CITY COUNCIL STAFF REPORT

DATE: May 21, 2014 CONSENT CALENDAR

SUBJECT: NON-MOTORIZED TRANSPORTATION COMMITTEE BICYCLE ROUTE PLAN AND RECOMMENDED PRIORITIES FOR THE FISCAL YEAR 2013-14 MEASURE J

FROM: David H. Ready, Executive Director

BY: Office of Sustainability

SUMMARY

The City contracted with Ryan Snyder Associates to create a Bicycle Route Plan and based on that plan the Non-Motorized Transportation Committee has recommended a schedule and priority of projects to be considered for construction using the Measure J funding allocated for bicycle infrastructure and improvements.

RECOMMENDATION:

Receive and file the Bicycle Route Plan (BRP).

STAFF ANALYSIS:

The City of Palm Springs adopted a Non-Motorized Transportation Plan (NMTP) in October 2011. The Sustainability Commission formed a Non-Motorized Transportation Committee (NMTC) that has spearheaded many projects to improve bicycle infrastructure and safety. This includes working to add bicycle parking, update bicycle routes and maps, increase education and outreach and review areas for potential bicycle transportation improvements.

The NMTC has reviewed the final BRP document from Mr. Snyder, and the NMTC supports the recommendations of Mr. Snyder. Ryan Snyder and Associates conducted several meetings with stakeholders and thus the Bicycle Route Plan includes collective efforts, research and edits of the NMTC, Mr. Snyder, City staff and community members including merchants, business leaders and neighborhoods.

The Measure J Commission recommended and the City Council approved $1 million in funding for fiscal year 2013-14. The NMTC has recommended a prioritization of projects as outlined below.

Additionally, the NMTC recommends the City Council fully fund the complete BRP with for three consecutive fiscal year's through 2015-16. The NMTC has proposed a schedule and priorities for funding of projects based on the plan presented by Ryan Snyder Associates.

The completion of these projects will create a network of Class II and Class III bike routes and paths that will define Palm Springs as a bike-able city. In addition, the proposed schedule of projects aids in the connectivity that will be necessary for the new CV Link project.

Based on the cost estimates included in the BRP, the NMTC has recommended that the following projects be prioritized for funding for the first year that Measure J funds are allocated.

2013-14 recommended projects ($1,055,850.00 estimated costs):
(2013-14 $1 million Measure J funds appropriated)

1. El Cielo corridor (Escoba to El Cielo, El Cielo to DOHC and Civic Dr. to Alejo - Class II and III with road diet). Approx. 2.5 miles; $122,500
2. Alejo E-W (Civic to Belardo - Class II and III with road diet). Approx. 2.0 miles; $130,000
3. Belardo N-S (South End to E. Palm Canyon). Approx. 1.61 miles; $112,750
4. Farrell (E. Palm Canyon Way to Racquet Club - dbl. col. buff.). Approx. 3.53 miles; $494,200
5. Calle Encilia (Ramon to Alejo - Class II). Approx. 1.0 miles; $89,000
6. Shared lane marking streets (10.64 miles approx.). Approx. $106,400
7. Araby Wash 'wooden' bike bridge north side railing extension. Approx. $1,000

For the next two fiscal years the NMTC has identified the following priority projects and recommends fully funding them for the 2014-15 and 2015-16 fiscal years.

2014-15 recommended projects ($1,511,300.00 estimated costs):

1. N. Palm Canyon (Tram Way to Alejo - col. buffered). Approx. 2.19 miles; $328,500+
2. Racquet Club (N. Palm Canyon to Farrell - buff lane). Approx. 1.52 miles; $98,800+
3. Class III/Sharrows. Approx. 27.39 miles; $773,000
4. Shared lane marking streets (31.1 miles approx.). Approx. $311,000+

2015-16 recommended projects ($1,003,000.00 estimated costs):

1. Lighted cross walk installation with cutouts (Farrell off of Mesquite CC bike path). Unless funding is to come from other sources. $75,000+ approx.
2. Indian Canyon (Alejo to Camino Parocela - 2-way Cycletrack). Approx. 1.16 miles; $928,000

All specified projects and estimated costs are per the BRP plan as outlined by Mr. Snyder.

The NMTC also recommends that the following be considered when implementing bicycle infrastructure projects:

- Any new paving or slurry on streets will be incorporated and match up to the BRP document for prioritization as warranted and feasible.
- Where a section of roadway will be paved or slurried along a designated bike route, but does not extend the full length of the route, then lane striping will be laid down for the entirety of the bike route.
- Signage will be incorporated into all bike lane infrastructure work as it is implemented.
- Street pedestrian and bicycle lighted crossings are included, but funding may be available from other sources.
- Section 14 matching funding may be available.

FISCAL IMPACT:

The total funding of the BRP for three consecutive fiscal years is $3,570,150.00. The Measure J Commission recommended and the City Council approved the appropriation of $1 million for fiscal year 2013-14.

The NMTC recommends the 2014-15 projects be funded for $1,511,300.00 and the 2015--16 projects be funded for $1,003,000.00.

City staff is in the process of several grant applications that may supplement and offer additional funding for even more bicycle infrastructure improvements as recommended by the NMTC. This includes applications to the CAL Trans Active Transportation Program and the Congestion Mitigation and Air Quality (CMAQ) Program.

Michele Mician,
Sustainability Manager

David H. Ready,
City Manager

Attachments:
1. Bicycle Route Plan

Palm Springs

BICYCLE ROUTE PLAN

MARCH 2014

Palm Springs

ON-STREET BIKEWAY PLAN

DESIGN OVERVIEW

The Palm Springs City Council has decided that *every street* in Palm Springs should be a bikeway. This is likely unprecedented in the United States and may set the stage for others to follow. The purpose of this Bikeway Plan is to recommend what type of bikeway each street should become. In order to prepare these recommendations, bikeway types were defined, the streets were surveyed and data reviewed. The following text describes the bikeway definitions, results of fieldwork and recommendations.

This text describes general design guidelines for the facilities identified in this Bikeway Plan. The City of Palm Springs will need to follow standard manuals such as the California Manual on Uniform Traffic Control Devices (CAMUTCD) and the Caltrans Highway Design Manual (HDM). Additional guidance can be found in the American Association of State Highway and Transportation Officials' (AASHTO) "A Policy on Geometric Design of Highways and Streets" and the National Association of City Transportation Officials' (NACTO) Urban Bikeway Design Guide. The City may need to amend its own street design guidelines in order to implement certain facilities. Palm Springs should take precaution and research the newest bikeway design guidelines and engineering treatments prior to constructing a facility.

FIGURE 1 Class I (top), Class II (middle), and Class III (bottom) bikeways.

BIKEWAY GUIDELINES

Definitions

CLASS I

Referred to as a bike path, shared-use path, or multi-purpose trail. Provides for bicycle travel on a paved right-of-way completely separated from any street or highway. Other users may also be found on this type of facility (see Design Guidelines on page 6).

CLASS II

Referred to as a bike lane. Provides a striped lane for one-way bicycle travel on a street or highway (see Design Guidelines on page 9).

CLASS III

Referred to as a bike route. Provides for shared use with pedestrian or motor vehicle traffic (see Design Guidelines on page 11).

COLORED BIKE LANES

Colored bike lanes are simply bike lanes with an approved color (see Design Guidelines on page 10).

BUFFERED BIKE LANES

Buffered bike lanes provide a painted area between the bike lane and either the travel lane or parking lane. Double-buffered bike lanes provide a painted buffer on both the travel lane and parking lane. These bike lanes may also be colored (see Design Guidelines on page 10).

CYCLE TRACKS

Cycle tracks, also called protected bike lanes, provide a physical barrier between the bike lane and other lanes. If there is on-street parking they are placed between the sidewalk and parking. Cycle tracks may be one-way or two-way. They may also be at the level of the street, at the level of the sidewalk, or between the two (see Design Guidelines on page 7).

TYPE B SHARROWS

Type B sharrows provide a more prominent shared lane marking than the standard shared lane marking. This may be achieved through augmentation of the shared lane marking with side lines, a larger stencil, more frequent placement, and/or paint underneath (see Design Guidelines on page 11).

SHARED LANE MARKING STREETS

Shared lane marking streets are simply streets with standard shared lane markings or “sharrows” to make motorists alert for bicyclists, to train cyclists where to ride in the lane and to educate motorists of bicyclists’ rights to ride in the lane. These shared lane-marking streets will not have bikeway signs (see Design Guidelines on page 11).

Design Guidelines

The following guidelines present the recommended minimum design standards and other recommended ancillary support items for bike paths, bike lanes, bike routes, cycle tracks, colored bike lanes, buffered bike lanes and sharrows. Where possible, it may be desirable to exceed the minimum standards. These guidelines cover basic concepts. The HDM Chapter 1000 contains more detailed standards and guidance and should be followed. The City may also reference the AASHTO Guide for the Development of Bicycle Facilities where the HDM is silent.

CLASS I BIKE PATH FACILITIES DESIGN RECOMMENDATIONS

1. All Class I bike paths should conform to the design guidelines set forth by Caltrans.
2. Class I bike paths should generally be designed as separated facilities away from parallel streets. They are commonly planned along rights-of-way such as waterways, utility corridors, railroads, and the like that offer continuous separated riding opportunities.
3. Both AASHTO and Caltrans recommend against using most sidewalks for bike paths. This is due to conflicts with driveways and intersections. Where sidewalks are used as bike paths, they should be placed along routes with few driveways and intersections, be properly separated from the roadway, not contain obstructions (bus stops, signs, trees, trash receptacles, etc.) and have carefully designed intersection crossings.
4. Bike paths should have a minimum of eight feet of pavement, with at least two feet of unpaved shoulders for pedestrians/runners, or a separate pathway for pedestrians/runners where feasible. A pavement width of 12 feet is preferred.
5. Sidewalk paths and unpaved facilities that are not funded with federal transportation dollars and that are not designated as Class I bike paths do not need to be designed to Caltrans standards.
6. Class I bike path roadway crossings should be carefully engineered to accommodate safe and visible crossing for users. The design needs to consider the width of the roadway, whether it has a median, and the roadway’s average daily and peak-hour traffic volumes. Crossings of low-volume streets may require simple stop signs. Crossings of streets with Average Daily Traffic (ADT) of over 15,000 vehicles per hour should be assessed for signalized crossing, flashing LED beacons, crossing islands, or other devices. Roundabouts may be a desirable treatment for a bike path intersecting with roadways where the bike path is not

FIGURE 2 Cycle track intersection treatment.

next to a parallel street.

7. Lighting should be provided where bicyclists will likely use the bike path in the late evening, such as along commuter routes.
8. Barriers at path entrances to prevent motorized vehicles from entering, such as obstacle posts and gates, can obstruct bicyclists and should be avoided when possible. Typically, barriers should not be considered until after it has been determined that other measures to prevent motor vehicles from entering have failed, and where the safety and other issues posed by unauthorized vehicles are more serious than the safety and access issues posed to path users. Signs and other design solutions are preferred.
9. Bike path construction should take into account vertical requirements and the impacts of maintenance and emergency vehicles on shoulders.

CYCLE TRACKS

Cycle tracks, also known as protected bike lanes, are Class I bikeways located on or adjacent to streets where bicycle traffic is separated from motor vehicle traffic by physical barriers. These barriers provide a sense of comfort and safety over and above that provided by typical bike lanes. Where on-street parking exists, cycle tracks are installed between the parking and the curb. Where no on-street parking exists they are located between the curb and travel lanes. They can be well suited to downtown areas where there are many people bicycling and walking, and where it is beneficial to get bicyclists off the sidewalk. They may also be used along some suburban streets with high-speed traffic. Streets selected for cycle tracks should have minimal pedestrian crossings and driveways. They should also have minimal loading/unloading activity and other street activity. The cycle tracks should be designed to minimize conflicts with these activities as well as with pedestrians and driveways.

