. Bike routes may be signed with “Bike route” plaques; “sharrows” (these are stencils that indicate travel lanes to be shared by cars and cyclists; see photo below); and signs reminding drivers and cyclists that bikes may use the full lane.

In Daly City, bicycle parking can be found at various City government buildings, including City Hall, libraries and community centers; City parks; public high schools and middle/intermediate schools; the Daly City BART station; and various private commercial developments, including Westlake Shopping Center and Serramonte Center. The City does not have an ordinance requiring bicycle parking in private developments. Most traffic signals in the City do not have bicycle-detection technology. Lastly, there are no dedicated bicycle shops in Daly City.
Events and activities

Besides physical infrastructure such as sidewalks and bikeways, special events, activities and other initiatives can help institutionalize and mainstream walking and bicycling by making pedestrians and cyclists feel cared for and catered to. Most of these initiatives fall under the categories of education, safety, encouragement/promotion and enforcement.

Safe Routes to School

The most common initiatives are those designed to encourage and make it safer for children to walk and bike to school. In San Mateo County, most of these efforts are led by the County’s Office of Education (COE), through its Safe Routes to School Program. During the 2016–2017 school year, the program sponsored bicycle rodeos, traffic-safety classes and other activities at four schools in Daly City: Fernando Rivera Middle School, Thomas Edison Elementary School, Marjorie H. Tobias Elementary School and Westlake Elementary School. (Bike rodeos are clinics to teach children how to ride safely in traffic.) In May 2018, the program helped organize a “Walk & Roll to School Day” encouragement event at Daniel Webster Elementary School. Students in the class with the most participants received reusable school-branded water bottles and other incentive items. More recently, in March 2019, the COE sponsored two walk audits at The Bayshore School and Woodrow Wilson Elementary School. Subsequently, City staff joined a working group called “Collective Impact” to further enhance student education and opportunities for bicycling and pedestrian activities.

Bicycle/Pedestrian Advisory Committee

The City has a seven-member Bicycle/Pedestrian Advisory Committee (B/PAC) consisting of volunteers appointed by the City Council. The committee serves in an advisory capacity to the Director of Public Works, and meets quarterly to discuss and make recommendations on proposed bicycle and pedestrian projects and other related issues.

Police Department activities

The City’s Police Department has webpages on pedestrian and bicycle safety, and online forms allowing the public to report speeding problems and other traffic violations, and to request traffic enforcement. Also, the department routinely makes public announcements about general traffic safety aimed at drivers, cyclists and pedestrians, and about particular traffic enforcement campaigns and activities.

Bike to Work Day

Perhaps the best-known bicycle-promotion initiative is Bike to Work Day, held annually in May. That day, during the morning and evening commutes, volunteers at a network of “energizer stations” give away refreshments, incentive items, bike-commuting information—and, of course, encouragement—to bicyclists. In recent years, there had been an energizer station in Daly City, near Lake Merced; this year (2019), the energizer stations closest to Daly City were at Colma Town Hall and at two locations in and near downtown Brisbane.
**Integration with other modes**

Walking and bicycling become more practicable the better they are integrated with other forms of transportation, especially transit. This might be particularly true in Daly City; because the City is largely residential, most people work outside of the City and are therefore less likely to make their trip to work entirely on foot or by bike.

Daly City is a regional transit hub, with passenger rail service provided by BART (and also by Caltrain and San Francisco Muni Metro, nearby) and bus service provided by SamTrans and, to a lesser extent, by Muni. In large part as a result, Daly City has the highest percentage of residents in San Mateo County who take transit to work (20%) — and the seventh highest percentage out of 101 cities in the Bay Area — according to the Metropolitan Transportation Commission’s “Vital Signs” database.

**Rail service**

The Daly City BART station is located on the north side of John Daly Boulevard east of I-280. Traffic from the I-280 and Highway 1 ramps, along with the need to traverse a pedestrian tunnel under John Daly Boulevard, create significant barriers for pedestrian and bicycle travel to and from the western and southern neighborhoods. Meanwhile, the wide arterials and lack of bike lanes connecting to the station pose other significant obstacles for cyclists. As a result, the station is tied, at 3%, for the lowest share of riders accessing the station by bike from home in the BART system, according to the 2015 BART Station Profile Study.

In addition, the Colma BART station is located just outside the City limits, off D and Hill Streets. Both it and the Daly City station have ample bicycle parking in the form of racks and lockers. BART allows bikes on all trains at all times with the following exceptions: (i) in the first car; (ii) in any crowded car; and, (iii) during commute hours, in the first three cars. Folded bikes are allowed on any car at any time.

Also just outside the City limits, near the Bayshore neighborhoods, are the Bayshore Caltrain station (accessed from Bayshore Boulevard, then Tunnel Avenue) and Muni Metro’s Sunnydale light-rail station (on Bayshore Boulevard just north of Geneva Avenue).

**Bus service**

Daly City is served by ten regular SamTrans bus routes, connecting most of the City’s neighborhoods to San Francisco to the north and other San Mateo County communities to the south and east. The destinations served by the most routes are the two BART stations and Serramonte Center. In addition, SamTrans runs several school-day-only routes that serve Jefferson and Westmoor High Schools and Ben Franklin Intermediate School. All SamTrans buses are outfitted with wheelchair lifts or ramps and with front-mounted racks for two bicycles. Two additional bikes may be carried inside at the driver’s discretion, depending on passenger loads.

The Daly City BART station and the Mission Street and Geneva Avenue corridors are served by Muni bus routes, providing connections to various points in San Francisco. All Muni buses are outfitted with wheelchair lifts or ramps and with front-mounted racks for 2–3 bicycles. Only folded bikes are allowed inside.

**Shuttles**

Lastly, there are several free weekday bus shuttle services available — in some cases with restrictions — to Daly City residents. These shuttles, operated by different institutions, variously serve San Francisco State University, the Daly City BART station, Bayshore Caltrain station, City Hall, Serramonte Center, Seton Medical Center and Skyline College in San Bruno.
Related plans

The development of the Walk Bike Daly City plan has been informed by a number of related plans and policies developed by both the City of Daly City and other agencies. These documents were reviewed and summarized with the goal of identifying recommended projects and specific, “actionable” policies that could be reflected in the Walk Bike Daly City plan.

The City of Daly City plans and policies that were reviewed include:
- Bicycle and Pedestrian Master Plan (2013)
- Circulation Element of the General Plan (2013)
- Vision Zero Resolution (2016)
- Complete Streets Policy (2012)
- Pedestrian Safety Assessment (2013)

The planning efforts of other agencies that were reviewed include:
- BART Daly City Station Access Improvement Plan (2012)
- San Mateo County Comprehensive Bicycle and Pedestrian Plan (2011)
- Plans of adjacent cities: San Francisco, Brisbane, Colma, South San Francisco and Pacifica
- Caltrans District 4 Bike Plan (2018)
- Regional Bicycle Plan for the San Francisco Bay Area (2009)
- “Creating Safer Streets near Schools” (2018)

In addition, the development of the Walk Bike plan was coordinated as appropriate with several other concurrent planning efforts of the City of Daly City:
- Vision Zero Action Plan
- Systemic Safety Analysis Report
- American with Disabilities Act (ADA) Transition Plan
- Green Infrastructure Plan
- Parks and Open Space Master Plan

In addition, the City has been involved in the update of a Community-Based Transportation Plan to determine transportation needs and identify improvements for the Bayshore, a project being led by the City/County Association of Governments of San Mateo County. That effort was in progress at the time of this writing and a final plan document was not yet available for review.

Daly City Bicycle and Pedestrian Master Plan (2013) and Circulation Element of the General Plan (2013)

The 2013 Bicycle and Pedestrian Master Plan updated and supplemented the Citywide network of existing and proposed bikeways designated in the Circulation Element of the General Plan.

Also, the 2013 Master Plan identified a set of proposed pedestrian improvements:
- I-280 overcrossing improvements at Junipero Serra Boulevard (two locations where the street crosses I-280), School Street and San Pedro Road.
- Sidewalk on the east side of Junipero Serra Boulevard between from San Pedro Road to D Street.
- Sidewalk bulb-outs (extensions) at several crossing locations along Mission Street.
- Thornton Beach access pathway.
- Crossing improvements along Geneva Avenue.
- Mussel Rock Park recreational trail improvements.

Among the bicycle and pedestrian improvements proposed in the 2013 Master Plan, five are identified as priorities for implementation:
- Priority One: Signage and pavement markings designating a Class III bike route on John Daly Boulevard between Sheffield Drive and Mission Street.
- Priority Two: Signage and pavement markings designating a Class III bike route the entire length of Mission Street / San Jose Avenue within Daly City.
- Priority Three: Signage and pavement markings designating a Class II bike lanes on Geneva Avenue between Santos Street and Bayshore Boulevard.
- Priority Four: Signage and pavement markings designating a Class III bike route on Junipero Serra Boulevard between John Daly Boulevard and the Colma city limit.
• Priority Five: Pathway from North Mayfair Avenue to the northeast corner of John Daly Boulevard / Skyline Boulevard and sidewalk on the north side of John Daly Boulevard between Eastgate Drive and Skyline Boulevard.

Additionally, the 2013 Bicycle and Pedestrian Master Plan included a goal and a set of policies and specific tasks—drawn largely from the Circulation Element of the General Plan—to support implementation of the plan.

Daly City Vision Zero Resolution (2016)
This City Council resolution endorses the main goal of the “Vision Zero” movement, which is to eliminate traffic deaths and life-altering injuries. The document states that such traffic violence “on city streets is unacceptable and preventable” and that “the life, safety and health of residents, employees and visitors to Daly City is the City Council’s highest priority.” Also, it references supporting City efforts, including the Complete Streets Policy and enforcement and education efforts of the Police Department. The resolution concludes by adopting “a vision of reducing traffic deaths to zero by prioritizing safety within current and future infrastructure projects in combination with public education and enforcement practices.”

Daly City Complete Streets Policy (2012)
This policy, which was adopted by resolution of the City Council, generally commits the City to plan, design, build and maintain “Complete Streets”—in other words, streets that provide safe, comfortable and convenient travel for different types of users and for people of all ages and abilities. The policy urges City departments to institutionalize Complete Streets practices and to “approach every relevant project or program as an opportunity to improve streets and the transportation network for all categories of users.”

The document states that street projects should consider incorporating improvements such as sidewalks, shared-use paths, bicycle lanes, bicycle routes, paved shoulders, street trees and landscaping, planting strips, accessible curb ramps, crosswalks, refuge islands, pedestrian signals, signs, street furniture, bicycle parking facilities [and] public transportation stops and facilities.” The policy enables the City’s Bicycle and Pedestrian Advisory Committee or other appropriate advisory body to review transportation projects early in the planning and design so that their comments and recommendations regarding Complete Streets features may be incorporated into the projects. Also, the policy tasks all relevant departments to evaluate how well the City’s streets and transportation network are serving each category of users.

The City Council resolution adopting the policy describes the benefits of Complete Streets in terms of reducing driving, improving transportation options and improving public health and environmental sustainability. The resolution concludes by committing the City to incorporate Complete Streets policies and principles into the next substantial revision of the Circulation Element of the City’s General Plan.

Daly City Pedestrian Safety Assessment (2013)
This study was conducted by a team of experts from the Technology Transfer Program of the Institute of Transportation Studies at UC Berkeley. It consisted of a “benchmarking” analysis of existing pedestrian policies, programs and practices in Daly City; and walking audits at five focus areas. The benchmarking analysis yielded numerous recommendations, among them:

• Prepare a Pedestrian Master Plan and Americans with Disabilities Act (ADA) Transition Plan.
• Implement a comprehensive Citywide Safe Routes to School program.
• Develop a GIS-based inventory of existing and missing sidewalks and other pedestrian facilities.
• Develop an inventory of crosswalks and ensure that the City’s crosswalk policy reflects best practices and recent research on the installation, removal, and enhancement of crosswalks.
• Implement sustained pedestrian safety enforcement efforts, and use enforcement as an opportunity for education.
• Employ traffic calming strategies where speed surveys suggest traffic speeds are too high for pedestrian areas.
• Explore the use of 15 mile-per-hour school zones.
• Hire or designate a pedestrian / bicycle coordinator to provide interdepartmental coordination, serve as liaison to schools and community groups, and pursue grant opportunities.

The walking audits examined and made site-specific recommendation for the following five locations:
• John Daly Boulevard between Junipero Serra Boulevard and Woodrow Street.
• Lake Merced Boulevard at Glenwood Avenue.
• Westridge Avenue between Skyline Boulevard and South Mayfair Avenue.
• Junipero Serra Boulevard at Washington Street.
• Junipero Serra Boulevard at San Pedro Road.

BART Daly City Station Access Improvement Plan (2012)
This document is a comprehensive analysis of the all-modes access challenges and opportunities for improvement at Daly City BART station. The main challenges identified for pedestrians and bicyclists are the imposing structures at and around the station—I-280, the Highway 1 ramps, the large parking structure and the BART guideway—that act as physical barriers; the station’s dark, uninviting architectural design; and the pedestrian tunnel under John Daly Boulevard.

Opportunities discussed for improvement within BART property include wayfinding signage, distinctive gateway treatments, and a variety of enhancements to the tunnel and the station’s public spaces. The plan also identified potential improvements on City streets, including an at-grade, signal-controlled crosswalk on John Daly Boulevard at Niantic Avenue or East Station Road; high-visibility crosswalks and streetscape improvements on De Long Street, East Station Road and West Station Road; and alternatives for improved bike access on John Daly Boulevard.

San Mateo County Comprehensive Bicycle and Pedestrian Plan (2011)
San Mateo County is in the process of updating its Bicycle and Pedestrian Plan. The current version, dated 2011, establishes a Countywide Bikeway Network (CBN) and includes maps of existing and proposed bikeways. The objectives of the CBN are to improve north–south connectivity along El Camino Real and Highway 1; improve east–west connectivity across Highway 1, I-280, El Camino Real, the Caltrain tracks and Highway 101; and provide access between cities, to San Francisco and Santa Clara Counties, and to significant destinations.

The CBN within Daly City incorporates existing and proposed facilities on Geneva Avenue, Bayshore Boulevard, Hillside Boulevard, San Jose Avenue, Mission Street, E. Market Street, San Pedro Road, Junipero Serra Boulevard, John Daly Boulevard, Lake Merced Boulevard, Skyline Boulevard, Southgate Avenue, Eastmoor Avenue, St. Francis Boulevard, Callan Boulevard, Serramonte Boulevard, Hickey Boulevard, Gellert Boulevard and King Drive.
Specific proposed pedestrian improvements consist of multi-use pathways and highway over- and undercrossings. These proposed improvements were incorporated into the CBN. The only pedestrian project identified within Daly City is the multi-use path along John Daly Boulevard.

Plans of adjacent cities

In addition to bordering unincorporated areas of San Mateo County, Daly City is bordered by five cities: San Francisco, Brisbane, Colma, South San Francisco and Pacifica. Below are highlights of the main studies and documents that address walking and biking in these cities.

Through its WalkFirst planning effort, completed in 2014, the City and County of San Francisco identified “key walking streets,” several of which connect to Daly City: Bayshore Boulevard, Santos Street, Geneva Avenue, Mission Street and Junipero Serra Boulevard. Two of these are also on WalkFirst’s list of “high-injury corridors,” where safety improvements are most needed: Geneva Avenue and Mission Street. The San Francisco Bicycle Plan (2009) designated a citywide bicycle route network. The network includes several routes that connect to Daly City: Bayshore Boulevard, Geneva Avenue, San Jose Avenue, St. Charles Avenue, Lake Merced Boulevard, John Muir Drive and Skyline Boulevard.

In 2017, the City of Brisbane published a walking and bicycling brochure that identifies facilities and suggested routes to schools, parks, civic buildings, trailheads, transit/shuttle stops and other points of interest. The map shows bike lanes on Bayshore Boulevard and Guadalupe Canyon Parkway connecting to Daly City.

The Town of Colma’s Circulation Element (2014) mostly reflects the recommendations in the San Mateo Comprehensive Bicycle and Pedestrian Plan (see above). The bikeways map in the Circulation Element shows bikeways on the following streets connecting to Daly City:

- Hillside Boulevard (proposed bike lanes)
- Junipero Serra Boulevard (existing bike lanes).
- Mission Street (proposed bike path and bike lanes).
- Serramonte Boulevard (proposed unclassified on-street bikeway).

In addition, the Town is in the process of preparing a plan to identify improvements for enhancing the comfort, safety, access and convenience of people walking and biking on El Camino Real in Colma, from Daly City to South San Francisco.

At the time of this writing, the City of South San Francisco was in the process of updating its bicycle and pedestrian plans. The current Pedestrian Master Plan proposes a number of projects connecting to or adjacent to Daly City:

- Sidewalk construction along King Drive and on Junipero Serra Boulevard, Gellert Boulevard and Callan Boulevard leading to the Daly City city limits.
- A range of pedestrian-oriented improvements to the Junipero Serra Boulevard / Hickey Boulevard intersection.

Meanwhile, South San Francisco’s current Bicycle Master Plan designates several bikeways connecting directly to Daly City:

- Junipero Serra Boulevard (existing bike lanes).
- Hickey Boulevard (existing bike route to Longford Drive and proposed bike route to the city limit).
- San Felipe Avenue / Newman Drive / King Drive (proposed bike route).
- Arroyo Drive (existing bike route).
- Gellert Boulevard (proposed bike lanes).
- Callan Boulevard (existing bike lanes).
The City of Pacifica also was in the process of updating its Bicycle Master Plan, and at the same time developing its first Pedestrian Master Plan. The existing bicycle plan designates bikeways on several streets leading into Daly City: Skyline Boulevard, Gateway Drive, Crenshaw Drive and Westline Drive (connecting to Mussel Rock Open Space Preserve).

Caltrans District 4 Bike Plan (2018)
This is a bicycle plan for highways and arterials owned by Caltrans, the California Department of Transportation, within the agency’s District 4, which covers the nine-county Bay Area. There are three such state routes within Daly City: I-280, on which bicyclists are prohibited; and Mission Street and Skyline Boulevard, on which cyclists are permitted. A needs analysis showed medium to high levels of non-recreational bicycle demand, collisions and “traffic stress” (a measure of bicycling comfort) along and across these facilities.

The plan identifies the following priority projects in Daly City:
- Separated bikeway on Skyline Boulevard (Highway 35) between Shelbourne Avenue and Highway 1.
- Separated bikeway on Mission Street / El Camino Real (State Route 82) between John Daly Boulevard and Collins Avenue in Colma.
- Signage and striping improvements on the I-280 ramps at Serramonte Boulevard.

