



CITY OF LANCASTER MASTER PLAN OF TRAILS AND BIKEWAYS



City of Lancaster

Master Plan of Trails and Bikeways

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CALTRANS STREETS AND HIGHWAYS

CODE 891.2

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EXECUTIVE SUMMARY



In June 2010, the City of Lancaster received a \$240,000 grant from the Los Angeles County Department of Public Health's Renewing Environments for Nutrition, Exercise and Wellness (RENEW) program. Lancaster was one of nine cities in the County to receive this highly competitive grant. This is in large part due to the City's commitment to improving the health of residents through preventative measures, such as encouraging active transportation and providing programming to support and encourage exercise. The Antelope Valley Partners for Health (AVPH) served as a key partner in the development of the Master Plan. AVPH played a critical role in reaching out to the public to gain their involvement.

This Master Plan directly responds to citizen input from the General Planning process. Lancaster residents would like to see increased opportunities for outdoor recreation, and opportunities to travel safely by foot and bicycle. The Master Plan is one of many steps to create a healthier and more active Lancaster. The City will implement low-cost, high-priority projects first to continue the momentum that has already been built.

In preparing the bicycle component contained in this Master Plan, the City becomes eligible to attract a wide range of funds which will facilitate implementation. The ADA Transition Plan component brings the City into compliance with federal law, and will go a long way toward making Lancaster a community with universal access.

INTRODUCTION

Chapter 1 sets the context of this plan, including the widespread benefits derived from Master Plan elements that promote non-motorized transportation. They include:

- Health benefits through increased physical activity
- Increased safety with better bicycle and pedestrian facilities
- Cost savings through better health and decreased fuel consumption
- Increased economic development, as demonstrated by “The BLVD”
- Fewer greenhouse gas emissions
- Energy savings



PUBLIC OUTREACH

The City conducted an aggressive public outreach effort to learn the needs and priorities of local cyclists, pedestrians, equestrians, and disabled community members. The City solicited the public’s knowledge and feedback in five different mediums. These were:

- a technical advisory committee,
- a survey,
- public workshops,
- walk audits, and
- receipt of public comments via e-mail, mail, and fax.



Technical Advisory Committee

The Master Plan of Trails and Bikeways Technical Advisory Committee (TAC) was comprised of representatives from the following stakeholders:

- City Planning Department
- City Manager’s Office
- City Parks Department
- City Public Works Department
- Residents
- Antelope Valley Transit Authority
- Local business owners
- Los Angeles County Department of Public Health
- Antelope Valley Union High School District
- Eastside Union School District
- Lancaster School District
- Los Angeles County Sheriff’s Department
- Equestrian and Trails advocates
- High Desert Cyclists





The Technical Advisory Committee was assembled to advise the project team of current concerns, and to provide guidance and input on the development of the Master Plan. The Committee held a total of four meetings.

Survey Questionnaire

The City posted a survey questionnaire about bicycling, walking, and trails on their website, as well as distributed paper copies of the survey at multiple community-wide events. Two hundred ten community members responded, representing a wide cross-section of Lancaster and a diverse respondent set in terms of age, gender, employment status, and home zip code. Respondents' suggestions about where to improve bikeways, walkways, and trails informed the proposed improvements included in this Master Plan.

Public Workshops

In total, the City held seven public workshops. The first three public workshops introduced the planning effort to the pedestrian and bicyclist community, the disabled community, and the equestrian community. The second three workshops presented draft recommendations to each of these communities. At this second round of workshops, attendees were asked to indicate their priorities within the Draft Master Plan. A third and final workshop solicited comments on the Draft Master Plan.



Walk Audits

The City hosted three walk audits with Dan Burden and Ryan Snyder. The walk audits began with a brief presentation on walkable and livable communities. This included a discussion of different devices to slow and calm traffic, the importance of land use mixes, network connectivity, and how to retrofit incrementally. Attendees were then led on a brief walk at each location and observed the street environment, identified safety concerns, and suggested improvements for the area. The walks took place at the following locations:

- Antelope Valley College, at the intersection of 30th Street West and Avenue K,
- Antelope Valley Partners for Health, at the intersection of 10th Street West and Avenue I, and
- First Christian Church, at the intersection of 17th Street East and Avenue J.



Again, public feedback from these walk audits informed the proposed pedestrian improvements described in Chapter 8.

Public Comments

The City and the consultant team also assembled public comments received throughout the duration of the planning process. These were received via e-mail, mail, and fax. Many of the suggested improvements were incorporated into the Master Plan of Trails and Bikeways.

PLANNING CONTEXT

Chapter 3 sets the planning context for this Master Plan. The consultant team reviewed the following major planning and policy documents that affect bikeway and trail development in the City of Lancaster:

- City of Lancaster 2008 Bicycle Transportation Plan and its 2011 amendment
- City of Lancaster General Plan 2030
- Amargosa Creek Pathway Master Plan and Design Guidelines
- City of Lancaster Architectural Design Guidelines
- City of Lancaster Engineering Design Guidelines, Policies, and Procedures Manual
- City of Lancaster Parks, Recreation, Open Space and Cultural Master Plan
- City of Lancaster Suggested Routes to School
- City of Lancaster Traffic Calming Policy
- City of Lancaster Municipal Code
- Maps of Census Data on Population Density, Median Income, Population Under 15 Years of Age, and Existing Bicycling, Walking, and Transit Activity in the City of Lancaster
- City of Palmdale's Circulation Element
- County of Los Angeles Bicycle Master Plan Update
- Metro Bicycle Transportation Account Compliance Document
- Metro Bicycle Transportation Strategic Plan
- Southern California Association of Governments Regional Transportation Plan
- Los Angeles County Congestion Management Program
- California Manual on Uniform Traffic Control Devices (CA MUTCD)



GOALS, POLICIES, AND ACTIONS

Chapter 4 contains the Goals, Policies, and Action items. The goals provide a broad statement describing a desired condition; the policies and actions provide the method of achieving the goal. The list of goals, policies and actions is a comprehensive blueprint by which the City can become more bicycle-friendly, pedestrian-friendly, and economically viable. The list was developed by city staff and the consultant team, and thoroughly vetted by the Technical Advisory Committee.

Lancaster's goals are to:

- Provide a safe, connected, and convenient street environment where people of all ages and physical abilities can travel throughout Lancaster without a vehicle.
- Create a network of off-street shared-use paths and trails within the City that is well located, safe, and secure.
- Provide amenities and facilities to increase the number of bicyclists and pedestrians by enticing more people to use their bicycles or walk instead of driving.
- Promote the health of Lancaster residents by providing more opportunities to bicycle or walk for commuting, recreating, shopping and visiting.
- Support safe access to and from schools.
- Develop routes and facilities to enhance the economic viability of Lancaster, including promotional events and activities supportive of "Destination Lancaster."

Policies to support and achieve these goals are as follows:

- The City will actively accommodate and encourage safe and convenient bicycle and pedestrian commuting throughout Lancaster.
- The City will actively accommodate and encourage safe and convenient bicycle and pedestrian utilitarian trips to schools, stores, parks and other destinations throughout Lancaster.
- The City will take steps to reduce the bicycle-involved and pedestrian-involved crash rate.
- The City will take steps to ensure bicycle parking is available, secure, and convenient throughout Lancaster.
- The City will work to create a network of bikeways so that every neighborhood is within ½ mile of an effective bicycling route in the north-south and east-west directions.
- The City will work with schools to evaluate, update, revise and maintain Safe Routes to School (SRTS) Plans for each Lancaster school within the next 10 years.
- The City will develop a trails system along available rights of way and in new development.
- Remove barriers to disabled pedestrian travel throughout Lancaster.
- The City will ensure that new development is bikeable, walkable, barrier-free, and includes access to a trail network.
- The City intends to implement this Master Plan of Trails and Bikeways within 20 Years.



EXISTING CONDITIONS

Chapter 5 assesses existing conditions of the bikeways, trails, and pedestrian network. The consultant team mapped and inventoried Lancaster’s existing bikeways, noting any unsafe or substandard conditions along them. Existing bicycle parking and bicycle amenities were inventoried. Finally, the consultant team analyzed the interface between bicycles and transit. Data from the most frequently traveled lines on the Antelope Valley Transit Authority are presented, as are the number of bicycle parking racks and lockers at each of the city’s six park-and-ride lots. Tables 5-1 through 5-4 show existing conditions for bikeways and parking.

This chapter also reviews the city’s compliance with the Americans with Disabilities Act and the existing pedestrian environment.

The chapter details existing trails for recreational users and equestrians. Many of these trails were developed through design guidelines for Landscape Maintenance Districts in Rural Residential areas, where an anticipated higher number of equestrians would use these facilities. Each of the existing trails is described in detail.

The consultant team analyzed the pedestrian and bicycle crash data from 2005-2009.

Finally, this chapter concludes with a description of the City’s existing programs that promote bicycling, walking, and trail use.

BICYCLE PLAN

Chapter 6 recommends newly planned bicycle projects.

To better accommodate and encourage bicycling in Lancaster, the City plans to add 40 miles of Class I Bike Paths, 138 miles of Class II Bike Lanes and 37 miles of Class III Bike Routes. Chapter 6 contains maps of these facilities. Detailed tables describing the proposed changes at each location can be found in Appendix A.

The type of recommended treatment depends on the street right-of-way, width, adjacent land uses, traffic volumes, speeds, etc. 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 that traffic volumes show could be handled with fewer lanes. 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.

In order to be eligible for Bicycle Transportation Account funds, the Bicycle Plan section contains the following as specified by the California Streets and Highways Code 891.2:





1. Estimated number of existing bike commuters and estimated increase
2. Map and description of existing and proposed land use
3. Map and description of existing and proposed bicycle routes
4. Map and description of existing and proposed bicycle parking
5. Map and description of existing and proposed links to other transportation modes
6. Map and description of existing and proposed facilities for changing and storing clothes and equipment
7. Description of safety education programs, efforts by law enforcement, and effect on accident rates
8. Description of public input
9. Description of coordination with other local and regional transportation, air quality, and energy conservation plans
10. Description of projects and their priorities
11. Description of past expenditures and future financial needs

These are all covered throughout this Master Plan. The Caltrans Table of Contents on page vi identifies where each of these can be found.

TRAILS PLAN

Chapter 7 provides recommendations for equestrian and recreational trails. Four trail types are defined in this Plan. For each category, this chapter recommends new trails with mileage as follows:

- Bike Paths, 40 miles
- Equestrian Trails, 48 miles
- Multipurpose Paths, 6 miles
- Jogging Trails, 24 miles



Chapter 7 also includes maps of proposed trails. The discussion of equestrian trails and jogging paths also identifies the location of existing and proposed trailheads.

PEDESTRIAN PLAN

Chapter 8 contains the pedestrian plan. The Plan describes a three-pronged approach to improving the pedestrian environment. First, there are overarching principles that guided the recommended improvements which can be further incorporated into the City's standards and policies. Second, based on public input, staff comment, and others, 60 locations were surveyed. Recommendations to improve the safety and attractiveness of these locations are detailed in this chapter. Third, programs will be needed to ensure correct use of facilities as well as create long-lasting behavior change.

Detailed tables list the existing conditions at each of the 60 locations and the proposed improvements. These include improved crosswalks, new or widened sidewalks, bulb-outs and curb extensions, new audio signals and countdown signals, median islands, and other types of pedestrian treatments. Graphics illustrate the proposed changes at each site. A map displays the location of all the pedestrian improvements.

ADA TRANSITION PLAN

Chapter 9 provides the Americans with Disabilities Act (ADA) Transition Plan. The Act, passed in 1990, requires public agencies to create Transition Plans to do the following:

1. Identify physical obstacles that limit accessibility
2. Create a plan to make facilities accessible
3. Dedicate a budget to fund these improvements
4. Provide a schedule for change
5. Identify someone within the agency responsible for coordinating implementation

This Plan describes the outreach targeted specifically at disabled stakeholders. It conducts a self-evaluation of the city's physical assets, including facilities in the public right-of-way such as sidewalks, pedestrian paths, curb ramps, transit stop accommodations, driveway crossings, and pedestrian signals. Tables list the location of missing sidewalks as well as four types of barriers to disabled travel: non-compliant bus stops, missing audio signals, inaccessible pedestrian push buttons, and non-compliant or missing curb ramps. The Plan then estimates the costs of addressing each of these barriers. The costs are presented both by improvement type and by location. The total cost of bringing the city into compliance with the ADA will be \$98 Million. The majority of this cost is missing sidewalks that will be added in conjunction with new development.



FUNDING

Chapter 10 provides funding guidelines. A variety of potential funding sources, including local, state, regional, and federal funding programs, may be used to construct bicycle, pedestrian and trail improvements or to institute programs. Most of the Federal and State programs are competitive, and involve the completion of extensive applications with clear documentation of the project needs, costs, and benefits. Local funding for projects can come from sources within jurisdictions that compete only with other projects in each jurisdiction's budget.

This chapter contains a detailed program-by-program explanation of available funding along with the latest relevant information. The chapter covers nine Federal sources of funds, fourteen state sources of funds, and thirteen local sources of funds.

IMPLEMENTATION

Chapter 11 outlines an implementation strategy for the City to follow. The consultant team performed a review of past expenditures and funding sources, and then the City's future financial needs for bicycle, pedestrian, and trail improvements were projected based on planning-level cost estimates for each improvement. The proposed projects were divided into three groups: short-term projects, medium-term projects, and long-term projects. These groupings, along with the total estimated cost for each grouping, are shown for each of the following networks:

- On-street Bikeways
- Off-street Bicycle Paths
- Pedestrian Off-Street Paths
- Equestrian Trails
- Pedestrian Improvements
- ADA Improvements



DESIGN GUIDELINES

Chapter 12 provides detailed design guidelines to ensure Lancaster implements best practices, and continues to develop in a manner that encourages active living. The guidelines include:

- bicycle design guidelines,
- pedestrian design guidelines,
- trails design guidelines,
- landscape design guidelines,
- maintenance and operation guidelines, and
- new development guidelines.

These complement the proposed network maps and tables by illustrating the design of the proposed improvements.

APPENDIX A

Appendix A provides detailed recommendations for each section of bikeway. The proposed recommendations includes guidance on bikeway type, width, and other special treatments.

APPENDIX B

Appendix B includes unit improvement costs for each on-street bikeway project by section, and includes the total planning-level cost to implement the on-street bicycle plan.

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CHAPTER 1

INTRODUCTION



A

B



The City of Lancaster and its residents are prepared to progress to an advanced stage of integrating bicycles, pedestrian improvements, and trails as an important component of the transportation system. Lancaster recognizes the value of becoming more friendly to alternative modes of transportation and recreation. The City wishes to offer opportunities for healthier lifestyles, to reduce dependence on automobiles, to reduce energy consumption, and to create more desirable neighborhoods. This document will launch Lancaster to the next stages of accommodating and encouraging bicycle and pedestrian travel for both utilitarian and recreational trips. It will help to bring Lancaster further into the age of environmental sustainability.

In June 2010, the City of Lancaster received a \$240,000 grant from the Los Angeles County Department of Public Health's Renewing Environments for Nutrition, Exercise and Wellness program. Lancaster was one of nine cities in the County to receive this highly competitive grant. This is in large part due to the City's commitment to improving the health of the City through preventative measures, such as encouraging active transportation and providing programming to support and encourage exercise. The Antelope Valley Partners for Health (AVPH) served as a key partner in the development of this Master Plan. AVPH played a critical role in reaching out to the public to gain their involvement.

This Master Plan directly responds to citizen input during the General Planning process. Lancaster residents would like to see increased opportunities for outdoor recreation, and to travel safely by foot and bicycle. This Plan is one of many steps to create a healthier and more active Lancaster. The City will implement low-cost, high-priority projects first to continue the momentum that has already been built.

In preparing the bicycle component contained in this Plan, the City becomes eligible to attract a wide range of funds which will facilitate implementation. The ADA Transition component brings the City into compliance with federal law and will go a long way toward making Lancaster a community with universal access.

This chapter introduces the reader to the benefits of non-motorized transportation.



Benefits of Non-Motorized Transportation

Why provide for non-motorized transportation? This section enumerates some of the benefits of bicycling, walking, and trail use. Some of these benefits, such as weight loss, accrue to individuals; other benefits, such as increased property values, accrue to communities or to the City of Lancaster. Finally, there are numerous ways in which non-motorized transportation benefits society as a whole, including reduced greenhouse gas emissions. This list of benefits frames the motivation for this Master Plan of Trails and Bikeways.



A

B

BENEFITS TO INDIVIDUALS

Health

The Master Plan of Trails and Bikeways proposes improvements that will provide opportunities for people to get outside to bicycle, horseback ride, jog, walk, skate, roller blade and engage in other similar physical activities. These aerobic activities all burn calories, enabling people to maintain a healthy weight and improve mental health. For the average adult, bicycling for one hour burns approximately 600 calories, jogging at a moderate pace for an hour burns about 650 calories, and walking for one hour burns about 200 calories (President's Council on Fitness, Sports, and Nutrition).

These physical activities reduce the risk of obesity and contracting chronic diseases such as diabetes, cancer, hypertension and various heart ailments. Moreover, these physical activities reduce stress. All of these outcomes can result in longer, healthier and more enjoyable lives.

Children that walk or bicycle to school are often healthier than their peers that ride in cars. Because of this, they miss fewer days of school, are more alert in class and perform better academically. Similarly, healthy employees miss fewer days of work, focus better and perform better at work than those that are less healthy.

Safety

By providing bikeways, improved pedestrian crossings, and trails, people will be able to cycle, walk, jog and ride in a safer environment.

Bike lanes make bicyclists more visible and provide a place to ride where motorists generally don't intrude and cyclists feel more comfortable. Bike paths, which are fully separated from traffic, provide a place where bicyclists can ride with little concern about riding next to fast-moving cars.

The bike lanes, new sidewalks and road re-configurations also have the potential to reduce motor vehicle speeds by narrowing the travel lanes. Speed is a key factor in crash reduction for three reasons. First, motorists' peripheral vision declines with speed. Second, stopping distance increases with speed. For example, the average stopping distance at 40 mph is 170 feet, while it is 60 feet at 25 mph. Third, crash severity increases with speed. If hit by a car moving 20 mph, a pedestrian has a 95% chance of survival, but only 15% chance at 40 mph (Federal Highway Administration Pedestrian Safety Design Course).

Finally, there is safety in numbers. The more cyclists, equestrians, pedestrians and joggers there are using Lancaster's streets and trails, the more motorists will be aware of their movements and look for them. As the new facilities draw more people out onto the bikeways, walkways, and trails, many more motorists will also have first-hand experience as cyclists, equestrians, pedestrians, and joggers themselves.

Children that walk or bicycle to school are often healthier than their peers that ride in cars

Enjoyment

Lancaster residents who use the trail and bikeway network will gain a significant opportunity to enjoy outdoor recreation. People will be able to go out to enjoy the network on their own, and may find that the trails offer a terrific chance to spend time together with family. Polls show that residents greatly value trails and bikeways in their communities. Lancaster already has well-organized equestrian and bicycling groups that engage in their favorite pastimes on existing facilities. New facilities will enable them to enjoy their riding more, and attract new participants to their sport. Best of all, trail activities can be enjoyed by people of nearly all ages.

Cost Savings

Lancaster residents that walk or bicycle for daily trips to the store, work, school, or other destinations can realize costs savings by not using their cars. The American Automobile Association calculates that the average cost to operate a car is 58.5 cents per mile. Reducing driving by just five miles per day could save someone \$1,068 a year.

Cost savings also result from better health. For example, the average diabetes patient spends \$13,000 per year on insulin and other related care, which is \$11,000 more than the average person without diabetes spends (National Committee for Quality Assurance). Lancaster residents that prevent type II diabetes by exercising can save significant amounts of money on medical costs. Lancaster residents that forego heart problems and cancer stand to save even more.

*Reducing
driving by just
5 miles per day
saves \$1,068
per year*





BENEFITS TO LANCASTER

Healthier Community

The City of Lancaster will benefit by having a healthier community. The proposed bikeway and trail system has the potential to change the community's way of life. By having an extensive network, many people will be encouraged to use a bicycle more often for transportation, or to walk for short trips. As more people do so, a cultural shift may take place. Although difficult to measure, schools and employers may experience less absenteeism. If students perform better, Lancaster schools may improve their ranking within the state, and these students become better citizens.

Safer Community

The bikeways, trails and pedestrian improvements would make Lancaster a safer place to bicycle, walk, jog, skate or horseback ride. Well-connected bikeways and trails help to ensure a safe environment for Lancaster residents. In addition, local drivers will become more accustomed to seeing bicyclists, pedestrians, horses, joggers and others and will look for them and expect them more. As it becomes safer to walk or bike, more people will do so. Added safety benefit comes from numbers.

Economic Development

The extensive planned bikeway and trail network could provide Lancaster a reputation as a livable community. Research shows that trails have the potential to create jobs, enhance property values and expand local businesses. Real estate data illustrates how property values increase with trails. In Dallas, for example, developers reported that properties along the Katy Trail were valued at 25% more than comparable properties not on the trail. In Apex, NC, developers added a \$5,000 premium for homes adjacent to a regional greenway, and those homes were still the first to sell (Rails to Trails Conservancy). Increases in property values represent both an individual benefit to the homeowner and a community benefit in the form of increased property tax revenue.

As the planned network unfolds, Lancaster will become known as a sustainable city where people can cycle or take part in a wide variety of other recreational activities. Along with the National Soccer Center, Lancaster may draw athletes training for marathons, triathlons, or other similar events. Lancaster may also become known as a walkable community.

All of these factors can help the tourist industry and attract restaurants and other retail venues providing increased tax revenue to the city. In addition to attracting visitors, local residents may choose to do more of their shopping and entertainment at home, rather than travelling to another city.

Properties adjacent to trails were valued at 25% more than comparable properties

BENEFITS TO SOCIETY AT LARGE

Fewer Airborne Pollutants

As local residents decide to walk or bicycle to work, school, to shop or for other purposes, instead of driving, tailpipe emissions will decrease. For every five-mile trip that is converted from a motorized trip to a non-motorized trip, an average of 0.14 pounds of CO, 0.01 pounds of NO_x, 0.01 pounds of hydrocarbons, and 4.4 pounds of CO₂ equivalent will be reduced. These reductions contribute to local and regional air quality. If done everyday, over the course of a year, this translates to 49.8 pounds of CO, 4.0 pounds of NO_x, 5.5 pounds of hydrocarbons, and 1,609 pounds of CO₂ equivalent. If 10,000 Lancaster residents reduce their driving by five miles a day, this will result in a reduction of 498,245 pounds of CO, 39,683 pounds of NO_x, 55,116 pounds of hydrocarbons, and 16.1 million pounds of CO₂ equivalent.

By reducing emissions from vehicles, Lancaster will also help to set an example for other cities to follow. While the emissions reduced in Lancaster may not be noticed, the cumulative reduction in cities throughout California and the US can make a significant difference. It is important to note that since most bicycling and walking trips replace short vehicle trips they eliminate 'cold starts,' the most polluting portion of a vehicle trip.

Lower Community Health Costs

To the degree that a healthier community reduces the number of people with diabetes, cancer, heart problems, hypertension and other medical conditions, significant costs will be saved. Increased medical expenditures for all of these diseases raise insurance rates and public health insurance costs for the entire community, not just the person with the disease.

Energy Savings

As local residents decide to walk or bicycle to various destinations (work, school, shopping, etc.) petroleum will be saved. For every five-mile trip that is converted from a motorized trip to a non-motorized trip, an average of 0.2 gallons of gasoline will be saved. If done everyday, over the course of a year, this translates to 73 gallons saved. If 10,000 of Lancaster residents all reduce a five-mile trip every day, 730,000 would be saved over the course of a year. (10,000 residents represent about 7 percent of Lancaster's population, a very achievable number given what other cities have accomplished.)



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CHAPTER 2

PUBLIC OUTREACH



Public input was an essential part of preparing this Master Plan. A comprehensive public outreach program was implemented in order to learn about the local cycling, walking, and trails environment, to understand needs and ensure they are met, and to set priorities. The outreach program included the following elements:

- Antelope Valley Partners for Health (AVPH) Outreach
- Master Plan of Trails and Bikeways Technical Advisory Committee
- Lancaster Master Plan of Trails and Bikeways Survey
- Public Workshops
- Walk Audits
- Public Comments via e-mail, mail, and fax

AVPH played a pivotal role in conducting outreach. They incorporated the Master Plan of Trails and Bikeways into their existing activities, outreached to existing clients, and expanded their promotion of the Plan to ensure as much public input as possible.

Master Plan Technical Advisory Committee

The Master Plan of Trails and Bikeways Technical Advisory Committee (TAC) was comprised of representatives from the following stakeholders:

- City Planning Department
- City Manager's Office
- City Parks Department
- City Public Works Department
- Residents
- Antelope Valley Transit Authority
- Local business owners
- Los Angeles County Department of Public Health
- Antelope Valley Union High School District
- Eastside Union School District
- Lancaster School District
- Los Angeles County Sheriff's Department
- Equestrian and Trails advocates
- High Desert Cyclists, and
- Consultant team.

The Technical Advisory Committee was assembled to advise the project team of current concerns, and to provide guidance and input on the development of the Master Plan. The Committee held a total of four meetings.

The first meeting took place early in the planning process to illuminate issues for cyclists, pedestrians, equestrians, and the disabled. During the second meeting, the TAC helped develop the Goals, Policies and Actions of this Plan. During the third meeting, the TAC reviewed preliminary plan results including draft bicycle routes, pedestrian improvements, ADA barriers, and trails. The TAC reviewed and commented on the Draft Plan during the fourth and final meeting.





Lancaster Master Plan Survey

In order to assess the needs and users' priorities of the bicycle, pedestrian, and trails system, the City conducted a survey. The City made the Lancaster Master Plan of Trails and Bikeways Survey available in both English and Spanish on the Master Plan of Trails and Bikeways website from September 2010 through December 3, 2010. In conjunction with other advocacy groups, the City passed out hard copies of the survey during community meetings and at community events. A total of 210 community members responded. Each question was analyzed to understand the community's needs and how bicycling, the pedestrian environment, and trails in Lancaster can be improved.