Cycle tracks are best suited for existing streets where surplus width is available; the combined width of the cycle track and the barrier is more or less the width of a travel lane. The area to be used by bicycles should be of adequate width for street sweeping to ensure that debris will not accumulate. Cycle tracks tend to work most effectively where there are few uncontrolled crossing points with unexpected traffic conflicts.

Cycle track concerns include treatment at intersections, uncontrolled midblock driveways and crossings, wrong-way bicycle traffic, and difficulty accessing or exiting the facility at midblock locations. Left-turns also present challenges. Early research shows that well-designed cycle tracks attract many new cyclists and can be safer.

Overall Design Considerations for Cycle Tracks

- The protective area should generally be a minimum of 3 feet wide. Where space is limited 2 feet may be considered acceptable. Protective barriers may include posts/bollards/pylons, curbing, parking stops and landscaped islands.
- Parking near driveways and intersections should be prohibited to allow for good visibility.
- Where motorists cross the cycle track to enter driveways, the opening should be constrained so that they have to slow down and turn at a right angle.
- Coloring, yield markings and “Yield to Bikes” signs should be used in areas where motorists cross cycle tracks.
- Cycle tracks at intersections require deliberate design solutions (see Figure 2). Typically, this entails adding a separate signal phase that corresponds with motor vehicles travelling the same direction. The cycle tracks should have a red phase when

FIGURE 3 One-way cycle track.

FIGURE 4 Two-way cycle track.

conflicting turning movements of vehicles in the travel lanes have a green phase, and vice versa.

- Cycle tracks should be colored and stenciled through both signalized and unsignalized intersections to notify motorists that they are crossing a bikeway.
- Gaps should be installed in protective barriers to allow people in wheelchairs to cross them. These gaps should be placed where curb ramps allow passage to sidewalks.
- When cycle tracks are to be implemented on existing roadway surfaces, it is important to identify and remediate any longitudinal cracking greater than ½" wide, utility covers that are not flush, vertical deformations, and other conditions that may affect rideability.
- Cycle tracks need to be carefully designed at bus stops. Passengers will need to cross the cycle tracks. The bus stop may be located in the protected area so buses and bicyclists don't cross. This requires that the protected area be as wide as a bus stop (minimum of 8 feet). The protected area can be widened at the bus stops in parallel with on-street parking. Raising the cycle tracks at the bus stop to sidewalk and bus stop level allow passengers waiting on the sidewalk to cross the cycle track and enter the bus easily, and cues the cyclists to yield. Raised cycle tracks also accommodate people in wheelchairs without the need for curb ramps.

One-Way Cycle Tracks

In most circumstances, one-way cycle tracks work best because they are much simpler to design at intersections (see Figure 3). They are designed similar to bike lanes, although they may be located between parked cars and the curb. On streets where no on-street parking exists, one-way cycle tracks are situated between the curb and travel lanes with physical protection between the cycle tracks and travel lanes. On streets with no on-street parking, one-way cycle tracks and buffered bike lanes have very similar design and function. Buffered bike lanes have a painted barrier, whereas cycle tracks have a physical barrier. Thus, cycle tracks and buffered bike lanes can be combined along a street, adding the physical protection where it is feasible, and reverting to the buffered bike lane in other sections. The bike lanes should be at least 5 feet wide, and a minimum of 6 feet is preferred. Where bicycle volumes are high, 7' allows cyclists to pass one another comfortably. Intersections can be designed like typical bike lanes: the physical protection is dropped, and on-street parking is prohibited on the intersection approach. Intersections may also be designed such that cyclists stay on the curbside and cross the intersection on the right of the travel lanes and turning vehicles. This design requires separate signal phasing. Using street sweepers that fit into one-way cycle tracks presents one of the primary challenges. Most street sweepers are too wide but smaller ones can be purchased.

Two-Way Cycle Tracks

Two-way cycle tracks take up less space on the street cross section than two one-way cycle tracks since they require only one protective barrier. They are also wide enough for most street sweepers. These are the primary advantages. The riding space of two-way cycle tracks should generally be at least 12 feet wide. Where they lead directly into a bike path or an intersecting cycle track, transitioning from two-way cycle tracks is seamless. However, where cycle tracks terminate into bike lanes or common travel lanes, the transition requires cyclists to enter and exit from crosswalks if they are travelling opposite traffic. Two-way cycle tracks present more potential conflict points at intersections than one-way cycle tracks and must be designed with more care. They require separate signal phases at intersections. Figure 4 shows a two-way cycle track.

FIGURE 5 Raised cycle track.

FIGURE 6 Bike lane schematic.

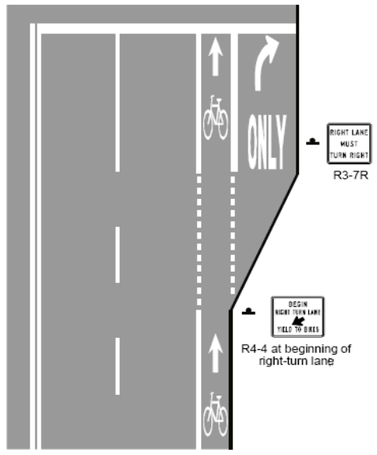


FIGURE 7 Bike Lane (R81) and Bike Route (D11-1) signs.

Raised Cycle Tracks

Cycle tracks that have curbs and are raised above the street level provide greater protection from midblock traffic (see Figure 5). At intersections they have the same issues, challenges and design solutions as one-way or two-way cycle tracks.

CLASS II BIKE LANE FACILITIES DESIGN RECOMMENDATIONS

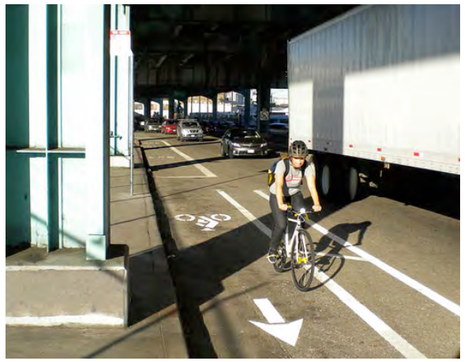
The following guidelines should be used when designing Class II bikeway facilities. The HDM Chapter 1000, the American Association of State Highway and Transportation Officials (AASHTO), the CAMUTCD, and the Caltrans Traffic Manual provide these guidelines.

1. Class II Bike Lane facilities should conform to the minimum design standard of 5 feet in width in the direction of vehicle travel adjacent to the curb lane. Where space is available, a width of 6 to 8 feet is preferred, especially on busy arterial streets, on grades, and adjacent to parallel parking.
2. Under certain circumstances, bike lanes may be 4 feet in width. Situations where this is permitted include:
    a. Bike lanes located between through traffic lanes and right turn pockets at intersection approaches (see Figure 6)
    b. Where there is no parking, the gutter pan is no more than 12” wide, and the pavement is smooth and flush with the gutter pan
    c. Where there is no curb and the pavement is smooth to the edge
3. “Bike Lane” (R81) and “Bike Route” (D11-1) Signage, as shown in Figure 7, shall be posted after every significant intersection along the route of the bike lane facility. “Begin” and “End” plaques (R81A or R81B) should accompany the “Bike Lane” sign when appropriate. The route number shown on the Bike Route Identification sign should correspond to the latest City Bicycle Routes and Facilities Map. The Bike Route Identification sign can also be used in conjunction with an arrow plaque (M6 series) in advance of another approaching bike lane or route to direct bicyclists. If a bike lane exists where parking is prohibited, “no parking” signage may accompany bike lane signage.
4. Bike lanes should be striped with a 6-inch wide solid white stripe of (CAMUTCD Detail 39) and should be dashed (Detail 39A) at an intersection approach. The length of Detail 39A shall be 100 feet when the block is short (less than 400') and 200 feet where the block is longer or vehicle speeds are high (greater than 35 mph). The dashed bike lane stripe allows for use of the bike lane as a right-turn pocket for motor vehicles.
5. At the beginning of each and end of each block and at approximately 150’ to 250’ intervals, pavement stencils of a bicycle and arrow shall be used to show the direction of travel (see Figure 8). The stencils at the end of the block should be placed just before the dashed bike lane stripe (Detail 39B).
6. Bike lanes with two stripes are more visible than those with one and are preferred. The second inside stripe (4 inch solid white) would differentiate the bike lane from the parking lane where appropriate.
7. Where space permits, intersection treatments should include bike lane ‘pockets’ as shown in Figure 6.
8. At signalized intersections, loops or other means of bicycle detection should be installed near the limit line in the bike lane and all vehicle lanes that have detection. Signal timing and phasing should be set to accommodate bicycle acceleration speeds. Painted bicycle detector stencils may be placed at detection zones located within the bike lane to notify bicyclists where they

FIGURE 8 Bike lane striping and stencil.

FIGURE 9 Green bicycle lane.

FIGURE 10 Buffered bicycle lane.



can actuate the signal.

9. Where bike lanes terminate, they typically should transition to a Class III bike route when possible. Cyclists should be notified through a sign that includes the Bike Lane sign (R81) with End plaque (R81B). Shared lane markings (sharrows) should be placed in the transition zone to help guide cyclists to the proper place to ride in the lane. Class III bike route time, distance and destination signs should help provide continuity.

10. When bike lanes are to be implemented on existing roadway surfaces, it is important to identify and remediate any longitudinal cracking greater than ½" wide, vertical deformations such as utility covers that are not flush, and other conditions that may affect rideability.

11. Traffic signals can be timed and coordinated for cyclists (where appropriate).

COLORED BICYCLE LANES

Green bicycle lanes increase visibility for cyclists. The Federal Highway Administration (FHA) and the California Traffic Control Device Committee have approved green bike lanes (shown in Figure 9) on an interim basis per CAMUTCD IA-14; Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes. The State of California has requested and received approval from the FHA to implement CAMUTCD IA-14 statewide. Consequently, the City may implement green bike lanes without need to notify the State or FHA, provided the CAMUTCD guidelines are followed.

Green bicycle lanes are sometimes used as "conflict zone" treatments. They are short lanes that are used at right-turn pockets or driveways to alert right-turning motorists of the bike lane. Green bicycle lanes can also be used as a continuous treatment spanning the extended length of a bike lane corridor.

BUFFERED BIKE LANES

Buffered bike lanes provide a painted divider between the bike lane and the adjacent travel lane (see Figures 10 and 11). This additional space can improve the comfort of cyclists, as they don't have to ride as close to motor vehicles. Buffered bike lanes can also be used to narrow travel lanes, which slows traffic. An additional buffer may be used between parked cars and bike lanes to direct cyclists to ride outside of the door zone of the parked cars. These are most important with significant parking turnover. Buffered bike lanes are most appropriate on wide, busy streets. They can be used on streets where physically separating the bike lanes with cycle tracks is undesirable for cost, operational, or maintenance reasons.

FIGURE 11 Buffered bicycle lane schematic.