Regional Bicycle Plan for the San Francisco Bay Area (2009)
This plan, developed by the Metropolitan Transportation Commission, designates a Regional Bikeway Network (RBN) consisting of continuous and connected bicycling corridors of regional significance. Existing and unbuilt RBN routes within Daly City include Geneva Avenue, Bayshore Boulevard, San Jose Avenue, Mission Street, John Daly Boulevard, Lake Merced Boulevard, Skyline Boulevard and a generally north–south route along Westmoor Avenue, Southgate Avenue, St. Francis Boulevard, Serramonte Boulevard and Callan Boulevard.

Creating Safer Streets near Schools (2018)
This report by the San Mateo County Health System and the County’s Office of Education identifies 15 public schools in high-poverty neighborhoods with a history of bicycle and pedestrian collisions. On the list are three Daly City elementary schools, including two with a history of “high” levels of collisions: Woodrow Wilson and Bayshore. The third school is Westlake.

The report lists a number of challenges to improving student safety while walking and biking. These include limited funding for programming and infrastructure improvements; limited or non-existent coordination between schools and cities; and lack of school and city staff resources to support “Safe Routes to School” projects. At the same time, the report identifies a number of “opportunities for action.” These include prioritizing infrastructure improvements for student drop-off and pick-up zones, high-collision intersections and mid-block crossings; disseminating information about grant opportunities available for transportation safety improvements; increasing dedicated Safe Routes to School staff and funding; and increasing enforcement of traffic laws near schools.
Concurrent planning efforts

The Walk Bike Daly City process overlapped in part with five other planning efforts being conducted by the City of Daly City that have a relationship to walking and biking. Efforts were made to coordinate the development of the Walk Bike plan with these other efforts as appropriate, and as allowed by the different project timelines. These concurrent planning efforts are listed below. The project descriptions reflect information as of the time of this writing.

Vision Zero Action Plan

In 2016, the City Council passed a resolution endorsing a “Vision Zero” approach toward eliminating traffic deaths and life-altering injuries (see write-up earlier in this section). The resolution envisions achieving this goal “by prioritizing safety within current and future infrastructure projects in combination with public education and enforcement practices.” More recently, the City received a grant from the Federal Highway Administration to develop the first Vision Zero Plan in San Mateo County. The plan seeks to advance the City’s Vision Zero resolution by setting measurable goals around traffic safety, and a timeline for implementation. Whereas the Walk Bike plan, and also the Systemic Safety Analysis Report (see below), recommend location-specific improvements, the Vision Zero Plan focuses primarily on recommended changes to policies and practices in order to institutionalize a systems approach to traffic safety.

Systemic Safety Analysis Report

The State of California awarded a grant to Daly City to conduct a Citywide safety analysis of the street network. The project will evaluate crash trends and patterns to identify the main locations with safety concerns; analyze the roadway characteristics of these locations to develop both systemic as well as location-specific safety treatments; and formulate concept designs for improvement projects at priority locations. It is expected that the City will then use the concept designs to pursue grant funding to implement the recommended improvement concepts (see flow chart below). Development of the concept designs was coordinated between the Systemic Safety Analysis Report and the Walk Bike plan so that each project focused on a different set of locations or concerns.

American with Disabilities Act (ADA) Transition Plan

The ADA is a civil-rights law that mandates equal opportunity for individuals with disabilities. Pursuant to the law, the City is updating the ADA Self-Evaluation and Transition Plan, which is required of all public agencies with more than 50 employees. The Self-Evaluation portion examines how the City’s policies, programs and services are provided to the public. The Transition Plan portion looks at physical barriers and identifies structural modifications necessary for providing access for people with disabilities to the City’s programs and services. As part of the Transition Plan, the City will develop a strategy and schedule for the elimination or mitigation of barriers.

Green Infrastructure Plan

Green infrastructure uses vegetation and soils to mimic natural processes for capturing, storing, releasing and cleaning stormwater. Examples of green infrastructure include landscaped medians and traffic islands; stormwater curb extensions; and pervious paving systems such as interlocking concrete pavers and porous asphalt. Green infrastructure improves water quality by removing trash and pollutants, decreases the chance of localized flooding and makes streets and neighborhoods more attractive.

Example of a green infrastructure project: landscaped medians and bioswales on John Daly Boulevard.

The City is currently developing a Green Infrastructure Plan to comply, as a permittee, with requirements of the regional stormwater permit under the National Pollutant Discharge Elimination

plan so that each project focused on a different set of locations or concerns.
System. The plan is examining opportunities and developing guidelines for the inclusion of green infrastructure measures into storm drains primarily on public property, including streets, roads, parking lots and roofs. Green infrastructure has benefits for walking and biking by promoting traffic calming (when incorporated into sidewalk bulb-outs, for example) and by making the streets more inviting.

**Parks and Open Space Master Plan**
Lastly, the City has also been preparing a Parks and Open Space Master Plan. The plan, called “Play Daly,” has evaluated the City’s existing park system and facilities and recreation programming; has solicited public input on parks-related needs and suggestions; and will develop a blueprint for protecting, improving and expanding the City’s network of parks, facilities and recreational services. The plan will provide both a long-term vision for the park system as well as specific policies and standards to direct day-to-day decisions.

**Equity analysis**
Certain communities and populations have been marginalized to varying extents by society’s over-reliance on cars. Children and many seniors, for example, cannot drive, while lower-income individuals are less likely to own cars and are more likely to be stretched financially by transit costs. Improving conditions for walking and biking can begin to address some of these challenges, as those forms of transportation are affordable and accessible to most people.

A citywide equity analysis was conducted as part of the Walk Bike Daly City planning process. The analysis examined the six indicators listed below. A report describing the methodology and results of the analysis is included under Appendix A.

1. Median household income.
2. Exposure and sensitivity to environmental pollution.
3. Students eligible for free or reduced-price school meals.
4. Seniors in the population.
5. School-age youth in the population.
6. Households with no vehicles available

**Public health analysis**
Common sense and hard data both tell us that sedentary lifestyles are taking a heavy toll on our health. In California, physical inactivity is the most prevalent chronic disease risk factor, contributing, by some estimates, to an estimated 30,000 deaths each year. As the evidence has mounted, the planning world has responded by paying increased attention to the connection between active transportation and public health. Walking and biking are among the most accessible forms of physical activity, promising multiple health benefits. Potential benefits include preventing or controlling chronic diseases such as high blood pressure, heart disease, stroke and diabetes; helping to maintain a healthy weight; and improving mood and lowering stress levels. Higher levels of walking and biking are correlated with lower obesity levels, lower diabetes rates and a lower incidence of several other health conditions.

The Walk Bike Daly City planning process also included a citywide public health analysis. The analysis examined the seven indicators related to active transportation that are listed below. A report describing the methodology and results of the public health analysis is included under Appendix B.

1. Percentage of youth who engaged in at least 60 minutes of physical activity daily.
2. Percentage of adults who walk regularly.
3. Percentage of adults in fair or poor health.
4. Percentage of adults considered obese.
5. Percentage of youth ever diagnosed with asthma.
6. Percentage of adults ever diagnosed with asthma.
7. Percentage of adults ever diagnosed with diabetes.
Community needs assessment

When it comes to identifying the walking and biking needs in any community, it is the members of that community who are the foremost experts. After all, they are the ones who walk or bike the streets on a regular basis—or who would like to but are discouraged by the existing conditions.

For this reason, the Walk Bike Daly City process relied on an extensive community outreach and engagement effort to identify needs. The purpose of that effort was to gather input from the general public on the barriers, obstacles and challenges to walking and biking in the City; the needs and concerns of local pedestrians and cyclists; specific problem areas and locations; and ideas and suggestions for improving conditions.

The community needs assessment was conducted in late 2018. Input from the public was gathered through three main channels: an online survey; an online map on which people could pin location-specific comments and also respond to other people’s comments; and comment cards handed out at public events and made available at community centers throughout the City. The effort resulted in almost 800 individual comments. These comments were assessed, summarized, and used to prioritize the needs and, ultimately, to help formulate the improvements recommended in this plan.

The rest of this chapter describes in detail the opportunities for public engagement and participation, and also the ways in which those opportunities were publicized. Perhaps more importantly, the chapter summarizes the comments received, identifying the key themes and main areas of concern. A series of appendices to this document lists all the comments received.

Online survey

The Walk Bike Daly City online survey was open for three months, from mid-September to mid-December 2018. The survey, administered through SurveyMonkey.com, contained 11 questions, all of which were optional. Respondents were eligible to win one of three $25 gift cards for Amazon.com. The survey received 316 responses. Below are the questions included in the survey, along with a summary of the responses to each question.
**Q1: Walking or biking for transportation**
The first question asked, “How often do you walk or bike in Daly City for transportation (to go to school, work, a transit stop, shopping, etc.)?” 305 people responded regarding walking and 280 responded regarding biking. As shown in the chart below, almost half of respondents (48%) walk in Daly City for transportation a few times a week while 15% bike for transportation at the same frequency. At the other end of the spectrum, 17% rarely or never walk, and just over three fifths (61%) rarely or never bike, in Daly City for transportation.

**Q2: Walking or biking for recreation/exercise**
This question asked, “How often do you walk or bike in Daly City for recreation or exercise?” 302 people responded regarding walking and 280 responded regarding biking. As the chart below shows, half (50%) of respondents walk in Daly City for recreation or exercise a few times a week while just over one tenth (11%) bike for those purposes at the same frequency. At the other end of the spectrum, 17% rarely or never walk, and almost three fifths (59%) rarely or never bike, in Daly City for recreation or exercise.
Q3: Challenges and obstacles to walking

This question listed nine potential challenges and obstacles related to walking and asked respondents, “In your opinion, how much do they discourage you or other people from walking in Daly City?” (In the survey, the challenges were always listed in random order.) The answer choices were “a lot” (shown on the chart below in red), “somewhat” (shown in yellow) and “not too much” (shown in green). 275 people responded to this question. As the chart shows, the following four challenges were seen by more than 75% of respondents as discouraging people “a lot” or “somewhat” from walking (the combined red and yellow parts of the bars):

- Aggressive or distracted drivers (83% of respondents).
- Difficult or challenging intersections to cross (82% of respondents).
- Poor street lighting (for walking when it is dark out; 79% of respondents).
- Fast or heavy traffic (84% of respondents).

These could be interpreted to be the most important or significant obstacles to walking in Daly City.

Respondents were allowed to submit a comment in response to this sub-question: “Did we forget any general challenges or obstacles to walking in Daly City?” 85 responses were submitted (see Appendix C-1). Additional challenges that were mentioned several times include the fog, which makes it hard for drivers to see pedestrians; cars parked on the sidewalk; litter and dog droppings on the sidewalks; cyclists who are inconsiderate of pedestrians; and concerns about crime. In addition, many of the responses simply echoed the challenges and obstacles listed in the main question, particularly the lack of sidewalks; aggressive or careless drivers; and challenging street crossings.
Q4: Improving walking conditions
This was an open-ended question asking, “Are there specific streets or intersections in Daly City that are especially challenging or intimidating for pedestrians? Or do you have specific ideas or suggestions for improving walking conditions in the City?” The question received 148 responses, which are listed in Appendix C-2. A summary of the responses has been incorporated into the “key themes” section, at the end of this chapter.

Q5: Type of cyclist
This question asked respondents to select the bicyclist profile that best describes them. 260 people responded to this question. As shown in the chart below, more than two fifths (43%) classified themselves as “interested but concerned.” One quarter (25%) responded, “no way, no how, am I getting on a bike,” while almost as many (24%) identified themselves as “enthused and confident” cyclists. Just under one tenth (8%) classified themselves as “strong and fearless” cyclists.

Q6: Challenges and obstacles to biking
This question listed eight challenges and obstacles related to biking and asked respondents, “In your opinion, how much do they discourage you or other people from biking in Daly City?” (In the survey, the challenges were always listed in random order.) The answer choices were “a lot” (shown in the chart on the following page in red), “somewhat” (shown in yellow) and “not too much” (shown in green). 251 people responded to this question. As the chart shows, the following challenges were seen by more than 85% of respondents as discouraging people “a lot” or “somewhat” from biking (the combined red and yellow parts of the bars):
- Aggressive or distracted drivers (90% of respondents).
- Lack of bike lanes, bike paths and bike routes (87% of respondents).
- Fast or heavy traffic (86% of respondents).

These could be interpreted to be the most important or significant obstacles to biking in Daly City.

Respondents were allowed to submit a comment in response to this sub-question: “Did we forget any general challenges or obstacles to biking in Daly City?” 37 responses were submitted (see Appendix C-3). Most of these responses did not raise new challenges or obstacles but rather echoed those listed in the main question, particularly the lack of space and facilities on the streets for cyclists. One additional challenge that was mentioned several times is Daly City’s cold, foggy weather.

Q7: Improving biking conditions
This was an open-ended question asking, “Are there specific streets or intersections in Daly City that are especially challenging or intimidating for cyclists? Or do you have specific ideas or suggestions for improving biking conditions in the City?” The question received 93 responses, which are listed in Appendix C-4. A summary of the responses has been incorporated into the “key themes” section, at the end of this chapter.
Q6 continued: Challenges and obstacles to biking

- Aggressive or distracted drivers: 66% a lot, 26% somewhat, 10% not too much
- Lack of bike lanes, bike paths and bike routes: 62% a lot, 25% somewhat, 13% not too much
- Fast or heavy traffic: 50% a lot, 26% somewhat, 14% not too much
- Poor street lighting (for biking when it’s dark out): 45% a lot, 32% somewhat, 25% not too much
- Lack of bike parking: 33% a lot, 37% somewhat, 30% not too much
- Hilly streets: 31% a lot, 45% somewhat, 24% not too much
- Poor pavement quality: 31% a lot, 44% somewhat, 26% not too much
- The places I want to bike to are too far: 15% a lot, 35% somewhat, 49% not too much

Q8: Connection to Daly City

This question asked, “What is your connection to Daly City?” (People could select more than one answer.) 265 people responded to this question. As shown in the chart below, more than four fifths of respondents (82%) live in Daly City, 15% work in Daly City and 14% “live and work elsewhere but visit Daly City to shop, dine, see friends or family, etc.” Almost a third (30%) are either youth who go to school in Daly City or are adults who have children who do. 28 people responded “Other” and specified their answer (see Appendix C-5).
Q9: Respondents’ age
264 people responded to this question. As shown in the chart below, 6% of respondents were under 18 years old; half (50%) were ages 18–44; one third (34%) were ages 45–64; and almost a tenth (9%) were 65 or older.

Q10: Disability status of respondents
265 people responded to this question. Almost a tenth (9%) of respondents had a “disability or medical condition that makes it difficult to walk at least some of the time” while 91% did not indicate having such a disability or medical condition.

Q11: Drawing for gift cards; sign-ups for project updates
- 219 people indicated that they would like to be entered in the drawing for one of three $25 gift cards for Amazon.com. See the sidebar below for the results of the drawing.
- 116 people indicated that they would like to receive future announcements and updates about Walk Bike Daly City.

Drawing for Amazon.com gift cards
Anyone who submitted a comment as part of the community needs assessment for the Walk Bike Daly City plan and who provided an email address was entered in a drawing for one of three $25 gift cards for Amazon.com. 343 email addresses were entered in the drawing. (Only unique addresses were entered; duplicate addresses—from people who submitted more than one comment using the same email address—were removed from the list of entrants to the drawing.)

The drawing was held on December 27, 2018, using an online application called Random.org. The following three winners were picked at random by the application (their email addresses have been anonymized for privacy); they were notified of having won and were invited to redeem their gift card:

- rm...rt@gmail.com
- rw...23@yahoo.com
- va...yr@sbcglobal.net
Interactive pinnable map

In addition to the online survey, the City set up an online map on which people could pin markers with location-specific comments, and also read and respond to the comments that others posted. Both the map and the online survey were available through the project webpage and both were open for comment during the same time period, from mid-September to mid-December 2018.

Participants could post the following five types of comments, using markers of different colors as shown in the screenshot below: “concern about walking” (turquoise marker), “concern about biking” (orange), “suggestion or idea” (dark blue), concern about general “traffic safety” (red), and “more general comment” (yellow). Commenters were also eligible to win one of the three $25 Amazon gift cards mentioned earlier.

360 comments were submitted through the map (of these, 329 were pinned comments and 31 were responses to the comments). The breakdown by comment type shows:

- Concern about walking: 178 comments. These comments are listed in Appendix D-1.
- Concern about biking: 69 comments; see Appendix D-2.
- Suggestion or idea: 42 comments; see Appendix D-3.
- Concern about general traffic safety: 49 comments; see Appendix D-4.
- More general comment: 22 comments; see Appendix D-5.

The locations with the greatest concentrations of comments include:
- The John Daly Boulevard / Skyline Boulevard intersection.
- John Daly Boulevard around I-280 and the BART station (roughly between De Long Street and Sheffield Drive).
- The San Jose Avenue–Mission Street–San Pedro Road corridor.
- Crocker Avenue, just west of the Village in the Park residential complex.
- Hickey Boulevard east of Gellert Boulevard.
Comment cards and other channels

The City distributed printed Walk Bike Daly City comment cards soliciting people’s opinions about walking and biking in Daly City, and their ideas and suggestions for improving conditions (see images below). The comment cards were handed out at meetings where project staff gave presentations or at community events or gathering spots where staff set up tables with information about the project. These occasions are listed below (all dates are 2018).

- Latino Heritage Month celebration at City Hall (September 15).
- Weekday senior luncheon at Doelger Senior Center (September 19).
- City Council hearing at City Hall (September 24).
- Tabling at the farmers’ market at Serramonte Center (September 27).
- Presentation and listening session at Hillcrest Gardens, a residential community for seniors (September 27).
- Kasayahan Sa Daly City (Filipino-American History Month celebration) at Marchbank Park (October 13).
- Meeting of the Bayshore Parent Teacher Organization at Bayshore Elementary School (October 17).
- Tabling on four occasions at the Daly City and Colma BART stations (various dates in October).
- Healthy Living, Healthy Lives Fair at Serramonte Center (November 10).

In addition to the above events, project staff also tabled at the National Night Out event at Serramonte Center on August 7, prior to launching the community needs assessment, to begin introducing the project to the public.