The survey asked questions such as:

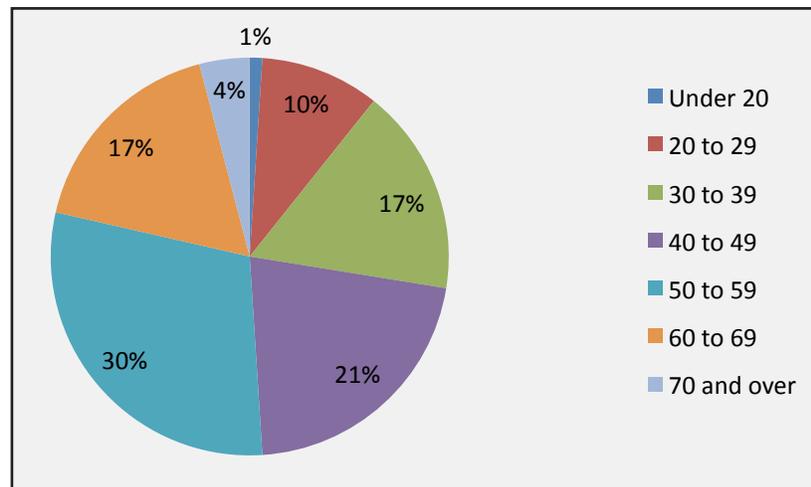
- why the respondent rides a bicycle / walks / uses trails;
- how often he / she rides / walks/ uses trails;
- areas in need of improvement;
- barriers to travel, and
- areas in need of bicycle parking, among others.

The following discussion summarizes and analyzes the results of the survey.

QUESTION 1: WHAT IS YOUR AGE?

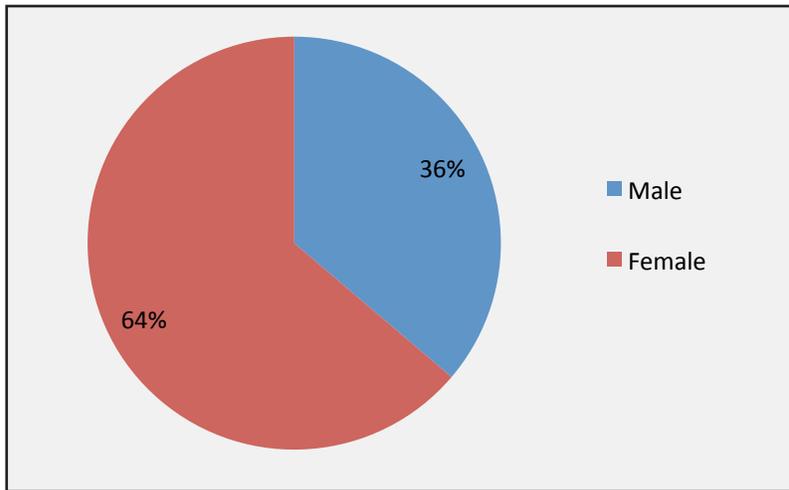
As shown in Chart 2-1, survey respondents have a wide range of ages. The majority (30 percent) of respondents are age 50 to 59, with another 21 percent age 40 to 49. Seventeen percent of respondents are 60 to 69, and another 17 percent are 30 to 39.

CHART 2-1: AGE OF SURVEY RESPONDENTS



QUESTION 2: WHAT IS YOUR GENDER?

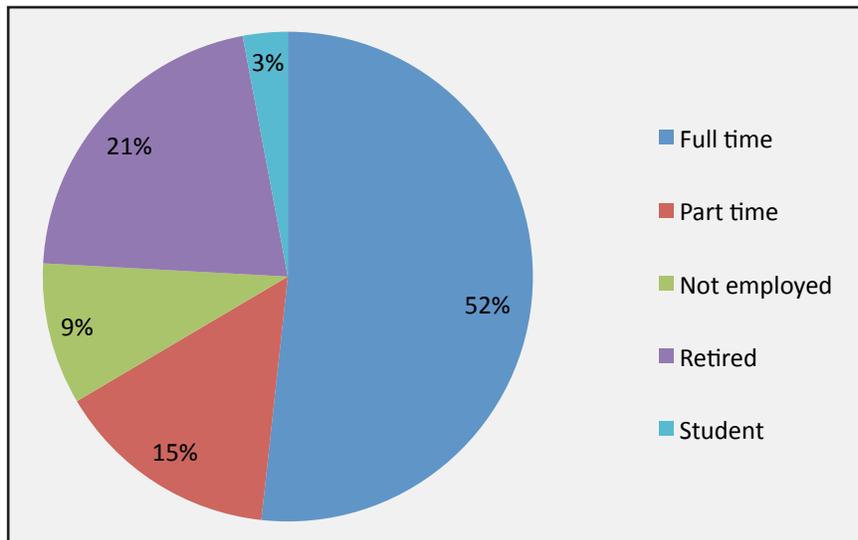
CHART 2-2: GENDER OF SURVEY RESPONDENTS



Fewer males than females responded to the survey, with 36 percent male and 64 percent female respondents.

QUESTION 3: WHAT IS YOUR EMPLOYMENT STATUS?

CHART 2-3: EMPLOYMENT STATUS OF SURVEY RESPONDENTS



More than half of the respondents are employed full time. Another 21 percent are retired, and 15 percent are employed only part time. Currently, nine percent of the respondents are not employed. Only three percent chose student as their employment status.



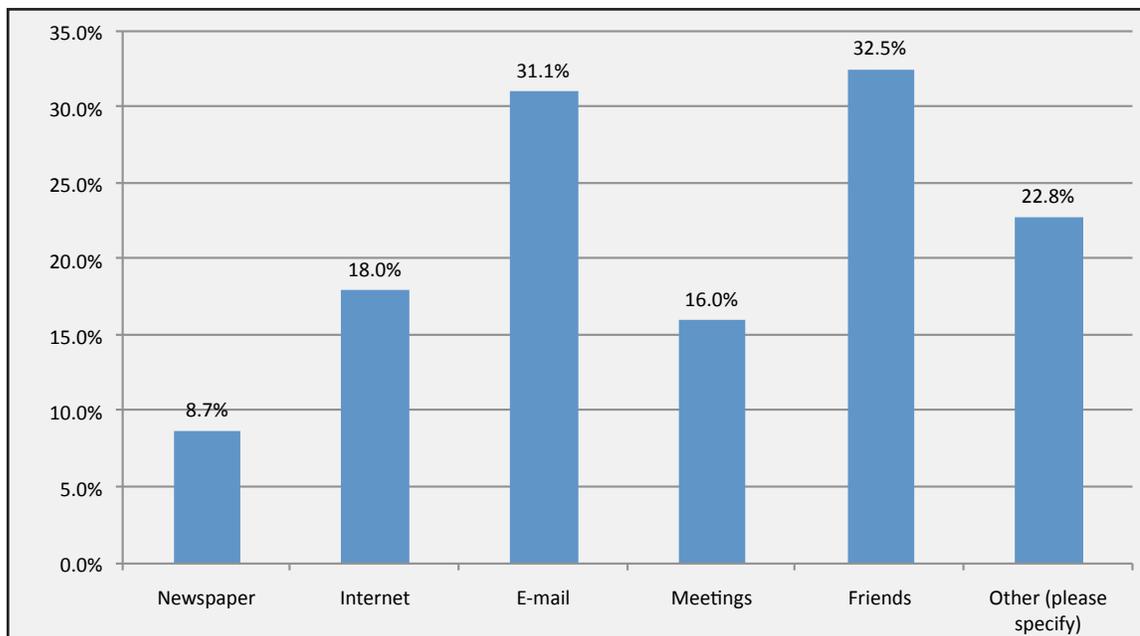
QUESTION 4: WHAT IS YOUR HOME ZIP CODE?

Survey respondents reside all over the City of Lancaster, and in surrounding communities. However, the largest number (26 percent) live in zip code 93536, which is primarily western Lancaster. Another 21 percent live in 93535, which is eastern Lancaster. Eleven percent reside in south Lancaster and in northern Palmdale in zip code 93551. Another 12 percent live in central Lancaster in zip code 93534.

QUESTION 5: HOW DID YOU HEAR ABOUT THIS SURVEY (PLEASE CHECK ALL THAT APPLY)?

The City widely circulated the announcement for the survey using many channels such as online e-mail blasts, newspaper, television, and radio. Of those who chose “other,” many respondents heard about the survey through the Lancaster Employee Health Fair, outreach through Antelope Valley Partners for Health, and announcements at their childrens’ schools.

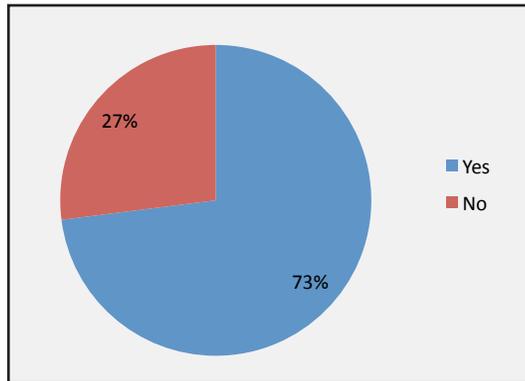
CHART 2-5: HOW DID YOU HEAR ABOUT THE SURVEY?



QUESTION 6: DO YOU OWN A BICYCLE?

As shown in Chart 2-6, most survey respondents own a bicycle. This implies most survey takers have the means to ride a bicycle if they so choose.

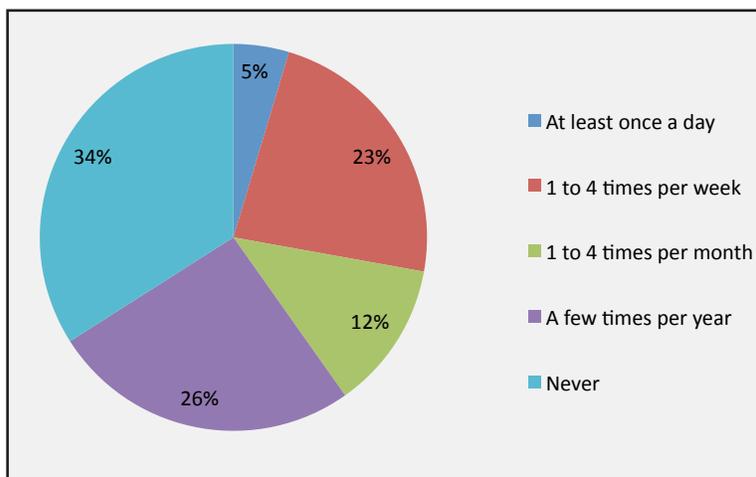
CHART 2-6: BICYCLE OWNERSHIP



QUESTION 7: ON AVERAGE, HOW OFTEN DO YOU RIDE A BICYCLE IN LANCASTER?

Twenty-three percent of respondents ride their bike one to four times per week. Another 12 percent ride one to four times per month. Over one-third of respondents on average do not ride a bicycle. Two-thirds of respondents already bicycle some of the time, and are likely to bicycle more with the implementation of this Plan.

CHART 2-7: BICYCLING FREQUENCY

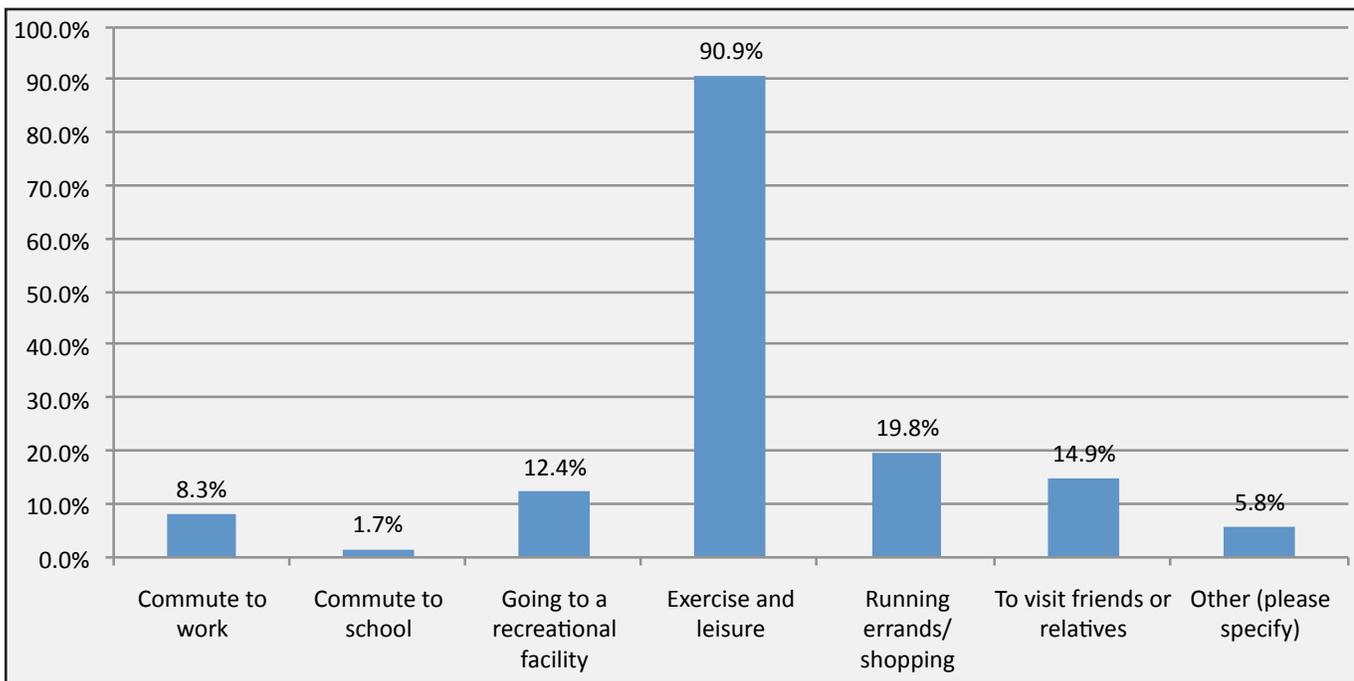




QUESTION 8: WHAT IS THE PURPOSE OF THE TRIPS YOU MAKE BY BICYCLE IN LANCASTER (PLEASE CHECK ALL THAT APPLY)?

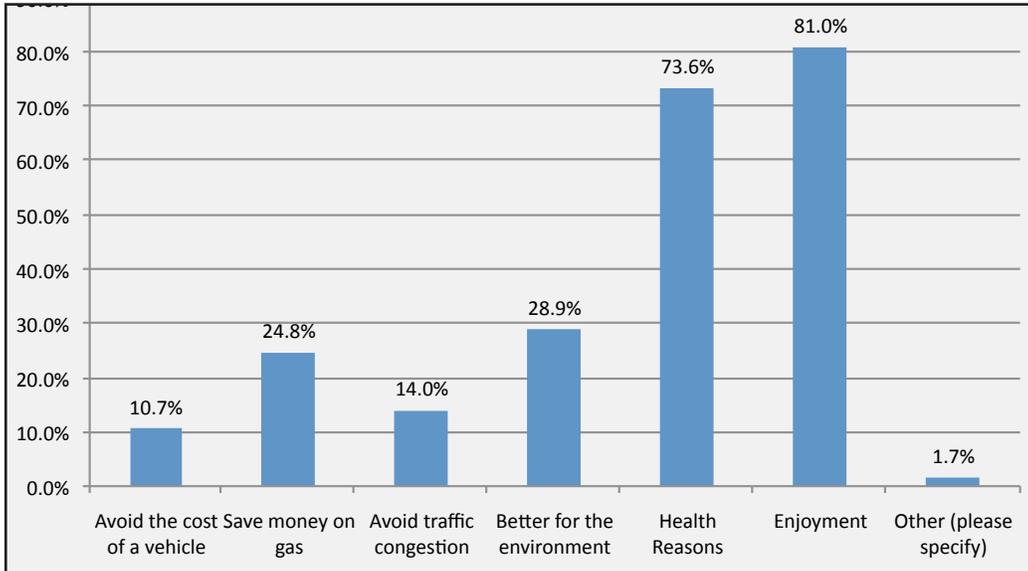
“Exercise and leisure” trips topped the list with over 90 percent of survey respondents marking this response. Respondents selected “running errands or shopping” second with 19.8 percent. Almost 15 percent identified “to visit friends or relatives,” and 12.4 percent chose “going to a recreational facility.” Few respondents commute to work (8.3 percent) or school (1.7 percent) on bicycle. The survey results show most current cyclists are recreational cyclists, rather than utilitarian cyclists.

CHART 2-8: BICYCLE TRIP PURPOSE



QUESTION 9: WHY DO YOU CHOOSE TO USE A BICYCLE (PLEASE CHECK ALL THAT APPLY)?

CHART 2-9: REASONS FOR BICYCLE USE



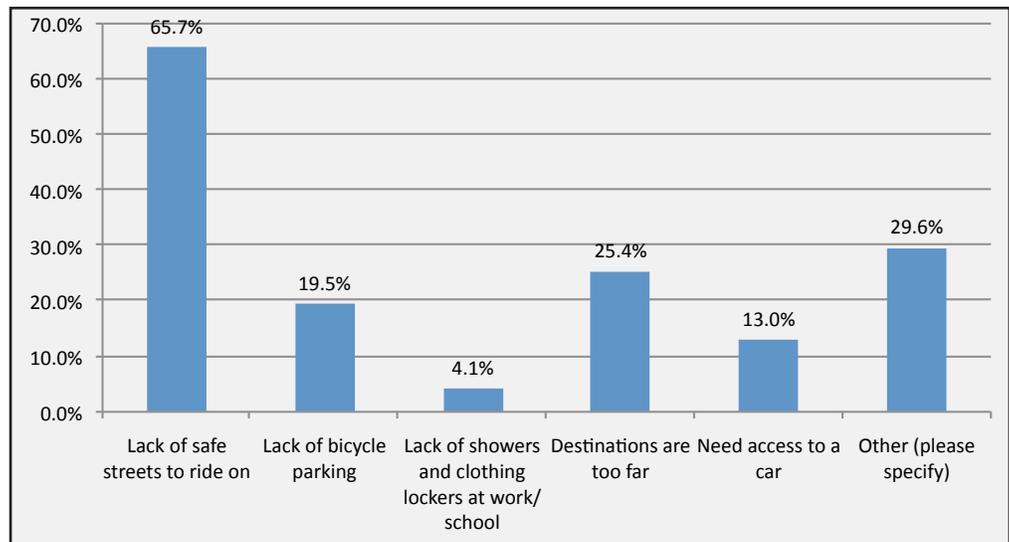
Health reasons (73.6 percent) and enjoyment (81 percent) top the list of reasons why respondents choose to bicycle. Nearly 29 percent of respondents cited environmental concerns, and 24.8 percent said they chose to ride a bicycle to “save money on gas.” This confirms the earlier finding that most respondents are recreational cyclists.



QUESTION 10: WHAT PREVENTS YOU FROM BICYCLING MORE IN LANCASTER (PLEASE CHECK ALL THAT APPLY)?

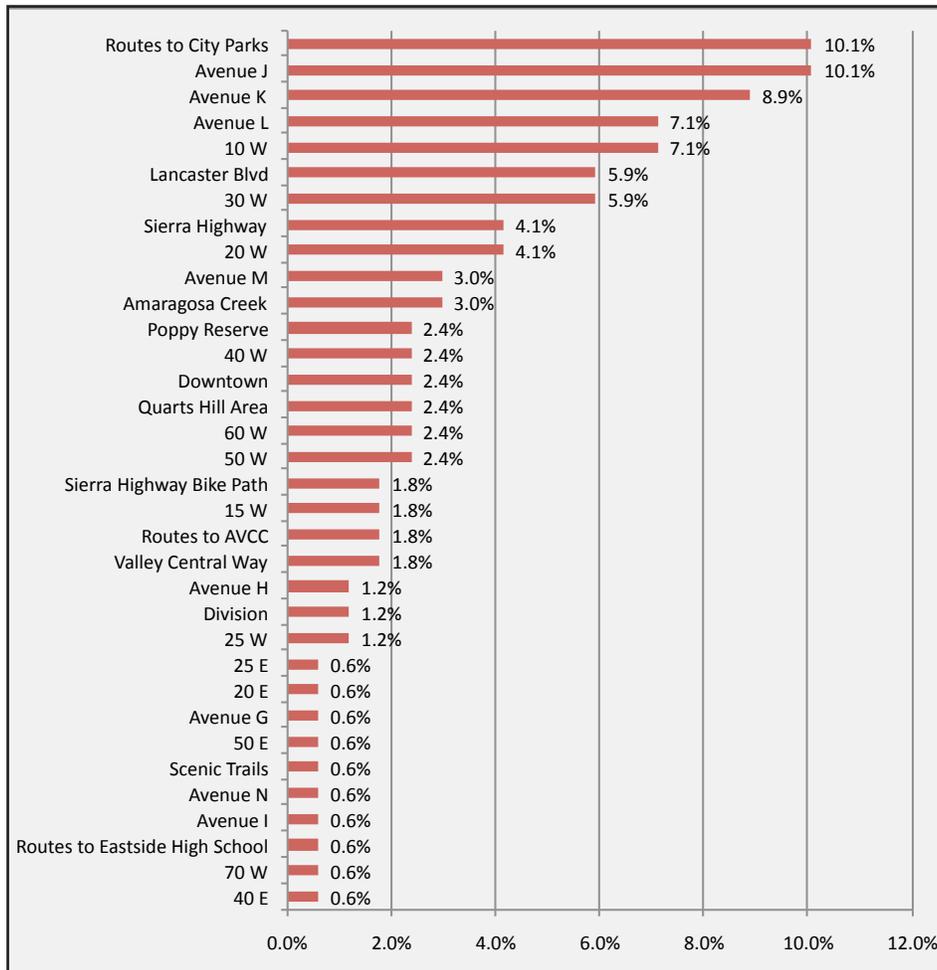
As shown in Chart 2-10, 65.7 percent of respondents cite the lack of safe streets to ride on as the primary reason they do not bicycle more. Nearly 30 percent of respondents marked the “other” category, giving reasons such as high car speeds, extreme weather conditions, and aggressive drivers as deterrents to bicycling. Twenty-six percent of respondents do not bicycle more because destinations in Lancaster are too far apart. The City can address the lack of infrastructure, high speeds, and aggressive driving through the implementation of this Plan.

CHART 2-10: DETERRENENTS TO BICYCLING



QUESTION 11: WHERE WOULD YOU LIKE TO SEE NEW OR IMPROVED BIKEWAYS IN LANCASTER?

CHART 2-11: AREAS FOR NEW OR IMPROVED BIKEWAYS



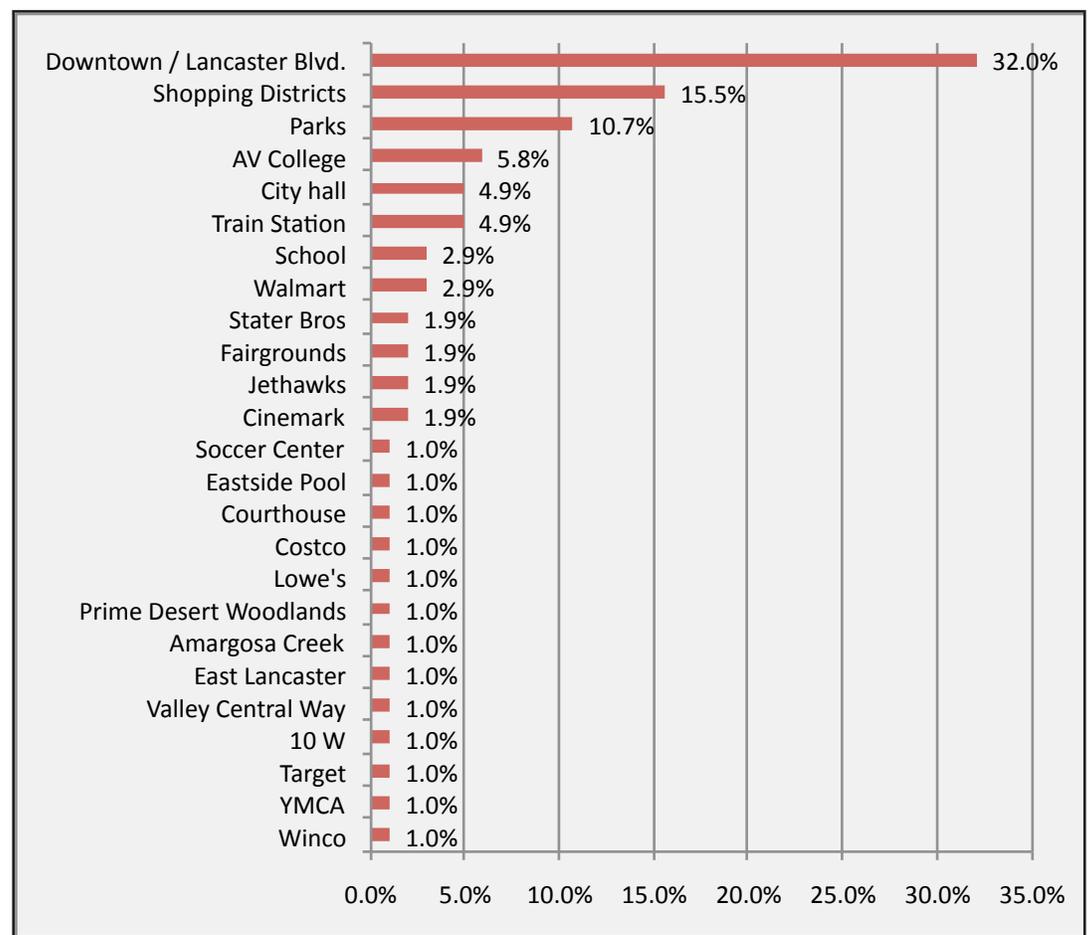
As shown above in Chart 2-11, survey respondents would most like to see improved routes to Lancaster’s parks such as Apollo Park, Lancaster City Park, among others. Improvements along major east / west and north / south routes such as Avenues J, K, L, Lancaster Boulevard and 10th Street West, 30th Street West, and Sierra Highway, were the most popular responses. Respondents clearly wish to see improved bikeways in the central area of town.