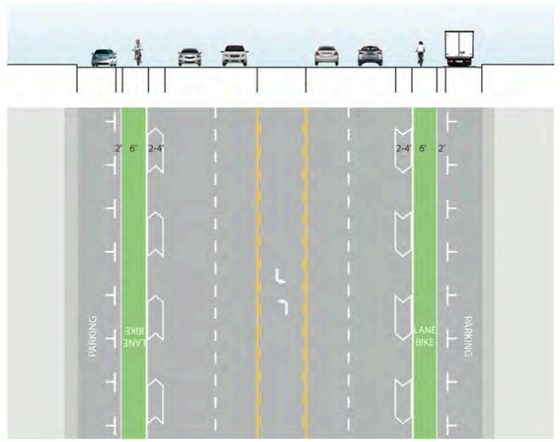
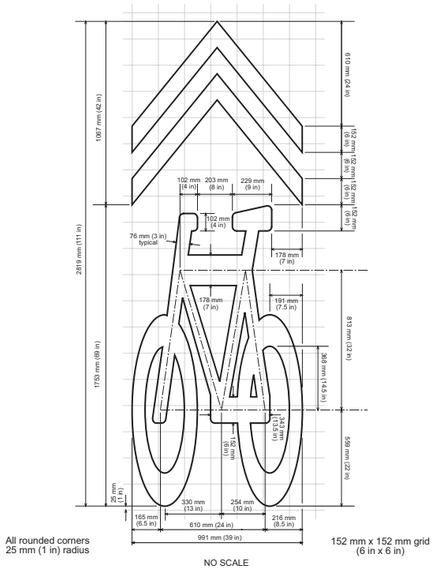


FIGURE 12 Sharrow stencil.



CLASS III BIKE ROUTES

Class III bike routes are typically simple signed routes along street corridors, usually local streets and collectors. With proper route signage, design, and maintenance, bike routes can be effective in guiding bicyclists along a route suited for bicycling that does not have enough roadway space for a dedicated Class II bike lane. Class III bike routes can be designed in a manner that encourages bicycle usage, convenience, and safety. Bike routes can become more useful when coupled with the following techniques:

- Route, directional, and distance signage
- Wide curb lanes
- Shared lane marking stencils painted in the traffic lane along the appropriate path of where a bicyclist would ride in the lane (see Figures 13 and 14 and discussion below)
- Accelerated pavement maintenance schedules
- Traffic signals timed and coordinated for cyclists (where appropriate)
- At signalized intersections, loop detectors or other means of bicycle detection should be installed near the limit lane in all vehicle lanes that have vehicle detection.
- Traffic signals can be timed and coordinated for cyclists (where appropriate). Signal timing and phasing should be set to accommodate bicycle acceleration speeds.
- Traffic calming measures
- Remediation of longitudinal cracking greater than ½" wide, utility covers that are not flush, vertical deformations, and other conditions that may affect rideability.
- "Bike Route" (D11-1) signage, as shown in Figure 7, should be posted after every intersection along the route to inform bicyclists that the bikeway facility continues and alert motorists to the presence of bicyclists. "Begin" and "End" plaques (M4-14 and M4-6) should accompany the Bike Route sign when appropriate. The route number shown on the Bike Route Identification sign should correspond to the latest City Bicycle Routes and Facilities Map. The Bike Route sign can also be used in conjunction with an arrow plaque (M6 series) in advance of another approaching bike route or lane to direct bicyclists. If a bike route exists where parking is prohibited, "no parking" signage may accompany bike lane signage.

SHARROWS

Sharrow stencils (Figure 12) are recommended as a way to enhance the visibility and safety of Class III bike routes. Sharrows (officially known as "shared lane markings") indicate to cyclists the proper position to ride within the travel lane and assist with wayfinding. They also alert motorists that the travel lane is to be shared with bicyclists.

California MUTCD, Section 9C.103(CA) Shared Roadway Bicycle Markings states: "The shared roadway bicycle marking shall only be used on a roadway (Class III Bikeway (Bike Route) or Shared Roadway (No Bikeway Designation))." When used on streets with on-street parking, sharrows are to be placed such that the centers of the markings are a minimum of 11 feet from the curb face or edge of paved shoulder on streets with on-street parallel parking. On streets without on-street parking that have an outside travel lane that is less than 14 feet wide, the centers of the sharrows should be at least 4 feet from the face of the curb.

FIGURE 13 Shared lane marking placement graphic (left) and photo (right).

On two-lane roadways, these minimum distances allow vehicles to pass bicyclists on the left within the same lane without encroaching into the opposite lane of traffic. (On multi-lane roadways, motorists must change lanes to pass a cyclist.) On streets with on-street parking, installing sharrows more than 11 feet from the curb will also move the bicyclist farther from the “door zone” (see Figure 13 [top]) (approximately 4’).

Sharrows should be placed in straight lines to encourage the bicyclist to travel in a straight line. This often means the sharrows are in the center of the lane, greater than the minimum guideline of 4 or 11 feet from the curb. Sharrows should always be placed outside the “door zone” where on-street parking is provided.

Ideally, sharrows should be placed immediately after an intersection and spaced no more than 150 feet apart on Class III bike routes. On shared lane marking streets they may be spaced up to 250 feet apart. Sharrows should also be placed at the end of each block approximately 50’ in advance of the limit line. Placing the sharrows between tire tracks increases the life of the markings and decreases long-term maintenance costs.

TYPE B SHARROWS

The Cities of Long Beach and San Francisco are presently experimenting with green coloring of travel lanes with sharrows, which Ryan Snyder Associates has termed Type B sharrows (see Figure 14, 15, and 16). The wide green stripe used in Long Beach and green-backed sharrows in San Francisco send a strong signal to cyclists as to where they should ride. They also communicate to motorists that bicyclists are legitimate users of the entire travel lane. Although no standards are established, multi-lane streets with narrow curb lanes are likely the most appropriate for Type B sharrows. This treatment has not yet been approved as part of the CAMUTCD. Until it is approved, the City would have to use this treatment under the sanctioned experimental process defined in section 1A.10 of the CAMUTCD. FHWA recently cancelled further experimentation with the Long Beach-style green stripe sharrows and the greenback sharrows. Brookline, Massachusetts uses another form of Type B sharrows, which consists of large sharrows placed close together with an additional outer marking (see Figure 15). Some cities highlight sharrows with a square of green paint to make them more visible. These are called green-back sharrows (see Figure 16).

FIGURE 14 Long Beach green sharrow lane.

FIGURE 15 Brookline, MA Sharrow markings.

FIGURE 16 UCLA campus Type B Sharrows.

Signage and Markings

Bikeway signage should conform to the signage standards identified in the Manual on Uniform Traffic Control Devices (MUTCD, 2009) and the California MUTCD 2010. These documents give specific information on the type and location of signage for the primary bikeway system. Table 1 on the next page provides guidance on some of the most important signs.

WAYFINDING SIGNAGE

Palm Springs should launch a wayfinding system to guide bicyclists to their destinations. Glendale, CA recently began installing wayfinding signs along their network, as Figure 18 shows. Signs will be typically placed at decision points along routes within the City's bicycle network, which may include the intersection of two or more bikeways and at key locations leading to and along bikeways. Similarly, Los Angeles recently began marking street signs with bicycles if the street is a bicycle friendly street (see Figure 19). Ideally, wayfinding signs should indicate direction, time and distance.

Figure 17 shows a supplemental "Bikes May Use the Full Lane" sign to alert motorists of cyclists right to the lane. These supplement wayfinding. This sign is being used as a potentially more effective sign than "Share the Road Signs".

Figure 7 illustrates a sign the City currently uses and can be used for wayfinding.

It is important to provide information to cyclists where bike routes turn, or where bikeways intersect. This can be done with both signs and pavement markings as shown in Figure 20. Palm Springs can enhance typical Class III routes with directional signage and pavement markings. These markings allow the cyclist to understand how the route continues, especially if it is one that may be less direct.

FIGURE 17 Bikes may Use the Full Lane (R4-11)

FIGURE 18 Glendale wayfinding sign.

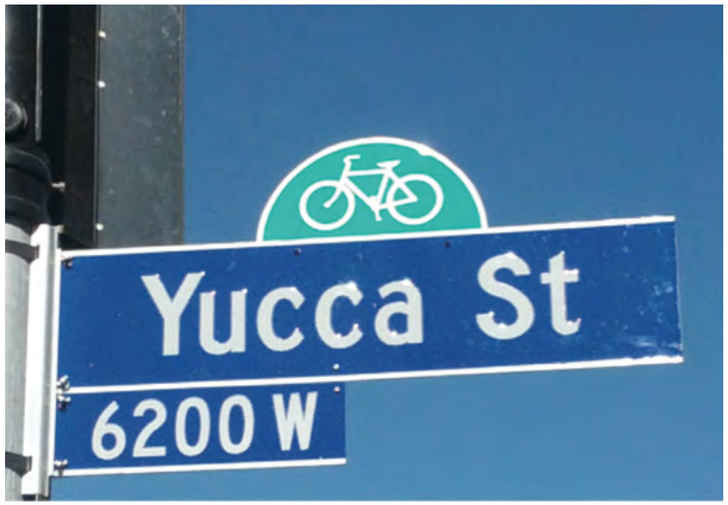


FIGURE 19 Los Angeles Bicycle Friendly Street sign.

FIGURE 20 Examples of paving markings (top two images) and directional signage (bottom two images).

TABLE 1 RECOMMENDED BIKEWAY SIGNAGE AND MARKINGS

Signage	Location	Color	CA MUTCD Designation	MUTCD Designation
Bicycle Crossing	For motorists at a bikeway crossing	B on Y	N/A	W11-15 with W11-15P (optional)
Bike Lane	At the far side of significant arterial intersections	B on W	R81	R3-17
Begin (bike lane)	Where a bike lane begins	B on W	R81A	
End (bike lane)	Where a bike lane ends	B on W	R81B	
Stop Ahead	Where a stop sign is obscured	B, R on Y	W3-1	W3-1
Signal Ahead	Where signal is obscured	B, R, G	W3-3	W3-3
Pedestrian Crossing	Where a pedestrian walkway crosses a bikeway	B on Y	W11-2	W11-2
Directional Signs	At intersections where access to major destinations is available	W on G	G7, G8	D1-1b, D1-2b, D1-3b, D1-1c, D1-2c, D1-3c
Right Lane Must Turn Right; Begin Right Turn Here, Yield to Bikes	Where a bike lane ends before an intersection	B on W	N/A, R4-4	R3-7, R4-4
Share the Road	Where there is need to warn motorists to watch for bicyclists along the highway	B on Y	W16-1 with W11-1	W16-1P with W11-1
Bicycles May Use Full Lane	Where travel lanes are too narrow for bicyclists and motor vehicles to travel side by side	B on W	R4-11	R4-11

CHOICE OF BIKEWAY TYPE

The type of treatment depends on the street or right-of-way, width, adjacent land uses, traffic volumes, and traffic speeds. When exclusive right-of-way exists, bike paths are planned. Bike lanes are planned on streets that have enough width to accommodate them. Road diets are planned to create space for bike lanes on multi-lane streets where traffic volumes allow. Improvements to bike lanes are planned where enough space exists to widen bike lanes or to stripe buffers. Bike routes are planned on streets where network connectivity is needed, but insufficient space exists for bike lanes, or where traffic volumes do not call for bike lanes.

The following factors should be considered guidelines, and will be modified and interpreted as necessary for a given situation. The City will use its judgment if it chooses to plan additional bikeways in the future or modify the proposed bikeways due to engineering constraints. The City will also use appropriate experimental processes and guidelines when implementing devices such as wayfinding markings, Type B sharrows, colored bike lanes, etc.

Lane Width

- Any road with 45 MPH speed limit: 11’ lanes preferred, minimum of 10’ allowable
- All other roads: Minimum 10’ lanes
- Parking lane: Minimum width of 7’, 8’ where bike lanes can be accommodated with wider parking lanes

Road Diets

Road diets are recommended to provide space for attractive bike lanes on where needed on four-lane streets with less than 20,000 Average Daily Traffic (ADT). This is the threshold that national studies have determined to have sufficient capacity with two lanes or two lanes and a center-turn lane. On six-lane streets, 40,000 ADT was used as the threshold for reducing the number of lanes to four.