Stacks of comment cards were also dropped off at public schools throughout the City. In addition, comment cards—along with display boards with general information about the project—were placed visibly at a dozen gathering places throughout the City. These included:

- War Memorial Community Center.
- Bayshore Community Center.
- Lincoln Park Community Center.
- Doelger Senior Center.
- Community Service Center.
- Larcombe Clubhouse.
- Serramonte Main Branch Library.
- Westlake Branch Library.
- Bayshore Branch Library.
- John Daly Branch Library.
- Administrative office of the Recreation Department (Westlake Park).
- Administrative office of the Public Works Department’s Engineering Division (City Hall).

Appendix E lists the 31 comments submitted on comment cards as well as through various other channels. These miscellaneous channels include the comment form on the project website (www.WalkBikeDalyCity.org), email, postal mail and Nextdoor (a social-media platform for neighborhoods).
Publicizing the opportunities for public participation

Opportunities for the public to provide input are effective only to the extent that people know about them. To inform the community, the City publicized the outreach for the Walk Bike Daly City plan through various online and off-line means:

- Mass email to the nearly 70 contacts that were on the project’s email distribution list at the time. (The list has since grown to more than 300 contacts.)

- Display boards at the gathering places listed in the previous section.

- Project website.

- Posts and announcements on the City’s website and Facebook and Twitter feeds; in the City’s “Daly Wire” (a monthly e-newsletter); and on Nextdoor.
• Tabling and presentations at the occasions listed in the previous section.

- Tabling at Kasayan Sa Daly City (Filipino-American History Month celebration) at Marchbank Park.

- Tabling at the farmers' market at Serramonte Center.

- Visit to the project table at City Hall, before a City Council hearing.

- After a presentation at the weekday senior luncheon at Doelger Senior Center.

• Requests to other agencies and organizations to post an announcement on their website or social-media feeds and in their newsletters. The request was sent to, among others, the Daly City Partnership (a community services nonprofit), Silicon Valley Bicycle Coalition and San Francisco Bicycle Coalition (advocacy groups) and Republic Services (the City’s garbage and recycling collection company).

- Announcement on the website of the Silicon Valley Bicycle Coalition.
Key themes

As mentioned previously, the City received almost 800 public comments providing input into the community needs assessment for the Walk Bike Daly City plan. The comments, which are compiled in the appendices to this report, offer a detailed look at the respondents’ thoughts and opinions regarding walking and biking in Daly City. This section presents the key themes from these comments, identifying the main areas of concern and opportunities for improvements expressed by the public. Below is a “word cloud” of the words that appear most frequently in the public comments. (The word cloud combines words with similar meanings—for example, “cyclist,” “cyclists” and “bikers”—and excludes words with very general meanings—for example, “only,” “will” and “around.”)

The themes are organized under two main categories—walking and biking—and are further divided into general and location-specific challenges. The themes are not necessarily listed in order of importance. It is worth noting that a large percentage of the location-specific comments and concerns involve a very small number of streets, namely major thoroughfares such as John Daly Boulevard, Mission Street, Junipero Serra Boulevard, Skyline Boulevard and Serramonte Boulevard. These streets tend to be the most direct, convenient routes to key destinations in Daly City. For this reason, they attract the bulk of local traffic and therefore experience a large share of the conflicts among drivers, pedestrians and cyclists.
General concerns about walking
- Difficult, challenging or intimidating intersections to cross.
- Speeding traffic, and careless or distracted drivers. This is a concern especially around the elementary and middle schools. Suggestions regarding unsafe driver behavior around schools included higher-visibility crosswalks, more crossing guards, slow-traffic zones, warning signs and a more consistent police presence.
- Cars parked on the sidewalk, obstructing pedestrian access.
- Trash, discarded furniture and dog waste on sidewalks.
- Poor street lighting, for walking when it is dark or foggy.

Location-specific concerns about walking
- Large, complex intersections can be difficult or intimidating for pedestrians to cross. These intersections tend to be where major thoroughfares cross each other. The following intersections were identified as being areas of concern for walking:
  - Along John Daly Boulevard: Mission Street/Hillside Boulevard, Junipero Serra Boulevard, I-280, Poncetta Drive, Lake Merced Boulevard and Skyline Boulevard.
  - Along Mission Street and Hillside Boulevard between John Daly Boulevard and Como Avenue.
  - Along Junipero Serra Boulevard: I-280, Washington Street, San Pedro Road, Southgate Avenue, Serramonte Boulevard and Hickey Boulevard. (It should be noted that the intersections at Southgate, Serramonte and Hickey are located in part or entirely outside the Daly City city limits.)
  - Along I-280: Washington Street, Serramonte Boulevard and Hickey Boulevard.
  - Along Gellert Boulevard: Serramonte Boulevard, Hickey Boulevard and King Drive.
  - Along Skyline Boulevard: Westridge Avenue and Westminster Avenue.
  - Other intersections: Mission Street/E. Market Street/San Pedro Road, Southgate Avenue/Westmoor Avenue, Sullivan Avenue/Eastmoor Avenue and Serramonte Boulevard/Highway 1.

General concerns about biking
- Too few bikeways (bike lanes, bike routes, bike paths and other similar facilities); more generally, lack of safe cycling space on streets due to narrow streets, fast traffic and on-street parking.
- Inadequate bike connections to the Daly City BART station, Westlake Shopping Center, Serramonte Center and neighboring jurisdictions, especially San Francisco, Colma and South San Francisco. Coordination with San Mateo County needed to provide bike connections through the unincorporated neighborhood of Broadmoor.
- Fast traffic, and aggressive or distracted drivers.
- Difficult, challenging or intimidating intersections to cross; also, intersections lack technology to detect cyclists waiting at the traffic light to cross.
- Daly City’s cold, windy weather; also, the fog makes it hard for drivers and cyclists to see each other.

Location-specific concerns about biking
- Lack of a safe bikeway on John Daly Boulevard between the Daly City BART station and Sheffield Drive; the boulevard is an essential east–west connector to the BART station, with no adequate alternatives. The I-280 and Highway 1 on- and off-ramps are particularly challenging. Also, opportunities could be explored to provide a continuous bikeway to Skyline Boulevard using the frontage roads (N. and S. Mayfair Avenues), and possibly the medians and parking lots, along John Daly Boulevard.
- Very fast traffic on Skyline Boulevard and, to a lesser extent, also on Skyline Drive.
- Lack of safe cycling space on a number of other important east–west thoroughfares such as Southgate Avenue (a segment of which runs north–south), Westmoor Avenue, Eastmoor Avenue, Crocker Avenue, S. Hill Boulevard,
Serramonte Boulevard and Hickey Boulevard (especially through I-280); and on other north–south routes such as the San Jose Avenue/Mission Street/San Pedro Road corridor, Hillside Boulevard, Lake Merced Boulevard, Junipero Serra Boulevard (a rare flat north-south route through Daly City) and Callan Boulevard.

- Intersections where the above-named streets cross tend to be large and complex, with many turning movements and potential conflicts. Challenging intersections for cyclists include John Daly Boulevard/Mission Street/Hillside Boulevard; John Daly Boulevard/Junipero Serra Boulevard; John Daly Boulevard/Skyline Boulevard; Southgate Avenue/Westmoor Avenue; Mission Street/San Pedro Road/E. Market Street; and San Pedro Road/Junipero Serra Boulevard/Washington Street.

- Opportunities for wayfinding signage to make more people aware of the pedestrian tunnel to the Daly City BART station under John Daly Boulevard and to bicycling routes between the Daly City BART station and San Francisco State University.

- Trash along Guadalupe Canyon Parkway (most of the road lies in unincorporated San Mateo County).
This chapter contains the policy framework for the 2020 Walk Bike Daly City plan. It includes a broad, overarching, long-term goal for the plan; several thematic policies in support of that goal; and detailed tasks under each policy area. The policy framework presented here revises and updates the policy framework in the 2013 Bicycle and Pedestrian Master Plan and is anticipated to amend the pedestrian- and bicycle-oriented goal, policies and tasks in the Circulation Element of the City’s General Plan.

**Goal**

The following goal reflects an end-condition which communicates what bicycling and walking will be like in Daly City in the future, once the projects proposed in the 2020 Walk Bike Daly City plan are implemented:

Daly City has an interconnected system of safe, convenient and universally accessible pedestrian and bicycle facilities, for both transportation and recreation. These facilities provide access to jobs, homes, schools, transit, shopping, community facilities, parks and regional trails throughout Daly City. At the same time, the City has improved its jobs/housing balance and has strengthened its network of vibrant, higher-density, mixed-use and transit-accessible neighborhoods that enable people to meet their daily needs without access to a car.

As a result of making our transportation system more balanced, equitable and sustainable, many more people in Daly City walk, while a new generation of bicycle improvements has greatly increased the number of cyclists. The new walking and bicycling activity has reduced automobile dependence, traffic congestion, pollution and the City’s carbon footprint while increasing mobility options, reinforcing transit, promoting healthy lifestyles, saving residents money and fostering social interaction.

**Policy 1: Pedestrian access**

Strengthen pedestrian safety and access between and within residential areas and schools, commercial areas, recreational facilities, transit centers, and other key destinations and major activity centers in the City.

- **Task 1-1:** Improve pedestrian safety by providing adequate separation of pedestrian and motor vehicle traffic. This includes making provisions for sidewalks on newly constructed or existing roads and constructing safe pedestrian crossings in areas of heavy pedestrian and vehicular traffic.

- **Task 1-2:** Include infrastructure and design treatments in public projects on both new and existing roads and constructing safe pedestrian crossings in areas of heavy pedestrian and vehicular traffic.

- **Task 1-3:** Ensure that pedestrian infrastructure and other aspects of the transportation right-of-way comply with the Americans with Disabilities Act and meet the needs of people of different
ages and of people with different types of disabilities, including mobility, vision, hearing and other impairments.

- **Task 1-4:** Provide additional opportunities for the City’s residents to congregate in public through dedicated physical spaces such as parklets, plazas or special events such as temporary car-free blocks or streets.

- **Task 1-5:** Consider mid-block pedestrian crossings where they facilitate a direct pedestrian connection between properties and uses and can be implemented safely.

- **Task 1-6:** Consider developing parking lot design guidelines for shopping center parking lots exceeding a certain size that maximizes safe pedestrian access from perimeter sidewalks, parking lots to storefronts, and between storefronts.

- **Task 1-7:** Evaluate updating the City standard for new sidewalk construction to be consistent with the recommendations of the 2020 Walk Bike Daly City plan in an effort to increase sidewalk usability for pedestrians with strollers, wheelchairs, and other walking assistance devices.

**Policy 2: Bicycle access**

Continue to install and maintain bicycle facilities throughout the city and take other steps to ensure that using a bicycle in Daly City is a viable transportation option.

- **Task 2-1:** Implement bikeway improvements, which include signing, striping, paving and the latest proven safety techniques including green-back sharrows, intersection crossing markings and buffered and separated bicycle lanes for bike routes serving employment sites, shopping centers, schools, public facilities and along other bicycle corridors.

- **Task 2-2:** Continue looking for opportunities to create direct bike routes on less-trafficked streets while enhancing existing bike routes on busier streets by adding conventional, buffered or separated bike lanes, or by otherwise redesigning the streets to reduce speeding.

- **Task 2-3:** Stay informed about the bicycle master planning efforts of adjacent jurisdictions, and coordinate with them on the development of connecting bikeways across jurisdictional boundaries.

- **Task 2-4:** Ensure that the prioritized bicycle, and also pedestrian, improvements identified in the Bicycle and Pedestrian Master Plan are included in the City’s Capital Improvement Program (CIP).

- **Task 2-5:** Pursue funding under countywide, regional, state and federal sources for new and improved bikeways, and also pedestrian facilities.

- **Task 2-6:** Require—either through the Zoning Ordinance or a stand-alone Bicycle Parking Ordinance—the provision of secure, covered off-street bicycle parking for large multifamily residential, commercial and office/institutional uses, and other key destinations. Where feasible consider sidewalk bicycle racks where supported and maintained by adjacent property owners.

- **Task 2-7:** Encourage provision of showers and lockers for employees as a part of all non-residential or mixed-use developments.

- **Task 2-8:** Support the provision of a bicycle rental vendor at the Daly City BART station, should BART decide to include such a vendor, and subsequently explore the deployment of bicycle rental kiosks in other commercial districts.

- **Task 2-9:** Work with transit providers to ensure that transit facilities are equipped with adequate bicycle carrying capacity.
Policy 3: Complete streets

View new and retrofit transportation improvements and maintenance operations as opportunities to create Complete Streets, with infrastructure and design features that improve safety, access, and mobility for all travelers, including pedestrians, cyclists and transit users.

- **Task 3-1:** In the design of any new roadway and as a part of any development review, ensure that adequate infrastructure is included that promotes a safe and convenient means of travel for all users. This shall include the provision of sidewalks, shared use paths, bicycle lanes and other types of bikeways.
- **Task 3-2:** Incorporate multimodal improvements into pavement resurfacing, restriping, and signalization operations where the safety and convenience of users can be improved within the scope of the work.
- **Task 3-3:** Formalize a program to implement—at the request of, and in coordination with, residents and neighborhood groups—traffic-calming measures on residential streets.
- **Task 3-4:** In accordance with the City's Green Infrastructure Plan, incorporate stormwater treatment measures such as landscaped medians and traffic islands, planted curb extensions, bioswales and pervious surfaces, into the design of pedestrian and bicycle improvements.
- **Task 3-5:** In any assessment, collection, and/or distribution of the City's Development Impact Fee (AB1600) funds, consider the implementation of City projects that further the provision of Complete Streets in Daly City.

Policy 4: Walking and biking to school

In collaboration with local school districts, individual schools, San Mateo County’s Safe Routes to School program and other advocates, implement capital projects as well as events and activities that make it safer and more appealing for students, parents, and staff to walk and bike to school.

- **Task 4-1:** Pursue funding to implement Safe Routes to School infrastructure improvements and education and promotion programs.
- **Task 4-2:** Pursue encouragement efforts such as Walk and Bike to School Days, as well as “Walking School Bus”/“Bike Train” programs (in which parents take turns accompanying a group of children to school on foot or by bicycle) and “Safety Patrol” programs at elementary schools.
- **Task 4-3:** Encourage educational programs that teach students safe walking and bicycling behaviors, and educate parents and drivers in the community about the importance of safe driving.
- **Task 4-4:** Enforce speed limits and traffic laws, assist in ensuring safe crossings, and promote safe travel behavior within the schools.
- **Task 4-5:** Invite the school districts to participate in the City’s Bicycle/Pedestrian Advisory Committee.

Policy 5: New development

Require, as appropriate, that new development projects and significant redevelopment projects contribute to the implementation of adjacent pedestrian and bicycle facilities, and that such development be designed to accommodate and encourage walking and cycling.

- **Task 5-1:** Require as a condition of development/redevelopment project approval the provision of sidewalks and wheelchair ramps where lacking; repair or replacement of damaged sidewalks; and reconstructing existing sidewalks along the project frontage to meet ADA standards including but not limited to width, slopes, obstruction removal, pedestrian push buttons and pedestrian signal upgrades.
- **Task 5-2:** In the review of new residential subdivisions, ensure that sidewalks are provided on both sides of public streets and, where site conditions allow, also on private streets. Where determined feasible by the City and where minimum lot size can be maintained, new residential development shall provide sufficient right-of-way to ensure comfortable and attractive sidewalks. The City shall update and provide a standard sidewalk cross-section to developers.
- **Task 5-3:** Require that new subdivisions be designed to minimize the use of cul-de-sacs,
unless pedestrian connections are provided in perpetuity between cul-de-sac ends.

- **Task 5-4**: As a part of all new development, require, where appropriate, the provision of pedestrian-oriented signs, pedestrian-scale lighting, street trees, landscaping, benches, bicycle racks and other street furniture. Where necessary in new development, the City may require additional sidewalk and/or right-of-way width to accommodate these amenities.

- **Task 5-5**: Require during the design review of all new public or private parking lots and driveways the incorporation of raised sidewalks providing access from the City sidewalk adjoining the development to site interior or, in the case of non-residential development, to the proposed store- or office-front(s).

- **Task 5-6**: Consider impacts to the existing and future bicycle and pedestrian network when completing environmental review for private development projects, and require mitigation measures where necessary and reasonable to ensure that these systems are not impacted.

- **Task 5-7**: As part of any reassessment of the City’s Development Impact Fee (AB1600) ensure that adequate and commensurate money is collected and distributed to City projects involving the improvement and expansion of Daly City’s pedestrian and bicycle systems. The amount of this allocation shall be determined at the time of the fee reassessment, should a reassessment occur.

**Policy 6: City practices and standards**

As appropriate and necessary, continue, revise, update or institute City practices and design standards that take full consideration of walking and bicycling as everyday modes of transportation.

- **Task 6-1**: For faster and cheaper installation of pedestrian and bicycle infrastructure, consider ‘quick-build’ solutions that rely on paint, soft posts and other inexpensive materials. These methods also provide flexibility in experimenting and piloting projects before a final, permanent design is chosen.

- **Task 6-2**: Prioritize implementation of the City’s 2016 Vision Zero resolution and 2020 Vision Zero Action Plan (to eliminating traffic deaths and life-altering injuries) by setting measurable goals and an implementation timeline; incorporating traffic-safety considerations into all infrastructure projects; enhancing public education and enforcement practices; and reporting publicly on progress.

- **Task 6-3**: Revise the City’s urban design standards to incorporate best practices in pedestrian- and bicycle-friendly siting, architecture and access for new development.

- **Task 6-4**: Increase the City’s efforts to attain a better jobs/housing balance as a way to shorten commutes and therefore encourage more walking and biking to work.

- **Task 6-5**: Stay informed about, and participate in, planning efforts of the county and of adjacent jurisdictions that are relevant to walking and biking in Daly City; also, actively comment on the environmental reviews completed by other agencies for projects within or adjacent to Daly City to ensure that pedestrian and bicycle circulation systems are not negatively impacted but rather enhanced.

- **Task 6-6**: As part of the effort to unify the Zoning Ordinance into a broader set of development regulations (see General Plan Policy LU 4.1), review the City’s public improvement standards for streets, curbs, sidewalks and other features to ensure that safe and effective pedestrian and bicycle circulation is accommodated.

- **Task 6-7**: Explore amendments to the Zoning Ordinance which would require increased sidewalk dedication along roadways where existing sidewalk width does not meet the recommendations of the 2020 Walk Bike Daly City plan.

- **Task 6-8**: Develop a citywide anti-litter campaign which may include education, enforcement and/or increased targeted maintenance activities to address trash, litter, animal waste, illegal dumping, and other obstructions which adversely impact the accessibility of pedestrian and bicycle facilities.