QUESTION 12: WHERE WOULD YOU LIKE TO SEE NEW OR IMPROVED BICYCLE PARKING IN LANCASTER?

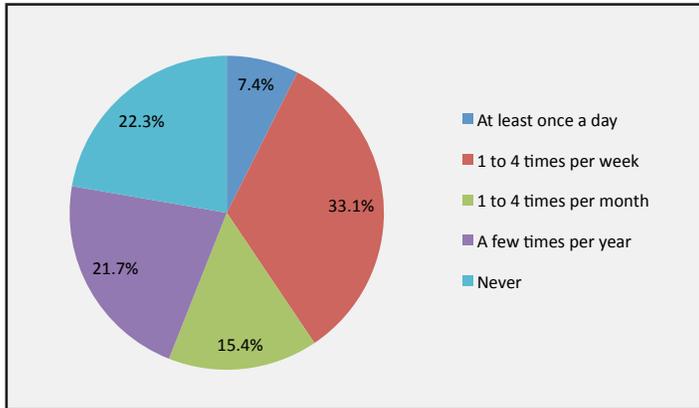
Thirty-two percent of respondents would like to see new bicycle parking in Downtown Lancaster. Another 15 percent would like more bicycle parking in shopping districts. As shown in the chart, parking is needed in major shopping centers such as Walmart, Stater Bros. and Target. Other areas that could use new or improved parking include Antelope Valley College, local parks, and the Metrolink station.

CHART 2-12: AREAS FOR NEW OR IMPROVED BICYCLE PARKING



QUESTION 13: ON AVERAGE HOW OFTEN DO YOU WALK IN LANCASTER?

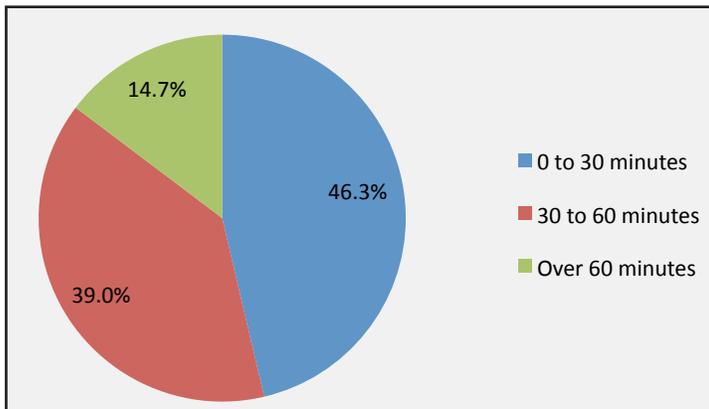
CHART 2-13: WALKING FREQUENCY



The majority of respondents walk at least a few times per year or more frequently. One-third, the highest number, of respondents walk one to four times per week. About 22 percent never walk in Lancaster.

QUESTION 14: WHAT IS THE TYPICAL DURATION OF YOUR WALK?

CHART 2-14: DURATION OF TYPICAL WALK



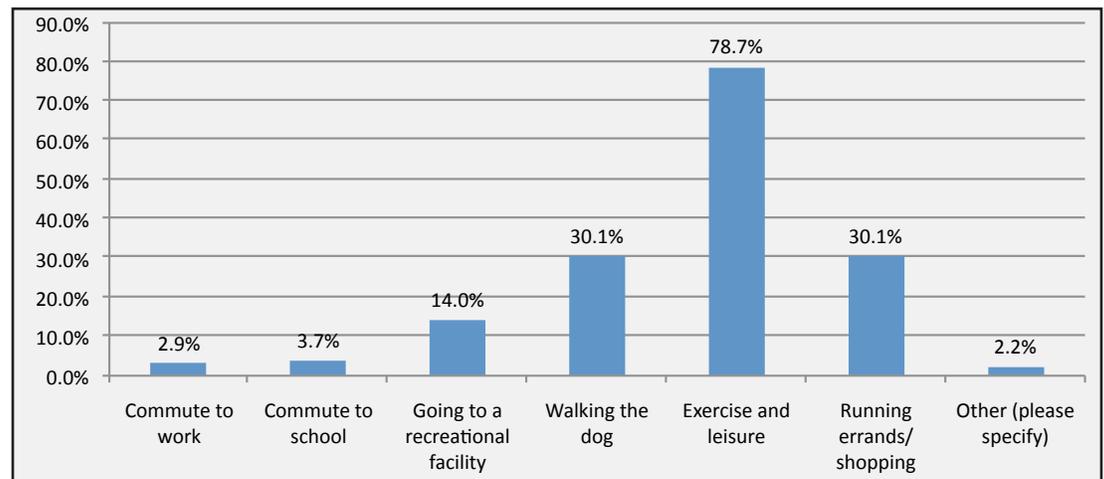
For those respondents who walk at least a few times per year, a typical walk is between 0 and 30 minutes (46 percent). Another 39 percent walk for 30 to 60 minutes. Nearly 15 percent walk for over 60 minutes.



QUESTION 15: WHAT IS THE PURPOSE OF THE TRIPS THAT YOU MAKE BY WALKING IN LANCASTER (PLEASE CHECK ALL THAT APPLY)?

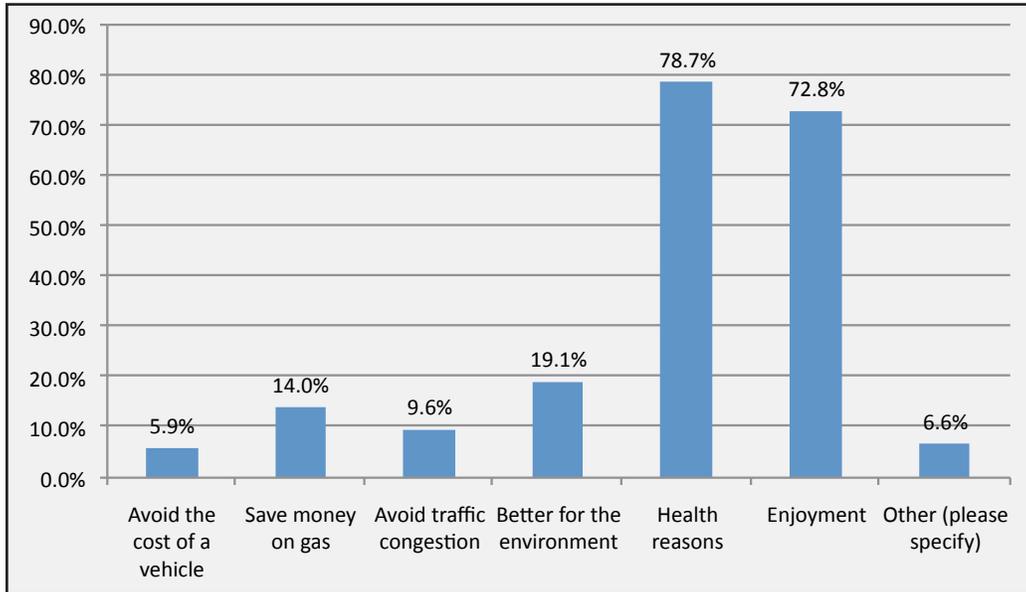
As shown below in Chart 2-15, 78 percent of respondents walk for exercise and leisure. Thirty percent walk to run errands or go shopping, and another 30 percent walk their dogs. These responses imply that there are utilitarian as well as recreational walkers.

CHART 2-15: WALKING TRIP PURPOSE



QUESTION 16: WHY DO YOU CHOOSE TO WALK (PLEASE CHECK ALL THAT APPLY)?

CHART 2-16: REASONS FOR WALKING



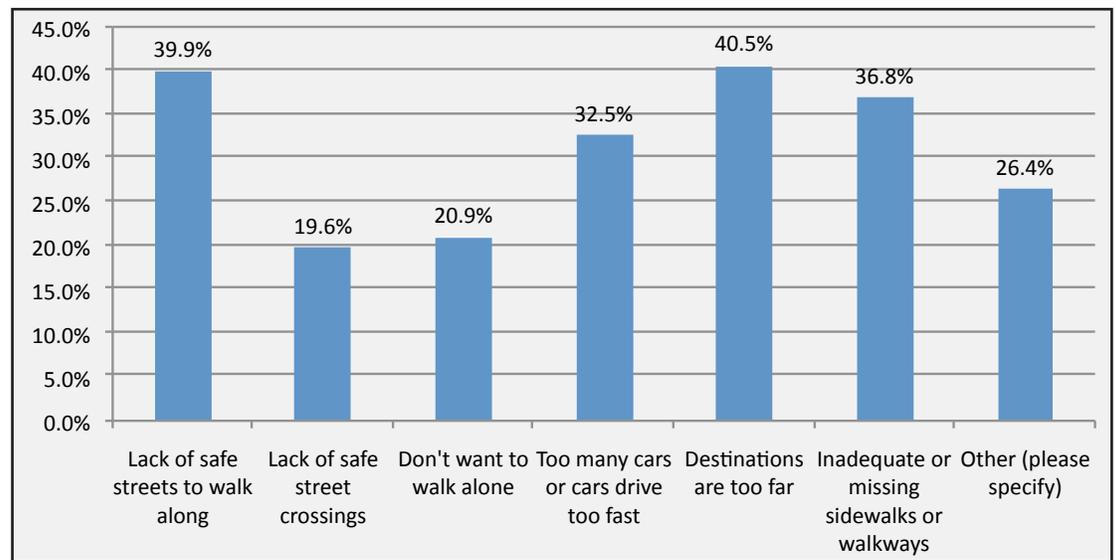
Nearly 79 percent of respondents choose to walk for health reasons. A majority (72.8 percent) also choose to walk for enjoyment. Respondents clearly see walking as a viable recreational activity. Nineteen percent choose to walk for environmental concerns, and another 14 percent walk to save money on gas.



QUESTION 17: WHAT PREVENTS YOU FROM WALKING MORE IN LANCASTER (PLEASE CHECK ALL THAT APPLY)?

Survey respondents identified numerous deterrents to walking. Most often cited include lack of safe streets to walk along, cars driving too fast, destinations too far, and inadequate or missing sidewalks or walkways. Reasons from the 26.4 percent of respondents that marked “other” include: uninviting walking areas, extreme heat and wind, and personal safety. Many of these concerns can be addressed through the implementation of this Plan.

CHART 2-17: DETERRENENTS TO WALKING



QUESTION 18: WHERE WOULD YOU LIKE TO SEE NEW OR IMPROVED SIDEWALKS IN LANCASTER?

Survey respondents cited numerous areas that needed improved or new sidewalks in Lancaster. A summary of responses cited at least twice follows below. There were no streets that stood out among the group as needing new or improved sidewalks; general repairs and maintenance are needed throughout the City.

- 30th Street West
- 20th Street West
- 25th Street East and Avenue J
- Lancaster Boulevard and 30th Street East
- 30th Street East and Avenue K
- Sierra Highway from Avenue H to Avenue J
- 10th Street West
- Avenue J between 10th Street West and Sierra Highway
- City Parks
- Avenue I
- Avenue K

QUESTION 19: WHERE WOULD YOU LIKE TO SEE IMPROVED PEDESTRIAN CROSSINGS IN LANCASTER?

Survey takers cited numerous crossings that need improvement. In particular, many cited crossings at Sierra Highway. A summary of responses cited at least twice follows below. No crossings stood out among the group.

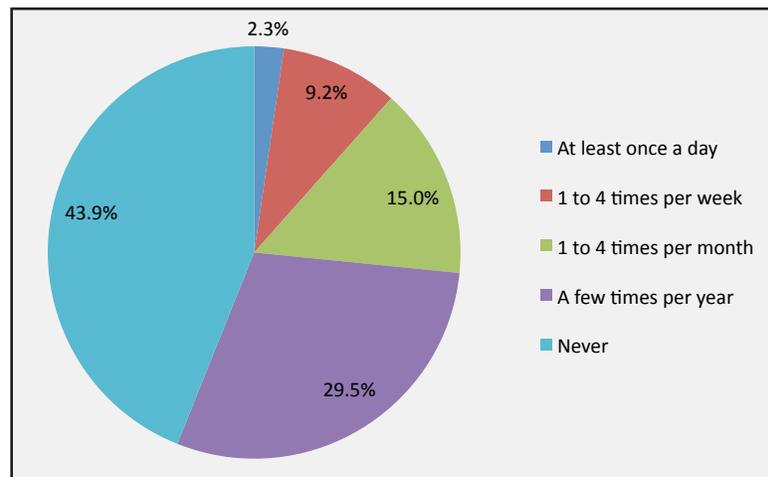
- Sierra Highway and Milling Street
- Sierra Highway and Lancaster Boulevard
- Sierra Highway and Avenue J
- 10th Street West and Jackman Street
- 10th Street West and Avenue K
- 10th Street West at the City Park
- 30th Street East at Lancaster National Soccer Center
- 35th Street West and Avenue L
- Over or under Avenue I for Amargosa Creek Trail
- Generally, train track crossings
- Generally, in front of schools, including Antelope Valley College



QUESTION 20: ON AVERAGE HOW OFTEN DO YOU USE ONE OF LANCASTER'S EXISTING UNPAVED TRAILS?

Over half of survey respondents use Lancaster's unpaved trails at least a few times per year. Almost 20 percent of respondents have never used Lancaster's unpaved trails. These numbers are low because there are few established trails in Lancaster.

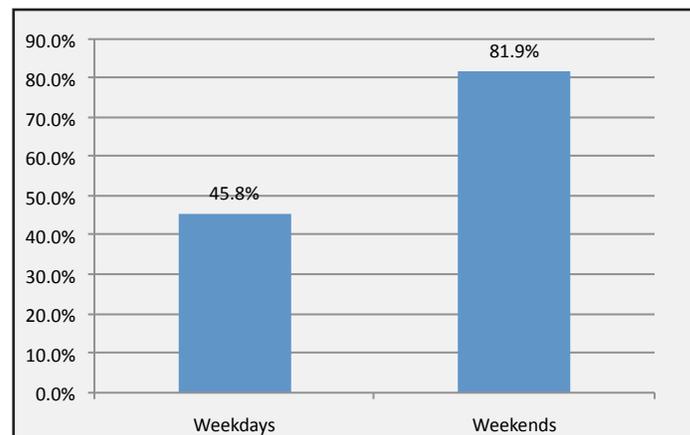
CHART 2-20: TRAIL USAGE FREQUENCY



QUESTION 21: WHEN DO YOU USE THE TRAILS (PLEASE CHECK ALL THAT APPLY)?

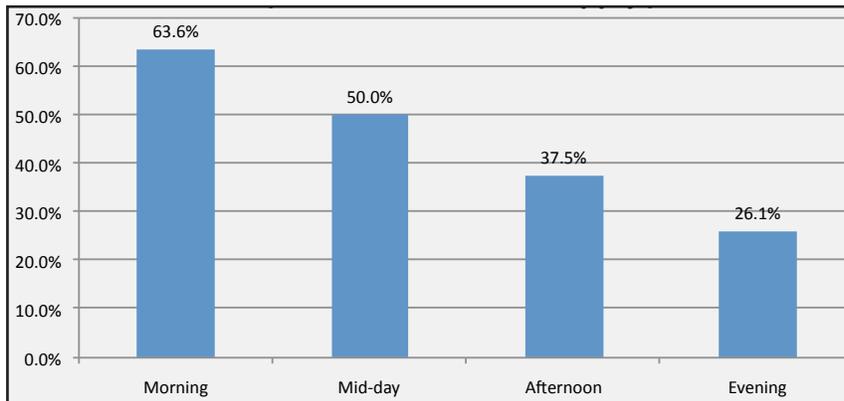
As shown in Chart 2-21, most respondents use the City's trails on the weekends. However, a considerable number, 45.8 percent, use trails on the weekdays as well.

CHART 2-21: DAYS OF TRAIL USAGE



QUESTION 22: WHAT TIME OF DAY DO YOU TYPICALLY USE THE TRAILS (PLEASE CHECK ALL THAT APPLY)?

CHART 2-22: TIME OF TRAIL USAGE

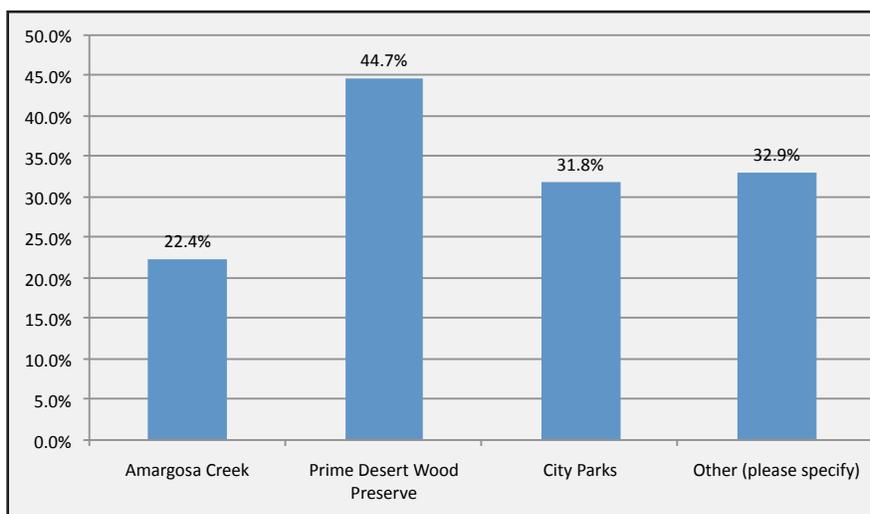


Morning is the most popular time for trail use. Fifty percent of respondents also frequent the trails during mid-day. The afternoon and evening are the least popular times to use the trails.

QUESTION 23: WHICH UNPAVED TRAILS DO YOU MOST FREQUENTLY USE IN LANCASTER (PLEASE CHECK ALL THAT APPLY)?

As shown below in Chart 2-23, respondents most frequently use trails in the Prime Desert Wood Preserve. Nearly thirty-three percent of respondents marked "other." Trails cited in the "other" category include: the Antelope Valley Poppy Preserve, dirt roads, Littlerock Wash, and other unofficial horse trails.

CHART 2-23: TRAILS MOST FREQUENTED



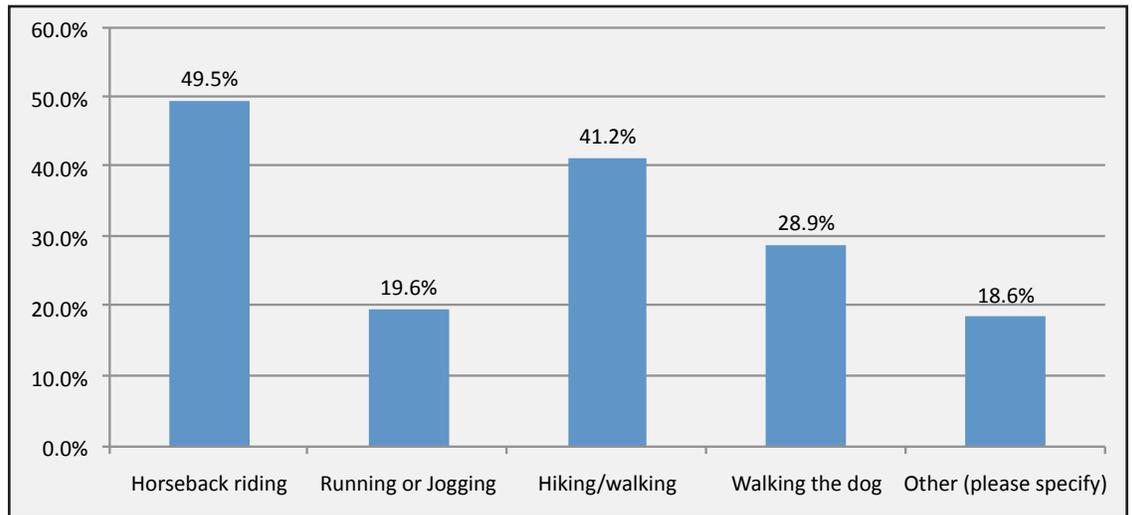


QUESTION 24: IF YOU ONLY USE THE TRAILS IN CITY PARKS, WOULD YOU BE INTERESTED IN LINEAR TRAILS IN LANCASTER?

Nearly all respondents (99 percent) are interested in more linear trails in Lancaster. The City can consider creating a linear trail network integrated with new development street network to achieve the development of new linear trails.

QUESTION 25: HOW DO YOU USE LANCASTER'S UNPAVED TRAILS (PLEASE CHECK ALL THAT APPLY)?

CHART 2-25: TYPES OF TRAIL USAGE

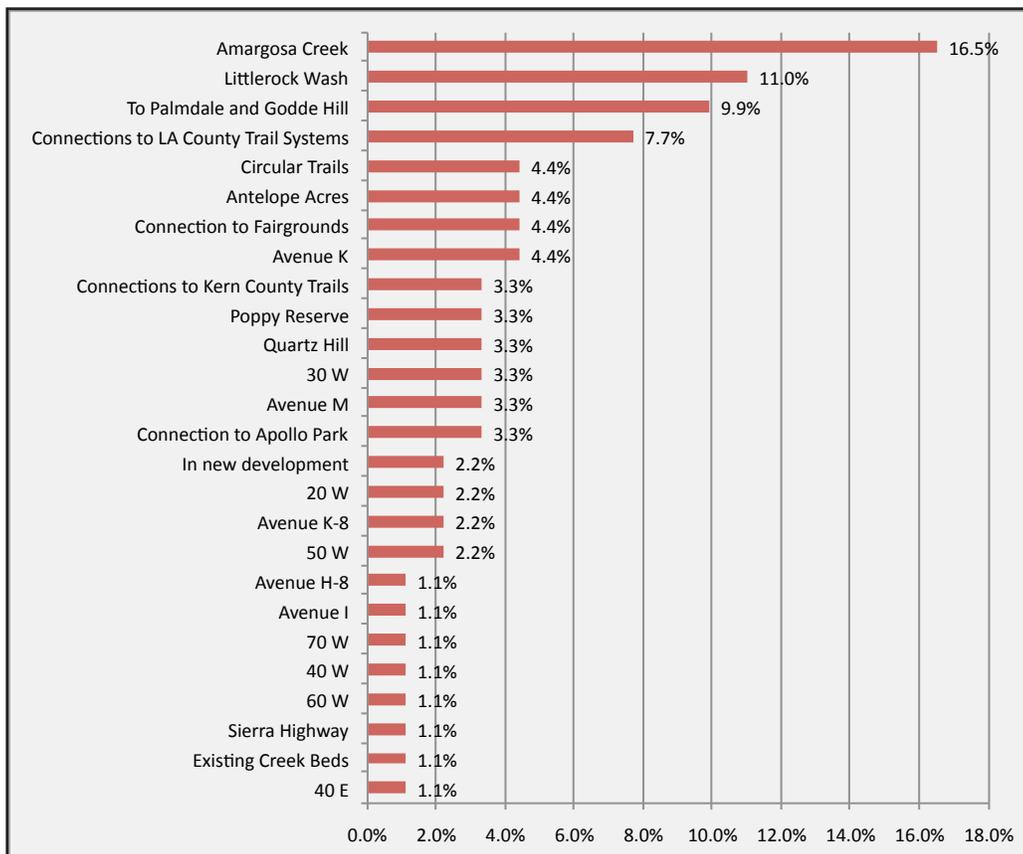


Respondents primarily use Lancaster’s unpaved trails for horseback riding more than any other purpose. Forty-one percent of survey takers also use the unpaved trails for recreational purposes, including hiking and walking. Another 28.9 percent use the trails for walking their dog. “Other” responses include mountain biking and cycle-cross.

QUESTION 26: WHERE WOULD YOU MOST LIKE TO SEE NEW UNPAVED TRAILS IN LANCASTER?

As shown in Chart 2-26, survey respondents would most like to see completed trails along the Amargosa Creek, Littlerock Wash, and connections through Godde Pass (Hill), and to Palmdale. Respondents also marked the need for connections to the Los Angeles County trail system. Several survey respondents remarked in this section that there are no existing equestrian trails in Lancaster, and the City should consider creating circular trails or trails to city destinations. Other responses are also listed in Chart 2-26.

CHART 2-26: AREAS FOR NEW UNPAVED TRAILS





QUESTION 27: WHERE WOULD YOU MOST LIKE TO SEE IMPROVED TRAIL CROSSINGS IN LANCASTER?

Crossings listed by survey respondents are below. Several survey respondents remarked that due to the lack of official equestrian trails, the question was difficult to answer. They also believe the City should mark these areas with signs to “watch for horse traffic and crossings” in the interim. No crossings stood out among the group.

- 17th Street East and Lancaster Boulevard
- Sierra Highway and Avenue J
- Avenue I and 20th Street West
- Amargosa Creek Trail, south of Avenue I to Avenue K
- Generally, crossing the freeway
- Generally, crossing the railroad tracks along Sierra Highway



Public Workshops

The City held three different types of public workshops, for a total of seven meetings with the public. The public was notified about the meetings through multiple channels:

- Antelope Valley Press' Community Section advertisements
- Television Channel 3's "Local Edition" program
- Flyer and literature distribution at Health and Resource Fairs
- Announcements at chamber group meetings including Antelope Valley Chamber (Lancaster), Palmdale Chamber, Hispanic Chamber, African American Chamber and the Quartz Hill Chamber
- Targeted agencies and businesses for interested parties for flyer and literature distribution including bicycle shops, animal feed stores, Easter Seals, Desert Haven, and Senior Centers
- E-mail blast to non-profit groups in the community, City's e-mail listserv, and interested parties that filled out the information section of the survey

The purpose and timing of each workshop is explained further below.