Bikeway Type

- Minimum width of a bike lane is 5’, but it is recommended to use 6’ to 7’ as the standard wherever possible.
- Where bike lanes do not fit, but network connectivity is necessary, bike routes with sharrows will be planned.
- Type B sharrows are recommended along streets with high traffic volumes and where a high quality of bikeway is needed in central areas, near schools, and other key locations.
- Colored bike lanes are recommended in central areas, along commercial streets, along streets with high traffic volumes and where a high quality of bikeway is needed near schools and other key locations.
- Buffers are painted between the travel lanes and bike lane and/or between on-street parking and striped bike lanes to provide extra comfort to the cyclist where roadway width permits (see note on buffer design and MUTCD compliance below).

- Double buffered bike lanes are recommended where adequate space exists, where traffic volumes are high and in commercial areas where significant parking turnover is likely.
- Cycle tracks are recommended along one-way portions of Palm Canyon Drive and Indian Canyon Drive where they would offer protection in a busy area, and where merchants may benefit from the traffic calming that would result (see Design Guidelines on page 7).
- Where average daily traffic (ADT) is high, in central areas of the city, or where traffic moves fast, this Plan recommends coloring bike lanes to ensure the bikeway is prominent to motorists.
- Consider traffic circles to replace stop-controlled intersections to improve bikeways where appropriate

Painted buffers greater than 2' in width are legal in California if they are placed outside of a bicycle lane where there is no on-street parking. If there is on-street parking, the City may want to go through an experimental process with the California Traffic Control Device Committee (CTCDC) to install buffers wider than 2'. Some jurisdictions, such as the City of Los Angeles, have developed striping plans that they believe comply with the California MUTCD and California Vehicle Code, allowing them to install wide painted buffers without going through an experimental process. The striping plans include breaks in the buffers.

Type B sharrows will also have to go through the experimental process with the CTCDC.

- Field Work results
- Existing Bikeways
- Proposed Bikeways

All streets not listed in the Proposed Bikeways table will be Shared Lane Marking streets.

Tables follow the maps to show Existing and Proposed Bikeways.

The City has 11.5 miles of existing Class II bike lanes, 15.57 miles of existing Class III bike routes and 8.04 miles of existing sidewalk bike paths next to streets.

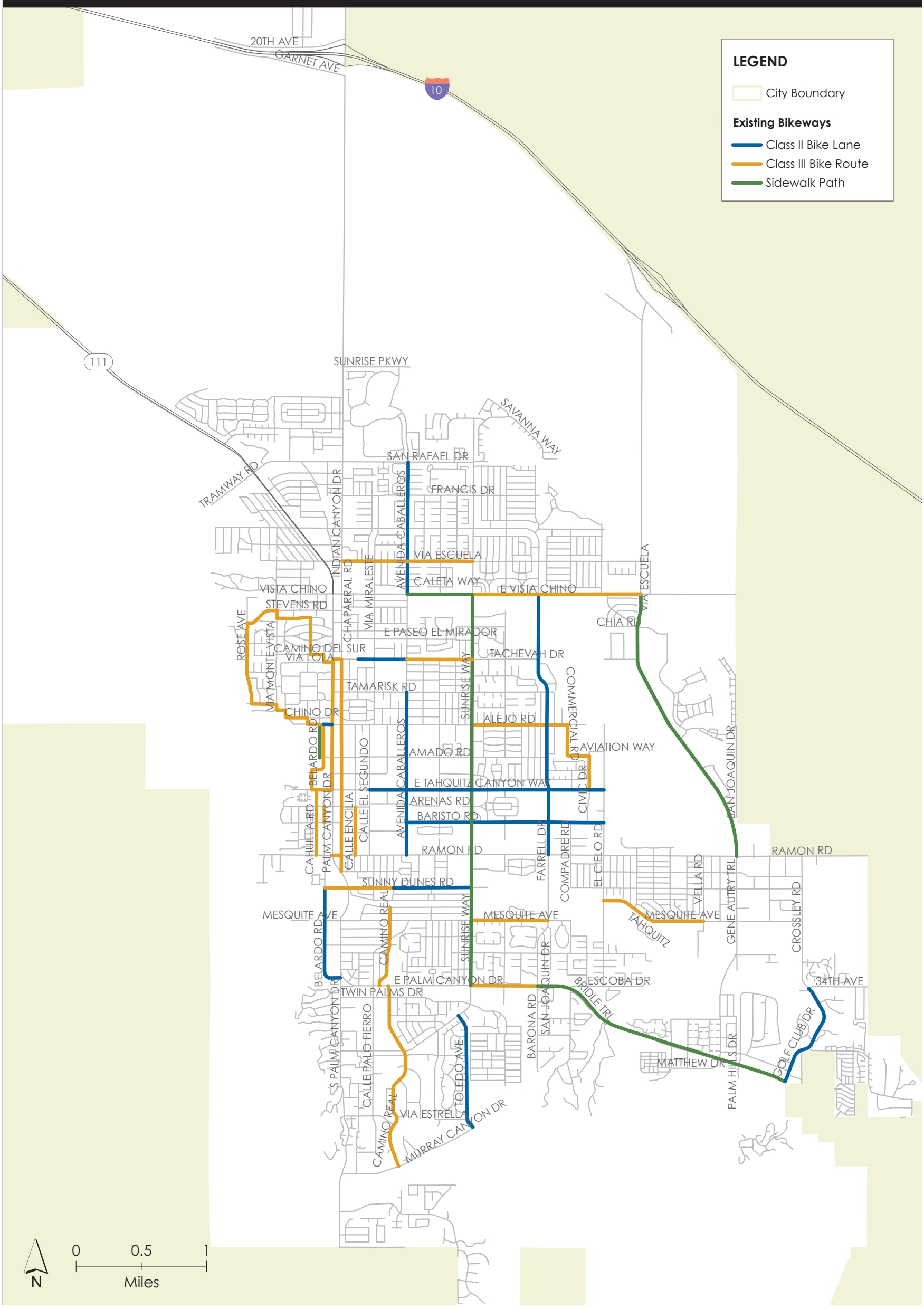
Table 2 shows the total proposed mileage for all types of bikeways along with planning level cost estimates.

TABLE 2 LENGTH BY BIKEWAY TYPE WITH PLANNING LEVEL COST ESTIMATES

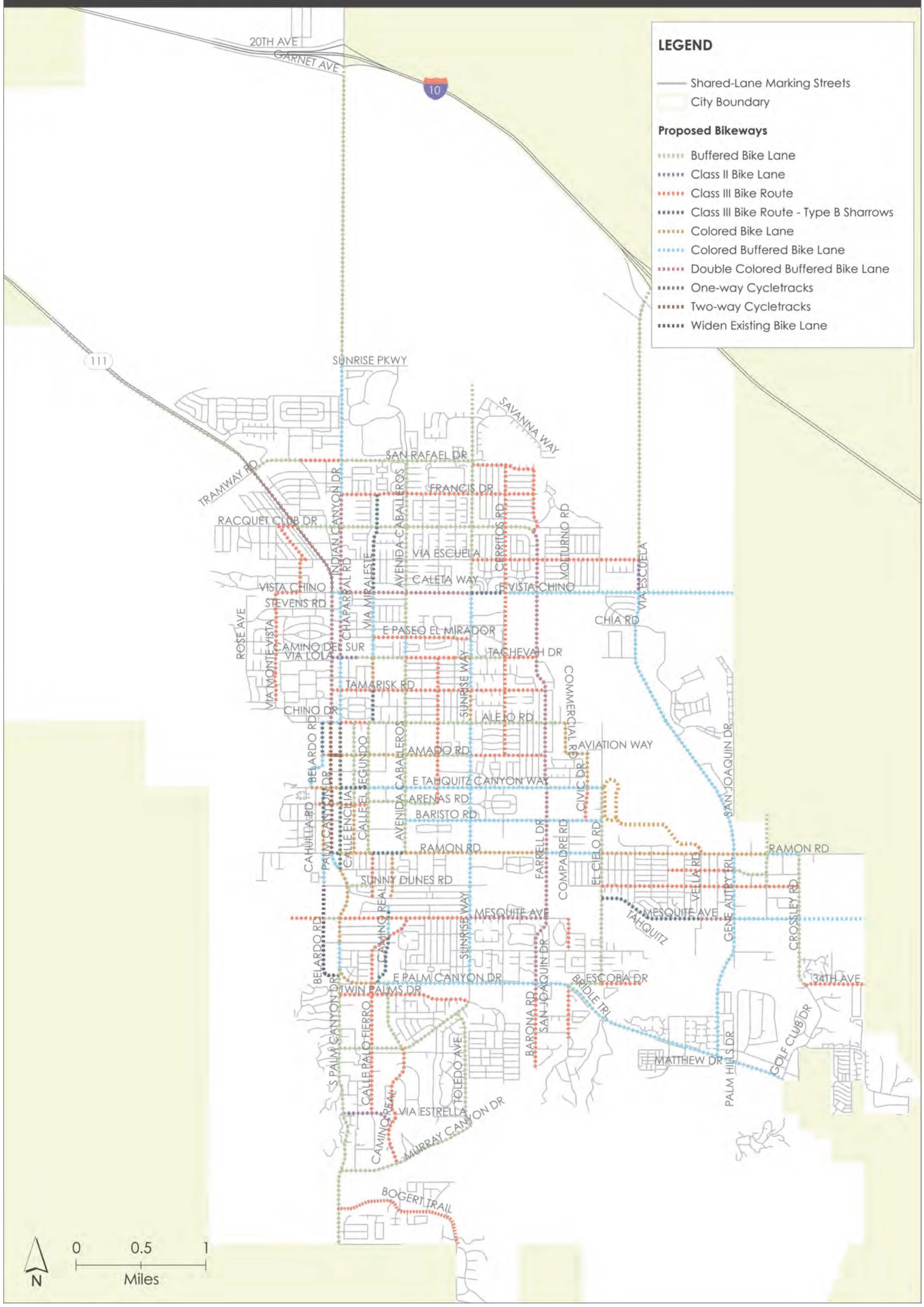
Bikeway Type	Total (mi.)	Cost/Mile	Estimated Cost
Buffered Bike Lanes	28.11	$65,000	$1,827,150
Class II Bike Lane	0.84	$50,000	$42,000
Class III Bike Route	23.86	$25,000	$596,500
Class III Bike Route with Type B Sharrows	3.53	$50,000	$176,500
Colored Buffered Bike Lanes	20.26	$150,000	$3,039,000
Colored Bike Lanes	8.54	$130,000	$1,110,200
One-way Cycletracks	1.13	$750,000	$847,500
Two-way Cycletracks	1.16	$800,000	$928,000
Double Colored Buffered Bike Lanes	8.72	$120,000	$1,046,400
Widen Existing Bike Lanes	0.79	$35,000	$27,650
Shared Lane Marking Streets	248.87	$10,000	$2,488,700
Grand Total	**339.94**		$12,129,600

Cycle tracks on Palm Canyon - 10 signal modifications, curb extension reconstruction. Requires more in depth cost analysis.
Cycle tracks on Indian Canyon - 7 signal modifications, curb extension reconstruction. Requires more in depth cost analysis.