- **Task 6-9**: Develop a policy that minimizes the number of curb-cuts along arterial and collector roadways, and when driveways are proposed,
that the sidewalk behind the driveway apron be an at-grade, accessible crossing for pedestrians.

Policy 7: Location-specific improvements

In addition to projects proposed in the Walk Bike Daly City Plan, implement improvements at a number of additional specific locations around the City to enhance conditions for pedestrians and cyclists in support of the City’s General Plan and adopted policies.

- **Task 7-1:** As part of the comprehensive infrastructure and streetscape plan for the Geneva Avenue corridor (see General Plan Task LU-3.2), ensure that both public and private improvements provide significant accommodation of both pedestrian and bicycle transportation modes.

- **Task 7-2:** As part of any City involvement in, or comments provided for, the Geneva Avenue connection with the Highway 101 Interchange and/or redevelopment of the Brisbane Baylands, require the improvement and enhancement of both the regional pedestrian and bicycle transportation networks.

- **Task 7-3:** Continue to participate in the Grand Boulevard Initiative for Mission Street and, when considering the design of Mission Street pedestrian improvements, seek to implement the street design guidelines identified by the Grand Boulevard Multimodal Transportation Corridor Plan.

- **Task 7-4:** Explore amendments to the Zoning Ordinance pertinent to Mission Street and Geneva Avenue to ensure that new buildings along these corridors: are sited to be easily accessible by pedestrians; provide for maximum setbacks, consistent with any City-adopted urban design plan; provide all parking spaces either underground or behind buildings; and provide on-site bicycle parking.

- **Task 7-5:** Work with adjacent jurisdictions and the transit providers to improve walking and biking access to the Daly City and Colma BART stations and nearby Caltrain stations, including utilizing existing street level crossings on John Daly Boulevard and maximizing either existing or future grade-separated crossing(s) at this location.

- **Task 7-6:** Work with Caltrans to implement pedestrian and bicycle improvements on Mission Street, Skyline Boulevard and where the Interstate 280 and Highway 1 ramps meet surface streets.

- **Task 7-7:** Encourage and work more closely with Caltrans to ensure adequate maintenance of pedestrian and bicycle facilities on Caltrans routes through Daly City.
05 | Priority improvements

Overview

One of the key goals of the Walk Bike Daly City plan is to propose the next generation of pedestrian and bicycle improvements that will expand the City’s network of walking and biking facilities, close gaps in the existing system and enhance connections to key destinations. This chapter presents the priority recommended improvements in terms of infrastructure projects. It includes both the priority pedestrian projects as well as improvements to the City’s bikeway network. While this chapter focuses on infrastructure, it should be noted that the supporting actions listed and described in Chapter 8 are also considered priorities of the Walk Bike plan.

Priority pedestrian projects

Daly City is largely built-out, with an extensive system of sidewalks, marked crosswalks and pedestrian crossing signals, particularly on the arterials and collectors, and at main intersections. In terms of challenges, the City is hilly and is crisscrossed and divided by several major thoroughfares that are challenging for pedestrians and even some that are entirely off-limits to them. Two grade-separated freeways—I-280 and Highway 1—pick up and drop off large volumes of traffic in the City at their on- and off-ramps. Surface streets such as Skyline, John Daly, Junipero Serra and Serramonte Boulevards are busy multi-lane arterials carrying fast traffic. Not surprisingly, the main concerns raised through the community needs assessment for the Walk Bike plan were traffic-related. These include aggressive or distracted drivers; fast, heavy traffic; and difficult or challenging intersections to cross.

The priority pedestrian projects recommended by the Walk Bike Plan are listed in Table 5.1 and their location is shown in Figure 5.1, on the pages that follow. The priority list consists of 14 projects, divided into two tiers of seven projects each. The tiering is based on such considerations as a project’s relative importance, its likely technical feasibility, whether it addresses a priority collision hotspot and the potential extent of community support. Within each tier, the projects are not listed in order of priority, importance or feasibility. Also, it is not intended that the City will complete all Tier I projects before taking on Tier II projects; instead, the City should pursue projects from either tier depending on the opportunities that arise. (The same consideration applies to the priority bicycle projects presented later in this chapter.)
Table 5.1: Priority pedestrian projects (projects *within* each tier are not listed in order of priority)

<table>
<thead>
<tr>
<th>Tier I</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>New crossing of John Daly Boulevard (between Niantic Avenue and Willits Street) to the Daly City BART station entrance (see conceptual design 5.3).</td>
</tr>
<tr>
<td>P2</td>
<td>Improvements to the intersection of John Daly Boulevard / Junipero Serra Boulevard / I-280 ramps / Highway 1 ramps (see conceptual design 5.2).</td>
</tr>
<tr>
<td>P3</td>
<td>Improvements to the intersection of John Daly Boulevard / Sheffield Drive / Poncetta Drive (see conceptual design 5.1).</td>
</tr>
<tr>
<td>P4</td>
<td>Improvements to the intersection of John Daly Boulevard / Skyline Boulevard (see conceptual design 5.4).</td>
</tr>
<tr>
<td>P5</td>
<td>Improvements to the intersection of Mission Street / E. Market Street / San Pedro Road (see conceptual design 5.5).</td>
</tr>
<tr>
<td>P6</td>
<td>Improvements to the intersection of Junipero Serra Boulevard / San Pedro Road (see conceptual design 5.6).</td>
</tr>
<tr>
<td>P7</td>
<td>Improvements to the intersection of Serramonte Boulevard / Highway 1 ramps (see conceptual design 5.7).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tier II</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8</td>
<td>Continuation of the multi-use path on the south side of John Daly Boulevard, within the public right-of-way, in front of Westlake Shopping Center.</td>
</tr>
<tr>
<td>P9</td>
<td>Improvements to the intersections of Skyline Boulevard / Westridge Avenue and Skyline Boulevard / Westmoor Avenue.</td>
</tr>
<tr>
<td>P10</td>
<td>Continuous sidewalk on Crocker Avenue between Pointe Pacific Drive and Hana Vista Lane.</td>
</tr>
<tr>
<td>P11</td>
<td>Improvements to the intersection of Junipero Serra Boulevard / Washington Street / I-280 on-ramps.</td>
</tr>
<tr>
<td>P12</td>
<td>Improvements to the intersection of Sullivan Avenue / San Pedro Road / Eastmoor Avenue.</td>
</tr>
<tr>
<td>P13</td>
<td>Sidewalk on the south side of Serramonte Boulevard between Callan Boulevard and just west of Gellert Boulevard.</td>
</tr>
<tr>
<td>P14</td>
<td>Stairs (including bicycle trough, or channel) from Hickey Boulevard and Callan Boulevard to the playing fields in Gellert Park.</td>
</tr>
</tbody>
</table>
Making it easier to walk and bike in Daly City

**Tier I**

P1  New crossing of John Daly Boulevard (between Niantic Avenue and Willits Street) to the Daly City BART station entrance (see conceptual design 6.3).

P2  Improvements to the intersection of John Daly Boulevard / Junipero Serra Boulevard / I-280 ramps / Highway 1 ramps (see conceptual design 6.2).

P3  Improvements to the intersection of John Daly Boulevard / Sheffield Drive / Poncetta Drive (see conceptual design 6.1).

P4  Improvements to the intersection of John Daly Boulevard / Skyline Boulevard (see conceptual design 6.4).

P5  Improvements to the intersection of Mission Street / E. Market Street / San Pedro Road (see conceptual design 6.5).

P6  Improvements to the intersection of Junipero Serra Boulevard / San Pedro Road (see conceptual design 6.6).

P7  Improvements to the intersection of Serramonte Boulevard / San Pedro Road (see conceptual design 6.7).

**Tier II**

P8  Continuation of the multi-use path on the south side of John Daly Boulevard, within the public right-of-way, in front of Westlake Shopping Center.

P9  Improvements to the intersections of Skyline Boulevard / Westridge Avenue and Skyline Boulevard / Westmoor Avenue.

P10 Continuous sidewalk on Crocker Avenue between Pointe Pacific Drive and Hana Vista Lane.

P11 Improvements to the intersection of Junipero Serra Boulevard / Washington Street / I-280 on-ramps.

P12 Improvements to the intersection of Sullivan Avenue / San Pedro Road / Eastmoor Avenue.

P13 Sidewalk on the south side of Serramonte Boulevard between Callan Boulevard and just west of Gellert Boulevard.

P14 Stairs (including bicycle trough, or channel) from Hickey Boulevard and Callan Boulevard to the playing fields in Gellert Park.
Citywide bikeway network

Bicyclists may use any public street in Daly City other than the two freeways. Nevertheless, the City has designated a set of streets as a Citywide bikeway network. These streets are intended to provide a higher level of comfort, convenience or connectivity for cyclists than other streets. The network is shown on the map in Figure 5.2. This network uses the network in the 2013 Bicycle and Pedestrian Master Plan as a starting point but makes several minor updates. The Walk Bike Daly City has not sought to increase the size of the network but rather to improve its safety, convenience and usability.

Table 5.2 breaks down the mileage of the network based on bikeway type (Class I bike paths, Class II bike lanes or Class III bike routes, defined in Chapter 2, “Planning Context”) and on completion status (existing/in progress or proposed). The table does not include the Class IV separated bikeway segments mentioned and described in the next section (on the priority bikeway projects) because those facilities are still highly conceptual and subject to detailed traffic studies before they can be implemented.

Table 5.2: Length of bikeway network (miles)

<table>
<thead>
<tr>
<th>Bikeway type</th>
<th>Existing or in progress</th>
<th>Proposed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I (paths)</td>
<td>0.8</td>
<td>0.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Class II (bike lanes)</td>
<td>9.4</td>
<td>2.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Class III (bike routes)</td>
<td>16.5</td>
<td>5.0</td>
<td>21.5</td>
</tr>
<tr>
<td>Total</td>
<td>26.7</td>
<td>7.7</td>
<td>34.4</td>
</tr>
</tbody>
</table>

Table 5.3, below, lists the existing bike lanes in Daly City as well as those that are in progress as of this writing, while Table 5.4, following the map on the next page, lists proposed bike lanes. Table 5.5 lists existing or in-progress bike routes, while Table 5.6 lists proposed bike routes. (Tables 5.5 and 5.6 include the streets’ posted speed limit, since this is an important consideration for the designation and design of bike routes.) The only existing Class I facility in Daly City is the multi-use path that runs along the south side of John Daly Boulevard. The path consists of two 0.4-mile segments separated by a gap in front of Westlake Shopping Center.

Table 5.3 | Existing or in-progress bike lanes (Class II)

<table>
<thead>
<tr>
<th>Street</th>
<th>From</th>
<th>To</th>
<th>General direction</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayshore Boulevard</td>
<td>Just south of Sunnydale Ave.*</td>
<td>Geneva Ave.</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Callan Boulevard</td>
<td>Serramonte Blvd.</td>
<td>King Dr.*</td>
<td>N–S</td>
<td>1.4</td>
</tr>
<tr>
<td>Eastmoor Avenue</td>
<td>Sullivan Ave. / San Pedro Rd.</td>
<td>Ocean Grove Ave.</td>
<td>E–W</td>
<td>0.7</td>
</tr>
<tr>
<td>Gellert Boulevard</td>
<td>Hickey Blvd.</td>
<td>King Dr.*</td>
<td>N–S</td>
<td>1.3</td>
</tr>
<tr>
<td>Geneva Avenue</td>
<td>Bayshore Blvd.</td>
<td>Just east of Santos St.*</td>
<td>E–W</td>
<td>0.7</td>
</tr>
<tr>
<td>John Daly Boulevard</td>
<td>Mission St.</td>
<td>Santa Barbara Ave.</td>
<td>E–W</td>
<td>0.1</td>
</tr>
<tr>
<td>John Daly Boulevard</td>
<td>Santa Barbara Ave.</td>
<td>DeLong St.</td>
<td>E–W</td>
<td>0.2</td>
</tr>
<tr>
<td>King Drive</td>
<td>Junipero Serra Blvd.*</td>
<td>Skyline Blvd.*</td>
<td>E–W</td>
<td>1.3</td>
</tr>
<tr>
<td>Lake Merced Boulevard</td>
<td>John Muir Dr.*</td>
<td>John Daly Blvd.</td>
<td>N–S</td>
<td>0.5</td>
</tr>
<tr>
<td>St. Francis Boulevard</td>
<td>Campana Ave.</td>
<td>San Miguel Ave.</td>
<td>N–S</td>
<td>0.1</td>
</tr>
<tr>
<td>St. Francis Boulevard</td>
<td>South of Belhaven Ct.</td>
<td>Serramonte Blvd.</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Southgate Avenue</td>
<td>Windsor Dr.</td>
<td>St. Francis Blvd.</td>
<td>N–S, E–W</td>
<td>2.2</td>
</tr>
<tr>
<td>Westmoor Avenue</td>
<td>Ocean Grove Ave.</td>
<td>Southgate Ave.</td>
<td>N–S, E–W</td>
<td>0.3</td>
</tr>
</tbody>
</table>

* Daly City city limit
** Existing Class II bike lane in the westbound direction, existing Class III bike route in the eastbound direction
Figure 5.2 | Daly City bikeway network
### Table 5.4 | Proposed bike lanes (Class II)

<table>
<thead>
<tr>
<th>Street</th>
<th>From</th>
<th>To</th>
<th>General direction</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skyline Boulevard</td>
<td>City limit near Olympic Way*</td>
<td>Just south of Hwy. 1*</td>
<td>N–S</td>
<td>2.7</td>
</tr>
<tr>
<td>* Daly City city limit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.5 | Existing or in-progress bike routes (Class III)

<table>
<thead>
<tr>
<th>Street</th>
<th>From</th>
<th>To</th>
<th>Speed limit (MPH)</th>
<th>General direction</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellevue Avenue</td>
<td>Guttenberg St.*</td>
<td>Crocker Ave.</td>
<td>25</td>
<td>E–W</td>
<td>0.9</td>
</tr>
<tr>
<td>Brunswick Street</td>
<td>Just west of Oliver St.*</td>
<td>Hillside Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.7</td>
</tr>
<tr>
<td>Callan Boulevard</td>
<td>Southgate Ave.</td>
<td>Serramonte Blvd.</td>
<td>35</td>
<td>N–S</td>
<td>0.5</td>
</tr>
<tr>
<td>Carter Street</td>
<td>Just south of Geneva Ave.*</td>
<td>Guadalupe Canyon Pkwy.*</td>
<td>30</td>
<td>N–S</td>
<td>0.7</td>
</tr>
<tr>
<td>Crocker Avenue</td>
<td>Mission St.</td>
<td>S. Hill Blvd.</td>
<td>25</td>
<td>N–S, E–W</td>
<td>1.1</td>
</tr>
<tr>
<td>E. Market Street</td>
<td>Price St.</td>
<td>Mission St.</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gellert Boulevard</td>
<td>Serramonte Blvd.</td>
<td>Hickey Blvd.</td>
<td>30</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Hickey Boulevard</td>
<td>Just west of Dunman Way*</td>
<td>Skyline Blvd.*</td>
<td>35</td>
<td>E–W</td>
<td>1.2</td>
</tr>
<tr>
<td>John Daly Boulevard</td>
<td>Mission St.</td>
<td>Santa Barbara Ave.</td>
<td>35</td>
<td>E–W</td>
<td>0.1</td>
</tr>
<tr>
<td>Junipero Serra Boulevard</td>
<td>John Daly Blvd.</td>
<td>Just south of D St.*</td>
<td>35</td>
<td>N–S</td>
<td>1.6</td>
</tr>
<tr>
<td>Lake Merced Boulevard</td>
<td>John Daly Blvd.</td>
<td>Southgate Ave.</td>
<td>25</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Martin Street</td>
<td>Schwerin St.</td>
<td>Carter St.</td>
<td>25</td>
<td>E–W</td>
<td>0.5</td>
</tr>
<tr>
<td>Park Plaza / Fairway / S. Park Plaza</td>
<td>Southgate Ave.</td>
<td>Broadmoor boundary*</td>
<td>25</td>
<td>N–S</td>
<td>0.2</td>
</tr>
<tr>
<td>San Pedro Road</td>
<td>Mission St.</td>
<td>Sullivan Ave.</td>
<td>25</td>
<td>N–S</td>
<td>0.5</td>
</tr>
<tr>
<td>School Street</td>
<td>Mission St.</td>
<td>Junipero Serra Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.3</td>
</tr>
<tr>
<td>Schwerin Street</td>
<td>Geneva Ave.</td>
<td>Martin St.</td>
<td>25</td>
<td>N–S</td>
<td>0.4</td>
</tr>
<tr>
<td>Serramonte Boulevard</td>
<td>St. Francis Blvd.</td>
<td>Junipero Serra Blvd.*</td>
<td>30</td>
<td>E–W</td>
<td>0.9</td>
</tr>
<tr>
<td>Skyline Drive</td>
<td>Westridge Ave.</td>
<td>Westline Dr.*</td>
<td>25</td>
<td>N–S</td>
<td>2.5</td>
</tr>
<tr>
<td>Southgate Avenue</td>
<td>Park Plaza Dr.</td>
<td>Windsor Dr.</td>
<td>25</td>
<td>E–W</td>
<td>0.3</td>
</tr>
<tr>
<td>Southgate Avenue</td>
<td>Junipero Serra Blvd.*</td>
<td>St. Francis Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.6</td>
</tr>
<tr>
<td>St. Francis Boulevard</td>
<td>Southgate Ave.</td>
<td>Campana Ave.</td>
<td>30</td>
<td>N–S</td>
<td>0.1</td>
</tr>
<tr>
<td>St. Francis Boulevard</td>
<td>San Miguel Ave.</td>
<td>South of Belhaven Ct.</td>
<td>30</td>
<td>N–S</td>
<td>0.1</td>
</tr>
<tr>
<td>Templeton Avenue</td>
<td>Brunswick St.</td>
<td>Bellevue Ave.</td>
<td>25</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Verducci Drive</td>
<td>Gellert Blvd.</td>
<td>King Dr.</td>
<td>25</td>
<td>N–S</td>
<td>0.3</td>
</tr>
<tr>
<td>Victoria Street</td>
<td>Gellert Blvd.</td>
<td>Callan Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.1</td>
</tr>
<tr>
<td>Warwick Street</td>
<td>Gellert Blvd.</td>
<td>Callan Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.5</td>
</tr>
<tr>
<td>Westlake Avenue</td>
<td>Mission St.</td>
<td>Junipero Serra Blvd.</td>
<td>25</td>
<td>E–W</td>
<td>0.4</td>
</tr>
<tr>
<td>Westmoor Avenue</td>
<td>Southgate Ave.</td>
<td>Skyline Dr.</td>
<td>25</td>
<td>E–W</td>
<td>0.2</td>
</tr>
<tr>
<td>Westridge Avenue</td>
<td>Southgate Ave.</td>
<td>Skyline Dr.</td>
<td>25</td>
<td>E–W</td>
<td>0.2</td>
</tr>
</tbody>
</table>