GENERAL PUBLIC WORKSHOPS

The City invited the general public to a series of three workshops to present the purpose of the Master Plan of Trails and Bikeways, understand concerns, take comments and questions, and prioritize capital improvement projects. Outcomes of each workshop are briefly described below.

Workshop 1: September 27, 2010

The first workshop took place on September 27, 2010 from 6:00 pm to 8:30 pm. The consultant team presented the overall scope for the Master Plan of Trails and Bikeways, the tentative schedule, and example recommendations for bikeways, trails, and pedestrian features. The workshop attendees commented and asked questions after the presentation. Attendee concerns and questions included:

- Narrow / substandard existing bike lanes
- Safety / Security; use of cameras
- High speed limits
- Freeway ramp treatments; bridge overpass opportunities
- Equestrian trail opportunities
- Bike path loops
- Bike and Trails Access points
- Rubberized Sidewalk Loop
- Trees / Shade along trails
- Signage at trails
- Directional signage / pavement markings



*Exercise loops,
shade-giving
trees, and
directional
signage may
encourage
active
transportation*



The next part of the workshop featured a mapping exercise. Attendees drew desired bikeways, trails, areas in need of repair, unsafe crossing locations, and missing sidewalks, among other information on multiple large-scale maps of Lancaster. The consultant team used this information when conducting fieldwork for the Master Plan. A partial list of recommended areas is below:

ADA / Pedestrian Map

- Rubberized Loop
 - N/S: Ave. H-8 to Ave. L-8
 - E/W: 35th St. W to 15th St. W
 - Ave. J-8
 - N/S: Ave. J-8 to E. Kettering St.; E/W: 5th St. E to 32nd St. E
 - 32nd St. E
 - N/S: Ave. L to Ave. K; E/W: 30th St. E to 35th St. E
- No lights
- Dark
- No sidewalks
 - N/S: Ave. F to Ave. G; E/W: 60th St. W to 40th St. W
- Missing Sidewalks / Inadequate Pedestrian Right-of-way
 - Near Lincoln School on Ave. J-8 – not enough space to walk
 - Ave. K-8 from 70th St. W to 35th St. E
 - Ave. L-8 from Valley View Elementary School to Waterway (between Sierra Highway and 10th St. W)
 - Ave. J-8 from 65th St. W to Eastside High School
 - Lancaster Blvd. from 40th St. W to 30th St. E
 - Ave. I from 50th St. W to 30th St. W
 - Ave. H-8 from Sierra Highway to 20th St. E
 - Ave. I from 10th St. W to Challenger Way
 - 45th St. W from Ave. I to Endeavor Middle School
 - Amargosa Creek Path
 - In front of Antelope Valley High School
 - 15th St. E from Ave. H-8 to Ave. K-8
 - 10th St. W from Ave. H to Ave. L; needs better sidewalks
 - Need sidewalk connection from Lake Lancaster to Fairgrounds
 - Ave. L from 60th St. W to Antelope Valley Christian School
 - Sidewalks / trail to connect Antelope Valley Christian School, Valley View Elementary School, Paraclete High School, Forrest Hull Park
- Problem Intersections
 - Crossing Sierra Highway on Ave. J-8
 - Ave. L / 60th St. W

Missing sidewalks, poor lighting, and crossing large streets may be barriers to walking



- 30th St. W / Ave. K
- 20th St. W / Ave. L
- Antelope Valley Freeway / Ave. L
- Sierra Highway / Ave. L
- 10th St. W / Ave. K
- Sierra Highway / Ave. K
- Sierra Highway / Ave. J
- Antelope Valley Freeway / Ave. J-8

Trails

- Ave. H
- 20th St. W and along Amargosa Creek
 - Staging area on Ave. H
 - Need pull in parking spots for longer rigs
- 40th St. W
- 60th St. W
- Littlerock Wash; connection to county trail, staging area here
- Ripley Nature Park (Palmdale) is on Godde Hill (60th St. W)
 - Good to have trail connect along 60th St. W
 - Trail to park could connect to the most convenient north / south connection; possibly 65th to 60th St. W
- Antelope Acres Trail Connection
 - At Ave. E-8 to connect with 93rd St. dirt road
 - Unsure about E/W connection
- Trail around Larwin Development
 - 93rd St. W to 100th St. W and between Ave. H and Ave. G
 - Agreement between Lancaster / Antelope Acres
 - Best way to connect to trail is on Ave. H
- Ave. I trail to Poppy Reserve
- Solar & Wind farms need to provide bike / walking / trail on their properties



Bikeways

Antelope Valley High Desert Cyclists Map

- Existing and Frequently Used Routes
 - Ave. L-8 from 70th St. W to 55th St. W
 - Ave. L from 60th St. W to 20th St. W
 - 60th St. W from Ave. L to Ave. N
 - 50th St. W from Ave. L to Ave. M-4



- 35th St. W from Ave. K-8 to Ave. L
- 30th St. W from Ave. I to Ave. L
- Ave. K-8 from 35th St. W to Antelope Valley Freeway
- Ave. K-8 from 10th St. W to 6th St. E
- Ave. J-8 from 30th St. W to 12th St. W
- Lancaster Blvd. from Antelope Valley Freeway to 10th St. W
- Lancaster Blvd. from Division St. to Sancroft Ave.
- Lancaster Blvd. from Challenger Way to 15th St. E
- Amargosa Creek Trail from Lake Lancaster to Ave. J
- 12th St. W from Kettering St. to Newgrove St.
- Newgrove St. from 10th St. W to Sierra Highway
- Sierra Highway from Newgrove St. to City Limit
- Division St. from Ave. J-1 to Ave. K-8
- Business Center Parkway from Division St. to Ave. L
- Ave. K-8 from Division St. to 6th St. E
- Challenger Way from Ave. I to Ave. L
- 15th St. E from Ave. I to Ave. L
- 20th St. E from Lancaster Blvd. to Ave. K-8
- 70th St. W
- 60th St. W
- Ave. G
- 50th St. W
- 30th St. W
- 20th St. W
- Along Antelope Valley Freeway
- Coventry St. from Ave. H to Ave. I
- Ave. H from 30th St. W to 40th St. E
- 10th St. W
- Ave. J-8 from 12th St. W to Sierra Highway
- Division St.
- 10th St. E
- 20th St. E
- 30th St. E

Workshop

- Suggested Routes / Problems
 - Ave. J-8 to Poppy Reserve
 - Ave. J
 - 60th St. W

- Ave. H
- Crossings at Sierra Highway at Ave. K-8, Ave. K, and Ave. J
- Jackson from 15th St. W to Sierra Highway
- 15th St. W
- 10th St. W Retail area
- Between Ave. L & Ave. K at 10th St. to Sierra Highway – New development
- Amargosa Creek
- 20th St. W
- 30th St. W
- Ave. L
- Ave. G fairgrounds access
- Facilities
 - Plant 42 access and facilities in area
 - Shade / shelter areas

Workshop 2: June 29, 2011

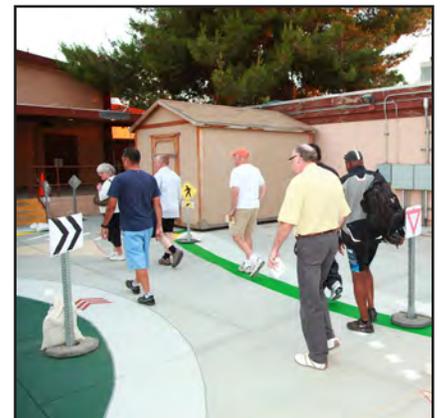
Over 160 people attended the second workshop, including community members and City staff. The City Manager kicked off the workshop with a brief introduction to the planning effort, and the importance of ushering in a new era for Lancaster. The Chair of the Architectural and Design Commission and a representative from Antelope Valley Partners for Health both gave brief statements.

The Consultant team gave a brief presentation about the planning effort to date and major findings. The team showed before and after pictures of communities that have embraced active living, and the transformational effect the plan could have on Lancaster when implemented. The team presented existing and proposed draft maps including: equestrian trails, pedestrian trails, missing sidewalks, jogging loops, intersection improvements, and bikeways.

After questions and comments were heard, workshop attendees participated in several interactive exercises.

City staff set up a mock roundabout for workshop participants to travel through and navigate. Roundabouts and mini-circles have many advantages compared to signalized and stop-controlled intersections, but are often misunderstood, as they are uncommon in the United States compared to Europe and other countries. City staff took advantage of this workshop to provide an educational introduction to roundabouts.

Staff created another outdoor exercise to show the importance of street connectivity. They created two different types of street networks in each box: one well-connected network, and the other, with many culs-de-sac and endpoints. Participants were to travel from point A to point B (which were equidistant in both boxes), and take note of their travel times. Participants found it took much longer to get to their destination when traveling in a disconnected street network.





After completing the outdoor exercises, attendees returned inside to participate in a prioritization exercise. Attendees were asked to respond to the planned projects, and to prioritize them with sticker dots. Each participant was given 20 red dots, and 20 blue dots. Participants placed red dots next to their highest project priorities, blue dots for second priority projects, and no dots for third priority projects. In scoring the exercise, two points are given for each red dot, and one for each blue dot. Participants prioritized among five different types of improvements: equestrian trails, bikeways, missing sidewalks, pedestrian intersection improvements, and off-street multi-purpose pedestrian / bicycle trails. The results of the exercise are displayed in the following tables.



TABLE 2-1: PUBLIC MEETING ON-STREET BIKEWAY PRIORITIES

Street	Section	Score
30th St. W	South	147
Avenue J	Central	128
Avenue K	Central	72
Avenue J	East	56
Avenue J-4	East	52
30th St. W	North	44
Avenue J	West	42
Avenue M	West	42
Avenue N	West	42
Avenue M	Central	42
Sierra Highway	North	36
50th St. W	Central	30
60th St. W	South	30
Avenue K	West	26
Sierra Highway	Central	26
50th St. W	South	26
Avenue G	Central	25
30th St. W	Central	23
Lancaster Boulevard	West	22
Avenue L	Central	22
60th St. W	North	18
15th St. W	Central	18
10th St. W	Central	18
10th St. W	South	16
Avenue I	Central	12
Avenue G	West	10



Street	Section	Score
Avenue N	Central	10
Division Street	North	10
Avenue I	West	8
Avenue K-8	Central	8
Avenue K-8	West	7
Avenue L	West	7
90th St. W	North	7
Avenue J-8	Central	6
15th St. W	North	6
60th St. W	Central	6
Avenue J-8	West	5
Avenue L-8	West	5
Avenue H	West	4
Avenue H	Central	4
80th St. W	North	4
50th St. W	North	4
40th St. W	North	4
Valley Central Way	North	4
12th St. W	North	4
Fern Avenue	North	4
Business Center Parkway	North	4
65th St. W	Central	4
45th St. W	Central	4
90th St. W	South	4
65th St. W	South	4
Lancaster Boulevard	Central	3
Avenue I	East	3
45th St. W	North	3
35th St. W	North	3
25th St. W	North	3
4th St. E	North	3
Division Street	Central	3
Avenue G	East	2
70th St. W	North	2
65th St. W	North	2
55th St. W	North	2

Street	Section	Score
32nd St. W	North	2
20th St. W	North	2
Motor Lane	North	2
Driver's Way	North	2
10th St. W	North	2
90th St. W	Central	2
55th St. W	Central	2
Fern Avenue	Central	2
70th St. W	South	2
25th St. W	South	2
20th St. W	South	2
Motor Lane	South	2
Avenue H-8	West	1
Fig Avenue	North	1
70th St. W	Central	1
40th St. W	Central	1



TABLE 2-2: PUBLIC WORKSHOP INTERSECTION IMPROVEMENTS PRIORITIES

Intersection	Score
Avenue L (eastbound) / CA-14 Northbound off-ramp	54
Avenue L (westbound) / CA-14 Northbound on-ramp	44
Avenue L (westbound) / CA-14 Southbound off-ramp	40
Avenue L (westbound) / CA-14 Southbound on-ramp	35
Avenue K / 30th St. West	31
Avenue J-8 / 27th St. West	25
Lancaster Boulevard / 12th St. West	14
Avenue I / 10th St. West	12
Avenue I / 5th St. East	12
Avenue J-8 / 30th St. West	12
30th St. East between Lancaster Boulevard and Avenue I	10
Lancaster Boulevard / 30th St. West	10
Avenue K-8 / 10th St. West	10
Avenue L / 20th St. West	10
Avenue L (eastbound) / CA-14 Northbound on-ramp	10
Avenue L Eastbound / Sierra Highway on- and off-ramps	10
Avenue I / Division Street	8
Lancaster Boulevard / Sierra Highway	8
Avenue J-8 / 20th St. West	8
Avenue K / 10th St. West	8
Avenue H-8 / 10th St. West	6
Lancaster Boulevard / 30th St. East	6
Avenue J / 10th St. West	6
Avenue J-8 / 10th St. West	6
Avenue K / 20th St. West	6
Avenue J / Challenger Way	5
Avenue I / Sierra Highway	4
Lancaster Boulevard / 15th St. West	4
Avenue J / Fig Avenue	4
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)	4
Avenue L Westbound / Sierra Highway on- and off-ramps	4
Avenue I / Fern Avenue	2
Avenue I / 15th St. East	2
Jackman Avenue / Fern Avenue	2

Intersection	Score
Avenue J / Sierra Highway	2
Avenue J / Division Street	2
Avenue J / 20th St. East	2
Avenue J-8 / 30th St. East	2
Avenue K (north side) / CA-14 Southbound Exit	2
Avenue K (north side) / CA-14 Northbound Ramp	2
Avenue L Eastbound On-ramp (west of railroad) / Sierra Highway	2
Avenue L-8 / 35th St. West	2

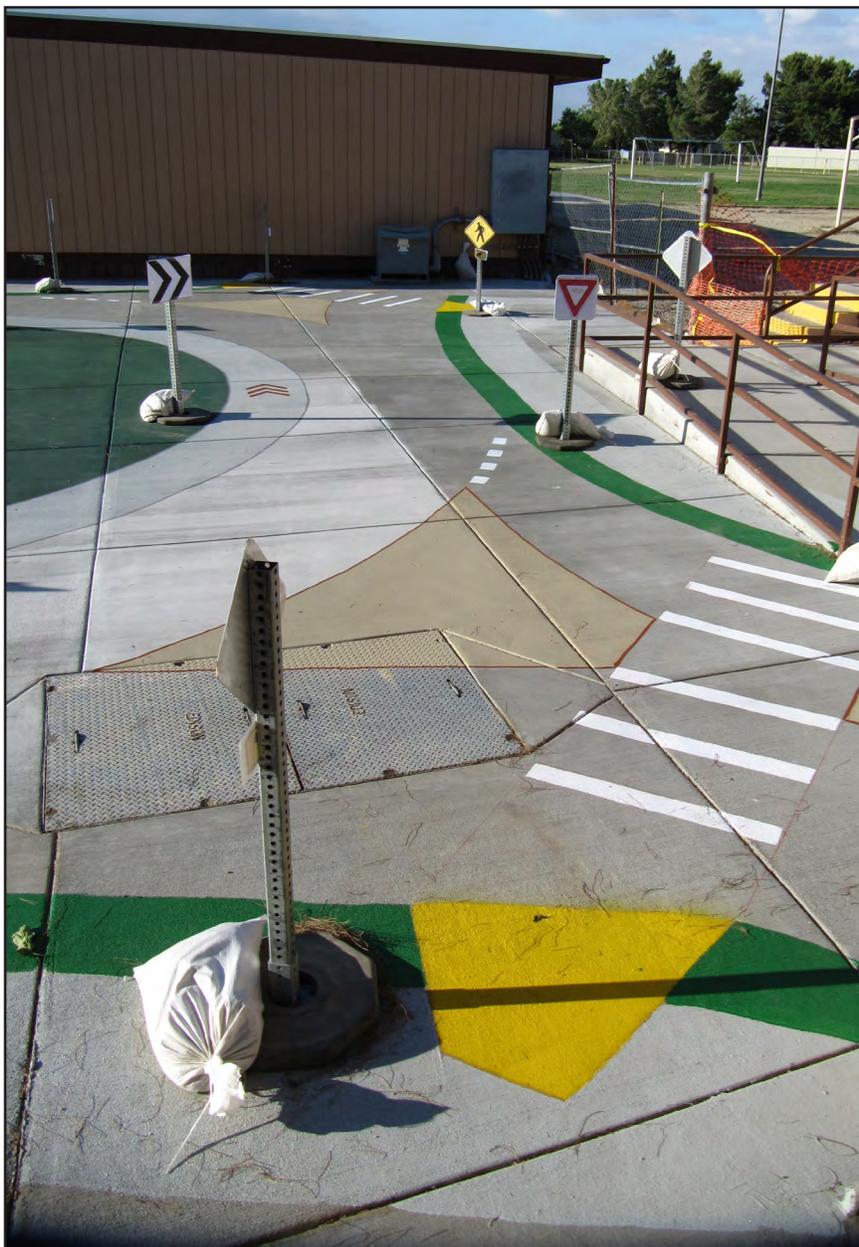


TABLE 2-3: PUBLIC WORKSHOP MISSING SIDEWALKS PRIORITIES

Street	Section	Score
Avenue J-4	Central	27
10th St. W	Central	17
Avenue L	Central	14
Valley Central Way	Central	14
Avenue I	Central	13
Avenue K-8	Central	12
Division Street	Central	12
Avenue K	West	9
30th St. W	North	9
15th St. W	Central	8
Lancaster Boulevard	Central	7
Avenue I	East	7
Avenue J	East	6
Division Street	North	6
30th St. W	Central	5
Avenue J	West	4
Avenue J-8	West	4
Avenue L-8	West	4
Avenue M	West	4
30th St. W	South	4
Avenue I	West	3
Division Street	South	3
Lancaster Boulevard	West	2
Avenue K-8	West	2
Avenue L	West	2
Avenue J	Central	2
Avenue J-8	Central	2
Avenue K	Central	2
Avenue L	East	2
Kingtree Avenue	Central	2
Fig Avenue	Central	2
Sierra Highway	Central	2
Sierra Highway	South	1



Approximately 100 additional sections of missing sidewalks were available in the public prioritization process. These sections received 0 points, and should be treated as third priority by the public.

TABLE 2-4: PUBLIC WORKSHOP EQUESTRIAN TRAILS PRIORITIES

Equestrian Trail	Score
California Aqueduct Trail	55
Westside Trail	13
Amargosa Creek Trail	9
SCE Utility Corridor Trail	9
40th St. East Trail	8
Avenue K-8 from 30th St. W to 15th St. W Trail	8
25th St. E from Avenue K-8 to Avenue L	8
Avenue K-8 from 35th St. E to Littlerock Wash	6
Avenue H Trail	5
Avenue K-8 from 20th St. E to 30th St. E Trail	5
Littlerock Wash Trail	4
33rd Street East Drainage Channel Trail	2
Avenue G / Division Street Trail	2

TABLE 2-5: PUBLIC WORKSHOP OFF-STREET TRAILS PRIORITIES

Off-street Trail	Score
California Aqueduct Bike Path	69
Sierra Highway Bike Path	66
Amargosa Creek Bike Path	56
Jogging Loop 1: 35th St. W, Avenue K-8, Sierra Highway, Avenue J	44
California Aqueduct Trail	38
Avenue L Bike Path	31
Avenue K-8 Bike Path	30
Avenue I, Lancaster Blvd., 35th St. W, 50th St. W loop Multipurpose Path	29
35th St. W from Lancaster Boulevard to Avenue K-8 Multipurpose Path	25
Jogging Loop 2: Lancaster Boulevard, 30th St. E, Soccer Center, Avenue J-8, 5th St. E	22
40th St. West Bike Path	19
Avenue G Bike Path	17
Amargosa Creek Trail	16
Water Channel Bike Path	16
Utility Corridor Bike Path	16
Avenue H Bike Path	14
Avenue K-8 from 30th St. W to 15th St. W Trail	10
Avenue K-8 from 35th St. E to Littlerock Wash	6
Utility Corridor Trail	5
Water Channel Trail	4
Avenue H Trail	3
Littlerock Wash Trail	2
Avenue G / Division Street Trail	2

Workshop 3: October 18, 2011

A third public workshop was held to present the Draft Master Plan of Trails and Bikeways. At the workshop, the consultant team presented final recommendations and created boards that summarized primary chapters of the Plan.



EQUESTRIAN WORKSHOPS

The City invited members of the equestrian community to attend focused workshops to ensure that the needs and concerns of the equestrian community were incorporated into the Plan. Outcomes of both workshops are briefly described below.

Workshop 1: October 25, 2010

Twenty community members attended the first equestrian workshop. The consultant team did a brief presentation about the overall scope of the Master Plan of Trails and Bikeways, and then presented in detail the scope for the trails section. This included a discussion of a backbone trail network, trail integration in new development, trailhead facilities, trail amenities, and surfacing and fencing of trails. Comments from the workshop included:

- Survey was difficult to understand and answer for equestrians because Lancaster does not currently have existing trails
- Equestrians and runners need a backbone north/south and east/west trail network that have destinations in mind or connect up to other trails
- Cars and drivers have a lack of respect and awareness for equestrians
- Parallel bike paths and equestrian paths need a fence or separator
- The Amargosa Creek Pathway needs to include equestrian facilities as stated in the plan
 - The Horse Access parking on Avenue H needs pull through for horses
 - 1 mile of the network should be open to equestrians
 - There should be a connection to the County Trail



Workshop 2: August 11, 2011

Thirty-two equestrian stakeholders attended the second equestrian workshop. The consultant team presented draft proposed equestrian trails, existing trails, and types of trail amenities. Comments on the trails plan included:

- Need for bicyclist education when sharing trails
- An additional trail may be available on the east side of Lancaster not currently on the map
- Water and other amenities are needed on the trails
- Trailhead locations must be identified in the Plan
- Trails should connect to outside jurisdictions, Los Angeles County and Palmdale
- Concern for shared use with ATVs, motorcycles, and other motorized vehicles - should be prevented from using the trails
- Design guidelines should follow those of Los Angeles County

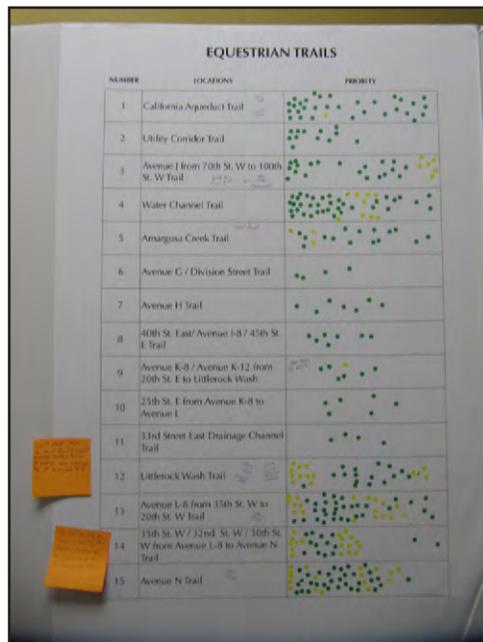


Attendees were asked to respond to the planned projects, and to prioritize them with sticker dots. Each participant was given 20 green dots, and 20 yellow dots. Participants placed green dots next to their highest project

priorities, yellow dots for second priority projects, and no dots for third priority projects. In scoring these, two points are given for each green dot, and one for each yellow dot. Participants prioritized among fifteen planned equestrian trails. The results of the exercise are displayed in the following table.

TABLE 2-6: EQUESTRIAN WORKSHOP PUBLIC RANKING

Equestrian Trail	Score
Water Channel Trail	81
Avenue L-8 from 35th St. W to 20th St. W Trail	80
Avenue N Trail	79
California Aqueduct Trail	63
35th St. W / 32nd St. W / 30th St. W from Avenue L-8 to Avenue N Trail	46
Avenue J from 70th St. W to 100th St. W Trail	46
Littlerock Wash Trail	45
Amargosa Creek Trail	32
Utility Corridor Trail	24
40th St. East / Avenue I-8 / 45th St. E Trail	14
Avenue H Trail	14
Avenue K-8 / Avenue K-12 from 20th St. E to Littlerock Wash	13
25th St. E from Avenue K-8 to Avenue L	12
33rd Street East Drainage Channel Trail	8
Avenue G / Division Street Trail	8





DISABLED STAKEHOLDERS WORKSHOPS

The Master Plan of Trails and Bikeways contains an Americans with Disabilities Act (ADA) Transition Plan. As part of the requirements of the ADA Transition Plan, and to ensure the rest of the components of the Master Plan are barrier free, the City hosted two workshops with the disabled community. Outcomes of both workshops are briefly described below.

Workshop 1: November 1, 2010

Nineteen community members attended the first disabled stakeholders workshop. The City provided sign-language translation for hearing-impaired attendees. The consultant team did a brief presentation about the overall scope of the Master Plan of Trails and Bikeways, and then presented in detail the scope for the ADA Transition Plan. This included a discussion of the purpose of the transition plan, barriers to disabled travel including lack of sidewalks, poor push button placement, inaccessible ramps, lack of truncated domes, etc. Attendees then engaged in discussion about barriers in the City.



Workshop 2: August 11, 2011

The Antelope Valley Senior Center hosted the second workshop to address barriers to disabled travel. Twenty-five community members, including seniors, disabled residents, staff, assistants, and others. The consultant team presented the purpose of the ADA Transition Plan, the sections of a compliant transition plan, types of barriers (missing ramps, sidewalks, audio signals, etc.), how to create compliant facilities, and the purpose of the workshop, including asking for feedback and prioritization. Comments included:

- Desired bus route through Avenue K and 30th St. E
- Avenue J and Sierra Highway have missing meter covers that make sidewalk discontinuous
- Avenue I and 17th St. W has poorly placed push buttons
- 20th St. W has a grocery store that is difficult to access
- Need for better crosswalks at Fern Avenue and Jackman Street



Attendees were asked to respond to the planned projects, and to prioritize them with sticker dots. Each participant was given 20 green dots, and 20 yellow dots. Participants placed green dots next to their highest project priorities, yellow dots for second priority projects, and no dots for third priority projects. In scoring these, two points are given for each green dot, and one for each yellow dot. Participants prioritized among missing sidewalks, and pedestrian intersection improvements with barriers to disabled travel. The results of the exercise are displayed in the following tables. The dot exercise has limitations given the type and level of attendance. The rankings displayed are of workshop attendees only, and serve as one tool to prioritize projects.