Existing Bikeways
City of Palm Springs



Proposed Bikeways
City of Palm Springs



Existing and Proposed Bikeways

City of Palm Springs

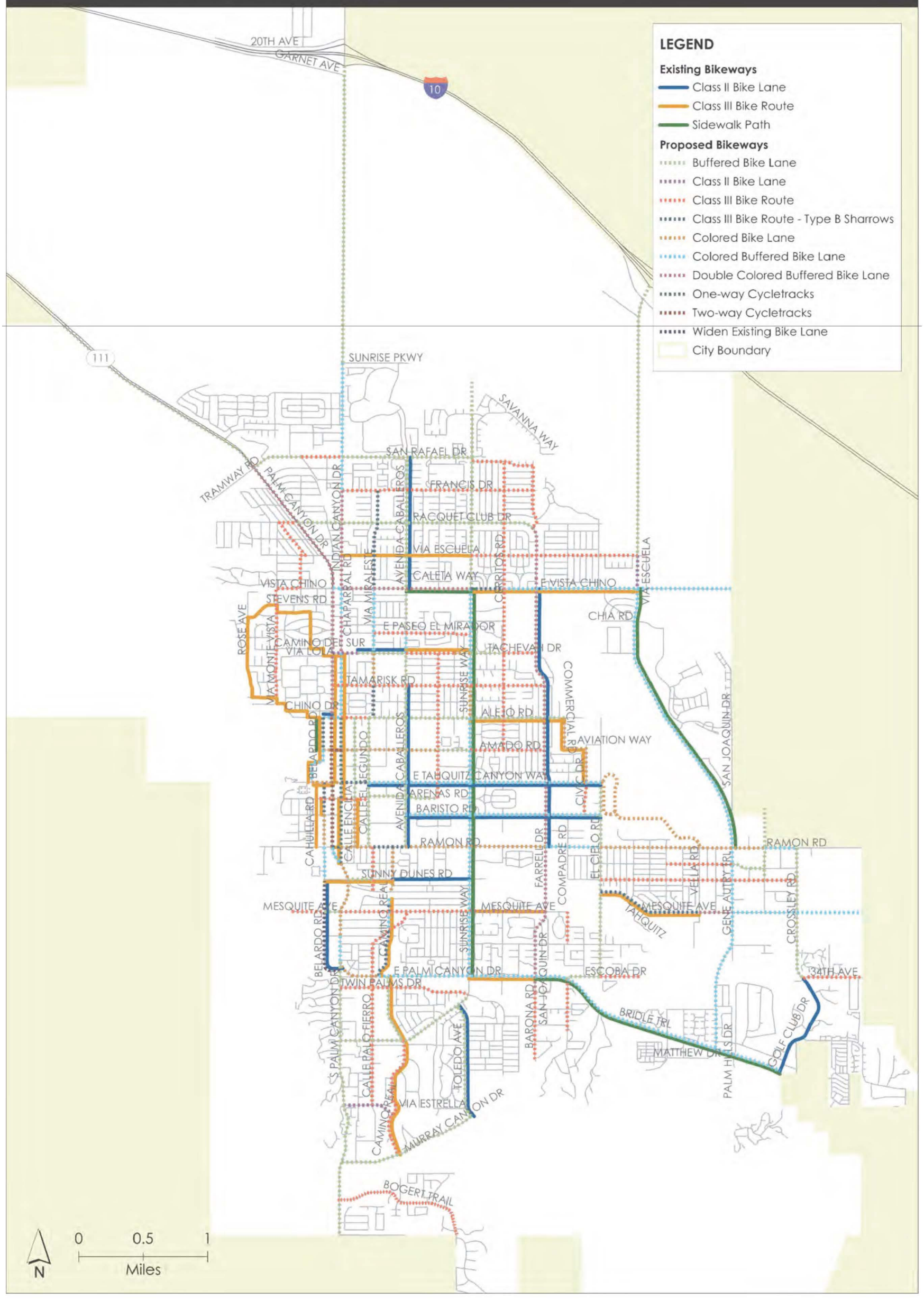


TABLE 3 FIELD WORK

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
34th Ave.	Crossley Rd.	Whitewater Wash	32		2		x	
Alejo Rd.	Belardo Rd.	N. Palm Canyon Dr.	38 -42		2		x	38' with no parking; 42' with parking and 2 turn lanes
Alejo Rd.	N. Palm Canyon Rd.	Indian Canyon Dr.	68		4	C		
Alejo Rd.	Indian Canyon Dr.	Calle El Segundo	32		2		x	
Alejo Rd.	N. Calle El Segundo	N. Sunrise Way	64		2		x	
Alejo Rd.	N. Sunrise Way	N. Farrell Dr.	51		2		x	
Alejo Rd.	N. Farrell Dr.	N. Civic Dr.	51		2		x	
Amado Rd.	N. Belardo Rd.	N. Indian Canyon Dr.	44		2		x	
Amado Rd.	N. Indian Canyon Dr.	N. Hermosa Dr.	48-60		2		x	Small stretch is narrower with soft shoulder
Amado Rd.	N. Hermosa Dr.	N. Sunrise Way	66		2		x	
Amado Rd.	N. Sunrise Way	N. Farrell Dr.	36-38		2		x	
Araby Rd.	E. Palm Canyon Dr.	Murray Canyon Dr.	40		2		x	
Arenas Rd.	S. Cahuilla Rd.	S. Palm Canyon Dr.	38		2		x	
Arenas Rd.	S. Palm Canyon Dr.	S. Indian Canyon Dr.	48-50		2	C	x	
Arenas Rd.	S. Indian Canyon Dr.	S. Calle Encilia	26		2		x	
Arenas Rd.	S. Calle Encilia	S. Calle El Segundo	33		2		x	
Arenas Rd.	S. Calle El Segundo	S. Avenida Caballeros	64		2		x	
Arenas Rd.	S. Avenida Caballeros	N. Hermosa Dr.	58		2		x	
Avenida Caballeros	W. Ramon Rd.	E. Tamarisk Rd.	64		2		x	6' wide bike lanes
Avenida Caballeros	E. Tamarisk Rd.	E. Tachevah Dr.	64		2		x	
Avenida Caballeros	E. Tachevah Dr.	E. Paseo El Mirador	50		4			
Avenida Caballeros	E. Paseo El Mirador	E. Vista Chino	64		4		x	
Avenida Caballeros	E. Vista Chino	E. San Rafael Dr.	64		2		x	
Avenida Granada	S. Palm Canyon Dr.	S. Camino Real	64		2		x	
Baristo Rd.	El Cielo Rd.	S. Avenida Caballeros	64		2		x	5' Bike lanes
Barona Rd.	E. Palm Canyon Dr.	Sandcliff Rd.	64		4		x	Parking not used much at the time of survey; Just S/O Ramon Rd. - no parking + center-turn lane
Barona Rd.	Sandcliff Rd.	South end	Narrow		2			Undeveloped
Belardo Rd.	W. Alejo Rd.	W. Amado Rd.	36-46		2		x	Multipurpose path on east side
Belardo Rd.	W. Amado Rd.	W. Tahquitz Canyon Way	48-58		2		x	
Belardo Rd.	W. Tahquitz Canyon Way	W. Arenas Rd.	40		2		x	
Belardo Rd.	W. Arenas Rd.	W. Baristo Rd.	40-48		2		x	Variable widths
Belardo Rd.	W. Baristo Rd.	W. Ramon Rd.	50		2		x	
Belardo Rd.	W. Ramon Rd.	E. Sunny Dunes Rd.	64		2		x	

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
Belardo Rd.	E. Sunny Dunes Rd.	S. Palm Canyon Dr.	36-38					
Bogert Trail	S. Palm Canyon Dr.	City limit	36				x	
Cahuilla Rd.	E. Tahquitz Canyon Way	E. Ramon Rd.	Narrow		2		x	
Calle El Segundo	E. Alejo Rd.	E. Amado Rd.	64		2		x	
Calle El Segundo	E. Amado Rd.	E. Ramon Rd.	64		4		x	
Calle Encilia	E. Alejo Rd.	E. Arenas Rd.	64		2	C	x	
Calle Encilia	E. Arenas Rd.	Ramon Rd.	47		2		x	Signed as one short bike route/30' section
Calle Palo Fierro	E. Ramon Rd.	N. Riverside Dr.	32-34		2		x	
Calle Palo Fierro	E. Mesquite Rd.	E. Palm Canyon Dr.	38-40		2		x	
Calle Palo Fierro	E. Palm Canyon Dr.	Twin Palms Dr.	40		2		x	
Calle Palo Fierro	Twin Palms Dr.	E. La Verne Way	24		2			
Calle Palo Fierro	E. La Verne Way	Ave Granada	40		2		x	
Camino Parocela	El Cielo Rd.	Gene Autry Trail	36-40		2		x	
Camino Parocela	Gene Autry Trail	San Luis Rey Rd.	50		2		x	
Camino Real	S. Riverside Dr.	Calle Palo Fierro	62		3		x	School
Camino Real	Calle Palo Fierro	E. Palm Canyon Dr.	30-51		2		x	Variable width
Camino Real	E. Palm Canyon Dr.	E. La Verne Way	64		2		x	
Camino Real	E. La Verne Way	Murray Canyon Dr.	38-40		2		x	
Cerritos Dr.	Joyce Dr.	Amado Rd.	20-40				x	
Civic Dr.	E. Alejo Rd.	E. Tahquitz Canyon Way	36-44		2		x	36' where parking probibited, 44' where permitted; Good route - signed bike route now
Civic Dr.	E. Tahquitz Canyon Way	E. Baristo Rd.	40		2		x	
Compadre Rd.	E. Mesquite Ave.	Sonora Rd.	40		2		x	
Crossley Rd.	E. Ramon Rd.	Sunny Dunes Rd.	64		4	C		
Crossley Rd.	Sunny Dunes Rd.	Dinah Shore Dr.	64		2			
Crossley Rd.	Dinah Shore Dr.	Entrance to Fairway Cir.	56		2			
Crossley Rd.	Entrance to Fairway Circle	34th Ave.	60-80		4	C		No bike lane
Dinah Shore Dr.	Gene Autry Trail	Golf Club Dr./Crossley Rd.	32	x	4	M		
Dinah Shore Dr.	Crossley Rd.	City Limit	31	x	4	M		
E. Palm Canyon Dr.	S. Palm Canyon Dr.	S. Indian Trail	64		4	C		
E. Palm Canyon Dr.	S. Indian Trail	Arguilla Rd.	70		4	C		
E. Palm Canyon Dr.	Arguilla Rd.	S. Sunrise Way	76		4	C		
E. Palm Canyon Dr.	S. Sunrise Way	Smoke Tree Ln.	68		4	C		
E. Palm Canyon Dr.	Smoke Tree Ln.	Farrell Dr./Barona Rd.	32	x	4	M		