* Daly City city limit

** Existing Class III bike route in the eastbound direction, existing Class II bike lane in the westbound direction
Table 5.6 | Proposed bike routes (Class III)

<table>
<thead>
<tr>
<th>Street</th>
<th>From</th>
<th>To</th>
<th>Speed limit (MPH)</th>
<th>General direction</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellevue Avenue</td>
<td>South Hill Blvd.</td>
<td>Just east of Pope St.*</td>
<td>25</td>
<td>E–W</td>
<td>0.2</td>
</tr>
<tr>
<td>Crenshaw Drive</td>
<td>Skyline Drive</td>
<td>Just north of Palmetto Ave.*</td>
<td>25</td>
<td>N–S</td>
<td>0.1</td>
</tr>
<tr>
<td>Guadalupe Canyon Parkway</td>
<td>Just north of JFK Elem. School*</td>
<td>Price St.</td>
<td>25</td>
<td>E–W</td>
<td>0.2</td>
</tr>
<tr>
<td>Hill Street</td>
<td>San Pedro Rd.</td>
<td>D St.</td>
<td>25</td>
<td>N–S</td>
<td>0.2</td>
</tr>
<tr>
<td>Hillside Boulevard</td>
<td>Mission St.</td>
<td>Just south of Hoffman St.*</td>
<td>25</td>
<td>N–S</td>
<td>1.5</td>
</tr>
<tr>
<td>John Daly Boulevard</td>
<td>DeLong St.</td>
<td>Sheffield Dr.</td>
<td>35</td>
<td>E–W</td>
<td>0.4</td>
</tr>
<tr>
<td>Mission Street</td>
<td>Just south of Bepler St.</td>
<td>Just south of Valley St.*</td>
<td>25</td>
<td>N–S</td>
<td>1.3</td>
</tr>
<tr>
<td>San Jose Avenue</td>
<td>Just south of Goethe St.*</td>
<td>Just south of Bepler St.</td>
<td>25</td>
<td>N–S</td>
<td>0.2</td>
</tr>
<tr>
<td>South Hill Boulevard</td>
<td>Just south of Canyon Dr.*</td>
<td>Crocker Ave.</td>
<td>25</td>
<td>E–W</td>
<td>0.9</td>
</tr>
</tbody>
</table>

* Daly City city limit

Total 5.0

Priority bikeway projects

The priority bicycle projects recommended by the Walk Bike Plan are listed in Table 5.7 and their location is shown in Figure 5.3, on the pages that follow. As with the pedestrian projects, the bicycle priority list consists of 14 projects, also divided evenly into higher-priority and lower-priority tiers, reflecting each project’s relative importance and feasibility. Within each tier, the projects are not listed in order of priority, importance or feasibility. Again, the priority projects were selected based on input from the public and City staff, or because they were identified in other planning efforts but have not been implemented yet. As noted in the table below, improvements proposed for some of the priority bicycle projects are shown in the design concepts that appear in Chapter 6.

It should be noted that many of the priority bicycle projects, especially under Tier II, involve “Class IV separated bikeways.” These are facilities that are separated from car traffic by a vertical barrier such as a concrete curb or flexible posts. Separated bikeways are generally thought to be necessary for most people to consider biking on multi-lane streets with fast or heavy traffic. Those conditions describe many of the streets in Daly City that provide good cross-town connectivity: John Daly Boulevard, Mission Street, Junipero Serra Boulevard, Skyline Boulevard and Serramonte Boulevard, among others.

Since public right-of-way on these streets is almost fully accounted for (in terms of travel lanes, parking lanes or sidewalks), incorporating Class IV bikeways would require the removal and reconfiguration of travel or parking lanes on most segments of those streets. The removal of traffic lanes might require traffic studies and detailed traffic-engineering drawings before the concepts would proceed. In particular, the studies would allow evaluation of the changes and potential effects to congestion and parking on the affected streets, and a consideration of the trade-offs of separated bikeways. Also, any changes impacting the design or function of state routes would need Caltrans’s approval, including changes at their on- and off-ramps. The state routes in Daly City are I-280, Highway 1, Mission Street (State Route 82) and Skyline Boulevard (State Route 35).
Table 5.7: Priority bikeway projects (projects within each tier are not listed in order of priority)

<table>
<thead>
<tr>
<th>Tier I</th>
</tr>
</thead>
<tbody>
<tr>
<td>❶  Bike lanes and routes listed as proposed in Tables 5.4 and 5.6 (see previous pages; citywide).</td>
</tr>
<tr>
<td>❷  Upgrade of bike routes in the Crocker neighborhood into a mini-network of bicycle boulevards:</td>
</tr>
<tr>
<td>- Brunswick Street (Hillside Boulevard to the city limit)</td>
</tr>
<tr>
<td>- Crocker Avenue (Mission Street to Bellevue Avenue)</td>
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<tr>
<td>- Bellevue Avenue (Crocker Avenue to Guttenberg Street)</td>
</tr>
<tr>
<td>- Templeton Avenue (Mission Street to Bellevue Avenue)</td>
</tr>
<tr>
<td>❸  Bike lanes and separated bikeways on John Daly Boulevard between Junipero Serra Boulevard and De Long Street (see conceptual design 5.3).</td>
</tr>
<tr>
<td>❹  Separated two-way bikeway on the north side of John Daly Boulevard between Sheffield Drive and Junipero Serra Boulevard (see conceptual designs 5.1 and 5.2).</td>
</tr>
<tr>
<td>❺  Separated bikeways on John Daly Boulevard between Skyline Boulevard and Fairmont Drive / Ashland Drive; or extension of the path on the south side of John Daly to Skyline Boulevard. Also, multi-use path from the intersection of John Daly / Skyline Boulevard to Northgate Avenue / N. Mayfair Avenue.</td>
</tr>
<tr>
<td>❻  Separated bikeways on Skyline Boulevard through Daly City (see part of the segment on conceptual design 5.4).</td>
</tr>
<tr>
<td>❼  Separated bikeways on Mission Street through Daly City (see part of the segment on conceptual design 5.5).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tier II</th>
</tr>
</thead>
<tbody>
<tr>
<td>❿  Detailed feasibility study of all the bikeways to look for opportunities to make them safer and more user-friendly (citywide).</td>
</tr>
<tr>
<td>❾  Separated bikeways on Junipero Serra Boulevard through Daly City (see part of the segment on conceptual design 5.6).</td>
</tr>
<tr>
<td>❿  Separated bicycle intersection at John Daly Boulevard / Skyline Boulevard (see conceptual design 5.4).</td>
</tr>
<tr>
<td>⓫  Buffered bikeways on Southgate Avenue from Windsor Drive to St. Francis Boulevard.</td>
</tr>
<tr>
<td>⓬  Separated bikeways along the length of E. Market Street and contraflow bike lane on W. Market between Mission Street and Station Avenue (see part of the segment on conceptual design 5.5).</td>
</tr>
<tr>
<td>⓭  Separated bikeways along the length of San Pedro Road (see part of the segment on conceptual design 5.6).</td>
</tr>
<tr>
<td>⓮  Separated bikeways on Serramonte Boulevard from St. Francis Boulevard to Gellert Boulevard (see part of the segment on conceptual design 5.7).</td>
</tr>
</tbody>
</table>
Tier I

B1 Bike lanes and routes listed as proposed in Tables 6.4 and 6.6 (citywide).

B2 Upgrade of bike routes in the Crocker neighborhood into a mini-network of bicycle boulevards.

B3 Bike lanes and separated bikeways on John Daly Boulevard between Junipero Serra Boulevard and De Long Street (see conceptual design 6.3).

B4 Separated two-way bikeway on the north side of John Daly Boulevard between Sheffield Drive and Junipero Serra Boulevard (see conceptual designs 6.1 and 6.2).

B5 Separated bikeways on John Daly Boulevard between Skyline Boulevard and Fairmont Drive / Ashland Drive; or extension of the path on the south side of John Daly to Skyline Boulevard. Also, multi-use path from the intersection of John Daly / Skyline Boulevard to Northgate Avenue / N. Mayfair Avenue.

B6 Separated bikeways on Skyline Boulevard through Daly City (see part of the segment on conceptual design 6.4).

B7 Separated bikeways on Mission Street through Daly City (see part of the segment on conceptual design 6.5).

Tier II

B8 Detailed feasibility study of all the bikeways to look for opportunities to make them safer and more user-friendly (citywide).

B9 Separated bikeways on Junipero Serra Boulevard through Daly City (see part of the segment on conceptual design 6.6).

B10 Separated bicycle intersection at John Daly Boulevard / Skyline Boulevard (see conceptual design 6.4).

B11 Buffered bikeways on Southgate Avenue from Windsor Drive to St. Francis Boulevard.

B12 Separated bikeways along the length of E. Market Street and contraflow bike lane on W. Market between Mission Street and Station Avenue (see part of the segment on conceptual design 6.5).

B13 Separated bikeways along the length of San Pedro Road (see part of the segment on conceptual design 6.6).

B14 Separated bikeways on Serramonte Boulevard from St. Francis Boulevard to Gellert Boulevard (see part of the segment on conceptual design 6.7).
This chapter presents conceptual designs developed for seven street segment and intersections around Daly City. The designs incorporate a variety of improvements that would make these streets and intersections safer and less intimidating for pedestrians and cyclists. The locations were selected by City staff from a longer list of hotspots identified by the public as areas of concern. Four of the seven conceptual designs focus on various portions of John Daly Boulevard. The street is one of the City’s main thoroughfares, connecting some of its original residential developments, the City’s BART station, I-280, newer neighborhoods west of the interstate, Westlake Shopping Center and the Thornton State Beach Overlook. At the same time, the boulevard remains the main location for which improvements identified in the 2013 Bicycle and Pedestrian Master Plan have not yet been implemented.

Of the seven designs, five involve State Routes, owned by Caltrans. These are I-280, Highway 1, Mission Street (SR 82) and Skyline Boulevard (SR 35). Any changes impacting the design or function of these routes, including access ramps, would need Caltrans’ approval. Caltrans reviewed the conceptual designs and provided comments. The agency’s comment letter is found under Appendix F.

More specifically, if the projects are to move forward, the City will need to prepare more detailed design drawings, conduct transportation impact studies and identify any needed measures to mitigate impacts to a Caltrans or City roadway. As the lead agency for these projects, the City will be responsible for all project mitigation, and will need to consider and plan for the fair-share contribution, financing, scheduling, implementation responsibilities and monitoring for all proposed mitigation measures. The City is encouraged to coordinate with programs such as Caltrans’ Capital Preventative Maintenance Project to identify opportunities to implement planned improvements that are on State Routes within Daly City. Also, any design feature that does not meet Caltrans standards will need to be documented in a Design Standard Decision Document (DSDD) and submitted for review and approval by Caltrans District 4 and Caltrans Headquarters; nonstandard features that cannot be justified will not be permitted by Caltrans. The City will also need to obtain a Caltrans permit for any work that encroaches onto the State right-of-way, and revise or update maintenance agreements with Caltrans for routes with new facilities. Last but not least, since community support will be essential for any of these projects to move forward, the City will need to conduct public outreach and engagement specific to each project.

**Planning-level cost estimates**

As part of this task, the project team developed planning-level cost estimates to implement the conceptual designs. These estimates are provided in Appendix G. (The first cost estimate covers the first two conceptual designs—John Daly Boulevard from Sheffield Drive/Poncetta Drive to the I-280 ramps, and from the ramps to Junipero Serra Boulevard—since these designs are two halves of a single project.) Project costs depend on numerous factors, and it is very difficult to arrive at accurate estimates without engineering details and specifications. Nevertheless, planning-level estimates are useful in providing a general idea of the expected costs.
Class IV (separated) bikeways

The conceptual designs presented in this chapter propose Class IV, or separated, bikeways on portions of John Daly Boulevard, Mission Street, E. Market Street, Junipero Serra Boulevard, San Pedro Road and Serramonte Boulevard. These are on-street bikeways that are demarcated and separated from car traffic by a vertical barrier such as a concrete curb or flexible posts. Separated bikeways may be one-way or, as shown in the photo below, two-way. More information on separated bikeways is provided in Chapter 7, “Design Toolkit,” especially under sections 3.5 and 4.11.

In order to be accommodated, the separated bikeways proposed in this chapter require the removal and reconfiguration of traffic lanes on various street segments. This is necessary because Daly City’s streets have historically been designed with most street space dedicated to travel and parking lanes. Without reallocating street space, it will be very difficult for Daly City to continue to make meaningful improvements for cyclists. That said, the removal of traffic lanes should be subject to detailed traffic studies, to gauge the impacts of the changes on congestion and parking on the affected streets.

John Daly Boulevard from Sheffield Drive/Poncetta Drive to I-280 ramps

The first conceptual design covers the stretch of John Daly Boulevard from Sheffield Drive/Poncetta Drive (just west of I-280) to just past the I-280 on- and off-ramps (see Figure 6.1). The design proposes extensions of the medians to reduce the effective pedestrian crossing distance across the boulevard on the west side of the Sheffield Drive/Poncetta Drive intersection; adding a marked crosswalk on the east side; and, most noticeably, incorporating a two-way separated bikeway on the north side of the boulevard.

In order to accommodate the bikeway, this design, as well as the next two, would require reconfiguring and reducing the number of traffic lanes on John Daly Boulevard through these segments. (The conceptual designs include notes with more specific details.) For these projects, a storage-capacity analysis would need to be conducted for the access ramps, to determine the impact of the reconfiguration and reduction of traffic lanes. Mitigation measures to reduce any traffic queuing that spills back onto the freeway or City streets would need to be fully considered. Additionally, due to the reduction of storage and intersection capacity at the highway ramps, a signal operations analysis would need to be conducted and would need to be approved by Caltrans. Also, installation of a Rectangular Rapid Flashing Beacon and the location of the crossing would be subject to a safety analysis to determine the adequacy of the stopping sight distance. Lastly, reduction of lane widths within an interchange to 11 feet would require Caltrans approval of a non-standard feature.
Figure 6.1 | John Daly Boulevard from Sheffield Drive / Poncetta Drive to I-280 ramps

- Install corner curb extension (bulb-out) to create space for bicycle left-turn queue box.
- Install retaining wall to install two-way separated bikeway (Class IV).
- Install Rectangular Rapid Flashing Beacon (RRFB) or other beacon at bikeway-ramp crossing.
- Install two-way separated bikeway (Class IV).
- Remove right-turn lane, install two-way separated bikeway (Class IV).
- Study separate signal phase to accommodate two-way Class IV bikeway.
- Remove existing right-turn lane.
- Study potential right-of-way impact.
- Reconstruct center median to provide width for bikeway facilities.
- Reduce curb return.
- Reconstruct center median to provide width for bikeway facilities.
- Widen sidewalk in conjunction with reconstructing median.
- Remove existing right-turn pocket. Widen multi-use path. Provide transition from path to street for people bicycling.
John Daly Boulevard from the I-280 ramps to Junipero Serra Boulevard

The second design, which addresses the segment of John Daly Boulevard from the I-280 ramps to Junipero Serra Boulevard, would continue the proposed two-way separated bikeway through this stretch (see Figure 6.2). While the concept retains the existing width of the bridge over I-280, it would require reconstruction of the roadway divider.

The final design will need to ensure that cars would not accidentally enter the bike path at the southeast corner of Junipero Serra Boulevard and John Daly Boulevard. (The design of the bikeway entrance could consider additional features such as a safety sign on the raised island, or extending closer to the intersection the green-painted area or the sharrow striping.) Also, due to the reduction of storage and intersection capacity at the highway ramps, a signal operations analysis would need to be conducted and would need to be approved by Caltrans.

John Daly Boulevard from Junipero Serra Boulevard to De Long Street

This conceptual design covers the segment of John Daly Boulevard from Junipero Serra Boulevard to De Long Street, just past the BART station (see Figure 6.3). The concept continues the proposed two-way separated bikeway into the BART station and incorporates conventional bike lanes on the south side of the street and on the north side past the station. The concept also includes a new, high-visibility crosswalk at the station entrance, roughly halfway between Niantic Avenue and Willits Street.
Figure 6.2 | John Daly Boulevard from the I-280 ramps to Junipero Serra Boulevard

- Install two-way separated bikeway (Class IV)
- Study separate signal phase to accommodate two-way Class IV bikeway
- Remove one through travel lane to accommodate bikeway
- Install two-way separated bikeway (Class IV)
- See Central Corridor Plan for changes to Junipero Serra Blvd
- Reconstruct center median to provide width for bikeway facilities
- Remove dedicated right-turn lane and install shared through-right lane
- Install separated bikeway (Class IV)
- Widen sidewalk in conjunction with reconstructing median
Figure 6.3 | John Daly Boulevard from Junipero Serra Boulevard to De Long Street

- Remove one through travel lane
- Install two-way separated bikeway (Class IV)
- Remove one left-turn lane
- Install corner curb extension (bulb-out)
- Install separated bikeway (Class IV)
- Install new pedestrian and bicycle crossing. Study potential for median refuge island. Modify existing signal to include pedestrian/bicycle phase for new crossing.
- Realign center median
- Study separate signal phase to accommodate two-way Class IV bikeway
- Reconstruct (narrow) center median
- Install bike lane (Class II)
**Intersection of John Daly Boulevard / Skyline Boulevard**

Access to Thornton Beach is the one priority pedestrian improvement identified in the previous Bicycle and Pedestrian Master Plan that has yet to be implemented. This project would redesign the John Daly Boulevard/Skyline Boulevard intersection by closing the slip lanes on the north side of Skyline, adding sidewalks on portions of Skyline and providing high-visibility crosswalks on all four legs of the intersection (see Figure 6.4). The design would add bike lanes on Skyline (including separated bike lanes at the intersection itself); a two-way bikeway on the south side of John Daly; a multi-use path from the intersection to N. Mayfair/Northgate; and an extension to the existing path on the south side of John Daly, along S. Mayfair (the precise alignment to be determined). An intersection operations analysis (including storage capacity evaluations of all turning movements) would need to be conducted to determine if the redesign would negatively impact the operations of this intersection. Also, shoulders narrower than 10 feet on Skyline would be a non-standard feature and as such would require Caltrans approval.