TABLE 2-7: DISABLED STAKEHOLDERS RANKING OF INTERSECTION IMPROVEMENTS

Intersection	Score
Avenue K / Challenger Way	14
Avenue L / 20th St. West	14
Avenue L / 60th St. West	14
Lancaster Boulevard / Sierra Highway	12
Avenue J / Sierra Highway	8
Avenue J-8 / 30th St. East	8
Avenue I / Division Street	6
Avenue L (eastbound) / CA-14 Southbound on-ramp	6
Avenue L (westbound) / CA-14 Northbound on-ramp	6
Avenue K (west of railroad) / Sierra Highway	6
Lancaster Boulevard / 15th St. West	6
Avenue I / Fern Avenue	4
Avenue J / 20th St. East	4
Avenue L (eastbound) / CA-14 Northbound on-ramp	4
Avenue I / Sierra Highway	4
Avenue I / 15th St. East	2
Avenue J / 20th St. West	2
Avenue J-8 / 20th St. West	2
Avenue K (north side) / CA-14 Northbound Ramp	2
Avenue K (north side) / CA-14 Southbound Exit	2
Avenue K / 5th St. East	2
Avenue K / CA-14 (15th St. West)	2
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)	2
Avenue K / CA-14 southbound on-ramp	2
Avenue J / Fig Avenue	1
Lancaster Boulevard / 12th St. West	1



TABLE 2-8: DISABLED STAKEHOLDERS RANKING OF MISSING SIDEWALKS

Street	Section	Score
15th St. W	North	16
Sierra Highway	North	10
Avenue J	Central	9
90th St. W	South	6
70th St. W	South	6
Lancaster Boulevard	Central	4
Avenue I	West	4
Valley Central Way	North	4
12th St. W	North	4
Fig Avenue	North	3
Avenue J-4	Central	2
Avenue I	Central	2
Avenue L	West	2
Avenue K	East	2
60th St. W	North	2
Challenger Way	North	2
15th St. E	North	2
60th St. W	South	2
Pillsbury St.	East	1

Walk Audits

On January 28th and 29th, 2011, the City hosted three walk audits with Dan Burden and Ryan Snyder. The walk audits began with a brief presentation on walkable and livable communities. This included a discussion of different devices to slow and calm traffic, the importance of land use mixes, network connectivity, and how to retrofit incrementally. Attendees were then led on a brief walk in each location to observe the street environment and identify safety concerns, and potential solutions to make the surrounding neighborhood a more friendly place for pedestrians and bicyclists. After the walk, attendees discussed in small groups and conducted a mapping exercise on how they would improve the area. A summary of general problems, locations that may need improvement, and potential solutions that were identified during each walk audit follows below.



ANTELOPE VALLEY COLLEGE (AVENUE K / 30TH ST. WEST)

General Problems

- Speeding
- Inability to cross streets safely
- College is a destination that needs better access and showcasing
- Connectivity
- Limited access with crossings
- Obesity / mortality
- Not enough eyes on the street
- Crashes / too many opportunities for accidents
- Land uses
- Noise pollution
- Safety for students



Locations

- 30th St. W / Ave. K
- 30th St. W / Ave. J-8
- 27th St. W / Ave. J-8
- ½ mile radius around college
- 32nd St. W / Ave. K
- 30th St. W / Ave. J-12





Suggested Improvements

- Add roundabouts
 - 30th St. W / Ave. K
 - Ave. J-8 / 20th St. W
- Add new pedestrian crossings at 27th St. W / Ave. J-8
- Add mini circle at 27th St. W / Ave. J-8
- Trail through Prime Desert Woodlands
- Pedestrian crossings from churches and parks
- Add mixed use development across from AVC at 30th St. W / Ave. K
- Stores should front sidewalks
- Add student housing
- Continue streets through college
- Parking should be in rear of stores
- Punch cul-de-sac through to improve connectivity
- Add speed tables
- Add raised pedestrian crossings to college
- Inset on-street parking along 30th St. W and Ave. K
- Reduce Ave. K from 4 lanes to 2 lanes
- Add parkways to sidewalks
- Add center medians
- Add chokers in neighborhood
- Reduce 30th St. W to 2 lanes in each direction
- Modify bike lanes to 6 feet in width with striped buffer on Ave. K and 30th St. W



ANTELOPE VALLEY PARTNERS FOR HEALTH (10TH ST. WEST / AVENUE I)

General Problems

- Speeding
- Wide streets
- Utilities / other barriers in sidewalks
- Dips in drainage on Jackman
- Pedestrian crossings - conflicts between pedestrians and car turning movements



Locations

- 10th St. W / Ave. I
- 13th St. W / Kettering St (near Monte Vista Elementary School)
- Jackman Ave. at Fern Ave. and Elm Ave. have big dips for drainage
- Jackman Ave. / 10th St. W need ramps
- Jackman Ave. has telephone poles in sidewalk

Suggested Improvements

- Add inset parking and medians on paths to the Arbor Grove Market
- Add roundabouts at:
 - 10th St. W / Ave. I
 - Lancaster Blvd. / 10th St. W
- Add school crossing for elementary schools
- Add midblock crossing and curb extensions around school on Kettering Street
- Lancaster Boulevard should have a bike lane and center median
- Reduce number of lanes on Ave. I to two
- Relocate utilities and boxes out of sidewalk
- Jackman Ave. needs resurfacing
- Relocate bus stops closer to the intersections and away from the mid-block





FIRST CHRISTIAN CHURCH (17TH ST. EAST / AVENUE J)

General Problems

- Difficult for pedestrians to cross
- Curb ramps needed
- Streets too wide
- Traffic too fast
- No sidewalk buffers

Locations

- 15th St. E / Avenue J
- Avenue J / 17th St. E
- 20th St. E / Avenue J
- 20th St. E / Avenue J-4



Suggested Improvements

- Creating areas through stores in big shopping centers to connect streets for pedestrian use
- Open up parking lots for commercial and residential development
- Paths on church property
- Parks, residential and wrapped commercial on existing sites on Ave. J
- Punch through culs-de-sac
- Add curb extensions and midblock crossings on Ave. J
- Remove lanes on Ave. J to narrow crossings
- Add inset parking
- Expand church at corner of 17th St. E / Ave. J
- Add parkways along Ave. J
- Narrow driveways and limit number of entrances and exits
- Add roundabouts and mini-circles to slow traffic



Other Public Comments

The City invited the public to provide further comments through e-mail, phone, fax, or mail. Major concerns and suggestions from these comments included the following:

- Lack of sidewalks on 30th St. W from Avenue H to Avenue I
- Need to educate motorists, cyclists, and pedestrians
- Increased maintenance and street sweeping to create clear bike lanes
- Make cycling through on and off-ramps safer
- Need for bike lanes on 30th St. W from Avenue L to Avenue M
- Connect bike paths with bike crossing at Avenue K-8 and Sierra Highway
- Street signs in Braille would assist visually-impaired residents
- “Wayfinder” program that inputs “points of interest” and reads aloud to visually-impaired users using GPS
- Speeding is a problem on Valley Central Way
- Bus stop on SE corner of Lancaster Boulevard and Valley Central Way not maintained (garbage)
- Need for increased traffic enforcement and increased fines for violators
- No sidewalk on 20th St. W between Lancaster Boulevard and Avenue J
- No shoulder or sidewalk on east side of street on 15th St. W between Avenue J-4 and Avenue J-8
- No sidewalk on west side of Valley Central Way in front of Wal-Mart
- No sidewalk on east side of Valley Central Way near Food-4-Less

All public comments and input were taken into consideration with the development of this Plan. Many of the improvements suggested at meetings and in the survey have been incorporated into the Master Plan of Trails and Bikeways.



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CHAPTER 3

PLANNING CONTEXT



Many other planning documents influence the trails, bikeways, and pedestrian systems. In order to understand the context of the Master Plan of Trails and Bikeways, the consultant team reviewed related documents and data described in more detail below.

Lancaster City Planning

2008 BICYCLE TRANSPORTATION PLAN

The City last adopted and updated its Bicycle Transportation Plan in 2008 and amended it in 2011. The Plan includes all sections as required by California Streets and Highways Code 891.2, and makes the City eligible for Caltrans Bicycle Transportation Account grant funds. Lancaster's General Plan and the Metro Bicycle Transportation Strategic Plan both recognize the need for alternative modes of transportation as a way to reduce traffic congestion, improve health, and improve air quality. The 2008 plan was reviewed extensively in preparation of this update. This plan provides more detail, and recommends a more extensive bikeway network than the 2008 plan.

GENERAL PLAN 2030

City Council recently adopted an updated General Plan on July 14, 2009. The General Plan serves as the long-term vision for the City of Lancaster, and addresses numerous aspects of the City including housing, transportation, land use, and public health, among others.

Existing and Future Land Uses

Lancaster's concentrated land uses are generally located in the City center with residential housing developments toward the outer edges of the City. The City has experienced fragmented development; between housing and commercial areas, there are often large blocks of undeveloped and unimproved land.

The General Plan describes compact growth strategies that will facilitate shorter trips and encourage increased bicycling and walking. One of the stated assumptions in the General Plan is that Lancaster will experience population growth, and that much of this will be accommodated by high intensity urban infill. The General Plan classifies all land uses in Lancaster as either located in the Urbanizing Area or the Rural area; all of the population growth projected through 2030 can be accommodated in the Urbanizing Area. The General Plan also assumes that the rising cost of fuel as well as state and regional initiatives to curb greenhouse gases will result in increased use of alternative modes of transportation.

Two components of the General Plan, the Plan for Active Living and the Plan for Physical Mobility, further specify how Lancaster will enable more trips to be made by foot or bicycle.

The General Plan and the City's zoning map dedicate large portions of land within the City limits west of 70th Street West, east of 40th Street East, south of Avenue L, and an area west of 40th Street West and north of Avenue K as "non-urban". These areas are intended to remain rural in nature. New residential development will occur in these areas, but they will maintain open areas for horseback riding and hiking. As they develop, they can be built with the trails, as well as bicycle and pedestrian paths.



Plan for Active Living

The City's General Plan section "Plan for Active Living" calls for the adoption and implementation of a Master Plan of Trails. Residents have long called for an integrated system of bicycle, pedestrian, and equestrian trails. The Master Plan of Trails would define such a system as well as establish standards for trail construction and design. This document fulfills the need for a Master Plan of Trails.

The Plan for Active Living further specifies policy actions that will lead to the development of a trails system. These are Specific Actions 10.2.2(a)-10.2.2(f), and they state that the city will:

- pursue agreements with utility agencies for rights-of-way for trail purposes;
- require all new development to provide dedicated right-of-way or easements and trail improvements in accordance with the Master Plan of Trails;
- coordinate with Los Angeles County to ensure that development on adjacent unincorporated land proceeds in accordance with the Master Plan of Trails;
- coordinate with other local agencies to extend the trail system across jurisdictions;
- consider the dedication of, or granting of easements for existing informal pedestrian and equestrian trail access and traditional travel routes; and
- use drainage flood control channels for trail purposes where feasible.

These actions are carried over to the Goals, Policies, and Actions section (Chapter 4) of this document.

The Plan for Active Living also dictates some general guidelines for trail construction and location. These guidelines concern fencing, landscaping, trail access points, signage, and other elements of trail planning and design. They have been incorporated into the Design Guidelines and Proposed Bikeways, Proposed Pedestrian Improvements, and Proposed Trails.

Lastly, the Plan for Active Living states three actions that aim to facilitate the use of bicycles as a form of transportation and recreation. The city will:

- incorporate bicycle routes into the City roadway system as appropriate,
- prepare and adopt standard roadway cross-sections which accommodate bicyclists, and
- design bikeway routes that access transit.

This document provides the framework for enacting all three of those actions.

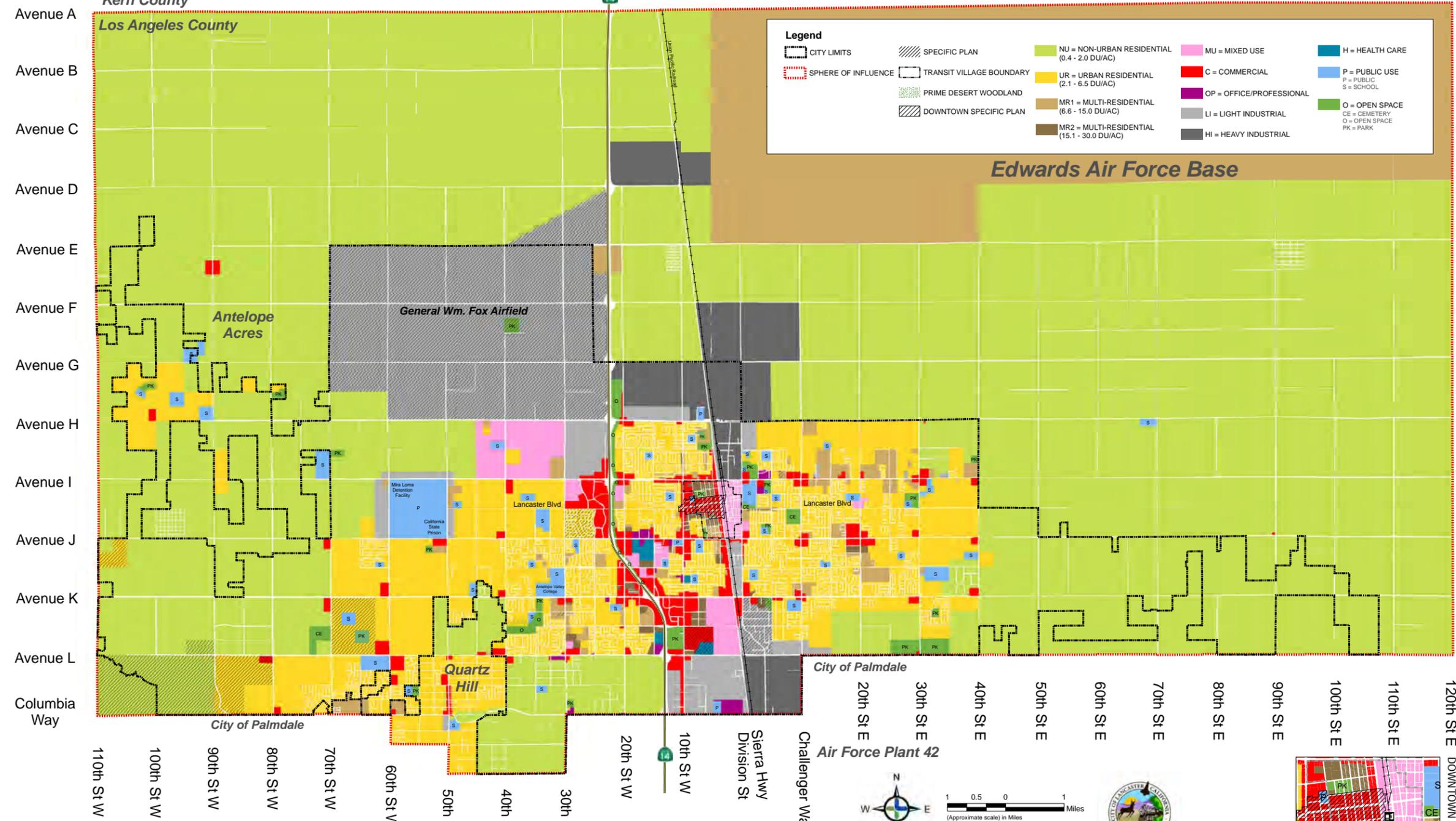
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MAP 3-1: LAND USE AND ZONING MAP



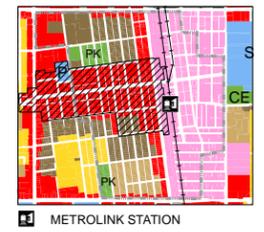
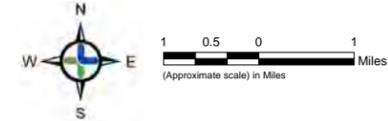
Lancaster General Plan Land Use Map
 Adopted July 14, 2009 by Resolution No. 09-52
 REVISED
 Resolution No. 09-73



Legend

CITY LIMITS	SPECIFIC PLAN	NU = NON-URBAN RESIDENTIAL (0.4 - 2.0 DU/AC)	MU = MIXED USE	H = HEALTH CARE
SPHERE OF INFLUENCE	TRANSIT VILLAGE BOUNDARY	UR = URBAN RESIDENTIAL (2.1 - 6.5 DU/AC)	C = COMMERCIAL	P = PUBLIC USE P = PUBLIC S = SCHOOL
PRIME DESERT WOODLAND	DOWNTOWN SPECIFIC PLAN	MR1 = MULTI-RESIDENTIAL (6.6 - 15.0 DU/AC)	OP = OFFICE/PROFESSIONAL	O = OPEN SPACE CE = CEMETERY O = OPEN SPACE PK = PARK
		MR2 = MULTI-RESIDENTIAL (15.1 - 30.0 DU/AC)	LI = LIGHT INDUSTRIAL	
			HI = HEAVY INDUSTRIAL	

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Plan for Physical Mobility

While the Plan for Active Living focuses on bicycling, walking, and horse riding specifically, the Plan for Physical Mobility describes these modes as a part of a larger transportation system. One of the major objectives stated in the Plan for Physical Mobility is Policy 14.1.3.11, which is to reduce vehicle-miles traveled by encouraging alternative forms of transportation, including non-motorized modes.

This portion of the General Plan also identifies a number of opportunities and constraints related to bicycling and walking. First, according to the Plan for Physical Mobility, many bicycle lanes on Lancaster's arterials were removed to provide for additional vehicle lanes. The Plan states that a Transportation Master Plan will examine the need for on-street bicycle lanes, and reiterates the need for a Master Plan of Trails to improve bicycle circulation. Second, the Plan for Physical Mobility states that the city has the opportunity to make all new development bicycle- and pedestrian-friendly.

The Plan proceeds to specify a number of actions and policies related to bicycling, walking, and street design. These include requirements for pedestrian access and bicycle parking in new development and on public facilities. Notably, the Plan for Physical Mobility clarifies an overarching principle: "Where conflicts arise between motorist convenience and the livability and well-being of neighborhoods, the latter concerns shall have priority" (Specific Action 14.2.3(a)).

AMARGOSA CREEK PATHWAY MASTER PLAN AND DESIGN GUIDELINES

The Plan and Guidelines provide guidance to the development of a pathway and trail for a five-mile corridor along the Amargosa Creek from Avenue M to Avenue G-8 at Lake Lancaster. The City began the Amargosa Creek planning effort in 1995. The plan includes guidance for pathway design and cross section, access points, equestrian access, trailhead locations and design, and street crossings. To date, only part of the path has been constructed from Lake Lancaster to Avenue I, and a staging area located at the Fairgrounds. During the equestrian and general public workshops, the public expressed the importance of this trail; guidance from the Pathway Master Plan and Design Guidelines was incorporated into this Master Plan of Trails and Bikeways.

CITY OF LANCASTER DESIGN GUIDELINES

Approved by City Council in December 2009, the Design Guidelines establish design standards and principles for all development in Lancaster, including residential, commercial, industrial, and mixed-use development. The guidelines instruct developers to provide direct and safe connections for bicyclists and pedestrians. They also call for landscaping and wayfinding features to highlight pedestrian and bicycle amenities. They instruct developers to reduce the number of vehicle travel lanes where traffic counts allow, and to provide increased space for pedestrian ways and bikeways. They identify specific design features that developers should use, including multiuse paths, bulb-outs, solar lighting, landscaped center islands, roundabouts, and pedestrian breaks in walls.

ENGINEERING DESIGN GUIDELINES, POLICIES, AND PROCEDURES MANUAL

The Manual guides the design of streets, utility systems, storm drains, lighting, and landscaping, as well as technical reports related to Public Works. It is primarily intended to guide private development.

The Manual defines a hierarchical road system of highways, arterials, collectors, and local streets. For each road type in the hierarchy, it sets minimum design speeds and establishes standard widths. It also specifies a curb return radius of 25 feet for intersections of residential collector and local streets, and a return radius of 35 feet for any intersection of arterials or streets serving commercial or industrial development.

The Manual makes few references to the design and engineering needs of bicyclists and pedestrians. For items not covered by the manual, it refers developers and city staff to the Highway Design Manual of Instructions issued by the Los Angeles County Department of Public Works.



PARKS, RECREATION, AND OPEN SPACE AND CULTURAL MASTER PLAN

Updated in 2007, this Plan contains the long-term vision and goals for the Lancaster Department of Parks, Recreation and Arts. It inventories current community needs and preferences, and projects future needs and preferences related to parks, recreation, open space, and cultural opportunities. The Plan concludes by describing policies and recommended actions.

Several of the policies and recommended actions are reflected in this document. Policy 3.3: calls for the expansion of trail connections and pathways, and specifies that these should be well-lit, well-marked, and connect to schools, workplaces, and adjacent communities. The proposed trails in this document fulfill this policy. Policy 9.1 calls for the development of a trails network, and emphasizes that this network should be built out in conjunction with new development. Action 9.1.2 says that the Department will provide developers with design guidelines and standards for internal trails; the Design Guidelines section of this document contains that information. The Master Plan of Trails and Bikeways also fulfills Actions 9.1.4, 9.1.5, and 9.1.6. Respectively, these call for a citywide master plan of trails, coordinated connections with adjacent communities, and increased involvement by community members in trails planning.

The Plan also specifies maintenance standards for trails (Table 5-5).

SUGGESTED ROUTES TO SCHOOL

The City's Suggested Routes to School study was completed in 1997. It reviews the mode that students take to school and provides maps of suggested walking routes. Due to the many changes to both the school system and the street system over the intervening years, the City is in need of an up-to-date Safe Routes to School Plan.

TRAFFIC CALMING POLICY

The Traffic Engineering Division of the City's Public Works Department developed the Traffic Calming Policy in 2008. It is a reference document that defines livable speeds, traffic calming, and other relevant terms. It also defines a process whereby constituents can seek traffic calming devices and strategies for their neighborhoods. According to the Policy, if conditions on a street meet any of the following criteria, it is eligible for traffic calming:

- 85th percentile speeds in excess of 10 miles per hour above the speed limit
- on a local residential street, 24-hour vehicle volumes in excess of 2,000 or peak hour in excess of 300
- on a local street in a business setting, 24-hour vehicle volumes in excess of 5,000, with a peak hour threshold of 1,000
- on a collector street in a business setting, 24-hour vehicle volumes in excess of 20,000, with a peak hour threshold of 2,000
- cut-through traffic in excess of 25%, calculated either by comparison with parallel routes or by peak hour trip generation rates published by the Institute of Transportation Engineers.



MUNICIPAL CODE

Local municipal code in Lancaster covers bicycle licensing, bicycle parking, and end-of-trip amenities such as showers and lockers. The code also bans sidewalk riding in commercial areas. The relevant codes are reviewed below.

The city currently requires bicyclists to register for a bicycle license with the Lancaster Sheriff's Station. The fee for registration is \$0.75.

Section 15.56.030 (Transportation demand and trip reduction) of the code requires nonresidential development of 50,000 square feet or more to provide bicycle racks or other secure bicycle parking to accommodate four bicycles per the first 50,000 square feet of development, and one bicycle per additional 50,000 square feet of development. The City requires a minimum of one bicycle space per 10 employees for development in the office-professional zone and industrial zone per sections 17.12.880 and 17.16.210. Bicycle parking is not required for residential development, with the exception of multi-family projects, where it will be considered when assigning parking.

In General Commercial Zones, the City requires parking per Section 17.12.230.A9.k. Freestanding buildings not within a shopping center or other commercial center which have a gross floor area of 50,000 square feet to 100,000 square feet shall provide one shower for each gender and 0.5 clothing lockers for each required bicycle parking space. An additional shower for each gender shall be provided for each additional 100,000 square feet of gross floor area or portion thereof. Shopping centers or other commercial centers shall provide showers and lockers at the same rate as subsection A.9.k.1) of this section for the total gross square footage of the center. The center may consolidate the showers in a common facility within the center rather than providing them by individual use.

According to Section 10.04.090.C of the Municipal Code, bicyclists are prohibited from riding on pedestrian facilities in commercial areas.

Census Data Analysis

POPULATION DENSITY

Map 3-2 displays the population density in people per square mile for census tracts in Lancaster. The tracts are symbolized in quintiles, with the densest tracts shown in the darkest color. Even the densest areas of Lancaster are fairly sparse compared to many cities. Improvements to bicycling and walking should be targeted to denser tracts for several reasons. First, facilities that run through more dense areas simply impact more people. Second, where many different kinds of destinations coexist in the densest tracts, trip distances are likely to be shorter, because there are more destinations per square mile. These short trips can be well served by bicycling and walking.

Most of the densest tracts in Lancaster are located along a southwest-to-northeast strip that extends from the intersection of Avenue L and 30th Street West to the intersection of Avenue H and 20th Street East. This strip passes through the downtown area. The densest tracts in Lancaster are located on the outer edge of this strip. One of the two densest tracts is in the area bounded by 20th Street West, 10th Street West, Avenue H, and Avenue I. The other is in the area bounded by Challenger Way, 20th Street East, Avenue J, and Avenue K.

MEDIAN INCOME

Map 3-3 displays the median household income for census tracts within Lancaster. These tracts are symbolized in quintiles, and the tracts with the lowest median income are the darkest. Improvements to bicycling and walking should be targeted in areas of low median income because in these areas, people are less likely to have access to cars, and are more likely to benefit from low-cost transportation alternatives.

Only two tracts have median income below \$19,000. One is located in the Downtown area bounded by Avenue I, Avenue J, 10th Street West, and Sierra Highway. The other tract with very low median income is located between Avenue I, Avenue J, 50th Street West, and 60th Street West. The Antelope Valley State Prison is located in this tract.