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
E. Palm Canyon Dr.	Farrell Dr./Barona Rd.	Murray Creek Bridge	65		4			
E. Palm Canyon Dr.*	Murray Creek Bridge	Golf Club Dr.	65-70		4	C		
E. Palm Canyon Dr.*	Farrell Dr.	Golf Club Dr.						Sidewalk bike path on north side.
El Cielo Rd.	E. Tahquitz Canyon Way	E. Ramon Rd.	64		4	C	x	
El Cielo Rd.	E. Ramon Rd.	Escoba Dr.	64		2	C	x	
Escoba Dr.	E. Palm Canyon Dr.	El Cielo Rd.	64		2	C		
Escoba Dr.	El Cielo Rd.	End	40		2		x	To River
Farrell Dr.	E. Joyce Rd.	E. Racquet Club Dr.	36		2		x	
Farrell Dr.	E. Racquet Club Dr.	E. Vista Chino	64		4	C		
Farrell Dr.	E. Vista Chino	E. Ramon Rd.	64		4	C	x	Bike route signs on east side only from Vista Chino to Ramon Rd.
Farrell Dr.	E. Ramon Rd.	E. Palm Canyon Dr.	64		4			
Francis Dr.	N. Indian Canyon Dr.	N. Farrell Dr.	36		2		x	
Gene Autry Trail	I-10	E. Via Escuela	69		4			8' shoulders
Gene Autry Trail	E. Via Escuela	E. Vista Chino	27	x	4	M		
Gene Autry Trail*	E. Vista Chino	E. Ramon Rd.	34-35	x	6	M		
Gene Autry Trail*	E. Ramon Rd.	E. Mesquite Ave.	35	x	4	M		Parking not used (at time of survey); narrows @ Mesquite Ave.
Gene Autry Trail*	E. Mesquite Ave.	S/O E. Mesquite Ave.	76		4	C		No bike route signs
Gene Autry Trail*	S/O E. Mesquite Ave.	E. Palm Canyon Dr.	60-76		3	C		Protected bike lane/ped path exist over bridge
Golf Club Dr.	34th Ave.	E. Palm Canyon Dr.	33	x	4	M		8' bike lane
Hermosa Dr.	E. Tachevah Dr.	E. Amado Rd.	40		2		x	
Hermosa Dr.	E. Amado Rd.	E. Arenas Rd.	22		2		x	Hermosa Dr. stops at Arenas Rd.
Indian Canyon Dr.	I-10	Sunrise Pkwy.	69		4			8' painted shoulders; narrows near Amtrak Station; bike lanes north of Amtrak Station
Indian Canyon Dr.	Sunrise Pkwy.	San Rafael Dr.	31	x	4	M		
Indian Canyon Dr.	San Rafael Dr.	E. Francis Dr.	55-60		4	C		
Indian Canyon Dr.	E. Francis Dr.	Racquet Club Dr.	76		4	C	x	
Indian Canyon Dr.	Racquet Club Dr.	Vista Chino	70-76		4	C	x	
Indian Canyon Dr.	Vista Chino	E. Camino Monte Vista	60		4	C	x	
Indian Canyon Dr.	E. Camino Monte Vista	E. Tachevah Dr.	76		4	C	x	
Indian Canyon Dr.	E. Tachevah Dr.	E. Alejo Rd.	61		4	C		Becomes two-way N/O Alejo Rd.
Indian Canyon Dr.	E. Alejo Rd.	E. Arenas Rd.	64		4		x	Curb extension; one way
Indian Canyon Dr.	E. Arenas Rd.	E. Camino Parocela	64		4		x	One-way
Joyce Rd.	N. Sunrise Way	N. Farrell Dr.	36		2		x	
Kirk Douglas Way/Airport	E. Tahquitz Canyon Way	E. Ramon Rd.	28, 43, 51		2,3,4			28' with 2 lanes, 43' with 3 lanes, 51' with 4 lanes

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
La Verne Way	S. Palm Canyon Dr.	S. Sunrise Way	62-64		4		x	Bike route signs only at intersections of Camino Real and Toledo Ave.
Las Palmas Trail: Via Lola, Camino del Corte, Camino Sur, Camino Cerrito, Camino Norte, Vine Ave., Stevens Rd., Rose Ave., Crescent Dr., Belardo Rd., Alejo Rd.			Varies, Narrow		2		x	
Mesquite Ave.	West End	S. Belardo Rd.	20-29-36		2			Variable width
Mesquite Ave.	S. Belardo Rd.	S. Palm Canyon Dr.	64		2		x	
Mesquite Ave.	S. Palm Canyon Dr.	S. Camino Real	40		2		x	
Mesquite Ave.	S. Camino Real	S. Sunrise Way	40-50		2		x	Variable width, sloped parking
Mesquite Ave.	S. Sunrise Way	S. Farrell Dr.	64		2		x	Existing bike route signs
Mesquite Ave.	El Cielo Rd.	Vella Rd.	Varies		2		x	Too narrow for bike lanes to Vella Rd.; bike route to Vella Rd.
Mesquite Ave.	Vella Rd.	S. Gene Autry Trail	64		4	C	x	Check ADT, maybe don't need 4 lanes
Murray Canyon Dr.	S. Palm Canyon Dr.	Toledo Ave.	64		4		x	Parking not used at the time of survey
N. Palm Canyon Dr.*	North City Limit	Tram Way	34	x	4			Wide shoulder
N. Palm Canyon Dr.*	Tram Way	W. San Rafael Dr.	64		4		x	
N. Palm Canyon Dr.*	W. San Rafael Dr.	Vista Chino	64		4		x	
N. Palm Canyon Dr.	Vista Chino	Alejo Rd.	64		4		x	
N./S. Palm Canyon Dr.	Alejo Rd.	Ramon Rd.	50-55		3		x	One-way
Paseo El Mirador	N. Via Miraleste	N. Avenida Caballeros	40		2		x	
Paseo El Mirador	N. Avenida Caballeros	Linda Vista Rd.	21		2		x	
Paseo El Mirador	Linda Vista Rd.	N. Sunrise Way	40		2		x	
Racquet Club Rd.	N. Palm Canyon Dr.	N. Indian Canyon Dr.	64		4	C		
Racquet Club Rd.	N. Indian Canyon Dr.	N. Farrell Dr.	62-64		4		x	
Racquet Club Rd., Cardillo Ave., Via Escuela, Via Norte, Vista Chino, Via Monte Vista	N. Indian Canyon Dr.	Crescent Dr.	20-40				x	
Ramon Rd.	S. Palm Canyon Dr.	S. Indian Canyon Dr.	62		4	C	x	Parking side bike route
Ramon Rd.	S. Indian Canyon Dr.	S. Calle Encilia	64		4	C		
Ramon Rd.	S. Calle Encilia	Calle Palo Fierro	61		4	C		
Ramon Rd.	Calle Palo Fierro	S. Avenida Caballeros	70		4	C	x	Parking allowed but not used at the time of the survey
Ramon Rd.	S. Avenida Caballeros	S. Sunrise Way	76		4	C	x	
Ramon Rd.	S. Sunrise Way	S. Farrell Dr.	64		4	C		No bike route signs
Ramon Rd.	S. Farrell Dr.	El Cielo Rd.	70		4	C		

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
Ramon Rd.	El Cielo Rd.	Kirk Douglas Way	86		6	C		
Ramon Rd.	Kirk Douglas Way	Gene Autry Trail	46 and 35	x	7	M		4 lanes WB, 3 lanes EB
Ramon Rd.	Gene Autry Trail	San Luis Rey Rd.	35	x	6	M		No bike route signs
Ramon Rd.	San Luis Rey Rd.	Crossley Rd.	35	x	4	M		No bike route signs
S. Palm Canyon Dr.	W. Ramon Rd.	E. Camino Parocela	64		3			One-way
S. Palm Canyon Dr.	E. Camino Parocela	Morongo Rd.	62-64		4	C		Cross section varies; 2 bike route signs NB< 1 SB
S. Palm Canyon Dr.	Morongo Rd.	E. Palm Canyon Dr.	72		4	C		
S. Palm Canyon Dr.	E. Palm Canyon Dr.	El Portal	56		4		x	
S. Palm Canyon Dr.	El Portal	Ave Granada	64		4		x	
S. Palm Canyon Dr.	Ave Granada	South City Limit	64		4		x	
San Luis Rey Rd.	Mission Dr.	E. Ramon Rd.	68		3	C	x	Tapers down north
San Luis Rey Rd.	E. Ramon Rd.	Sunny Dunes Rd.	50		2	C		
San Rafael Dr.	N. Palm Canyon Rd.	N. Virginia Rd.	64		4	C	x	
San Rafael Dr.	N. Virginia Rd.	Indian Canyon Dr.	24		2			Soft shoulders
San Rafael Dr.	N. Indian Canyon Dr.	N. Avenida Caballeros	64		4	C		
San Rafael Dr.	N. Avenida Caballeros	N. Sunrise Way	64		4		x	
Sunny Dunes Rd.	West End	S. Palm Canyon Dr.	40		2		x	Signed bike route
Sunny Dunes Rd.	S. Palm Canyon Dr.	Calle Palo Fierro	64		2		x	Signed bike route
Sunny Dunes Rd.	Calle Palo Fierro	S. Camino Real	40		2		x	
Sunny Dunes Rd.	S. Camino Real	S. Sunrise Way	40		2		x	Parking on south side
Sunny Dunes Rd.	El Cielo Rd.	Crossley Rd.	40		2		x	Parking not used at the time of the survey
Sunrise Way	Whitewater Wash	E. San Rafael Dr.	35	x	4	M		
Sunrise Way	E. San Rafael Dr.	E. Vista Chino	64		4	C		
Sunrise Way	E. Vista Chino	E. Tamarisk Rd.	70		4	C		
Sunrise Way	E. Tamarisk Rd.	E. Alejo Rd.	66		4	C		
Sunrise Way	E. Alejo Rd.	E. Ramon Rd.	70		4	C		
Sunrise Way	E. Ramon Rd.	E. Sunny Dunes Rd.	72		4	C		No parking
Sunrise Way	E. Sunny Dunes Rd.	E. Palm Canyon Dr.	70		4	C		Parking on west side - not used at time of survey
Sunrise Way	Vista Chino	E. Palm Canyon Dr.						Sidewalk bike path whole way - 8'
Tachevah Dr.	N. Palm Canyon Rd.	N. Indian Canyon Dr.	52		4		x	Parking south side only
Tachevah Dr.	N. Indian Canyon Dr.	1/2 way to N. Via Miraleste	46		2	C	x	
Tachevah Dr.	1/2 way between N. Indian Canyon Dr. and N. Via Miraleste	N. Via Miraleste	56		2	C	x	Bike lane on north side only; Parking on south side only
Tachevah Dr.	N. Via Miraleste	N. Avenida Caballeros	51-52		2	C	x	Bike lane on north side only; Parking on south side only
Tachevah Dr.	N. Avenida Caballeros	N. Paseo de Anza	24-32		2		x	
Tachevah Dr.	N. Paseo de Anza	N. Sunrise Way	48-52		2		x	

Street	From	To	Width (Ft.)	To Median (x)	# of Lanes	Center Turn Lane/Median (C,M)	Parking (x)	Comments
Tachevah Dr.	N. Sunrise Way	Cerritos Dr.	64		2		x	
Tachevah Dr.	Cerritos Dr.	N. Farrell Dr.	33		2		x	
Tahquitz Canyon Way	N. Museum Dr.	N. Palm Canyon Dr.	50		2		x	
Tahquitz Canyon Way	N. Palm Canyon Dr.	N. Indian Canyon Dr.	47		2		x	
Tahquitz Canyon Way	N. Indian Canyon Dr.	N. Calle El Segundo	31-33	x	4	M	x	
Tahquitz Canyon Way	N. Calle El Segundo	El Cielo Rd.	31	x	4	M		5-6' bike lane
Tamarisk Rd.	N. Palm Canyon Dr.	N. Via Miraleste	30		2		x	
Tamarisk Rd.	N. Via Miraleste	N. Avenida Caballeros	41		2		x	No pavement for parking, north side
Tamarisk Rd.	N. Avenida Caballeros	N. Sunrise Way	30		2		x	
Tamarisk Rd.	N. Sunrise Way	N. Farrell Dr.	40		2		x	
Toledo Ave.	S. La Verne Way	Murray Canyon Dr.	64		2		x	6' bike lane; 14' parking
Twin Palms Dr.	S. Palm Canyon Dr.	S. La Verne Way	39		2		x	
Via Escuela	N. Palm Canyon Rd.	N. Indian Canyon Dr.	40		2		x	
Via Escuela	N. Indian Canyon Dr.	N. Sunrise Way	40		2		x	
Via Escuela	N. Sunrise Way	N. Volturno Rd.	36		2		x	
Via Escuela	N. Volturno Rd.	N. Gene Autry Trail	40		2		x	
Via Miraleste	E. Francis Dr.	E. Vista Chino	32-40		2		x	
Via Miraleste	E. Vista Chino	E. Tachevah Dr.	51-52		2		x	
Via Miraleste	E. Tachevah Dr.	E. Tamarisk Rd.	45		4		x	
Via Miraleste	E. Tamarisk Rd.	E. Alejo Rd.	35					Soft shoulders
Vista Chino*	N. Palm Canyon Rd.	N. Indian Canyon Dr.	51		4			
Vista Chino*	N. Indian Canyon Dr.	N. Sunrise Way	76		4		x	
Vista Chino*	N. Sunrise Way	Cerritos Dr.	24, 36	x	5	M		3 lanes EB, 2 lanes WB
Vista Chino*	Cerritos Dr.	N. Gene Autry Trail	64		4	C		
Vista Chino	N. Gene Autry Trail	East City Limit	60		4			Wide paved shoulders

*State Highways. Modifications to these streets will require cooperation with Caltrans.