**Intersection of Mission Street / E. Market Street / San Pedro Road**

This design would provide separated bikeways at the E. Market Street and Mission Street approaches and add a contraflow bike lane on W. Market Street allowing cyclists to ride legally in the opposite direction of car traffic (see Figure 6.5). The separated bikeways would also reduce pedestrians’ exposure to passing car traffic as they cross the street. The proposed design would require removing and reconfiguring traffic lanes at various approaches to the intersection. An additional crosswalk from the Wendy’s parking lot to the Goodwill should be considered, to avoid forcing pedestrians to make extra crossings. This would likely require traffic signal modifications and coordination with Caltrans.

If the project moves forward, an intersection operations analysis (including storage capacity evaluations of all turning movements) would need to be conducted. Also, it will be necessary to verify that turning trucks would not encroach onto the new bike facilities; if they do, the design could consider different bikeway buffer configurations—including pavement striping alone and pavement striping with vertical features such as soft posts or concrete islands—that would progressively increase the protection from turning trucks. Additionally, depending on truck and general-traffic volumes, traffic lanes narrower than 12 feet on Mission Street might not meet Caltrans standards.
Figure 6.4 | Intersection of John Daly Boulevard / Skyline Boulevard

- Install separated bikeway (Class IV)
- Remove slip lane
- Install protected intersection and reconstruct traffic signal.
- Close off-ramp. Redirect right-turning traffic to John Daly Boulevard.
- Install multi-use path (Class I)
- Install multi-use path (Class I)
- Install separated bikeway (Class IV)
Figure 6.5 | Intersection of Mission Street / E. Market Street / San Pedro Road

- Install separated bikeway (Class IV)
- Install bike lane (contra-flow, Class II)
- Convert W. Market Street from Mateo Avenue to Allomany Street to one-way westbound (except bicycles)
- Remove one through travel lane
- Enlarge corner island
- Realign parking, install sidewalk extension, study opportunity for further sidewalk/plaza activation
- Install separate bikeway (Class IV)
- Install separated bikeway (Class IV)
- Install separated bikeway (Class IV)
- Install buffered bike lane
- Remove one through travel lane in each direction
6 Intersection of Junipero Serra Boulevard / San Pedro Road

This design would add high-visibility crosswalks on all four legs of the intersection and across the slip lanes, and incorporate separated bikeways on both streets (see Figure 6.6). Installing the proposed bikeways would require removing and reconfiguring traffic lanes, which, again, would be subject to traffic-impact studies.

While the City is already planning to add a Class II/Class III bikeway on portions of Junipero Serra Boulevard, this design would make it even easier and more convenient for cyclists to navigate this stretch. Any work on the San Pedro Road overcrossing would be subject to Caltrans standards, including lane widths and shoulder widths.

Satellite view of Junipero Serra Blvd. at San Pedro Road.

Junipero Serra Blvd. at San Pedro Road, looking south.

7 Intersection of Serramonte Boulevard / Highway 1 ramps

The interface between surface streets and freeway ramps is particularly challenging for pedestrians and cyclists. This design for Serramonte Boulevard at Highway 1 would introduce high-visibility crosswalks across Serramonte Boulevard and the highway (including across the slip lanes), and separated bikeways in both directions of Serramonte Boulevard (see Figure 6.7).

The City is considering a traffic signal at this intersection. While the proposed improvements would be compatible with signalization, an intersection operations analysis would need to be conducted for a signal warrant and queue lengths to determine the impact of installing a signal at this intersection. Also, it will be necessary to verify that the Highway 1 off-ramp-to-eastbound Serramonte Boulevard movement can accommodate truck turns and also that drivers have adequate sight distance for crossing around parked cars, as cyclists may move slowly towards the uphill direction.

Satellite view of Serramonte Boulevard at Highway 1.

Serramonte Boulevard at Highway 1, looking west.
Figure 6.6 | Intersection of Junipero Serra Boulevard / San Pedro Road
Figure 6.7 | Intersection of Serramonte Boulevard / Highway 1

Project Notes:
1. In shared cycle track/bus stops, the bike lane rises and runs along the extended curb at the same level as the sidewalk. Bicyclists can ride through the boarding area when no bus is present, but must yield the space to boarding and alighting passengers when a bus stops. This is an especially appropriate treatment for this location because it is a steep uphill slope (so bicyclists will be traveling slowly). See NACTO Transit Street Design Guide.
Overview

This chapter contains a design toolkit of pedestrian and bicycle facilities and treatments. While the previous chapter presents location-specific design concepts, the toolkit gives general design guidance on facilities that may be applicable to multiple locations. The toolkit is intended to help Daly City staff plan and design appropriate pedestrian and bicycle improvements for a range of locations and roadway characteristics. In a number of cases, the City’s design standards, policies and specifications might need to be updated. The facilities and treatments presented here are based on criteria established in published literature, best practices and national guidance.

The chapter is divided into five sections:

1. Guidelines and standards for sidewalks, crosswalks and other common types of pedestrian facilities.
2. Design treatments for some of the types of pedestrian facilities outlined in the section above.
3. Guidelines and standards for common types of bikeways and other bicycle facilities.
4. Design treatments for bicycle facilities.
5. Facilities and treatments for pedestrian- and bicycle-friendly roadways.

For each facility or treatment, the toolkit generally outlines more-flexible design guideline and lists documents containing firmer, more established design standards. Standards documents cited in the guidelines are referenced using superscript numbers. Unless noted, all the images used in this chapter are by Parisi Transportation Consulting.

1 Pedestrian facilities

1.1 Sidewalks

Sidewalks are the most fundamental public space in a city. Extending sidewalks where they currently do not exist provides access to important pedestrian destinations and amenities, including transit stops. Sidewalk widening enables pedestrians to walk side-by-side or wheelchair users to pass each other.

Design guidelines

Sidewalks have a desired minimum through zone of 6 feet and an absolute minimum of 5.5 feet, including the curb top. In commercial areas (for example, Mission Street, Southgate Avenue near Westlake Shopping Center and the area around Junipero Serra Boulevard and 87th Avenue), sidewalks should be at least 8 feet wide; however, this standard might need to be reduced in areas with

Newly constructed sidewalk (Fairfax, CA).
Making it easier to walk and bike in Daly City

A constricted right-of-way width. Also, where a sidewalk is directly adjacent to moving traffic, the desired minimum is 8 feet, providing a minimum 2-foot buffer for street furniture and utilities.\(^3\)

Daly City’s “Standard Detail S-2” provides that “Where a new sidewalk is to be constructed, the sidewalk shall be extended up to an additional 35 feet or 25%, whichever is greater to connect with an existing sidewalk.” This toolkit recommends increasing this to “150 feet or 25%, whichever is greater” and incorporating the 8-foot minimum sidewalk width, except in areas of constrained right-of-way width.

Similarly, the toolkit recommends revising the city’s “Standard Detail S-3” to reduce commercial driveway widths from “Commercial garage 8-30’ with 3’ flares” to “Commercial garage 8-24’ with 1.5’ flares.” The detail should note that driveway curb cuts for two-way traffic should generally not be wider than 18’, except in industrial locations requiring frequent access for large trucks or semi-tractor trailers.

Design standards

1.2 Crosswalks (general)

Crosswalk markings provide crossing guidance for pedestrians by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops. In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or “stop” or “yield” signs.\(^1\)

Some four-way intersections have just two or three pedestrian crossings instead of the standard four, which requires people walking to take circuitous routes. A single missing crosswalk at a large, signalized intersection triples the distance that a person walks to reach an opposing corner, which increases the likelihood that a person will cross outside a marked crosswalk.

Crosswalks should be striped across all legs of the intersection unless there is an unusual safety concern to consider, such as roadway geometry or grade that reduces a driver’s visibility of the crosswalk. Inconvenience and access for pedestrians should be considered and evaluated against potential delay incurred by drivers within the context of other city policies.

High-visibility crosswalks (such as the continental crosswalk shown in the image above) should be the standard for all crosswalk striping. High-visibility crosswalks are preferable to traditional crosswalks, which consist of two transverse lines. High-visibility crosswalks are more visible to approaching vehicles and have been shown to improve yielding behavior.

Design guidelines

Crosswalks should be at least 10’ wide or the width of the approaching sidewalk if it is greater. In areas of heavy pedestrian volumes, crosswalks can be up to 25’ wide. Crosswalks should be aligned with the approaching sidewalk.\(^1,2\) All legs of signalized intersections should have marked crosswalks unless pedestrians are prohibited from the roadway or section thereof, or if there is physically no pedestrian access on either corner and no likelihood that access can be provided. Pedestrians are unlikely to comply with a 3-stage crossing and may place themselves in a dangerous situation as a result.\(^1\)
The intersection of Serramonte and Gellert Boulevards is an example of a location that should not have crosswalks striped at all four legs. At present, only two legs are striped with crosswalks because there is no sidewalk on the northeast corner. The existing striping treatment is appropriate given the current lack of pedestrian facilities, but in the future the City should consider constructing a sidewalk and striping crosswalks here. The intersection of Serramonte and Junipero Serra Boulevards is another example of a location that should not have marked crosswalks on all four legs, since the freeway entrance ramps here present a safety concern.

Traditional crosswalks (two transverse lines) are significantly less visible to drivers than high-visibility continental, ladder, or zebra crosswalks. As such, they should be used only on low-speed residential streets and other cases when engineering judgement determines that such markings are adequate.3

Design standards
3. Federal Highway Administration, Crosswalk Marking Field Visibility Study (FHWA-HRT-10-068); https://www.fhwa.dot.gov/publications/research/safety/pedbike/10067/.

1.3 Uncontrolled crosswalks
Crosswalk signage and advanced signage help announce designated pedestrian crossing points at uncontrolled locations. The pedestrian crossing sign and related supplemental plaques may have fluorescent yellow-green color for added visibility.1

Yield lines, sometimes called shark’s teeth, consist of a row of solid white triangles pointing toward approaching vehicles. They are used in advance of crosswalks to indicate where drivers are required to yield in compliance with a “Yield Here to Pedestrians” sign.2

In-street pedestrian crossing signs are low-cost treatments that can be effective in increasing the proportion of motor vehicles yielding to pedestrians. In-street pedestrian crossing signs can be placed between travel lanes or in conjunction with a refuge island or raised median.

Rectangular rapid-flashing beacons (RRFBs) are user-actuated LEDs that supplement warning signs at uncontrolled crossings.3 They can be activated by a pushbutton or by a pedestrian detection system. RRFBs help alert oncoming drivers of pedestrians in the crosswalk and have been shown to increase yield compliance at uncontrolled crossings. RRFBs are not present in the current edition of the CAMUTCD, and as such, detailed warrants are not currently available. However, individual cities in California have developed their own criteria for installation. Generally, these policies suggest that streets with more than 9,000 vehicles per day and speeds of 30 mph or more may be candidates for RRFB installation. Additional consideration is often given to adjacent land uses, such as schools.1,2,3,4,6,7
Pedestrian hybrid beacons are used to control traffic when conditions require more than warning signs but do not justify a full traffic signal. They are installed at intersections having a history of traffic collisions involving pedestrians and in areas with high pedestrian volumes. The California MUTCD provides guidelines for the installation of pedestrian hybrid beacons based on vehicle and pedestrian volumes.\textsuperscript{1,2,4}

Corridors should also be assessed to determine if there are adequate safe opportunities for non-drivers to cross and if a pedestrian signal or a hybrid beacon is needed to provide an active warning to drivers when a pedestrian is in the crosswalk.

Design standards
5. California Manual on Uniform Traffic Control Devices (2014), Chapter 4F.
7. Boyce, P. R., and John Van Derlofske, “Pedestrian Crosswalk Safety: Evaluating in-Pavement, Flashing Warning Lights” (New Jersey Department of Transportation; 2002).

1.4 Curb ramps
When installing new curb ramps, directional (dual) curb ramps should be used wherever possible, especially at areas of high pedestrian traffic. Diagonal curb ramps, while less expensive to build than dual ramps, cause users (such as wheelchair riders and people with strollers) to enter the intersection at an angle misaligned from the crosswalk; this places them at greater exposure and risk to vehicle traffic.

Design guidelines
Curb ramps shall provide turning space, running slope, transition, width, grade break, counter slope, clear space, and other requirements in keeping with Americans with Disabilities Act standards.\textsuperscript{1,2}

Design standards

1.5 Accessible pedestrian signals / pedestrian push buttons

Accessible pedestrian signals can actuate the pedestrian phase at traffic signals and assist people with vision disabilities. Push buttons may feature tactile arrows for vision-impaired users and audible beaconing, such that blind pedestrians can home in on the signal coming from the target corner as they cross the street.

In general, fixed-time signals are the rule in urban areas for reasons of regularity, network organization, predictability and reducing unnecessary delay. In less-trafficked areas, actuated signals such as push buttons and loop detectors may be appropriate; however, these must be programmed to minimize delay so as to increase compliance.² Push buttons should be separated by direction when possible—that is, they should not be mounted on the same pole.²

Design standards

1.6 Stairs and ramps

Staircases can help people walking up steep slopes and connect segments of a disconnected street grid. Adding a staircase connection is especially appropriate near schools, transit stations, retail or services, and other trip-generating activity centers.

Design guidelines
Staircases have tread, riser, nosing, handrail, surface, clearance, and other accessibility requirements.³ All stairways should include a bicycle trough (also called a “runnel”) on at least one side, which allows persons with bicycles to push them up or down the stairway without lifting them (see image above).

Potential locations in Daly City for staircases are from Hickey Boulevard and Callan Boulevard to the playing fields at Gellert Park. Staircases installed as shown in yellow in the image below would allow nearby residents to take a shorter, more direct route to the park facilities.

Design standards
Design treatments for pedestrian facilities

2.1 Pedestrian sight lines at intersections (daylighting)

Parking should be prohibited with red curb markings at intersections and crosswalks where parked vehicles would obstruct the visibility of people entering a crosswalk; this practice is referred to as “daylighting.” Daylighting also improves the view of drivers approaching an intersection and allows them to see if a pedestrian is waiting to cross. In the longer term, curb extensions (also known as bulb-outs) can be installed in the space made available. Implementation of this measure should take into account the scarcity of on-street parking in Daly City.

Design guidelines
Parking should be prohibited, and a red curb be striped, within 20 feet of a crosswalk at an intersection, or within 30 feet in advance of the approach to any flashing signal, stop sign, yield sign or traffic-control signal, where determined necessary by engineering judgement. The parking restriction area should be greater on higher-speed streets, since drivers’ stopping sight distance increases with speed. For 35–45 mph streets, it is recommended that parking be restricted to 50 feet from the crosswalk; for streets with faster traffic, parking should be restricted to 100 feet from the crosswalk.

Design standards

2.2 Corner curb radii

Smaller, or tighter, corner curb radii tend to reduce pedestrian crossing distances at intersections and slow vehicles when turning. Larger curb radii create longer crosswalks that increase pedestrian exposure to vehicle traffic and higher turning speeds, which are directly related to injury severity. When designing an intersection, the full width of the receiving vehicle lanes should be considered, to allow for corner designs with small curb radii.

Design guidelines
Curb radii should be designed based on the wheel path of a typical, but not necessarily the largest possible, design vehicle. When using turning templates to consider changes to curb radii, the vehicle should be assumed to be turning from the rightmost lane on the sending street to any lane traveling in the desired direction on the receiving street. Since emergency vehicles have sirens and flashing lights and other vehicles must pull over, emergency vehicles can typically use the full right-of-way without encountering opposing vehicles; however, on busier streets, the ability of emergency vehicles to swing wide may be limited by queued traffic which might not be able to pull over.
Daly City’s curb radii standards are currently “Local/Alley: R = 20 feet and Collector/Local: R = 35 feet” (Standard Detail S-1), with a note that “Curb radius provided are for reference only. Curb radius ‘R’ shall be reduced where practical.” The toolkit recommends updating this standard to a 15- or 10-foot radius, with an allowance that the radius be increased where necessary. The effective turning radius should consider how on-street parking will affect the turning path, and the design vehicle evaluated should be appropriate for the roadway under consideration (for example, whether the roadway is a truck or bus route).

Design standards
2. San Francisco Better Streets Plan, Chapter 5.

2.3 Curb extensions / bulb-outs
Curb extensions, also called bulb-outs, extend the sidewalk into the parking lane or shoulder to narrow the roadway and provide additional pedestrian space at corners. Bulb-outs increase pedestrian visibility by creating a waiting area in front of parked vehicles and decrease pedestrian exposure to vehicles by reducing crosswalk length. They also reduce vehicle turn speeds.

Curb extensions are not limited to use at corners. They may also be used to shorten existing mid-block crossings or create public space near popular destinations. Curb extensions need not be expensive or permanent; they can be designed with inexpensive materials such as paint and plastic traffic bollards to improve safety quickly.

Design guidelines
Corner curb extensions will vary in design according to the context. Curb extensions are not to extend into Class II Bikeways. The corner curb radii should be the minimum needed to accommodate the design vehicle.

Design standards

2.4 Pedestrian refuge islands
Refuge islands are protected areas where pedestrians, especially those who are less able to cross the street in one stage, may safely pause or wait while crossing a street. Refugee island increase safety by reducing the exposure time experienced by a pedestrian in the intersection. They are recommended where a pedestrian must cross more than two lanes of traffic traveling in one direction (whether on a one-way or two-way street) but may be implemented on smaller cross-sections where space permits.
Design guidelines
The recommended width of pedestrian refuge islands is 8-10 feet¹ and at least 6 feet in constrained locations.² All medians at intersections should have a “nose” which extends past the crosswalk to protect people waiting on the median and slow turning drivers.

Design standards

2.5 Intersection lighting
Intersection lighting is appropriate at all intersections and is of particular benefit to non-motorized users. Lighting not only helps people walking and bicycling navigate the intersection, but also helps make them visible to oncoming drivers.

Pedestrian-scale lighting should be prioritized on streets with high pedestrian volumes; key civic, downtown and commercial streets; underpasses and other streets with particular safety concerns; and small streets such as alleys and multi-use paths.