In general, the downtown area and the eastern arm of the city are the poorer areas of Lancaster. Most of the area west of the CA-14 Highway has a relatively high median income. There is also a pocket of high income on the southern boundary of the city, between Sierra Highway and 40th Street East.



POPULATION UNDER 15

Map 3-4 displays the number of children under 15 who live in each tract in Lancaster. The tracts are symbolized in quintiles, and the tracts with the highest numbers of children are the darkest. This population is mapped because they are not eligible to become licensed drivers and must travel by bicycling, walking, transit, or being shuttled by parents or guardians. As such, improvements to bicycling and walking should be targeted to areas where many children live.

This map demonstrates that the spatial distribution of children differs from the spatial distribution of Lancaster's population as a whole. While the tracts with the largest numbers of people are in and near the downtown, the tracts with the largest numbers of children are located in two pockets on either side east and west of the downtown. The southwest quadrant of the city has relatively high numbers of children, while the area east of 40th Street East has very low numbers of children. Most of the tracts in the middle of the city, between 20th Street West and Challenger Way, fall into the 3rd or 4th quintile for number of children under 15.

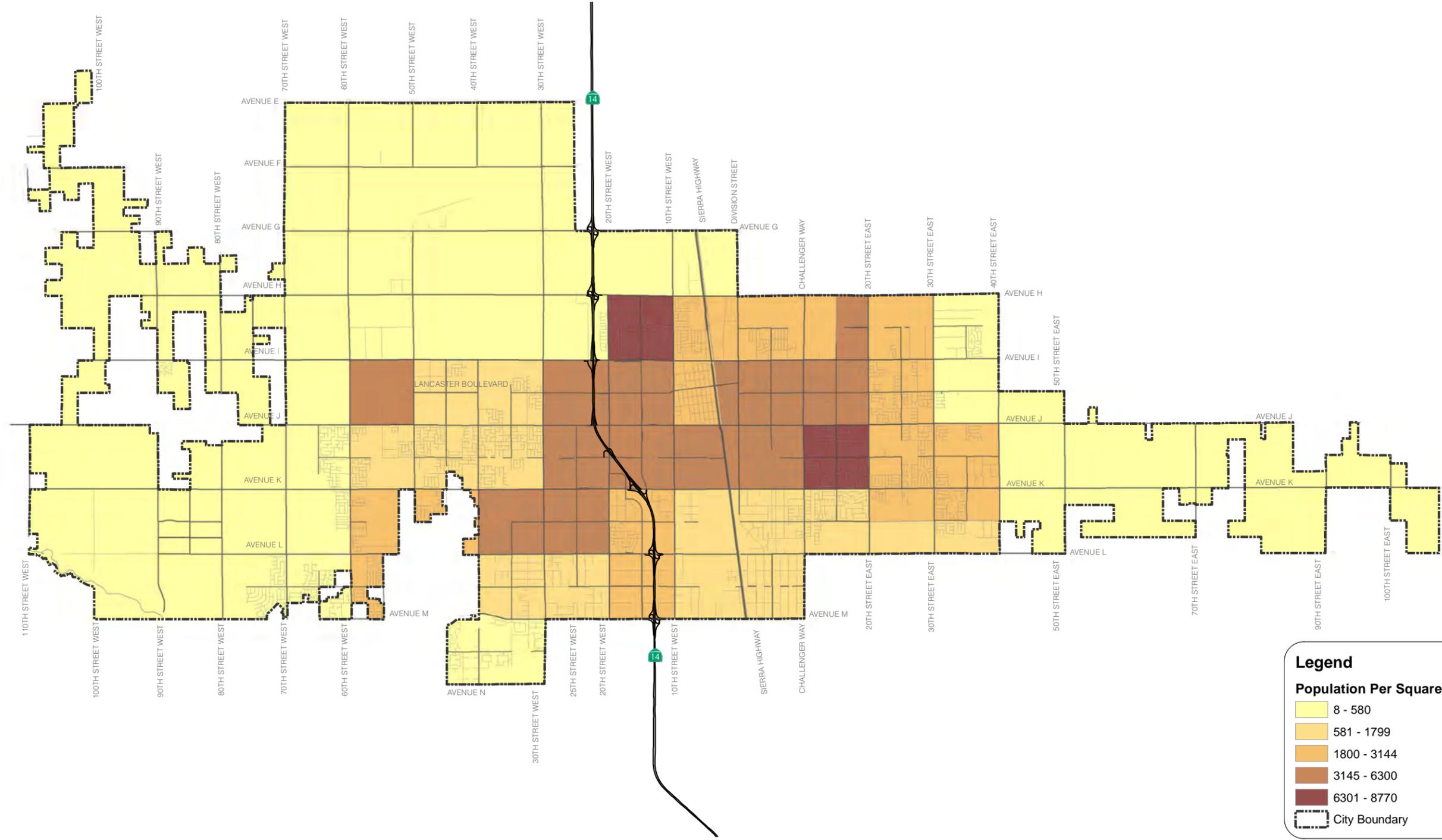
TRANSIT, WALKING, AND BICYCLING ACTIVITY

Map 3-5 displays the sum of the number of people who commute by transit, bicycling, and walking. The tracts are symbolized in quintiles, and the tracts with the highest numbers of these commuters are shown in the darkest ink. The goal of this map is to capture current walking and bicycling activity in the City of Lancaster. Transit is included because all transit trips must include an access and egress trip, and the majority of these access and egress trips are made by foot or bike. It is important to note that this map does not capture all bicycling and walking activity in the city. Commuting only constitutes a minority of all trips, and many trips taken by transit, bicycling, and walking serve other trip purposes, such as travel to school, running errands, and making social visits. With that caveat in mind, these data are the most direct proxy for transit, bicycling, and walking activity in the City of Lancaster. Tracts with high numbers of these commuters probably have higher rates of trip-making by bicycling, walking, and transit for all other trip purposes. As such, improvements to bicycling and walking should be targeted to the areas where there are many people commuting by transit, walking, and bicycling.

Not surprisingly, several of the tracts with the most of these commuters are located immediately adjacent to the Lancaster Metrolink Station. There is also a pocket of many commuters in the area bounded by Avenue H, 20th Street East, Avenue J, and Challenger Way. Most of the tracts in the 1st and 2nd quintile for number of alternative commuters are located in a strip between Avenue I and Avenue K.

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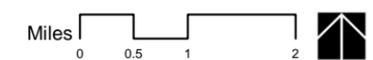
MAP 3-2: POPULATION DENSITY



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Population Per Square Mile

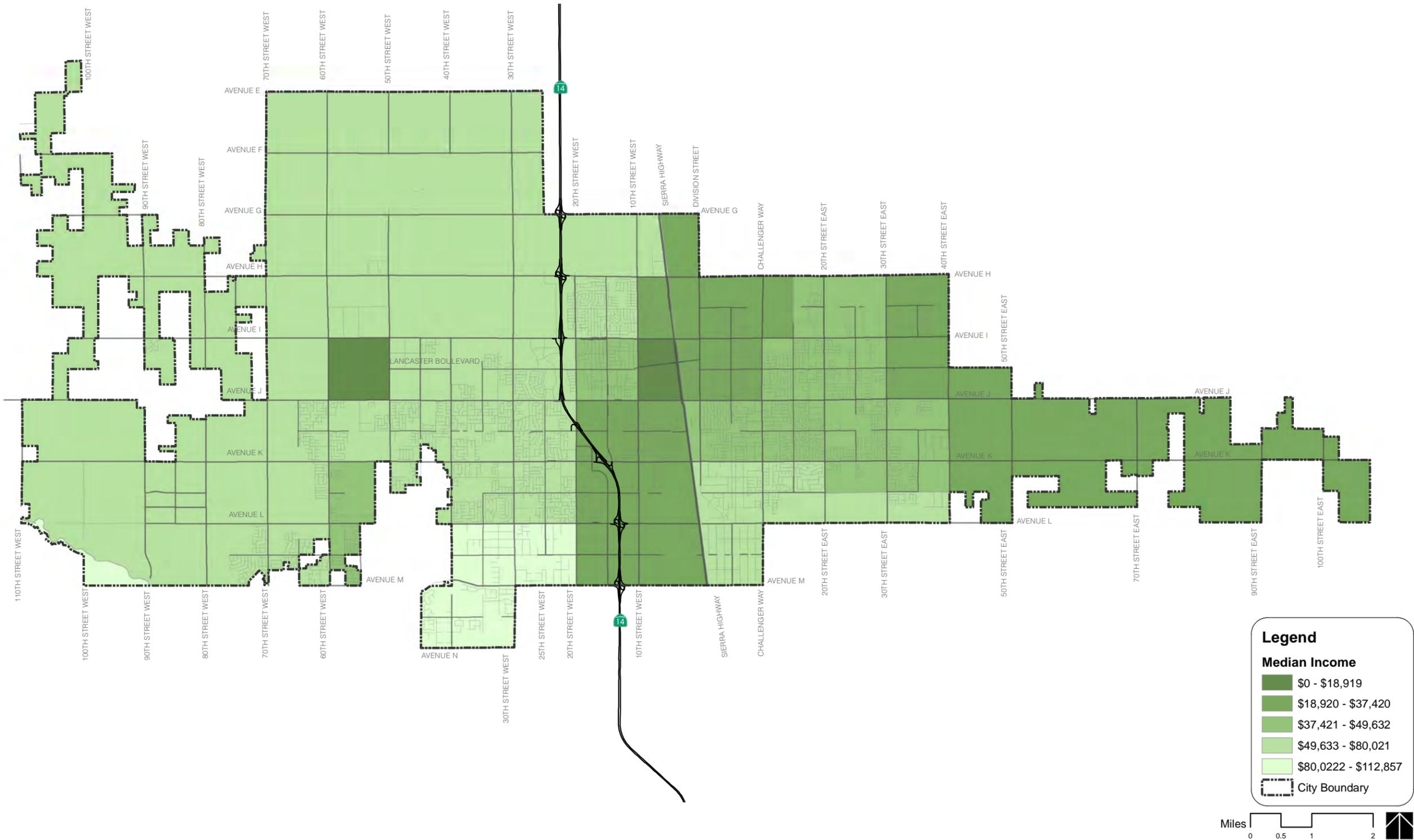
- 8 - 580
- 581 - 1799
- 1800 - 3144
- 3145 - 6300
- 6301 - 8770
- City Boundary



Data Source: U.S. Census Bureau, Five-year estimates from the American Community Survey 2005-2009.

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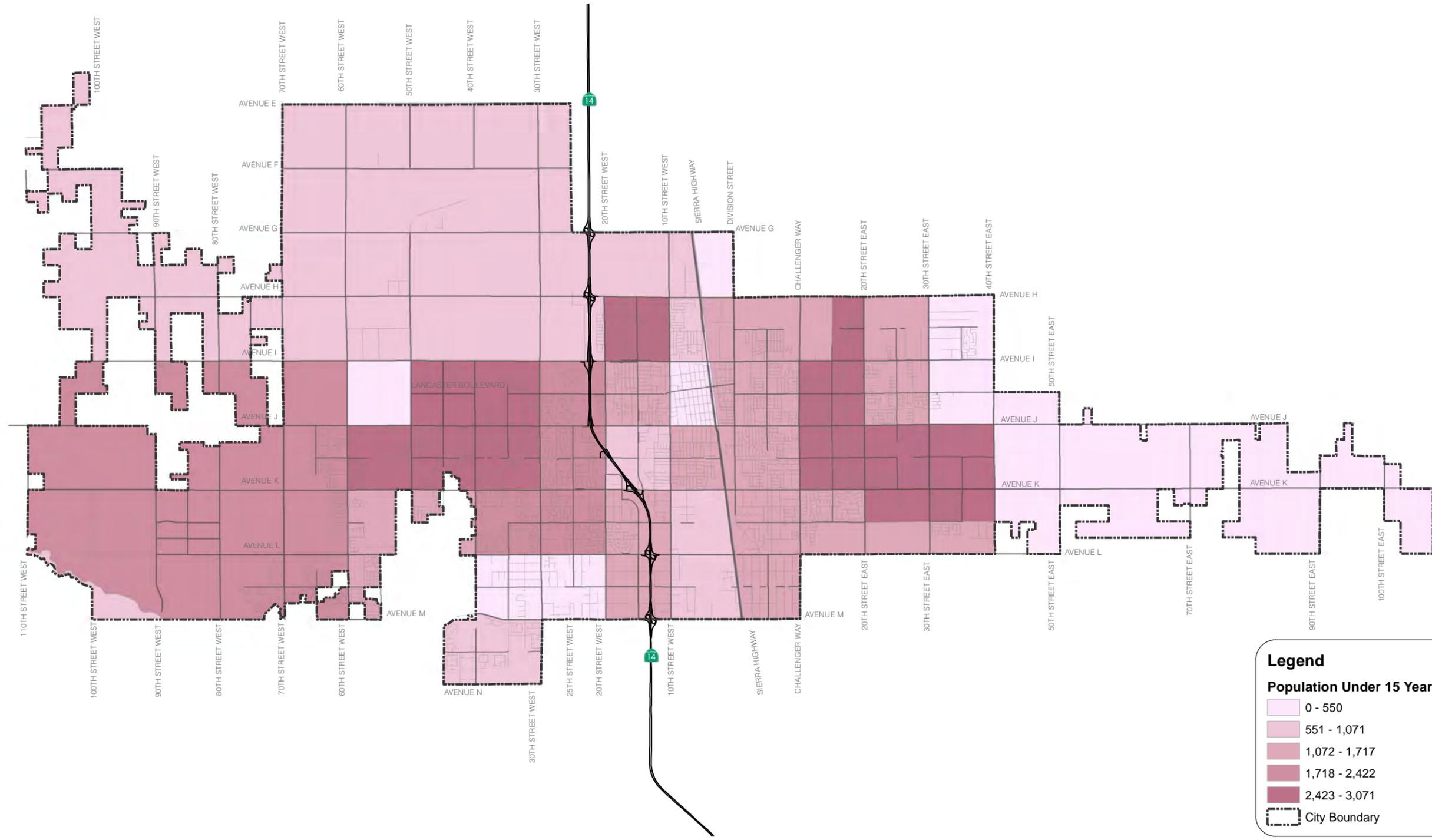
MAP 3-3: MEDIAN INCOME



Data Source: U.S. Census Bureau, Five-year estimates from the American Community Survey 2005-2009.

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MAP 3-4: YOUNG POPULATION



Legend

Population Under 15 Years Old

- 0 - 550
- 551 - 1,071
- 1,072 - 1,717
- 1,718 - 2,422
- 2,423 - 3,071
- City Boundary



Data Source: U.S. Census Bureau, Five-year estimates from the American Community Survey 2005-2009.

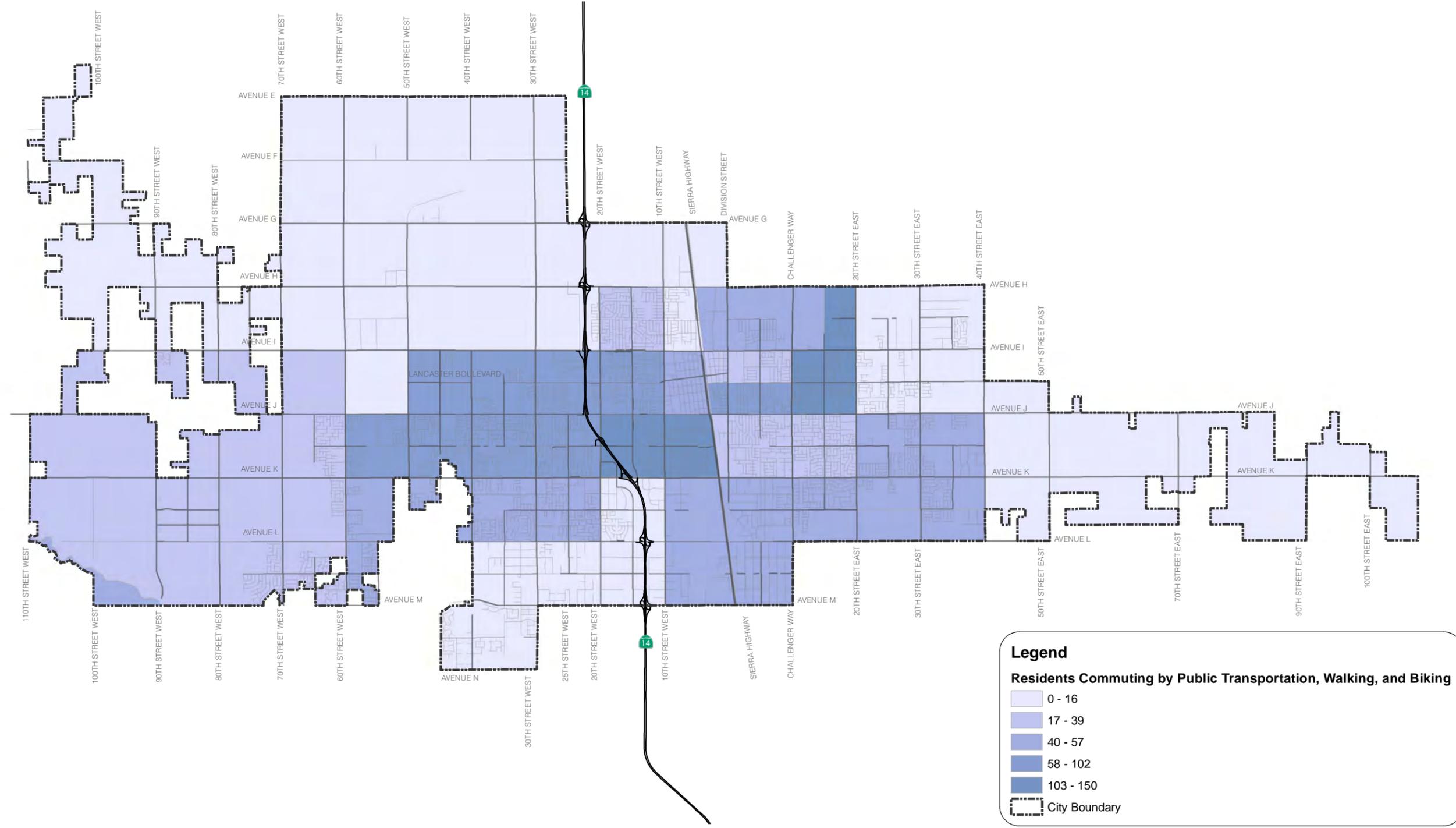


Population Under 15 Years Old

Lancaster Master Plan of Trails and Bikeways

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MAP 3-5: TRANSIT, WALKING AND BICYCLING ACTIVITY



Data Source: U.S. Census Bureau, Five-year estimates from the American Community Survey 2005-2009.

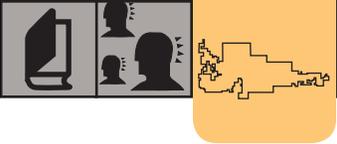


Miles 0 0.5 1 2

Transit, Walking, and Bicycling Activity

Lancaster Master Plan of Trails and Bikeways

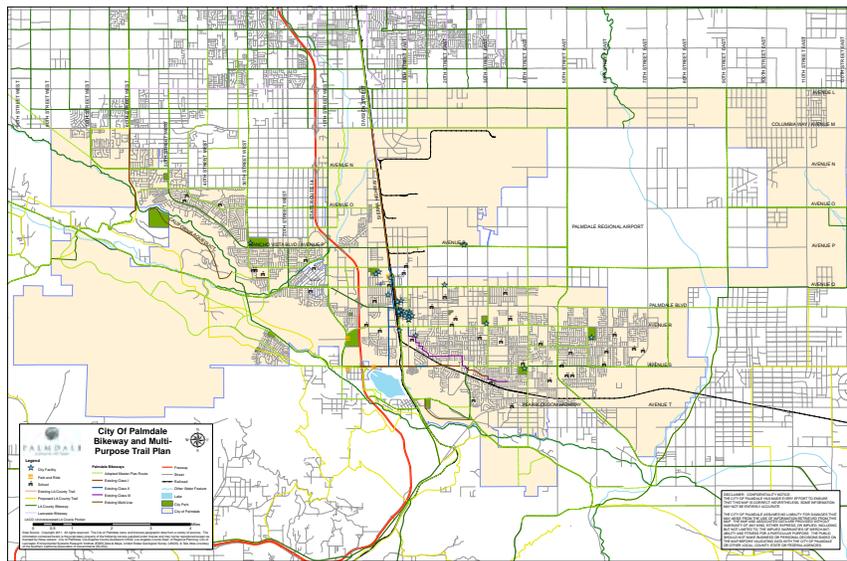
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Bikeways and Trails Plans of Neighboring Cities

Lancaster’s neighboring jurisdictions have bicycle and trails plans that propose links with its facilities. This Plan will attempt to create a complete network by connecting to these existing and planned bikeways and trails.

The **City of Palmdale** updated their General Plan in 2003, and included a bikeways and trails map and list of facilities in the Parks, Recreation, and Trails section. The Master Plan of Trails and Bikeways proposes connecting bikeways to the proposed bikeways in Palmdale. Several of the proposed bikeways in Palmdale connect to streets in Lancaster with no current development. These streets should have bikeways if development should occur, but are not included in this plan.



The **County of Los Angeles** has several existing and planned routes for bikeways and trails. The County updated their Bicycle Master Plan and adopted it in February 2012. The County Bicycle Master Plan proposes bikeways on county unincorporated land. Current proposed bikeways that connect to Lancaster include:

- Avenue G bike lanes, west of Lancaster
- Avenue I bike route, west of Lancaster
- Sierra Highway, north of Lancaster
- Lancaster Boulevard, east of Lancaster
- Avenue H, east of Lancaster
- Avenue L, Quartz Hill
- Avenue L-8, Quartz Hill

- 60th Street West, Quartz Hill
- 55th Street West, Quartz Hill
- 50th Street West, Quartz Hill
- 45th Street West, Quartz Hill
- 30th Street West, Quartz Hill

This Master Plan of Trails and Bikeways proposes connecting bikeways to all of the proposed bikeways on Los Angeles County unincorporated land.



Consistency with Regional Plans

METRO BICYCLE TRANSPORTATION ACCOUNT COMPLIANCE DOCUMENT

The Los Angeles County Metropolitan Transit Authority “Metro Bicycle Transportation Account Compliance Document” of 2006 shows 5.66 miles of proposed bicycle lanes and 0.5 miles of proposed bicycle routes in Lancaster. All proposed bikeways in this document are consistent with those described in the Metro Bicycle Transportation Account Compliance Document. Metro publishes an inventory of existing and proposed bikeways on their website, which has Lancaster’s existing and proposed bikeways as part of the inventory.

METRO BICYCLE TRANSPORTATION STRATEGIC PLAN 2006

This Plan proposes bicycle transit hubs and gap closures in the regional bikeway network. One of the potential bike-transit hubs, Hub 624, is located at the Lancaster Metrolink Station. This hub received a score of 155 out of 359 possible points on a metric of future bicycling and walking activity. The proposed bikeways and bicycle amenities in the Master Plan of Trails and Bikeways reflect the importance of the Lancaster Metrolink Station. The Metro Bicycle Transportation Strategic Plan does not specify any regional bikeway gap closures in Lancaster.

This Master Plan is consistent with local and regional plans in preservation of air quality and energy conservation. It sets goals to

- increase funding for bicycle and pedestrian infrastructure,
- increase accommodations and planning for bicyclist and pedestrians,
- decrease congestion,
- decrease vehicle miles traveled,
- increase transportation options for trips short trips, and
- decrease bicycle and pedestrian fatalities and injuries.

REGIONAL TRANSPORTATION PROGRAMS

This Bicycle Master Plan supports regional transportation goals, including those of the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the Regional Transportation Plan (RTP) put forth by the Southern California Association of Governments (SCAG). The Southern California Air Quality Management District (SCAQMD) delegates its transportation planning to SCAG through its RTP document, which identifies

goals and objectives that promote bicycling and reduce air emissions. An emphasis on utilitarian bicycling, including supporting amenities and infrastructure, is an important aspect of meeting these goals.

The City is in compliance with LACMTA's Congestion Management Plan through Lancaster Resolution 93-27 and Ordinance 633, "Adopting Trip Reduction and Travel Demand Measure in Accordance with State Government Code Sections 65089 and 65089.3." The ordinance establishes a system for the management of transportation demand by bicycle, along with other motor trip reduction mechanisms, by requiring large developments to display "bicycle route and facility information, including regional/local bicycle maps and bicycle safety information." In addition, "bicycle racks or other secure bicycle parking shall be provided to accommodate 4 bicycles per the first 50,000 square feet of non-residential development and 1 bicycle per each additional 50,000 square feet of nonresidential development..." A bicycle parking facility may also be a fully enclosed space or locker accessible only to the owner or operator of the bicycle, which protects the bike from inclement weather."

The Los Angeles County Congestion Management Program (CMP) awards credits and debits toward funding eligibility for various transportation improvements. For example, implementation of bicycle facilities would give the City credits in the CMP. These credits can be used to offset debits for other transportation improvements elsewhere in the City.

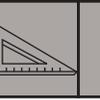
In encouraging bicycling and walking, the Master Plan of Trails and bikeways will also meet the goal of reduced energy consumption.



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CHAPTER 4

GOALS, POLICIES, ACTIONS



The City will use this Master Plan to create complete streets to provide safer travel for all users. The City also aims to develop a network of trails that serve a variety of recreational needs. The following goals provide broad statements describing a desired vision; the policies and actions provide the method to achieving the goal.

Goals

1. Provide a safe, connected, and convenient street environment where people of all ages and physical abilities can travel throughout Lancaster without a vehicle.
2. Create a network of off-street shared-use paths and trails within the City that is well located, safe, and secure.
3. Provide amenities and facilities to increase the number of bicyclists and pedestrians by enticing more people to use their bicycles or walk instead of driving.
4. Promote the health of Lancaster residents by providing opportunities to bicycle or walk for commuting, recreating, shopping and visiting.
5. Support safe access to and from schools.
6. Develop routes and facilities to enhance the economic viability of Lancaster, including promotional events and activities supportive of "Destination Lancaster."