TABLE 4 EXISTING BIKEWAYS

Street	From	To	Sidewalk Paths	Class II Bike Lane (BL)	Class III Bike Route
Alejo Rd.	Belardo Rd.	N. Palm Canyon Dr.		x	
Alejo Rd.	N. Sunrise Way	N. Farrell Dr.			x
Alejo Rd.	N. Farrell Dr.	N. Civic Dr.			x
Avenida Caballeros	W. Ramon Rd.	E. Tamarisk Rd.		x	
Avenida Caballeros	E. Vista Chino	E. San Rafael Dr.		x	
Baristo Rd.	El Cielo Rd.	S. Avenida Caballeros		x	
Belardo Rd.	W. Alejo Rd.	W. Amado Rd.	x		
Belardo Rd.	W. Arenas Rd.	W. Baristo Rd.			x
Belardo Rd.	E. Sunny Dunes Rd.	S. Palm Canyon Dr.		x	
Cahuilla Rd.	E. Tahquitz Canyon Way	E. Ramon Rd.			x
Calle Encilia	E. Arenas Rd.	Ramon Rd.			x
Camino Real	S. Riverside Dr.	Calle Palo Fierro			x
Camino Real	Calle Palo Fierro	E. Palm Canyon Dr.			x
Camino Real	E. Palm Canyon Dr.	E. La Verne Way			x
Camino Real	E. La Verne Way	Murray Canyon Dr.			x
Civic Dr.	E. Alejo Rd.	E. Tahquitz Canyon Way			x
E. Palm Canyon Dr.	S. Sunrise Way	Smoke Tree Ln.			x
E. Palm Canyon Dr.	Smoke Tree Ln.	Farrell Dr./Barona Rd.			x
E. Palm Canyon Dr.	Farrell Dr.	Golf Club Dr.	x		
Farrell Dr.	E. Vista Chino	E. Ramon Rd.		x	
Gene Autry Trail	E. Vista Chino	E. Ramon Rd.	x		
Golf Club Dr.	34th Ave.	E. Palm Canyon Dr.		x	
Indian Canyon Dr.	E. Tachevah Dr.	E. Alejo Rd.			x
Indian Canyon Dr.	E. Alejo Rd.	E. Arenas Rd.			x
Indian Canyon Dr.	E. Arenas Rd.	E. Camino Parocela			x
Las Palmas Trail: Via Lola, Camino del Corte, Camino Sur, Camino Cerrito, Camino Norte, Vine Ave., Stevens Rd., Rose Ave., Crescent Dr., Belardo Rd., Alejo Rd.					x
Mesquite Ave.	S. Sunrise Way	S. Farrell Dr.			x

Street	From	To	Sidewalk Paths	Class II Bike Lane (BL)	Class III Bike Route
Mesquite Ave.	El Cielo Rd.	Vella Rd.			x
Ramon Rd.	S. Palm Canyon Dr.	S. Indian Canyon Dr.			x
Sunny Dunes Rd.	West End	S. Palm Canyon Dr.			x
Sunny Dunes Rd.	S. Palm Canyon Dr.	Calle Palo Fierro			x
Sunny Dunes Rd.	Calle Palo Fierro	S. Camino Real			x
Sunny Dunes Rd.	S. Camino Real	S. Sunrise Way		x	
Sunrise Way	Vista Chino	E. Palm Canyon Dr.	x		
Tachevah Dr.	N. Palm Canyon Rd.	N. Indian Canyon Dr.			x
Tachevah Dr.	1/2 way between N. Indian Canyon Dr. and N. Via Miraleste	N. Via Miraleste		x	
Tachevah Dr.	N. Via Miraleste	N. Avenida Caballeros		x	
Tachevah Dr.	N. Avenida Caballeros	N. Paseo de Anza			x
Tachevah Dr.	N. Paseo de Anza	N. Sunrise Way			x
Tahquitz Canyon Way	N. Calle El Segundo	El Cielo Rd.		x	
Toledo Ave.	S. La Verne Way	Murray Canyon Dr.		x	
Via Escuela	N. Indian Canyon Dr.	N. Sunrise Way			x
Vista Chino	N. Avenida Caballeros	N. Sunrise Way	x		
Vista Chino	N. Sunrise Way	Cerritos Dr.			x
Vista Chino	Cerritos Dr.	N. Gene Autry Trail			x

TABLE 5 PROPOSED BIKEWAYS

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
34th Ave.	Crossley Rd.	Whitewater Wash							x				0.46
Alejo Rd.	Belardo Rd.	N. Palm Canyon Dr.					x (remove left-turn lane)						0.07
Alejo Rd.	N. Palm Canyon Rd.	Indian Canyon Dr.					x						0.07
Alejo Rd.	Indian Canyon Dr.	Calle El Segundo							x				0.22
Alejo Rd.	N. Calle El Segundo	N. Sunrise Way				x							0.78
Alejo Rd.	N. Sunrise Way	N. Farrell Dr.				x							0.57
Alejo Rd.	N. Farrell Dr.	N. Civic Dr.				x							0.16
Amado Rd.	N. Belardo Rd.	N. Indian Canyon Dr.			x								0.14
Amado Rd.	N. Indian Canyon Dr.	N. Hermosa Dr.			x								0.75
Amado Rd.	N. Hermosa Dr.	N. Sunrise Way				x							0.25
Amado Rd.	N. Sunrise Way	N. Farrell Dr.							x				0.57
Araby Rd.	E. Palm Canyon Dr.	Murray Canyon Dr.							x				0.4
Arenas Rd.	S. Cahuilla Rd.	S. Palm Canyon Dr.							x				0.12
Arenas Rd.	S. Palm Canyon Dr.	S. Indian Canyon Dr.			x								0.07
Arenas Rd.	S. Indian Canyon Dr.	S. Calle Encilia							x				0.1
Arenas Rd.	S. Calle Encilia	S. Calle El Segundo							x				0.11
Arenas Rd.	S. Calle El Segundo	S. Avenida Caballeros				x (w/ road diet)							0.28
Arenas Rd.	S. Avenida Caballeros	N. Hermosa Dr.				x							0.25
Avenida Granada	S. Palm Canyon Dr.	S. Camino Real	x (8')										0.4
Avenida Caballeros	W. Ramon Rd.	E. Tamarisk Rd.				x							1.25
Avenida Caballeros	E. Tamarisk Rd.	E. Tachevah Dr.				x							0.25
Avenida Caballeros	E. Tachevah Dr.	E. Paseo El Mirador					x						0.16
Avenida Caballeros	E. Paseo El Mirador	E. Vista Chino				x							0.34
Avenida Caballeros	E. Vista Chino	E. San Rafael Dr.				x							1.01

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Baristo Rd.	El Cielo Rd.	S. Avenida Caballeros					x						1.51
Barona Rd.	E. Palm Canyon Dr.	Sandcliff Rd.						x (w/ road diet)					0.12
Barona Rd.	Sandcliff Rd.	South end							x				0.53
Belardo Rd.	W. Alejo Rd.	W. Amado Rd.								x			0.25
Belardo Rd.	W. Amado Rd.	W. Tahquitz Canyon Way					x						0.33
Belardo Rd.	W. Tahquitz Canyon Way	W. Arenas Rd.								x			0.13
Belardo Rd.	W. Arenas Rd.	W. Baristo Rd.								x			0.12
Belardo Rd.	W. Baristo Rd.	W. Ramon Rd.			x (7')								0.25
Belardo Rd.	W. Ramon Rd.	E. Sunny Dunes Rd.					x						0.25
Belardo Rd.	E. Sunny Dunes Rd.	S. Palm Canyon Dr.		x									0.79
Bogert Trail	S. Palm Canyon Dr.	City limit							x				
Calle El Segundo	E. Alejo Rd.	E. Amado Rd.				x							0.25
Calle El Segundo	E. Amado Rd.	E. Ramon Rd.				x (w/ road diet)							0.75
Calle Encilia	E. Alejo Rd.	E. Arenas Rd.				x							0.63
Calle Encilia	E. Arenas Rd.	Ramon Rd.			x								0.37
Calle Palo Fierro	E. Ramon Rd.	N. Riverside Dr.							x				0.34
Calle Palo Fierro	E. Mesquite Rd.	E. Palm Canyon Dr.							x				0.63
Calle Palo Fierro	E. Palm Canyon Dr.	Twin Palms Dr.							x				0.09
Calle Palo Fierro	Twin Palms Dr.	E. La Verne Way							x				0.41
Calle Palo Fierro	E. La Verne Way	Ave Granada							x				0.5
Camino Parocela	El Cielo Rd.	Gene Autry Trail							x				0.51
Camino Parocela	Gene Autry Trail	San Luis Rey Rd.				x							0.26
Camino Real	Ramon Rd.	N. Riverside Dr.			x								0.35
Camino Real	S. Riverside Dr.	San Lorenzo Rd.					x						0.05
Camino Real	San Lorenzo Rd.	E. Mesquite Ave.								x			0.05
Camino Real	E. Mesquite Ave.	Calle Palo Fierro					x						0.14
Camino Real	Calle Palo Fierro	E. Palm Canyon Dr.								x			0.38
Camino Real	E. Palm Canyon Dr.	E. La Verne Way				x							0.53
Camino Real	E. La Verne Way	Murray Canyon Dr.							x				0.95
Cerritos Dr.	Joyce Dr.	Amado Rd.							x				

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Civic Dr.	E. Alejo Rd.	E. Tahquitz Canyon Way			x								0.66
Civic Dr.	E. Tahquitz Canyon Way	E. Baristo Rd.							x				0.25
Compadre Rd.	E. Mesquite Ave.	Sonora Rd.							x				0.25
Crossley Rd.	E. Ramon Rd.	Sunny Dunes Rd.				x (w/ road diet)							0.25
Crossley Rd.	Sunny Dunes Rd.	Dinah Shore Dr.				x							0.25
Crossley Rd.	Dinah Shore Dr.	Entrance to Fairway Cir.				x							0.31
Crossley Rd.	Entrance to Fairway Circle	34th Ave.				x (w/ road diet)							0.22
Dinah Shore Dr.	Gene Autry Trail	Golf Club Dr./Crossley Rd.					x						0.5
Dinah Shore Dr.	Crossley Rd.	City Limit					x						0.5
E. Palm Canyon Dr.	S. Palm Canyon Dr.	S. Indian Trail			x								0.35
E. Palm Canyon Dr.	S. Indian Trail	Arguilla Rd.					x						0.33
E. Palm Canyon Dr.	Arguilla Rd.	S. Sunrise Way					x						0.37
E. Palm Canyon Dr.	S. Sunrise Way	Smoke Tree Ln.					x						0.26
E. Palm Canyon Dr.	Smoke Tree Ln.	Farrell Dr./Barona Rd.					x						0.26
E. Palm Canyon Dr.	Farrell Dr./Barona Rd.	Murray Creek Bridge					x						0.53
E. Palm Canyon Dr.	Murray Creek Bridge	Golf Club Dr.					x						1.55
El Cielo Rd.	E. Tahquitz Canyon Way	E. Ramon Rd.				x (w/ road diet)							0.5
El Cielo Rd.	E. Ramon Rd.	Escoba Dr.				x							1
Escoba Dr.	E. Palm Canyon Dr.	El Cielo Rd.				x							0.26
Escoba Dr.	El Cielo Rd.	End							x				0.32
Farrell Dr.	E. Joyce Rd.	E. Racquet Club Dr.							x				0.5
Farrell Dr.	E. Racquet Club Dr.	E. Vista Chino						x (w/ road diet)					0.48
Farrell Dr.	E. Vista Chino	E. Ramon Rd.						x (w/ road diet)					2.02
Farrell Dr.	E. Ramon Rd.	E. Palm Canyon Dr.						x (w/ road diet)					1.03