Design guidelines
Smaller, pedestrian-scale lighting, closer to the ground, creates a much more inviting, comfortable atmosphere for pedestrians than roadway-scale lighting. Daly City’s current standards for lighting include only large roadway-scale lighting, at a height of 30 feet (Standard Details S-6 and S-7). This toolkit recommends that S-6 and S-7 be updated to include pedestrian-scale lighting at a height of 12–15 feet, sharing poles with the more conventional streetlights. The cities of San Francisco, San Jose and Los Angeles all have detailed guidelines for pedestrian-oriented street lighting that could serve as reference guides for Daly City.

Design standards

2.6 Raised crosswalks
Raised crosswalks are best suited on lower-speed local and collector streets that do not involve significant vehicular traffic and are not frequently used as emergency access routes. Raised crosswalks improve accessibility and safety by allowing pedestrians to cross at a nearly constant grade without the need for a curb ramp and by making pedestrians more visible to approaching drivers. Raised crosswalks may be added as a complement to standard crossing elements. An example of candidate locations for raised crosswalks are intersections along Chester Street near Susan B. Anthony Elementary School.

Image credit: City and County of San Francisco, SF Better Streets Plan.

Raised crosswalk (Albany, CA).

Design guidelines
Raised crosswalks should be flush with the height of the sidewalk. They should be at least 10 feet wide.
and designed to allow the front and rear wheels of a car to be on top of the table at the same time.\textsuperscript{1,2}

Design standards

2.7 Pedestrian countdown signals

Pedestrian countdown timers alert pedestrians to the time remaining to cross. Pedestrians may use the countdown signal to decide when to begin crossing the street.

Design guidelines
Pedestrian signal heads at crosswalks where the pedestrian change interval is more than seven seconds should include a pedestrian change interval countdown display in order to inform pedestrians of the number of seconds remaining in the pedestrian change interval.\textsuperscript{1} Pedestrian signal heads are recommended at all signalized intersections.

Design standards

2.8 Leading pedestrian interval

A leading pedestrian interval provides pedestrians with walk time before turning vehicles have green time as opposed to simultaneous walk and green indications. Pedestrians have priority and turning vehicles must yield to pedestrians already in the crosswalk.

Design guidelines
At intersections with high volumes of pedestrians and of conflicting turning vehicles, a brief leading pedestrian interval may be used to reduce conflicts. During such intervals, an advance “walking person” indication is displayed for the crosswalk while red indications continue to be displayed to parallel through and/or turning traffic.

Design standards
- California Manual on Uniform Traffic Control Devices (2014); Section 4E.06.

2.9 Protected left-turn phasing

A common conflict at signalized intersections involves vehicles turning left permissively (that is, without a left-turn signal) and pedestrians crossing during the concurrent pedestrian signal phase. Drivers typically focus on on-coming traffic to identify gaps for left turns and often do not pay enough attention to pedestrians approaching or in the crosswalk. Permissive left turns at congested intersections cause drivers to accept smaller gaps in traffic, turn at higher speeds and sneak through the intersection during the yellow or red signal phases. (This happens at, for example, the intersection of Hillside Boulevard and E. Market Street, where left-turning drivers on all approaches must yield to both oncoming traffic and pedestrians in the crosswalk.) Implementing protected left-turn phasing can reduce conflicts with pedestrians crossing parallel to vehicle traffic.
3 Bicycle facilities

3.1 Multi-use paths (Class I bikeways)
Multi-use paths and shared-use paths are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. This treatment is especially appropriate near schools, transit stations and other important pedestrian and bicycle attractors. In cities, due to the lack of free, available space, multi-use paths are typically found in parks, through other open spaces, along creeks and on abandoned rail corridors and other rights-of-way and easements. In Daly City, one opportunity is to improve the path on the south side of John Daly Boulevard and complete the missing segment in front of Westlake Shopping Center.

Design guidelines
The recommended width for multi-use paths is 12–14 feet and as little as 8 feet in constrained locations. This narrower dimension is too narrow for pedestrians and bicyclists to share the space comfortably, so should be used only for short connections through physically constrained areas.

Design standards

3.2 Bike lanes (Class II bikeways)
These are conventional bike lanes, defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. They are one-way facilities, typically striped adjacent to car traffic traveling in the same direction. Bike lanes can provide a comfortable riding experience for all ages and abilities on streets with a single lane in each direction, car speeds at 25 mph or less, volumes less than 6,000 vehicles per day and low curbside activity. For streets not fitting this profile, separated bikeways (Class IV; see section 3.5) should be considered. When space allows, additional striping, cross hatching and/or a raised curb should be added to provide extra separation, in the form of a buffer, between cyclists and vehicles.

Design guidelines
The recommended width for bike lanes next to the curb face is 6–8 feet wide and at least 5 feet in constrained locations; of this width, 1.5–3 feet can consist of a striped buffer. When the bike lane is next to a parking lane, the desirable distance from the curb face to the edge of the bike lane (including the parking lane, bike lane and optional buffer) is 14.5 feet (for example, a 6.5-foot bike lane and an 8-foot parking area), with a minimum distance of 12 feet in constrained locations (for example, a 5-foot bike lane and a 7-foot parking area).

Design standards
3.3 Bike routes (Class III bikeways)

Bike routes are established by placing bike route signs and optional shared-roadway markings known as sharrows. Bike routes designate a preferred route for bicyclists on streets shared with car traffic. Bike routes are useful to establish connections between more comfortable bikeways. If they are designed to the standard of a bicycle boulevard (see section 3.4), bike routes can be comfortable for users of all ages and abilities.

Design guidelines

Bike routes are recommended on roadways with less than 1,500 vehicles per day (vpd), with up to 3,000 vpd allowed for short segments of the route. Bicycle refuge islands should be provided at intersections with high-volume cross-streets, allowing cyclists to cross one direction of traffic at a time when gaps in traffic allow. Also, signage should be provided indicating that the street segment is a designated bike route.1 “Bicycle Boulevard” stencils may be installed on streets meeting the standard for such facilities.2

Design standards


3.4 Bicycle boulevards (Class III bikeways)

Bicycle boulevards are specially designated bike routes with design features that seek to accommodate cyclists of all ages and abilities. Bicycle boulevards should have a maximum posted speed limit of 25 mph; these slower speeds improve the bicycling environment by reducing overtaking events, enhancing drivers’ ability to see and react, and diminishing the severity of crashes, if they occur.

Design guidelines

Like bike routes, bike boulevards should be designed for motor vehicle volumes under 1,500 vehicles per day (vpd), with up to 3,000 vpd allowed in limited sections. To create opportunities for bike boulevards, traffic volumes can be reduced by forcing turns, providing partial intersection closures such as diagonal diverters. “Bicycle boulevard” stencils should be provided, and also bicycle refuge islands at intersections with high-volume cross-streets.1 A potential candidate in Daly City for bicycle boulevard treatment is Brunswick Street: it is a residential street that provides a lower-volume alternative to Mission Street, connecting the Crocker neighborhood to the Daly City BART station.
Design standards

3.5 Separated bikeways or cycle tracks (Class IV bikeways)
Separated bikeways, or cycle tracks, are for the exclusive use of bicycles, being physically separated from motor traffic with a vertical feature such as flexible posts, curb or on-street parking. Separated bikeways are needed to encourage riders of all ages and abilities on fast, busy streets (higher than 25 mph and 6,000 vehicles per day or greater) with multiple lanes or with high curbside activity.¹ The Caltrans District 4 Bicycle Plan identifies the full length of Skyline Boulevard (Highway 35) and Mission Street (Highway 82) as candidates for separated bikeways on their list of “top-tier” projects in San Mateo County. Other potential candidates in Daly City include John Daly Boulevard, Junipero Serra Boulevard and Serramonte Boulevard.

Design guidelines
The recommended width for separated bikeways is generally 7–8 feet wide and 5 feet wide in constrained locations.¹,²,³ When located at disabled-accessible parking or a bus stop, the separated bikeway can be as narrow as 4 feet to bypass these features.⁴ Separated bike lanes may be designed as raised facilities, either at sidewalk grade or at an intermediate grade. If designed at the sidewalk level, the use of different pavement types, markings or buffers may be necessary to keep bicyclists and pedestrians separated. If placed at an intermediate level, a 3-inch mountable curb may be used to permit access of sweeping equipment.

Design standards

3.6 Pedestrian/bicycle underpasses and overpasses
A dedicated pedestrian/bicycle bridge or underpass may be appropriate at locations that are grade-separated or that present frequent conflicts with motor vehicles. Possible sites include areas bisected by a freeway or railroad, and at-grade crossings across wide, high-speed and high-volume arterial streets. Between the two, bridges are generally preferred to underpasses because they have security advantages and are less likely to have drainage problems.

Bridges and underpasses are long-term projects that take a considerable amount of funding to implement. They are the result of a strong need to connect areas currently divided by major physical barriers to pedestrian and bicycle travel, such as freeways and railroad tracks. While not a particularly high community priority, a potential location in Daly City for a pedestrian/bicycle bridge is between W. Market Street and 92nd Street, across I-280 and the BART tracks.
Design guidelines
The recommended clear width for pedestrian/bicycle bridges and underpasses is 14–16 feet, and at least 10 feet in physically constrained locations. A single-level surface should generally be used, with pedestrian and bicycle space delineated by paving color, striping or other surface treatment. Grade separation for the pedestrian and bicycle space may be considered for facilities wider than 16 feet.

Design standards

Design treatments for bicycle facilities

4.1 Filling bikeway gaps
The city should study opportunities to continue bike lane striping where it currently discontinues at intersections, and bike route designation where it currently ends. Striping bike lanes to and through intersections leads to more predictable travel movements by both bicyclists and drivers. Techniques to fill bikeway gaps can involve removing turn lanes or curbside parking, or constructing an adjacent raised bikeway in the form of a protected intersection for cyclists (see section 4.14). Locations where these treatments might be applicable include: (i) Skyline Boulevard, on which the right edge lines taper to and from the corners of intersections; these edge lines are considered and used as bike lanes, even though they begin and end mid-block; and (ii) Westmoor Avenue, where the bike lanes ends just before Skyline Boulevard, where it is perhaps needed most.

Design standards

4.2 Paving or widening roadway shoulders
On roadways where the shoulder is used as a bike lane, paving narrow shoulder sections allows bicyclists greater separation from adjacent vehicle traffic. Shoulder widening may allow for the bike lane to be upgraded with a striped buffer (see section 4.3) or to be upgraded to a separated bikeway (section 3.3). This treatment might apply to Skyline Boulevard and the western portion of John Daly Boulevard.

Design standards
4.3 Buffered bike lanes

Buffered bike lanes provide greater separation between cyclists and moving cars, as well as space for bicyclists to pass each other without encroaching into the adjacent car lane. Buffered bike lanes are considered Class II facilities because—unlike separated bikeways, which are considered Class IV facilities—they do not provide a physical barrier between cyclists and cars. Like other Class II bike lanes, buffered lanes can provide a comfortable experience for most users on streets with a single lane in each direction, car speeds equal to or less than 25 mph and volumes less than 6,000 per day, and low curbside activity.

Design guidelines

Painted buffers are generally 18 to 36 inches wide.1 They should be painted between moving vehicles and the bicycle lane. One potential location for buffered bike lanes in Daly City is Southgate Avenue. Much of the street is 52 feet wide with conventional bike lanes. Given these dimensions, the travel lanes can be narrowed to 11 feet, the parking lanes can be made 8 feet wide, and five-foot-wide bike lanes can be given a 2-foot striped buffer.

4.4 Green bike lanes

Installing green bike lanes increases the visibility of bike facilities and identifies potential areas of conflict, particularly at intersections and driveways. Color also reduces the road width visually, encouraging drivers to drive at slower speeds. The Class II bike lanes on John Daly Boulevard between De Long Street and Mission Street could be improved by adding green-color treatments in conflict areas.

Design standards


4.5 Shared-lane markings (sharrows)

Shared-lane markings, better known as “sharrows,” are useful for wayfinding and help to clarify where bicyclists are expected to ride. They assist bicyclists with lateral positioning in a shared travel lane, and alert road users to the position that bicyclists are likely to occupy.1 Sharrows are not a facility type and should not be considered a substitute for bike lanes, separated bike lanes (cycletracks) or other separation treatments where dedicated bikeway facilities are warranted.1,2 One location in Daly City where sharrows could be added is St. Charles Avenue, from the Daly City BART station to the city limits (where they would meet sharrows in adjacent San Francisco).
Sharrows might be appropriate:
1. On Bicycle Boulevards or similar low-volume, traffic-calmed shared streets with a design speed of less than 25 mph.
2. On downhill segments, preferably paired with an uphill bike lane.
3. On streets where the traffic signals are timed for the travel speed of a bicyclist (12–15 mph).
4. Along front-in angled parking, where a bike lane is undesirable.
5. To transition bicyclists across traffic lanes or from conventional bike lanes or cycle tracks to a shared lane.
6. To designate movement and positioning of bicycles through intersections.

Sharrows should not be applied on roadways with traffic speeds above 25 mph, where bike lanes or a protected bikeway would be the more appropriate bicycle facility.\(^1\) It is worth noting that some studies show that sharrows might not improve bicyclist safety.\(^3,4\) However, on multilane streets with on-street parking, sharrows might marginally shift bicyclists’ lateral position closer to the center of the lane and away from parked cars.\(^5\)

Design guidelines
Sharrows should be positioned so that bicyclists’ preferred path of travel aligns with the center of the sharrow marking. In most cases, this will be in the center of the right-most through travel lane, to discourage unsafe passing and encourage bicyclists to position themselves outside of the door zone of parked cars.

Design standards

4.6 Green-backed sharrows and intersection crossing markings
Sharrows painted with green-colored backing can improve their visibility to drivers and bicyclists and also their durability. Green-backed sharrows and green-colored blocking are also typically used as intersection crossing markings to raise driver awareness of potential conflict areas and to reinforce bicyclist priority over vehicles entering the roadway.\(^1\)
Making it easier to walk and bike in Daly City

If used to delineate a bicycle route, green-backed sharrows should be applied on low-volume and low-speed roads, and are not recommended on roads with traffic speeds greater than 35 mph (see section 4.5). The installation of green-backed sharrows should be prioritized at intersections and where bicycle routes end or change direction. One location where green-backed sharrows could be installed is Southgate Avenue between Crestwood Drive and Park Plaza Drive.

Design guidelines
See section 4.5.

Design standards

4.7 Uphill bike lane with downhill sharrows
On steep grades, bicyclists traveling uphill move considerably slower than bicyclists traveling downhill; at the same time, climbing bicyclists typically need wider bikeways to maneuver compared to a roadway on a level grade. On the other hand, bicyclists going downhill are better able to match vehicle speeds but need space to maneuver around roadway obstacles, including the door zone of parked cars.

When space is constrained on streets with steep grades, it is generally better to provide a wider facility for uphill travel and a shared roadway in the downhill direction than to split the space available between two narrow bike lanes. (For example, if 10 feet of space is available on a steep roadway, it is better to provide a protected bike lane in the uphill direction than two five-foot-wide bike lanes. A five-foot bike lane is too narrow for a cyclist traveling downhill at, say, 20 mph; this is especially true if the bike lane is next to a lane of parked cars since this would expose cyclists to the risk of being hit by an opening car door.) In this case, the bike route would be considered a hybrid Class II/Class III route.

4.8 Contraflow bike lane
Contraflow bicycle lanes are lanes designed to allow bicyclists to ride in the opposite direction of car
traffic. Contraflow lanes convert a one-way traffic street into a two-way street: one direction for motor vehicles and bicycles, and the other for bicycles only. Often their installation normalizes movements that are already taking place. A potential location for this treatment is W. Market Street between Mission Street and Station Avenue.

Design guidelines
Contraflow lanes should be separated at least with yellow center lane striping, a painted median island or a raised median island.¹²

In constrained locations, bike lanes can be combined with a bus bulb. In such shared situations, the bike lane rises to the level of the sidewalk and runs along the boarding area, rather than wrapping behind the boarding area (see photo below). Bicyclists can ride through the boarding area when no transit vehicle is present, but when a bus is stopped, cyclists must yield the space to boarding or exiting passengers. This plan proposes to install a shared cycletrack/bus stop on Serramonte Boulevard at Kent Court (see the last conceptual design, in Chapter 5). This is a particularly appropriate location for this treatment given that it’s a steep uphill slope, where bicyclists will be riding slowly.

Design guidelines
Transit boarding islands and bus bulbs should be long enough to accommodate the size of the bus that serves the stop (for example, a 40-foot-long island for a 40-foot bus).²
Design standards

4.10 Bicycle wayfinding signs
Bicycle wayfinding signs indicate to cyclists that they are on a designated bikeway, and alert drivers that they are on a bikeway. Signs should provide at a minimum the name of the bikeway and may also include the direction, distance or time to other nearby bikeways. In particular, bicycle wayfinding signs could be used in Daly City to direct cyclists to the Daly City and Colma BART stations, to neighboring jurisdictions and to San Francisco State University, in cooperation with the City and County of San Francisco.

4.11 Separated bikeways (Class IV)
Separated bikeways are considered Class IV bikeways. They separate cyclists from moving cars using any of various vertical barriers mentioned further below. Separated bikeways are needed to provide access to cyclists of all ages and abilities when streets have multiple lanes, fast and heavy traffic or high curbside activity. Note that separated bikeways must generally have at least 8 feet of clear width to be swept with standard street-sweeping equipment; however, narrow-profile sweepers exist and some cities are now investing in them to maintain their separated bikeways and multi-use pathways.

Flexible bollards (pictured below) are one option for a barrier. Because these may suffer from maintenance issues if they are repeatedly hit by drivers, bollards are most appropriate as an interim design solution until funding allows for more durable alternatives.

“Armadillos” (see photo below) are an alternative to bollards. They are more durable than bollards but are not appropriate for bikeways next to parked cars, as they can be a tripping hazard for people exiting vehicles.
Building the bikeway at sidewalk grade or providing a curb (as in the example pictured below) are both best practices for the construction of separated bikeways.\textsuperscript{1,2,3} Curb-separated bikeways are especially useful in commercial areas, where they prevent drivers from parking in them.\textsuperscript{4}

Planters and planter boxes (see below) can be either a temporary or permanent barrier option. Planters allow for subsequent design changes to the bikeway. Also, if special events require the street to be cleared, planters provide the flexibility to do so.