Policies and Actions

POLICY 1: THE CITY WILL ACTIVELY ACCOMMODATE AND ENCOURAGE SAFE AND CONVENIENT BICYCLE AND PEDESTRIAN COMMUTING THROUGHOUT LANCASTER.

Actions

- Implement a planned citywide network of bikeways and pedestrian improvements
- Ensure the maintenance of the bikeway, sidewalk and roadway system
- Recognize that bicyclists ride on all streets and that all streets need to accommodate bicyclists
- Improve technology to ensure that bicyclists and pedestrians can activate traffic signals at vehicle-activated intersections
- Encourage existing employers and commercial landowners to provide bicycle parking, showers, and clothing lockers for commuters
- Assist employers with promotional campaigns to encourage bicycle and walking commuting
- Conduct periodic bicycle and pedestrian counts at various locations and upgrade the network

POLICY 2: THE CITY WILL ACTIVELY ACCOMMODATE AND ENCOURAGE SAFE AND CONVENIENT BICYCLE AND PEDESTRIAN UTILITARIAN TRIPS TO SCHOOLS, STORES, PARKS AND OTHER DESTINATIONS THROUGHOUT LANCASTER.

Actions

- Implement a planned citywide network of bikeways and pedestrian improvements. Ensure that these networks serve children, the disabled, elderly, intermediate cyclists, experienced cyclists, and various recreational cyclists
- Maintain bikeway, sidewalk and roadway system
- Conduct periodic bicycle and pedestrian counts at various locations and upgrade the network
- Carry out promotional efforts to encourage bicycle use and walking by stressing the health and environmental benefits



- Promote bicycling and walking to destinations and special events throughout Lancaster
- Construct new sidewalks where needed to complete important pedestrian networks or improve safety conditions
- Work with the schools to implement Safe Routes to Schools programs
- Maintain bike racks on Antelope Valley Transit buses. Replace racks with new 3-bicycle racks if needed. Conduct targeted promotional efforts to educate cyclists on how to use the bus bike racks.

POLICY 3: THE CITY WILL TAKE STEPS TO REDUCE THE BICYCLE-INVOLVED AND PEDESTRIAN-INVOLVED CRASHES.

Actions

- Design and implement a citywide network of trails, bikeways and walkways to reduce the conflict among motorized and non-motorized vehicles and pedestrians
- Calm motor vehicle traffic on appropriate Lancaster streets
- Encourage bicycle and pedestrian safety education in schools, at work sites, and at public venues. These programs should include comprehensive safety training.
- Encourage safety education for motorists to learn to interact with bicyclists and pedestrians
- Encourage safety education for motorists on pedestrian rights when crossing at unmarked and/or unsignalized intersections
- Provide information on the City website regarding safe bicycle riding and walking
- Work with the Los Angeles County Sheriff's Department to ensure that traffic laws are enforced and that people are educated as to traffic laws related to bicycling and walking
- Work with the Los Angeles County Sheriff's Department to ensure a mutual understanding of safe riding and crash report procedures
- Work with the schools to implement Safe Routes to Schools programs
- Work with outside organizations and agencies to provide free helmets and lights to students and low-income cyclists
- Provide signage for routes, way-finding, and safety tips at trailheads

POLICY 4: THE CITY WILL TAKE STEPS TO ENSURE BICYCLE PARKING IS AVAILABLE, SECURE, AND CONVENIENT THROUGHOUT LANCASTER.

Actions

- Create design standards for bicycle parking regarding the devices, spacing, etc.
- Add safe, convenient, standardized bicycle parking to parks, schools, libraries, and other civic buildings where needed
- Encourage commercial property owners to install bike racks and/or bike lockers on their property; permit reductions in parking or other accommodations where needed to allow for the placement of bike racks and lockers.
- Provide bicycle parking at local bus stops
- Work with Metro, Metrolink, Santa Clarita Transit, and Antelope Valley Transit Authority to provide and maintain bicycle lockers, racks, and other parking options at transit stations and stops
- Conduct periodic surveys to determine where bicycle parking is needed

POLICY 5: THE CITY WILL WORK TO CREATE A NETWORK OF BIKEWAYS SO THAT EVERY NEIGHBORHOOD IS WITHIN ½ MILE OF AN EFFECTIVE BICYCLING ROUTE IN THE NORTH-SOUTH AND EAST-WEST DIRECTIONS.

Actions

- Recognize that bicyclists ride on all streets and that all streets need to safely accommodate bicyclists
- Maintain bikeway and roadway system
- Implement a complete network of bikeways using the bikeway type appropriate for each street or corridor
- Add destination and way-finding signage to bikeways
- Implement traffic calming techniques to create suitable bikeways
- Re-stripe appropriate multi-lane streets with road diets and/or narrower travel lane widths to create space for bicycle lanes
- Install roundabouts, mini-roundabouts, mini-traffic circles, and other treatments to reduce the need for bicycles to stop
- Link Lancaster's bikeway network with bikeways in surrounding jurisdictions



POLICY 6: THE CITY WILL WORK TO EVALUATE, UPDATE, REVISE AND MAINTAIN SAFE ROUTES TO SCHOOL (SRTS) PLANS IN EACH LANCASTER SCHOOL WITHIN THE NEXT 10 YEARS.

Actions

- Form a citywide SRTS coalition of key stakeholders
- Form SRTS coalitions of key stakeholders at each school
- Complete SRTS plans for each school that include all “5 Es”: education, engineering, evaluation, enforcement and encouragement
- Implement a complete network of bikeways that provide access to schools
- Construct sidewalk and pedestrian crossing improvements on routes to school

POLICY 7: THE CITY WILL DEVELOP A TRAILS SYSTEM ALONG AVAILABLE RIGHTS OF WAY AND IN NEW DEVELOPMENT.

Actions

- Develop earthen trails along waterways, utility corridors, rail rights of way, and other available rights-of-way
- Implement the Amargosa Creek Trail Plan
- Install quality horse hitching stations at equestrian trails and facilities in Lancaster
- Create trailheads where people can park, unload horse trailers, view maps, and begin using trails
- Install amenities along the trail network such as hitching stations, benches, water fountains, dog and equestrian fountains, trash/recyclables receptacles, restrooms, and other amenities as appropriate
- Develop rest stops along the trails that provide shelter from the wind and sun
- Promote the use of trails
- Create a program to ensure continued trail maintenance
- Adopt a policy of integrating trails into new developments

POLICY 8: REMOVE BARRIERS TO DISABLED PEDESTRIAN TRAVEL THROUGHOUT LANCASTER.

Actions

- Implement the ADA Transition Plan contained in the Master Plan of Trails and Bikeways
- Develop procedures to keep streets free of debris, potholes and any obstructions on sidewalks to disabled travel
- Use federal ADA standards in construction of all sidewalks, curb ramps, paved paths, etc.
- Set aside a budget for implementing the ADA Transition Plan
- Set a schedule for implementing the ADA Transition Plan

POLICY 9: THE CITY WILL ENSURE THAT NEW DEVELOPMENT IS BIKEABLE, WALKABLE, BARRIER-FREE, AND INCLUDES ACCESS TO A TRAIL NETWORK.

Actions

- Enact new zoning code that embodies the smart growth principles of the General Plan
- Adopt a zoning code that yields compact and mixed-use development
- Work with the school districts to plan for neighborhood schools that are not on busy streets
- Require new development to be designed with small blocks and have interconnected street networks, both internally and with adjacent development.
- Adopt Complete Streets road standards
- Adopt sidewalk design guidelines with the four-zone system
- Require development of an earthen and paved trail network as an integrated element of the new street network
- Require bicycle parking, showers, and clothing lockers in new large employment centers for commuters
- Require bicycle parking in new commercial and multi-family residential development



POLICY 10: THE CITY INTENDS TO IMPLEMENT THIS MASTER PLAN OF TRAILS AND BIKEWAYS WITHIN 20 YEARS.

Actions

- Create a tiered priority project list based on immediate needs and available funds
- Pursue acquisition of right-of-ways where needed
- Aggressively pursue all federal, state, and local funding options; leverage funds to maximize matching opportunities
- Seek opportunities to piggyback bikeway, pedestrian, and trails projects onto new development, road resurfacing, re-striping, etc.
- Update the Master Plan of Trails and Bikeways in conjunction with major General Plan revisions.

CHAPTER 5

EXISTING CONDITIONS



Lancaster has a number of existing bikeways and bicycle amenities. There are several designated trails in Lancaster, but they currently do not provide coverage citywide. There are also few trailheads, and current trailheads do not accommodate equestrians. Although the City has sidewalks on most of its major streets, there are many discontinuities. Most of the bike lanes are five feet wide - not an ideal width along busy streets. The paint is generally in good condition, although fading in some areas. Although the City Municipal Code and Engineering Design Guidelines call for bike lanes only on secondary arterials, they can be appropriate on other street designations.

The following describes in detail existing conditions for bicyclists, pedestrians, people with disabilities, and trail users in Lancaster.

Bikeways

Caltrans designates three types of bikeways:

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.

Class II: Referred to as a bike lane. Provides a striped lane for one-way bicycle travel on a street or highway.

Class III: Referred to as a bike route. Provides for shared use with motor vehicle traffic.

Although these facilities are designed for bicycle travel, it is important to recognize that all public roadways, except for those segments of freeways where it is prohibited, are open to travel by bicycle.

These three bikeway types can be enhanced using a number of different devices such as sharrows, b-type sharrows, diverters, bicycle loop detectors, and others. Chapter 12 provides design guidelines for each of these types of bikeways, including other features that are described in the proposed projects.

The following tables show existing bikeways in Lancaster. Currently, Lancaster has 5 miles of Class 1 bike paths, 35 miles of Class II bike lanes, and 3 miles of Class III bike routes. The tables reflect conditions as of November 2010.

A finer network and higher-design level of bikeways will accommodate and encourage more bicycling.



TABLE 5-1: EXISTING BIKEWAYS OF EAST-WEST STREETS

Street	From	To	Facility Type (Class I, II, III)
Avenue I	15th St. W	20th St. W	Class II Buffered Bike Lanes
Lancaster Boulevard	35th St. W	CA-14 on-ramp	Class II Bike Lanes
Lancaster Boulevard	CA-14 on-ramp	20th St. W	Class II Bike Lane westbound only
Lancaster Boulevard	20th St. W	10th St. W	Class II Bike Lanes
Lancaster Boulevard	Division St.	5th St. E	Class II Bike Lanes
Lancaster Boulevard	Challenger Way	30th St. E	Class II Bike Lanes
Lancaster Boulevard	30th St. E	Cajun St.	Class II Bike Lane westbound only
Avenue J	Andale Avenue	Challenger Way	Class II Bike Lane westbound only
Avenue J	26th St. E	27th St. E	Class II Bike Lane eastbound only
Avenue J-8	65th St. W	60th St. W	Class II Bike Lanes
Avenue J-8	60th St. W	56th St. W	Class II Bike Lane eastbound only
Avenue J-8	Challenger Way	20th St. E	Class II Bike Lanes
Avenue J-8	Midblock Appaloosa Drive / 47th St. W	47th St. W	Class II Bike Lane eastbound only
Avenue J-8	47th St. W	12th St. W	Class II Bike Lanes
Avenue K-8	62nd St. W	60th St. W	Class II Bike Lanes
Avenue K-8	35th St. W	10th St. W	Class II Bike Lanes
Avenue K-8	10th St. W	West of Gadsden Avenue	Class I Bike Path
Avenue K-8	East of Gadsden Avenue	Sierra Highway	Class I Bike Path
Avenue L	65th St. W	60th St. W	Class II Bike Lane eastbound
Avenue L	60th St. W	52nd St. W	Class II Bike Lanes
Avenue L	45th St. W	22nd St. W	Class II Bike Lanes
Avenue L	22nd St. W	20th St. W	Class II Bike Lane westbound
Avenue L	Sierra Highway	Business Center Parkway	Class II Bike Lanes

TABLE 5-2: EXISTING BIKEWAYS OF NORTH-SOUTH STREETS

Street	From	To	Facility Type (Class I, II, III)
70th St. W	Avenue L-8	Columbia Way	Class II Buffered Bike Lanes
65th St. W	Avenue J	Avenue J-12	Class II Bike Lane northbound only
60th St. W	Avenue L	Avenue L-8	Class II Bike Lane southbound only
60th St. W	Avenue L-8	Avenue M	Class II Bike Lanes
45th St. W	Avenue J-8	Avenue K	Class II Bike Lane southbound only
40th St. W	Avenue J-8	Avenue J-12	Class II Bike Lanes with buffer northbound
35th St. W	Kildare Street	Lancaster Boulevard	Class II Bike Lane northbound only
35th St. W	Lancaster Boulevard	Avenue J	Class II Bike Lanes
35th St. W	Avenue J-8	Avenue J-9	Class II Bike Lane northbound only
35th St. W	Avenue K-8	Avenue L	Class II Bike Lanes
32nd St. W	Lancaster Boulevard	Avenue J	Class II Bike Lanes
30th St. W	Avenue I	Avenue L	Class II Bike Lanes
25th St. W	Avenue J	Avenue K	Class II Bike Lanes
25th St. W	Avenue K-8	Avenue L	Class II Bike Lanes
15th St. W	Avenue H	Avenue H-8	Class II Bike Lanes
12th St. W	Kettering Street	Avenue J	Class III Signed Route
Kingtree Avenue	Avenue J	Avenue J-4	Class III Signed Route
Avenue J-4	12th St. W	Kingtree Avenue	Class III Signed Route
12th St. W	Avenue J-4	Motor Lane	Class III Signed Route
Motor Lane	12th St. W	Driver's Way	Class III Signed Route
Driver's Way	Motor Lane	Avenue K-8	Class III Signed Route
Division Street	Avenue J	Business Center Parkway	Class II Bike Lanes
Business Center Parkway	Avenue K-8	Avenue L	Class II Bike Lanes
5th St. E	Avenue I	Avenue J-4	Class II Bike Lanes
Challenger Way	Avenue I	Kettering Street	Class II Bike Lane southbound only
Challenger Way	Kettering Street	Avenue L	Class II Bike Lanes



Street	From	To	Facility Type (Class I, II, III)
15th St. E	Avenue I	Marion Avenue	Class II Bike Lanes
15th St. E	Avenue K-4	Avenue K-8	Class II Bike Lane northbound only
20th St. E	Avenue J-8	Avenue K	Class II Bike Lane southbound only
Amargosa Creek	Avenue H	Avenue I	Class I Bike Path
Sierra Highway	Avenue J	Columbia Way	Class I Bike Path
Sierra Highway	Avenue I	Avenue J	Class II Bike Lanes

EXISTING CLASS I BIKE PATHS

- Between Sierra Highway and the Antelope Valley Metrolink line from the south city limit, to Avenue J. This paved path is 8' wide with soft shoulders and is in good condition. The crossings of Avenue K need improvement with ladder-style crosswalks and stop signs for path users. The path has nice benches, trash receptacles and bicycle parking. There are several billboards in the path. These might be a source of maintenance funds.
- Along Amargosa Creek from Avenue H to Avenue I. The paved path is 8' wide with soft shoulders and is in fair condition. It has no signs or markings. Access is blocked by fences at both ends, but is provided at H-8. The H-8 access point is not identified or maintained. Two benches provide a resting stop. This path needs signing to access points, access at both ends, and better facilities at the rest stop.
- Along Avenue K-8 corridor from 10th Street West to west end of paved portion of Avenue K-8, then from east end of paved portion of Avenue K-8 to Sierra Highway. This path is 8' wide with soft shoulders and is in fair condition. It needs landscape maintenance and some signs. It also needs signalized crossings at 10th Street West and at Sierra Highway.
- Along the 40th Street West right-of-way from Avenue G to Apollo Community Park.

Map 5-1 shows the existing bikeways.

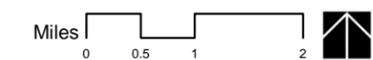
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MAP 5-1: EXISTING BIKEWAYS



Legend

Class I Bike Path	Park
Class II Bike Lanes	School
Class III Bike Route	City Boundary



Existing Bikeways Map

Lancaster Master Plan of Trails and Bikeways

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Bicycle Parking

Bicycle parking can be provided in two general types: racks and high-security bicycle parking. Racks are best for short-term needs like quick shopping trips, stops to the library, etc. Racks should be placed at dispersed locations to take advantage of the point-to-point flexibility of the bicycle. Commuters and those who park for longer times need higher security parking. High security parking may consist of lockers, attendant parking, or automated parking.

Bicycle lockers are available at Lancaster City Hall, as well as the Lancaster Metrolink station. There are also inverted-U racks available at the Metrolink station. There are currently few racks throughout the City at other destinations. Several bicycle owner shops have provided their own bicycle racks. These racks vary in style from the inverted-U rack, to the “front wheel support” style rack.

Lancaster’s municipal code mandates that developments of a certain size and employment generation provide bicycle parking. The following businesses and facilities have installed bicycle parking at their locations:

- Lancaster City Hall (Fern Ave. and Lancaster Blvd.)
- Rite-Aid Distribution Center (Ave. H and 28th St. W)
- Lancaster Baptist Church (Ave. I and 40th St. E)
- Antelope Valley College (Ave. K and 30th St. W)
- WinCo Foods (Ave. K-4 and 10th St. W)
- Costco (Ave. L and 10th St. W)
- Recently developed industrial complex (Ave. L and 7th St. W)

There is bicycle parking available at park-and-ride locations throughout Lancaster. These locations are described in the “Links to Other Transportation Modes” section below.

There are currently very few bicycle racks available in Downtown Lancaster along Lancaster Boulevard. There are also no bicycle racks at the City’s parks, except for one rack which accommodates three bicycles at Lancaster City Park. According to the City’s survey (see Public Outreach), Lancaster Boulevard is the number one location in need of additional bicycle parking. Survey takers also would like to see more bicycle parking at shopping districts throughout Lancaster, parks, Antelope Valley College, and City Hall.

The City currently does not have a bicycle parking program, or standard style of bicycle parking. The design guidelines of this plan recommend different style of parking for different locations and trip purposes.

Bicycle Amenities

City Hall has showers and lockers available for City staff. The WalMart center at Avenue J and 20th St. E currently has changing and storing clothes equipment; however, the amenities are available only to employees. Some other private buildings may have such amenities per requirements for new developments; however, most people who bicycle to work have no place to shower and change.

Facilities are needed most in Downtown Lancaster, Antelope Valley College, and at several of the major shopping centers that employ many people such as shopping district along Valley Central Way.

Links to Other Transportation Modes

The Antelope Valley Transit Authority (AVTA) provides local bus service throughout Lancaster. AVTA also provides dial-a-ride service which is a curb-to-curb van service primarily for disabled persons. AVTA also provides commuter bus service to Downtown Los Angeles, Century City, and the San Fernando Valley.

AVTA buses have standard storage for two or three bicycles at the front of each bus. Bicycles are not allowed on board the buses.

Santa Clarita Transit also provides commuter bus service between Santa Clarita and the Antelope Valley. Each bus has a compartment on the side of the bus to accommodate bikes. These compartments currently do not fill up, so bicyclists are largely accommodated.

Metrolink commuter rail serves Lancaster with a station on Sierra Highway at Lancaster Boulevard. Currently, Metrolink provides two bicycle racks within each train car. If the rack is full, bicyclists must try another car or wait for the next train. Metrolink is piloting increased bicycle parking in several of its cars to accommodate up to 18 bicycles, but they are unsure whether they will expand or keep this program. The City is responsible for providing bicycle parking at the station itself. Currently there are both bicycle lockers and bike racks for passengers to use. As bicycling increases in the City, it will be necessary to provide more parking at the station.



TRANSIT DATA ANALYSIS

The most frequently used routes in Lancaster are routes 1, 4, 11, and 12. The table below shows annual passenger counts for each line in the past five years.

TABLE 5-3: AVTA ANNUAL PASSENGER COUNTS

Line	2006	2007	2008	2009	2010
1	599,830	599,367	618,016	599,094	637,032
11	404,453	403,652	396,433	367,893	366,512
12	426,335	429,084	448,087	401,982	369,772
14	215,344	217,367	239,834	210,434	195,481

Lancaster City Park serves as a major hub where many lines including 1, 4, 11, and 12 stop.

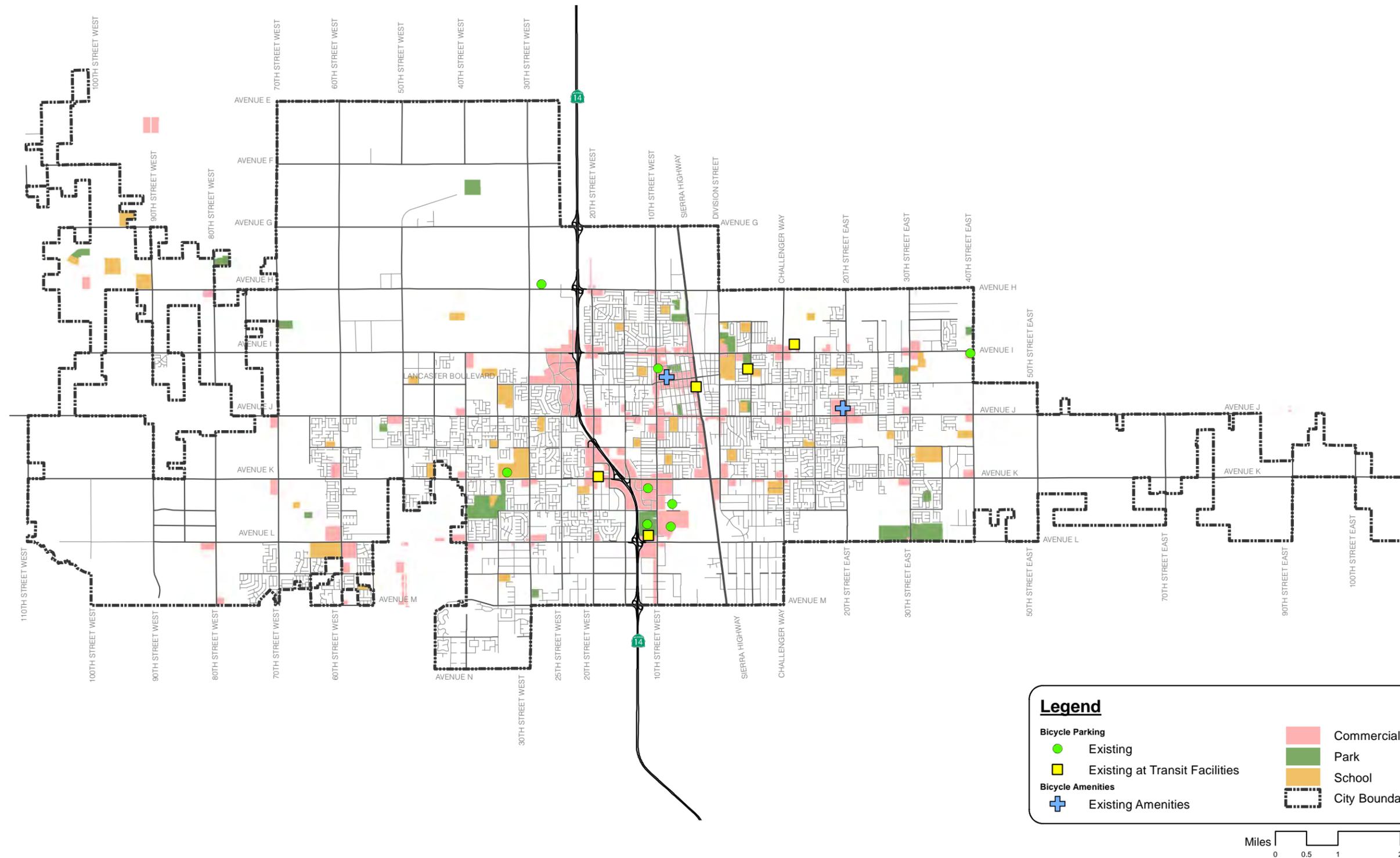
Most park-and-ride facilities are currently well-equipped with bicycle parking. They include the following:

TABLE 5-4: BICYCLE PARKING AT PARK AND RIDE LOTS

Address	Transit Agencies	Bicycle Racks	Bicycle Lockers
1501 W. Avenue K, 93534	AVTA	6	
45045 N. 5th St. E, 93535	AVTA	6	
43011 N. 10th St. W, North Lot, 93534	AVTA, Santa Clarita, Kern Co.	6	12
43011 N. 10th St. W, South Lot, 93534	AVTA, Santa Clarita	6	6
1011 E. Avenue I, 93535	AVTA	0	0
44812 N. Sierra Highway, 93534	Metrolink, Santa Clarita, Amtrak, AVTA	8	6

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MAP 5-2: EXISTING BICYCLE PARKING, INTERMODAL LINKS AND AMENITIES



Legend

Bicycle Parking	Existing	Commercial Area
	Existing at Transit Facilities	Park
Bicycle Amenities	Existing Amenities	School
		City Boundary



Existing Bicycle Parking, Intermodal Links and Amenities

Lancaster Master Plan of Trails and Bikeways

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ADA Compliance and Pedestrian Environment

Lancaster is in the process of assessing its infrastructure for ADA compliance. The City has collected data on many of its sidewalks and curb ramps, and plans to prioritize these projects. Lancaster lacks sidewalks on many of its residential streets, as well as in the rural residential areas. The City's hopscotch development pattern creates discontinuities in the street system and sidewalk infrastructure.

Typical existing sidewalks meet the minimum standards for ADA compliance. New curb ramps have been installed, and several older ramps have been retrofitted with truncated domes for visually-impaired users.

The City lacks comprehensive design standards for sidewalks. Most new sidewalks lack a buffer or furniture zone, but meet the minimum 5'-wide standard. Speeds are high on Lancaster's streets, making a wide sidewalk and buffer essential to creating an inviting pedestrian atmosphere.