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Francis Dr.	N. Indian Canyon Dr.	N. Farrell Dr.							x				1.48
Gene Autry Trail	I-10	E. Via Escuela				x (add 4' buffer)							2.1
Gene Autry Trail	E. Via Escuela	E. Vista Chino	x										0.25
Gene Autry Trail	E. Vista Chino	E. Ramon Rd.					x (w/ road diet to 4 lanes)						2.22
Gene Autry Trail	E. Ramon Rd.	E. Mesquite Ave.					x						0.5
Gene Autry Trail	E. Mesquite Ave.	S/O E. Mesquite Ave.					x						0.16
Gene Autry Trail	S/O E. Mesquite Ave.	E. Palm Canyon Dr.					x						0.93
Hermosa Dr.	E. Tachevah Dr.	E. Amado Rd.							x				0.75
Hermosa Dr.	E. Amado Rd.	E. Arenas Rd.							x				0.37
Indian Canyon Dr.	I-10	Sunrise Pkwy.				x (add 4' buffer)							2.3
Indian Canyon Dr.	Sunrise Pkwy.	San Rafael Dr.					x						0.73
Indian Canyon Dr.	San Rafael Dr.	E. Francis Dr.					x (w/ road diet)						0.26
Indian Canyon Dr.	E. Francis Dr.	Racquet Club Dr.						Option1 (w/ road diet)		Option 2			0.25
Indian Canyon Dr.	Racquet Club Dr.	Vista Chino						Option1 (w/ road diet)		Option 2			0.5
Indian Canyon Dr.	Vista Chino	E. Camino Monte Vista					Option1 (w/ road diet)			Option 2			0.22
Indian Canyon Dr.	E. Camino Monte Vista	E. Tachevah Dr.						Option1 (w/ road diet)		Option 2			0.28
Indian Canyon Dr.	E. Tachevah Dr.	E. Alejo Rd.					Option1 (w/ road diet)			Option 2			0.5
Indian Canyon Dr.	E. Alejo Rd.	E. Arenas Rd.						Option 3 (road diet to 3 lanes on west side)			Option 1 (road diet to 3 lanes on west side)	Option 2 (road diet to 3 lanes west side)	0.63

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Indian Canyon Dr.	E. Arenas Rd.	E. Camino Parocela						Option 3 (road diet to 3 lanes on west side)			Option 1 (road diet to 3 lanes on west side)	Option 2 (road diet to 3 lanes on west side)	0.5
Joyce Rd.	N. Sunrise Way	N. Farrell Dr.							x				0.48
Kirk Douglas Way/Airport	E. Tahquitz Canyon Way	E. Ramon Rd.			x (7')								1.56
La Verne Way	S. Palm Canyon Dr.	S. Sunrise Way				x							1.11
Mesquite Ave.	West End	S. Belardo Rd.							x				0.25
Mesquite Ave.	S. Belardo Rd.	S. Palm Canyon Dr.				x							0.12
Mesquite Ave.	S. Palm Canyon Dr.	S. Camino Real							x				0.38
Mesquite Ave.	S. Camino Real	S. Sunrise Way							x				0.62
Mesquite Ave.	S. Sunrise Way	S. Farrell Dr.						x					0.59
Mesquite Ave.	El Cielo Rd.	Vella Rd.								x			0.81
Mesquite Ave.	Vella Rd.	S. Gene Autry Trail						x (w/ road diet)					0.26
Murray Canyon Dr.	S. Palm Canyon Dr.	Toledo Ave.				x							1.09
N. Palm Canyon Dr.	North City Limit	Tram Way				x (add 4' buffer)							1.81
N. Palm Canyon Dr.	Tram Way	W. San Rafael Dr.						Option 1 (w/ road diet)		Option 2			0.06
N. Palm Canyon Rd.	W. San Rafael Dr.	Vista Chino						Option 1 (w/ road diet)		Option 2			1.13
N. Palm Canyon Rd.	Vista Chino	Alejo Rd.						Option 1 (w/ road diet)		Option 2			1
N./S. Palm Canyon Rd.	Alejo Rd.	Ramon Rd.						Option 3 (w/ road diet)			Option 2 (w/ road diet)	Option 1 (w/ road diet)	1.16
Paseo El Mirador	N. Via Miraleste	N. Avenida Caballeros							x				0.25
Paseo El Mirador	N. Avenida Caballeros	Linda Vista Rd.							x				0.3
Paseo El Mirador	Linda Vista Rd.	N. Sunrise Way							x				0.2
Racquet Club Dr.	N. Palm Canyon Dr.	N. Indian Canyon Dr.				x (w/ road diet)							0.34

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Racquet Club Dr.	N. Indian Canyon Dr.	N. Farrell Dr.				x (w/ road diet)							1.48
Racquet Club Rd., Cardillo Ave., Via Escuela, Via Norte, Vista Chino, Via Monte Vista	N. Indian Canyon Dr.	Crescent Dr.							x				
Ramon Rd.	S. Palm Canyon Dr.	S. Indian Canyon Dr.								x			0.07
Ramon Rd.	S. Indian Canyon Dr.	S. Calle Encilia			x								0.1
Ramon Rd.	S. Calle Encilia	Calle Palo Fierro			x								0.14
Ramon Rd.	Calle Palo Fierro	S. Avenida Caballeros								x			0.25
Ramon Rd.	S. Avenida Caballeros	S. Sunrise Way			x								0.5
Ramon Rd.	S. Sunrise Way	S. Farrell Dr.			x								0.59
Ramon Rd.	S. Farrell Dr.	El Cielo Rd.					x						0.42
Ramon Rd.	El Cielo Rd.	Kirk Douglas Way			x								0.76
Ramon Rd.	Kirk Douglas Way	Gene Autry Trail			Option 1					Option 2			0.25
Ramon Rd.	Gene Autry Trail	San Luis Rey Rd.											0.26
Ramon Rd.	San Luis Rey Rd.	Crossley Rd.					x						0.24
S. Palm Canyon Dr.	W. Ramon Rd.	E. Camino Parocela					x						0.15
S. Palm Canyon Dr.	E. Camino Parocela	Morongo Rd.			x								0.59
S. Palm Canyon Dr.	Morongo Rd.	E. Palm Canyon Dr.					x						0.2
S. Palm Canyon Dr.	E. Palm Canyon Dr.	El Portal				x (w/ road diet)							0.4
S. Palm Canyon Dr.	El Portal	Ave Granada				x (w/ road diet)							0.72
S. Palm Canyon Dr.	Ave Granada	South City Limit				x (w/ road diet)							1.02
San Luis Rey Rd.	Mission Dr.	E. Ramon Rd.				x							0.31
San Luis Rey Rd.	E. Ramon Rd.	Sunny Dunes Rd.				x							0.25
San Rafael Dr.	N. Palm Canyon Rd.	N. Virginia Rd.				x (w/ road diet)							0.39
San Rafael Dr.	N. Virginia Rd.	Indian Canyon Dr.							x				0.32
San Rafael Dr.	N. Indian Canyon Dr.	N. Avenida Caballeros				x (w/ road diet)							0.5

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
San Rafael Dr.	N. Avenida Caballeros	N. Sunrise Way				x (w/ road diet)							0.5
Sunny Dunes Rd.	S. Palm Canyon Dr.	Calle Palo Fierro				x							0.19
Sunny Dunes Rd.	El Cielo Rd.	Crossley Rd.							x				1.52
Sunrise Way	Whitewater Wash	E. San Rafael Dr.				x							0.61
Sunrise Way	E. San Rafael Dr.	E. Vista Chino				x (w/ road diet)							1.01
Sunrise Way	E. Vista Chino	E. Tamarisk Rd.					x						0.75
Sunrise Way	E. Tamarisk Rd.	E. Alejo Rd.			x (7')								0.25
Sunrise Way	E. Alejo Rd.	E. Ramon Rd.					x						0.99
Sunrise Way	E. Ramon Rd.	E. Sunny Dunes Rd.					x						0.25
Sunrise Way	E. Sunny Dunes Rd.	E. Palm Canyon Dr.					x (remove parking)						0.75
Tachevah Dr.	N. Palm Canyon Rd.	N. Indian Canyon Dr.	x (w/ road diet)										0.07
Tachevah Dr.	N. Indian Canyon Dr.	1/2 way to N. Via Miraleste	x (remove center-turn lane)										0.12
Tachevah Dr.	1/2 way between N. Indian Canyon Dr. and N. Via Miraleste	N. Via Miraleste				x (remove center-turn lane)							0.12
Tachevah Dr.	N. Via Miraleste	N. Avenida Caballeros				x (remove center-turn lane)							0.25
Tachevah Dr.	N. Avenida Caballeros	N. Paseo de Anza							x				0.37
Tachevah Dr.	N. Paseo de Anza	N. Sunrise Way			x (6'-7')								0.13
Tachevah Dr.	N. Sunrise Way	Cerritos Dr.				x							0.25
Tachevah Dr.	Cerritos Dr.	N. Farrell Dr.							x				0.25
Tahquitz Canyon Way	N. Museum Dr.	N. Palm Canyon Dr.			x								0.15
Tahquitz Canyon Way	N. Palm Canyon Dr.	N. Indian Canyon Dr.			x								0.07

Street	From	To	Class II Bike Lane	Widen Existing Bike Lanes	Colored Bike Lanes	Buffered Bike Lanes	Colored Buffered Bike Lanes	Double Colored Buffered Bike Lanes	Class III Bike Route	Class III Bike Route with Type B Sharrows	One-way Cycletracks	Two-way Cycletracks	Length of Proposed Bikeways (mi.)
Tahquitz Canyon Way	N. Indian Canyon Dr.	N. Calle El Segundo								x			0.21
Tahquitz Canyon Way	N. Calle El Segundo	El Cielo Rd.					x						1.79
Tamarisk Rd.	N. Palm Canyon Dr.	N. Via Miraleste							x				0.32
Tamarisk Rd.	N. Via Miraleste	N. Avenida Caballeros							x				0.25
Tamarisk Rd.	N. Avenida Caballeros	N. Sunrise Way							x				0.5
Tamarisk Rd.	N. Sunrise Way	N. Farrell Dr.							x				0.57
Toledo Ave.	S. La Verne Way	Murray Canyon Dr.				x							0.89
Twin Palms Dr.	S. Palm Canyon Dr.	S. La Verne Way							x				1
Via Escuela	N. Sunrise Way	N. Gene Autry Trail							x				0.54
Via Miraleste	E. Francis Dr.	E. Vista Chino								x			0.76
Via Miraleste	E. Vista Chino	E. Tachevah Dr.					x						0.5
Via Miraleste	E. Tachevah Dr.	E. Tamarisk Rd.			x								0.25
Via Miraleste	E. Tamarisk Rd.	E. Alejo Rd.								x			0.25
Vista Chino	N. Palm Canyon Rd.	N. Indian Canyon Dr.					x						0.07
Vista Chino	N. Indian Canyon Dr.	N. Sunrise Way						x					1
Vista Chino	N. Sunrise Way	Cerritos Dr.								x			0.25
Vista Chino	Cerritos Dr.	N. Gene Autry Trail					x						1.03
Vista Chino	N. Gene Autry Trail	East City Limit					x						0.72