Design standards

1. Massachusetts Department of Transportation, Separated Bike Lane Planning and Design Guide (2015), Chapter 3.4.2.

4.12 Bike boxes

A bike box is a designated area at a signalized intersection that provides bicyclists with a queuing area in advance of stopped traffic during the red signal phase. Bike boxes are primarily used to eliminate conflicts between bicyclists and drivers on streets with high volumes of right-turning cars. Bike boxes also facilitate bicyclist left-turn positioning at intersections during red-signal indication if the box is extended across all lanes of travel. Bike boxes can be used where bicycle facilities end to allow for
bicyclists to transition from a bicycle lane to a shared lane, so that lane changes do not take place within the intersection.

A potential location in Daly City for a bike box is Sheffield Drive at John Daly Boulevard, should a bike lane be installed on John Daly from Sheffield to De Long Avenue based on the conceptual designs presented in this plan. In that case, bicyclists will need a way to transition from the Class IV/Class II bike lane to the existing Class I path on the south side of John Daly at Sheffield Drive/Poncetta Drive. Due to the presence there of a bus bay, there is no space for a two-stage bicycle left-turn box (see section 4.13). Also, a two-stage turn box would place cyclists immediately next to fast traffic. In this case, a bike box might be a better solution.

4.13 Two-stage bicycle left-turn boxes

Two-stage turn boxes allow a bicyclist to make a left turn movement by crossing a signalized intersection in two stages rather than merging with vehicle traffic into a left-turn lane. The design of two-stage turn boxes is similar to that of bicycle boxes, except that turn boxes are positioned at the far side of a signalized intersection. Two-stage turn boxes are essential in the case of separated bikeways because the design of such bikeways generally prevents bicyclists from merging into the left-hand turn lane.

Design guidelines

Two-stage turn should be painted green for high visibility. Pavement markings should include a bicycle stencil and a turn arrow to clearly indicate proper bicycle direction and positioning. The queue box should be placed in a protected area, typically within and on-street parking lane or between the bicycle lane and the pedestrian crossing. On streets where a constrained roadway prevents the creation of a dedicated two-stage turn queue box, the pedestrian crosswalk may be adjusted or realigned to create the space. A bike box may be provided behind the pedestrian crossing to serve the same purpose, but only where pedestrian volumes are relatively low, so as not to create conflict between pedestrians and cyclists.

Design standards


Image credit: Google Street View.
2. FHWA Interim Approval 20;

4.14 Protected intersections

A protected intersection maintains the physical separation of bicyclists through the intersection, thereby eliminating the merging and weaving movements inherent in conventional bike lane and shared lane designs. This reduces the conflicts to a single location where turning traffic crosses the bike lane. This single conflict point can be eliminated by providing a separate signal phase for turning traffic.

On many streets, large turning radii and wide lanes encourage drivers to make sweeping, fast turns. Protected intersections reduce vehicle turning speeds, make bicyclists more visible, and give priority to through bicyclists over turning vehicles. A potential location in Daly City for this treatment is the intersection of Skyline Boulevard and John Daly Boulevard.

Design standards

5 Pedestrian- and bicycle-friendly roadway design

5.1 Vehicle lane widths

Narrower travel lanes encourage motorists to drive more slowly while freeing up space for other uses. Space gained by narrowing existing lanes can be redistributed to bike lanes, sidewalks, landscaping or parking lanes.

Design guidelines
The standard lane width should generally be 10 feet. On designated truck and transit routes, one travel lane of 11 feet—ideally the right-most lane—may be used in each direction. If the truck or transit route does not include on-street parking or is only a single lane in either direction, a 12-foot lane would provide the space to ensure adequate clearance for truck or bus mirrors.

Design standards
- San Francisco Municipal Transportation Agency Memorandum, “Lane widths for streets with Muni vehicles and bicycle facilities” (2013).

5.2 Irregularly shaped intersections

Intersections with irregularly geometries present safety hazards for all road users by reducing visibility for drivers at approaches intersecting at
less than 90 degrees and by allowing for high-speed turns at approaches intersecting at greater than 90 degrees; skewed intersections also create long pedestrian crossings. Roadway approaches at irregularly angled intersections should be considered for realignment, to be perpendicular with the intersecting street, in order to shorten crossing distances and simplify intersection movements.

Design guidelines

One approach to correcting irregularly shaped intersections is to remove right-turn channelized lanes, known as slip lanes, at intersections; this would improve pedestrian visibility and slow down turning vehicles. For example, the slip lane serving the southbound right-turn from Sullivan Avenue to Eastmoor Avenue could potentially be removed, as could many of the slip lanes on Skyline Boulevard. The double slip lane from Serramonte Boulevard to Gellert Boulevard could potentially be removed, and adding a pedestrian crossing and sidewalk could be considered. Another possibility is to remove right-turn pockets to shorten pedestrian crossing distances and to fill bikeway gaps at intersections where right-turn queues would not create a traffic hazard.

Making changes to irregular intersections need not be expensive or permanent. For example, curb extensions can be designed with inexpensive materials such as paint and plastic traffic bollards to improve safety quickly. Such treatments may be used to reconfigure the intersection of San Pedro Road, Mission Street and Market Street (shown in Figure 6-5, in the “Conceptual Designs” chapter), for example, to reduce crossing distances for pedestrians. Consideration should be given to repurposing excess road space for wider sidewalks, pedestrian plazas, protected bike lanes and green infrastructure such as bioswales.

Design standards


5.3 Road diets

Typical road diets involve reconfiguring four-lane roads into three-lane roads (two through lanes and a center left-turn lane) with bike lanes on both sides. Road diet studies have suggested that two through lanes and one center left-turn lane can accommodate up to approximately 23,000 vehicles per day (vpd)\(^1\), though some four-to-three-lane conversion road diets have been successful with volumes as high as 30,000 vpd.\(^2\) A potential candidate for such a road diet project might be East Market Street.

Design standards

1. Stamatiadis, Nikiforos; Kirk, Adam; Wang, Chen; Cull, Andrea; and Agarwal, Nithin, "Guidelines for Road Diet Conversions" (2011). Kentucky Transportation Center (Research Report KTC-11-19/SPR415-11-1F; https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1017&context=ktc_researchreports.

5.4 Street conversions: from two-way to one-way with bike lanes

An option for accommodating bike lanes on an otherwise too-narrow street is to eliminate a lane of through traffic by converting a two-way street to one-way with bike lanes. This might be desirable on bike corridors where alternate routes would require excessive out-of-direction travel for cyclists. Such a treatment might be appropriate, for example, on St. Charles Avenue between the BART station and Niantic Avenue. One-way southbound vehicle travel would not affect buses, since vehicles would be able to enter the station from St. Charles Avenue but they would need to leave via John Daly Boulevard.

Design standards


5.5 Parking-lane widths

The minimum width for a parking lane should be 7 feet, with 8 feet recommended for most streets\textsuperscript{1,2} and 9 feet recommended for streets with Class II bike lanes next to the parking lane.\textsuperscript{1,2,3}

Design standards


5.6 Edge-line striping

Edge lines delineate the right or left edges of a roadway. They narrow the traffic lanes visually, which encourages slower driving speeds. Edge lines are appropriate when there is additional space in a roadway cross-section that cannot be allocated to other uses, such as bike lanes or parking lanes.

Design standards

Design guidelines
A right-side edge line on urban streets should consist of a minimum four-inch-wide solid white line, while a six-inch-wide stripe is the standard for highways. Except for dotted extensions, edge line markings should not continue through intersections or major driveways.\textsuperscript{1}

Design standards

5.7 Speed humps / speed cushions
Speed humps, also known as speed cushions, may be used to decrease traffic speeds selectively along a corridor to 15–20 mph. (These devices should not be confused with speed bumps, which are designed for even lower speeds, causing cars to almost need to stop.) Emergency-access personnel should be consulted prior to the installation of speed humps on any street.

5.8 Mini-roundabouts / neighborhood traffic circles
Mini-roundabouts, also known as neighborhood traffic circles, are raised circular islands with wayfinding signs and optional landscaping, designed to lower speeds at minor stop-controlled intersections. These devices offer most of the benefits of conventional roundabouts but in the context of residential streets. Occasional large vehicles like fire trucks may be allowed to make turns against the signed counter-clockwise direction of traffic.\textsuperscript{1,2} Emergency responders should be consulted prior to the installation of mini-roundabouts, to ensure adequate access for large vehicles. Brunswick Street, Vista Grande Avenue, Belleview Avenue and De Long Street all have intersections that could potentially benefit from the installation of mini-roundabouts/neighborhood traffic circles.

Design standards
1. FHWA, ”Mini Roundabouts” (FHWA-SA-10-007); https://safety.fhwa.dot.gov/intersection/innovative/roundabouts/fhwasa10007/fhwasa10007.pdf .
When it comes to pedestrian and bicycle planning, much of the attention goes to filling in sidewalk gaps, making street crossings safer and building out bikeway networks. This is understandable, since most walking and biking happens on those types of facilities. However, that focus, while necessary, is not sufficient. In order to maximize the potential of walking and biking as forms of transportation, cities need to create a built environment, and a policy context, that is more fully supportive of pedestrians and cyclists.

The range of pedestrian- and bicycle-supporting actions that cities can undertake is almost overwhelmingly large. These activities come in many flavors, from education and safety campaigns, to promotion and encouragement initiatives, to enforcement efforts. To focus Daly City staff’s attention and resources over the next few years (until this plan is updated), this chapter outlines five recommended actions. They address some of the most common non-infrastructure needs expressed by the public through the community needs assessment, or seem especially well-suited to Daly City’s particular context. While the actions are a diverse lot, they all seek to encourage more people to walk and bike in Daly City by making it safer, more convenient and more inviting to do so.

The recommended supporting actions are described more fully in the rest of this chapter and relate to the following five issues and items:

1. Parklets (these are extensions of the sidewalk area into the parking lane).
2. Bicycle parking ordinance.
3. Community-led traffic safety initiatives.
4. Neighborhood traffic calming.
5. Coordination with private development.

Several of the resources cited in this chapter are from the City and County of San Francisco. For one, San Francisco has been, and continues to be, a pioneer in many aspects of pedestrian and bicycle planning. For another, it is Daly City’s immediate neighbor; obviously San Francisco in the aggregate is very different than Daly City but it could be considered a “peer city” in that its southern neighborhoods share many characteristics with a large portion of Daly City.

**1 Parklets**

As mentioned above, parklets are extensions of the sidewalk realm into the parking lane, providing a place for people to sit, relax, congregate and watch the activity around them. Parklets typically consist of a non-permanent yet durable platform, and incorporate amenities such as seating, tables, greenery, outdoor umbrellas and bike parking. They are usually found on neighborhood commercial strips and tend to be open to the public, even if they are associated with a particular business at the parklet’s location. Parklets may be funded by businesses, individuals or the municipal government, as well as other entities.
In Daly City, parklets might be particularly appropriate for the commercial stretches of Geneva Avenue, Mission Street and Southgate Avenue (near Westlake Shopping Center). The City could create a parklets program by: revising its zoning code to allow or facilitate the setting up of parklets and the supporting and associated activities that animate parklets, including outdoor dining and vending; creating a permitting process that establishes the rules and regulations for the planning, design, funding, installation, operation and removal of parklets; and providing logistical and financial support. Parklets should be visible, well-lit and well-maintained by owners, and they can be designed to incorporate stormwater bulbouts and other green infrastructure ideas proposed in the City’s Green Infrastructure Plan (see Chapter 2, “Planning Context”).

Groundplay (groundplaysf.org), a multi-agency program of the City of San Francisco, has produced a manual of parklet-related policies, procedures, guidelines and other resources. The manual would be an especially useful resource for the City of Daly City in creating its own parklet program.

As described in Chapter 2, bike parking in Daly City is somewhat limited. There are several ways in which the City can help expand the supply of parking.

As many cities in the Bay Area have done, the City could adopt a bicycle parking ordinance requiring that sponsors of commercial, institutional and multi-family development projects install bike parking as a condition of approval of development permits. Typically, such ordinances apply to both new projects and redevelopment or renovation projects that exceed certain size thresholds; address short-term parking (for visitors) and long-term parking (for residents or employees); and specify the number of required bike parking spaces for different types of land uses and the size of the development project. The City could also use the ordinance to require, where appropriate (including where the sidewalk is sufficiently wide), that developers install and maintain bike parking racks in the public right-of-way.

Perhaps the most comprehensive resource on bicycle parking—including the development of a bike parking ordinance—is the Association of Pedestrian and Bicycle Professionals’ “Bicycle Parking Guidelines” (2nd Edition; 2010; www.apbp.org/page/publications). Among other topics, the document addresses general bicycle parking principles; elements of a good parking rack or locker; sample quantity requirements for bicycle parking to meet need by land use; and plentiful images and charts to illustrate concepts and conditions. The document is appropriate for adoption—possibly with some adaptations—by local agencies as official bicycle parking policy.
### Community-led traffic safety initiatives

Some of the most pressing pedestrian and bicycling concerns identified through the community needs assessment were related to traffic safety. They include aggressive or distracted drivers; difficult or challenging intersections to cross; and fast or heavy traffic. These concerns can be addressed in large part through continued enforcement of traffic regulations as well as through safer pedestrian and bicycle facilities such as the projects proposed earlier in this plan. Also, the City is in the process (as of this writing) of adopting a “Vision Zero” plan. That plan lays out a broad suite of traffic safety-related recommendations with the goal of eventually eliminating traffic deaths and serious injuries in the City.

At the same time, it is clear that new, different approaches are needed to improve pedestrian and bicycle safety. One possibility is to encourage City residents to sign a safe-driving pledge. These pledges are voluntary commitments by people to adopt such practices as driving defensively; avoiding texting, cell phones and other distractions; using extra precaution when driving in poor conditions; and never driving under the influence of substances. The City could promote one of many existing pledge programs; create its own, Daly City-specific program; or partner with neighboring jurisdictions to spearhead the creation of a San Mateo County-wide program.

Another possibility is to promote any one of a number of existing, voluntary traffic-safety “gamification” programs. These are typically software programs that monitor, using car sensors, certain safety-related aspects of driving behavior and vehicle performance such as speeding and hard braking. The programs quantify this information and “gamify” it by providing users with scores, rankings relative to other users of the program, prizes, merit badges and other features. The makers of these programs are working with car insurance companies to reward good-driving behavior through lower insurance premiums.

The pledge and gamification programs could be promoted through the Police Department, through the City’s media (website, social-media accounts and e-newsletter) and among neighborhood and other community groups. These programs should by no means be seen as replacements for engineering improvements, enforcement activities or other institutional efforts to improve safety. However, they are additional tools worth exploring that might make a contribution toward a safer-driving civic culture in Daly City.

### Neighborhood traffic calming

One of the biggest deterrents to walking and biking is fast, aggressive traffic. The survey administered as part of the community needs assessment for Walk Bike Daly City asked to what extent different challenges and obstacles discouraged people from walking and biking in Daly City; the answer choices were “a lot,” “somewhat” and “not too much.” Regarding walking, the challenges identified as the most serious were: “Fast or heavy traffic,” with 84% of people responding that it discouraged people “a lot” or “somewhat”; “Aggressive or distracted drivers” (83%); and “Difficult or challenging intersections to cross” (82%). The results for biking were quite similar.

Roughly speaking, a pedestrian hit by a car traveling at 20 miles per hour (mph) has a 90% chance of surviving, but only a 10% chance if the car is traveling at 40 mph. One way to address speeding—in addition to ongoing enforcement efforts—is traffic-calmed streets. Traffic lights and stop signs control traffic at intersections but do not prevent speeding between uncontrolled intersections. Traffic calming, on the other hand, seeks to lower speeds...
Making it easier to walk and bike in Daly City

along the length of street blocks. The objectives are to reduce the number of crashes—and perhaps more importantly, their severity—and to make streets more comfortable for everyone, including pedestrians, cyclists and neighborhood residents. Traffic calming uses any of various physical measures to slow cars. These include raised crosswalks, median islands, sidewalk bulb-outs, traffic circles (or mini roundabouts), changes to lane widths and other devices and treatments.

Traffic calming projects in Redwood City (credit: City of Redwood City).

Daly City’s Traffic Safety Committee has a “traffic and pedestrian safety request” process through which residents, business owners and others can petition for new or revised regulations at specific locations to address speeding and other traffic issues. This request process could be expanded and formalized with guidelines to incorporate a neighborhood traffic-calming component through which individuals or neighborhood groups could request small-scale, lower-cost traffic calming measures on individual blocks. The city would need to develop guidelines for the planning, selection, design and installation of traffic calming measures, as well as procedures for community engagement and prioritization of requests. Development of the guidelines should be made with input from the City’s Fire and Police Departments, SamTrans and other relevant agencies to ensure that neighborhood traffic calming measures do not negatively impact access by fire trucks, ambulances, buses and other large vehicles.

Certain types of traffic calming measures are also appropriate for busier collectors and arterials. However, traffic calming projects on busier streets are more complex efforts, involving more stakeholders and more complex considerations about traffic impacts. While the city should pursue traffic calming on busier streets and larger, multi-block projects, it should do so on a case-by-case basis rather than through the type of resident initiated program proposed above.

Below are some online resources regarding traffic calming programs, projects and measures:


Coordination with private development

If there is one thing that sprawl development and the resulting regional traffic congestion have taught us, it is that transportation and land use decisions should not be made independent of each other. The way our built environment is structured and designed strongly influences how people choose to get around. The relationship between transportation and land development applies at almost every scale, from neighborhoods to regions, and in every type of community—with Daly City being no exception.

This effect is especially true in the case of non-motorized transportation. The decision to walk or bike is greatly impacted by factors not directly related to transportation infrastructure. These factors include proximity to one’s destination, development densities, the mix of land uses,
availability of parking and the quality of the buildings around us.

Pedestrians crossing Mission Street in Daly City (credit: Jimmy Fu, City of Daly City).

The City could revise its zoning and planning codes to incorporate robust pedestrian- and bicycle-friendly standards and guidelines for the siting and design of buildings and the provision of parking. General aspects of pedestrian- and bicycle-friendly urban design include: visually interesting architecture; an appropriate mix of uses—for example, homes, office and shops—on the same street and even within the same parcel; active ground floors; a well-defined building frontage, with entrances oriented toward the street; pedestrian-oriented lighting; generous landscaping; and relaxed or flexible parking requirements. Further below are two among the many resources available online that address pedestrian-and bicycle-friendly urban design.

Using such standards and guidelines, planning staff and the City’s Planning Commission would be able to better coordinate City plans and infrastructure improvements with developers to guide the installation of pedestrian and bicycle improvements as part of new development projects. This recommendation has some urgency in the sense that Daly City has been seeing increased development activity, which is expected to continue. Given the long life of buildings, development decisions made today will affect the transportation choices of Daly City residents well into the future.