At signalized intersections, the City typically has installed:

- Diagonal curb ramps
- Pedestrian push buttons
- Lateral-line crosswalks
- Pedestrian signals

These devices are important components to improve pedestrian safety; however, there are measures that can improve safety further, and will also create an inviting walking environment.

There are few improved uncontrolled crossing locations. At uncontrolled crossings, the City typically has installed:

- Ladder-style crosswalks
- Pedestrian crosswalk signs
- Advanced pedestrian crosswalk signs
- Perpendicular ramps
- Advanced yield lines (shark's teeth)

Additional devices are needed to make uncontrolled crossings safer in Lancaster. This is especially important on multi-lane arterial streets.

Trails

EXISTING EQUESTRIAN TRAILS

There are some existing trails for recreational users and equestrians. Many of these trails were developed in Rural Residential areas, where there are a higher number of equestrians through Landscape Maintenance Districts. The existing trails are described in further detail below.

Amargosa Creek

Currently, the trail for the Amargosa Creek extends from just north of Avenue H to Avenue I.

Landscape Maintenance District Trails

Some trails have been built with development and are maintained through a landscape maintenance district. These include those along the following streets and rights-of-way:

- Along the south side of Ave. H-8 from 1300' east of 35th St. E to 35th St. E, along the east side of 35th St. E from Ave. H-8 to Ave. I, along the north side of Ave. I from 35th St. to about 1300' east
- Along the south side of Ave. K from drainage channel E to 35th St. E
- Along the drainage channel near 33rd St. E from Ave. K to the National Soccer Center
- Along the west side of 20th St. E from approximately Ave. K-4 to Ave. K-8, along the north side of Ave. K-8 from 15th St. E to 20th St. E, and along the east side of 15th St. E from Ave. K-8 to Ave. K-4
- The south side of Ave. M from 30th St. W to 32nd St. W, along the west side of 30th St. W from Ave. M to Ave. M-8, and along the north side of Ave. M-8 from 30th St. W to 32nd St. W
- 32nd W from Ave. M to Ave. M-6
- The west side of 35th St. W from Ave. L-4 to approximately 660' south
- The west side of 35th St. W from Ave. M-8 to Derby Circle alignment, along the south side of Ave. M-8 from 35th St. W to 40th St. W, and along the east side of 40th St. W from Ave. M-8 to Derby Circle
- Ave. M from 32nd St. W to 55' east of 35th St. W
- Ave M-8 from 42nd St. W to 45th St. W

There are two existing trailheads. One at Avenue J and Sierra Highway, which is relatively unimproved for the Sierra Highway Bicycle Path. The other is at the Antelope Valley Fairgrounds, located at Avenue H and 27th St. W. This trailhead has a parking lot and restrooms, but has few improvements for equestrian users, including a lack of a staging area.



Crash Analysis

BICYCLE

According to the U.S. Census American Community Survey, between 2005 and 2009, 0.2 percent of Lancaster residents commuted to work by bicycle.

TABLE 5-5: BICYCLE CRASH ANALYSIS

# of Bicycle Involved Crashes 2005 (City records)		# of Bicycle Involved Crashes 2006 (City records)		# of Bicycle Involved Crashes 2007 (City records)		# of Bicycle Involved Crashes 2008 (City records)		# of Bicycle Involved Crashes 2009 (City records)		Total # of Bicycle Crashes	Average # of Bicycle Crashes per year
Fatality	Injury										
1	32	0	36	0	28	1	26	1	39	164	33

2010 Census Population	Crashes per 1000 people/yr.
156,633	0.19

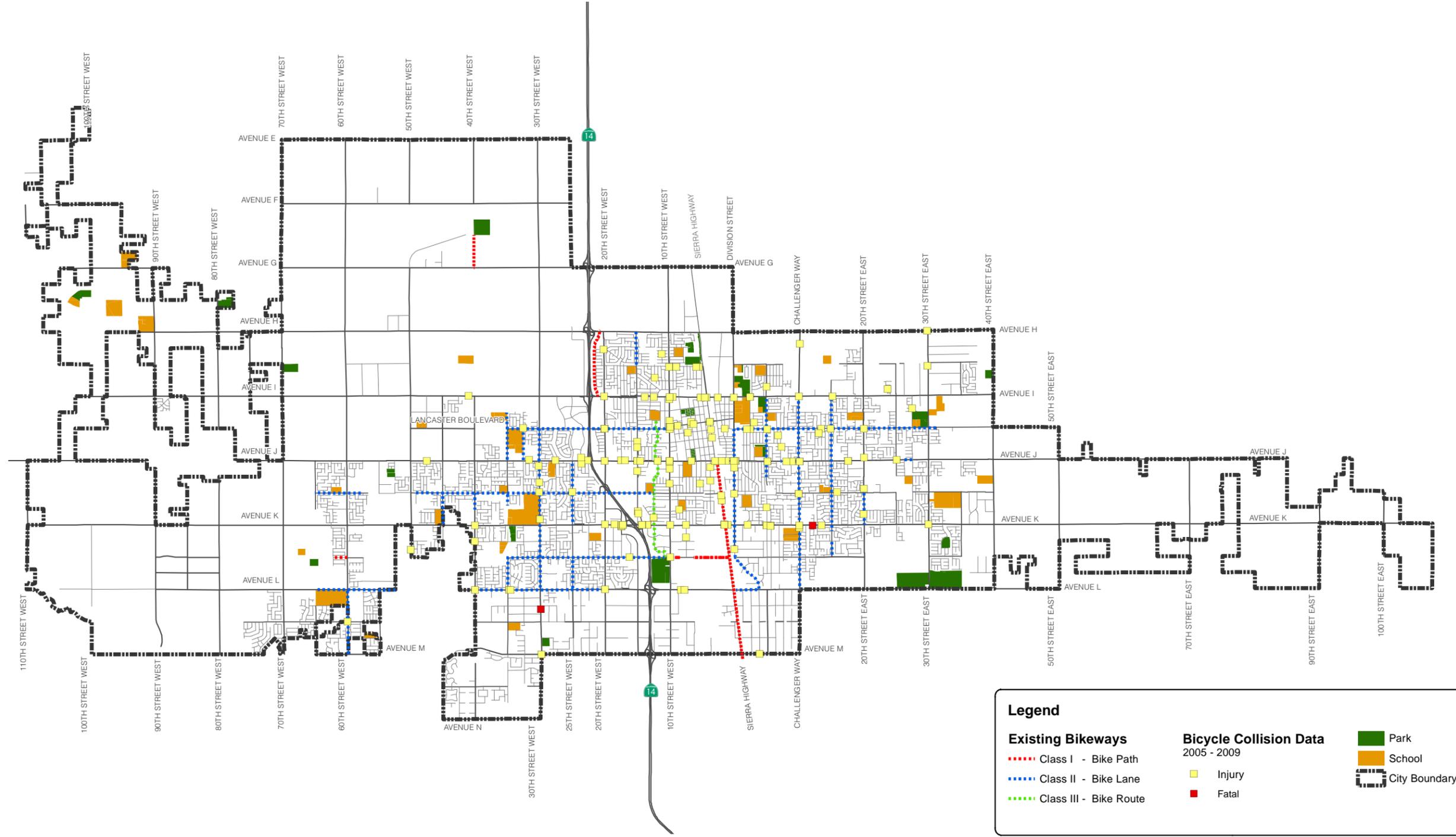
Lancaster has experienced roughly the same number of bicycle-involved crashes every year. No discernible trend stands out from this data collected by the Lancaster Sheriff’s Station. Thus, there are no safety efforts that are impacting crash trends one way or the other.

Forty-nine of these crashes involved the cyclist riding in the wrong way of traffic. Another 43 crashes involved right-turning vehicles. Many of Lancaster’s cyclists continue to ride on the sidewalk, and many of the bicycle-involved crashes seem to occur where drivers may not expect the cyclists, and when the cyclists may be riding in the wrong direction. A comprehensive safety and education campaign for both bicyclists and motorists may help reduce the crash rate. Cyclists need to follow the rules of the road, and similarly, Lancaster drivers need to look for bicyclists to their right before making any turning movements.

As Map 5.3 illustrates, most bicyclist-involved crashes occurred in more central parts of Lancaster. Although these crashes were generally scattered throughout the central area, some concentration can be seen along Avenues I, J and K, and along 10th Street West.

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MAP 5-3: BICYCLE-INVOLVED CRASHES, 2005 TO 2009



Legend

Existing Bikeways	Bicycle Collision Data 2005 - 2009	Park
Class I - Bike Path	Injury	School
Class II - Bike Lane	Fatal	City Boundary
Class III - Bike Route		



Bicycle Collision Data

Lancaster Master Plan of Trails and Bikeways

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PEDESTRIAN

According to the U.S. Census American Community Survey, between 2005 and 2009, 0.9 percent of Lancaster residents commuted to work by walking.

The following table evaluates pedestrian-involved crashes resulting in injury or death in Lancaster.

TABLE 5-6: PEDESTRIAN CRASH ANALYSIS

# of Pedestrian Involved Crashes 2005 (City records)		# of Pedestrian Involved Crashes 2006 (City records)		# of Pedestrian Involved Crashes 2007 (City records)		# of Pedestrian Involved Crashes 2008 (City records)		# of Pedestrian Involved Crashes 2009 (City records)		Total # of Pedestrian Crashes	Average # of Pedestrian Crashes per year
Fatality	Injury										
9	55	5	55	4	54	2	48	3	52	287	57

2010 Census Population	Crashes per 1000 people/yr.
156,633	0.36

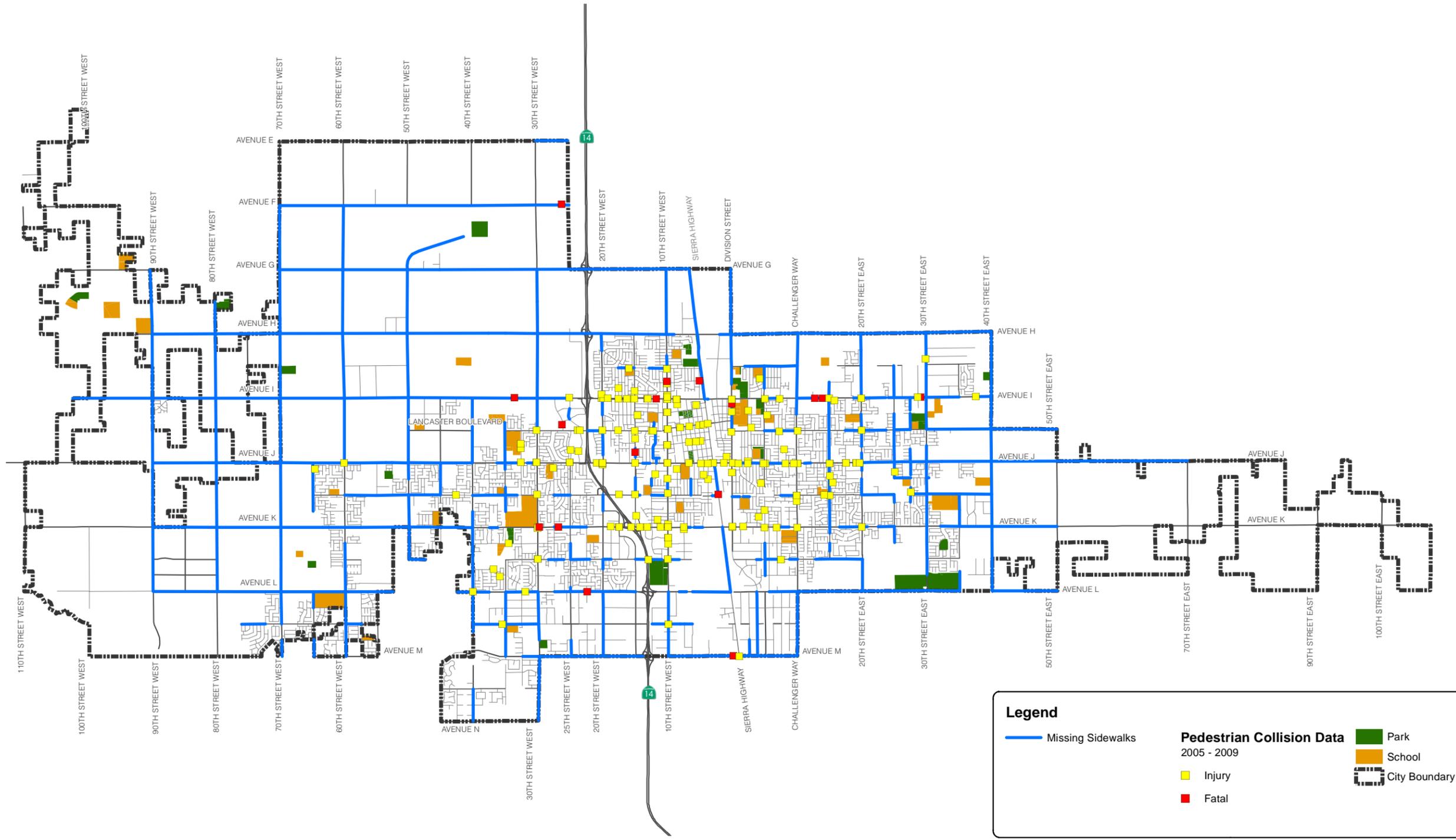
Similarly to the bicycle crash data, there is no discernible trend in pedestrian crashes. Pedestrian fatalities seem to be decreasing, but the total number of crashes remains on average about 57 per year. More Lancaster residents commute by walking than do by bicycle.

About half of all crashes occurred when the driver was traveling straight. However, half of these injuries were also the pedestrian’s fault. Approximately 80 crashes can be attributed to drivers who were making right or left turns, with the driver at fault. This high number of crashes for turning movements indicates the need for higher-visibility crosswalks, night illumination, as well as driver education. Slowing traffic speeds through traffic calming may also help increase pedestrian visibility to drivers and reduce the number of crashes.

As Map 5.4 shows, most pedestrian-involved crashes occurred in more central parts of Lancaster. Although these crashes were generally dispersed throughout the central area, some concentration can be seen along Avenues I, J and K, and along Lancaster Boulevard and 10th Street West. This is likely due to the many destinations along these streets, and thus, high numbers of pedestrians.

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MAP 5-4: PEDESTRIAN-INVOLVED CRASHES, 2005 TO 2009



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Education Programs and Promotional Campaigns

The City of Lancaster encourages walking, bicycling and trail use through a variety of ongoing programs. Many of these are conducted in partnership with community groups and other agencies.

- The LanCoaster Bicycle Experience, a community bike ride, leaves monthly from city hall. The family friendly ride travels at a leisurely pace and is marshalled by safety escorts. The City invites local celebrities to host the ride. The City launched the LanCoaster bike ride in conjunction with the development of this Master Plan. The City wanted to engage residents in community events and to promote healthy and active living. The City partnered with a local bicycle shop to host monthly bike rides from April through September 2011. The rides will start again in Spring 2012 and will continue annually.
- The City publishes a map of bikeways and makes it available for download on the City's website under Public Works, Traffic Engineering. The City updates the Bikeway Map annually.
- The City of Lancaster supports projects that promote bicycling and walking by linking to them on its website. These include Antelope Valley Partners for Health, the County of Los Angeles Bicycle Master Plan, and local bike blog, Biking in the AV.
- Similarly, the city supports biking clubs, running groups, and bike shops by providing links on their website. The City partners with these groups to publicize community bike rides and events.
- The City hosts walks on Lancaster Boulevard to encourage healthy lifestyles. In the past, these walks have drawn several hundred people. The City's community partner, Antelope Valley Partners for Health (AVPH), hosted a walk in Downtown during their Healthy People Celebration in May 2011. This is an annual event which alternates between the City of Lancaster and the City of Palmdale.
- The City hosts a "Walk with the Mayor" on the 1st and 3rd Wednesday of each month from June through September at Lancaster City Park. This happens annually.
- The city also supports a permitting process to close the boulevard for walks and events. The City closed Lancaster Boulevard for healthy events hosted by nonprofit organizations such as the "Totally AV Fair Wave 5K Race" which happens annually in August. The City also closes the street for "Toys for Tots 5K" which happens annually on the 1st Saturday in December.
- The Lancaster Sheriff's Station conducts bicycle safety education sessions as part of the City's Safe Routes to School initiative at various health and safety events such as the annual Lancaster Poppy Festival in April, and the Public Safety Fair in August.
- Programming in Prime Desert Woodland Preserve invites people onto the Preserve's trails to walk, learn, and explore. On these guided walks, participants learn about a variety of topics including wildlife, astronomy, or dinosaurs. The Elyze Clifford Interpretive Center also

offers educational hikes.

- The Antelope Valley Transit Authority supports bicycling by offering bike racks on all of its buses.
- The City will soon begin the development of its Strategic Plan for Utilization of Trails. The goal of this Plan is to encourage active transportation and recreation on the City's trail network. The Plan will further specify encouragement programs related to trails.

Enforcement

Lancaster prohibits wrong-way riding and sidewalk riding. The City also requires bicyclists to apply and receive a bicycle license for their bicycles. This law is enforced, but ticketing cyclists is not a high-priority for the Lancaster Sheriff's Station.

The Lancaster Sheriff's Station enforces all traffic laws that pertain to motor vehicles, bicyclists as well as pedestrians as routine.

Lancaster's existing programs have been effective, well-attended, and well-received. With the recent redevelopment of Downtown Lancaster, as well as upcoming improvements for bicyclists, trail users, and pedestrians, the City can capitalize on the momentum to create more effective programming.

Design for safety should be the focus for pathways and parking areas. Crime Prevention Through Environmental Design (CPTED) should ensure proper design and effective use of the built environment, which can enhance physical features to maximize visibility.

The bicyclist-involved crash data is inconclusive and does not indicate whether the education and enforcement efforts have made a difference or not.



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CHAPTER 6

BICYCLE PLAN



To better accommodate and encourage bicycling in Lancaster, the City plans to add 40 miles of Class I Bike Paths, 138 miles of Class II Bike Lanes and 37 miles of Class III Bike Routes. The City plans to install bicycle parking, provide for end-of-trip amenities, and to maintain and enhance links to other transportation modes. The City also plans to provide a comprehensive education program and continue to promote bicycling.

The type of bikeway treatment depends on the street or right-of-way, width, adjacent land uses, traffic volumes, speeds, etc. 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 indicate streets could be reduced to fewer lanes. Improvements to bike lanes are planned where sufficient 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. Bicycle routes can be distinguished in multiple ways including the use of signage and pavement markings, such as sharrows. Bicycle boulevards are not a separately designated class of bikeway, but are designed to make cycling as easy and safe as possible on certain streets.

Several of the proposed bikeways and street improvements would be installed along with new development as streets are widened. If the City adopts new street design standards as recommended in Chapter 12, the network of streets would be designed for 35 mph travel. In this case, 6'-wide bike lanes would be adequate. If the street standards remain with the current cross-sections, ideally these high-speed roads should have painted buffers outside of the bike lanes.

Bikeway improvements will be implemented according to the priority list identified in Chapter 11. The City will look for other opportunities to implement the recommendations below such as during routine pavement resurfacing, new development, and other improvements which require re-striping. The recommendations below are "short-term," meaning, with the existing street configuration and curb-to-curb width. If the City or new development adds sidewalks, parkways, medians, or any other curb and gutter, the City should maintain at a minimum 6' bike lanes on streets that have a recommended bike lane. On those streets that have bicycle routes, if new development creates enough room for bicycle lanes, the City should consider adding them.

Guiding Assumptions for Bikeways

Several assumptions were followed when planning for bikeways. These guidelines can be incorporated into City policy and practice when rethinking a street's cross-section, especially in future development. On major and secondary arterials, the City tried to achieve bicycle lanes. This is largely a matter of curb-to-curb width availability. Minimum lane widths then dictate whether there may be space left over for a bikeway. Additional pavement space can also be allocated to sidewalks and/or parkways. The assumptions for planning bikeways follow below.

Lane Widths

- A minimum travel lane width of 10'
- A preferred lane widths next to a median and the outside lanes are 11'
- An absolute minimum width of 9' for a center-turn lane for rare cases, but prefer 10', and predominantly use 10'
- A minimum width of 7' for parking lanes

Bikeway Type (Class I, II, III)

- Standard bike lane is 6', minimum width may be 5'
- If bike lanes fit with the existing roadway configuration using the assumed travel lane widths above, the road configuration will remain constant
- If road average daily traffic is under 20,000, road diets may be suggested to fit in bike lanes
- Where bike lanes do not fit, but network connectivity is necessary, recommend Class III bike routes
- On roadways with on-street parking, recommend painted sharrows along with the Class III designation
- On busier roadways or in more urban areas where there is on-street parking on both sides, recommend more frequent and prominent "b-type" sharrows along with the Class III designation
- Bike paths may be recommended to create connections in the network across undeveloped land areas
- Bike paths are also recommended along other rights-of-way
- On two-lane rural streets with soft shoulders and little development, this Plan recommends widening the shoulder to provide an area for walking and bicycling, but with no bikeway designation



Class II Configuration

- Wherever the option exists to widen bike lanes, 6'-wide bike lanes are preferred to 5'-wide bike lanes, but will recommend 7' if space permits
- Where there is excess road space for at least a one-half mile, this Plan recommends the inclusion of a painted buffer with the bike lane

The California Manual on Uniform Traffic Control Devices allows a painted buffer formed by a pair of double-wide lanes of striping where there is no on-street parking. Experiments are underway in several California cities for bike lanes with painted buffers where parking is adjacent to the bike lane. We anticipate that buffered bike lanes will become a standard option in California, with and without on-street parking.

Bikeways (Class II, III and other improvements)

Proposed on-street bikeways and other improvements are detailed in Appendix A. Each table shows the existing and proposed condition of the route. An example table follows below.

(PROJECT NUMBER) STREET NAME			
STREET:	Start of street section		
LIMITS:	End of street section		
EXISTING	<ul style="list-style-type: none"> Number of lanes and street configuration Street width 	PROPOSED	<ul style="list-style-type: none"> Bikeway designation including width of bikeway, special road treatment

The proposed recommendations detail not only the bikeway type (bike lane, bike route), but also any special treatments for that bikeway. This may include the addition of a buffer to a bike lane, colored bike lanes, reducing the number of lanes to reallocate pavement space (road diet).



Proposed Off-street Bike Paths

CLASS I BIKE PATHS

Avenue G Bike Path

Pave a bike path along the Avenue G right-of-way from 40th Street West east to Sierra Highway.

40th Street West Bike Path

Pave a bike path along the 40th Street West right-of-way from Avenue G to Avenue I.

Westside Bike Path

Pave a bike path along the following right-of-way:

- From the Amargosa Creek bridge (just north of Avenue H) southwesterly to the intersection of 30th Street West and Avenue I
- Along the south side of Avenue I from 30th Street West to 50th Street West
- Along the west side of 50th Street West from Avenue I to Avenue J
- Along the north side of Avenue J from 50th Street West to 70th Street West
- Along the west side of 70th Street West from Avenue J to Avenue L
- Along the north side of Avenue L from 70th Street West to 90th Street West
- Along the 90th Street West right-of-way from Avenue L to the California Aqueduct

SCE Utility Corridor Bike Path

Pave a bike path along the Southern California Edison utility corridor in the western end of Lancaster that runs NW to SE from a point SW of the rights-of-way for Avenue I and 110th Street West, to a point just east of 80th Street West at the south city limit.

California Aqueduct Bike Path

Pave a bike path along the California Aqueduct within the Lancaster city limits.

Avenue K-8 Local Bike Path

Pave a bike path along the Avenue K-8 right-of-way from 60th Street West, to 62nd Street West.

Avenue K-8 Bridge

Add a bicycle and pedestrian bridge over Sierra Highway and adjacent railroad.

Avenue L Bike Path

Pave a new bike path along the north side of Avenue L west from the Water Channel Bike Path at 90th Street West to the California Aqueduct. Pave a second segment along the north side of Avenue L from the Sierra Highway to connect with the multipurpose path in the Lancaster Soccer Center.

Sierra Highway Bike Path

Extend existing Sierra Highway Bike Path to north city limit from Avenue I on the westside of the tracks.

Amargosa Creek Bike Pathway

Provide a loop extending the Amargosa Creek Bike Pathway northward from Avenue H along both sides of the creek to connect up to Avenue G. Route the path along a new bridge going over the creek north of Avenue H.

Extend the Amargosa Creek Bike Pathway south along the creek to the north end of Rimvale Avenue where it would end. The path would pick up south of Avenue K-8 then follow Amargosa Creek as a Class I bike path to the south city limit.

Ideally, the crossings of the bike path portions along the creek would be grade-separated by digging a clearance of at least 7' under the existing bridges, and putting a retaining wall up to prevent water from coming in. Where grade-separation isn't feasible, the street crossings should be designed to make bike path users visible and safe crossing the street.

Avenue H Bike Path

Pave a path along the north side Avenue H from the Sierra Highway Bike Path to the Amargosa Creek Bike Path.

Avenue H-8 Connector Bike Path

This short path connects the end of Ave. H-8 from 7th St. E to Challenger Way to connect proposed bike lanes.

Avenue L Connector Bike Path

This short path connects the end of Ave. L from 35th St. E to 40th St. E to connect proposed bike lanes.



PAVED MULTIPURPOSE PATHS

35th Street West Bike Path

- Pave a bike path along the west side of 35th Street West right-of-way from Avenue I to Avenue J next to a proposed earthen trail for pedestrians.
- From Avenue J to Avenue J-12, the bikeway would revert to Class II bike lanes and pedestrians would use existing sidewalks. A new path would begin at 35th Street West and head easterly along Avenue J-12 to the east side of an existing horse trail.
- The path would then head south along the east side of the housing development from Avenue J-12 to Avenue K.
- Pave a bike path along the north side of Avenue K to Yew Street. Cross Avenue K at Yew Street.
- Pave a bike path through an alignment near the park to Avenue K-4 to connect with path through the Prime Desert Woodlands.

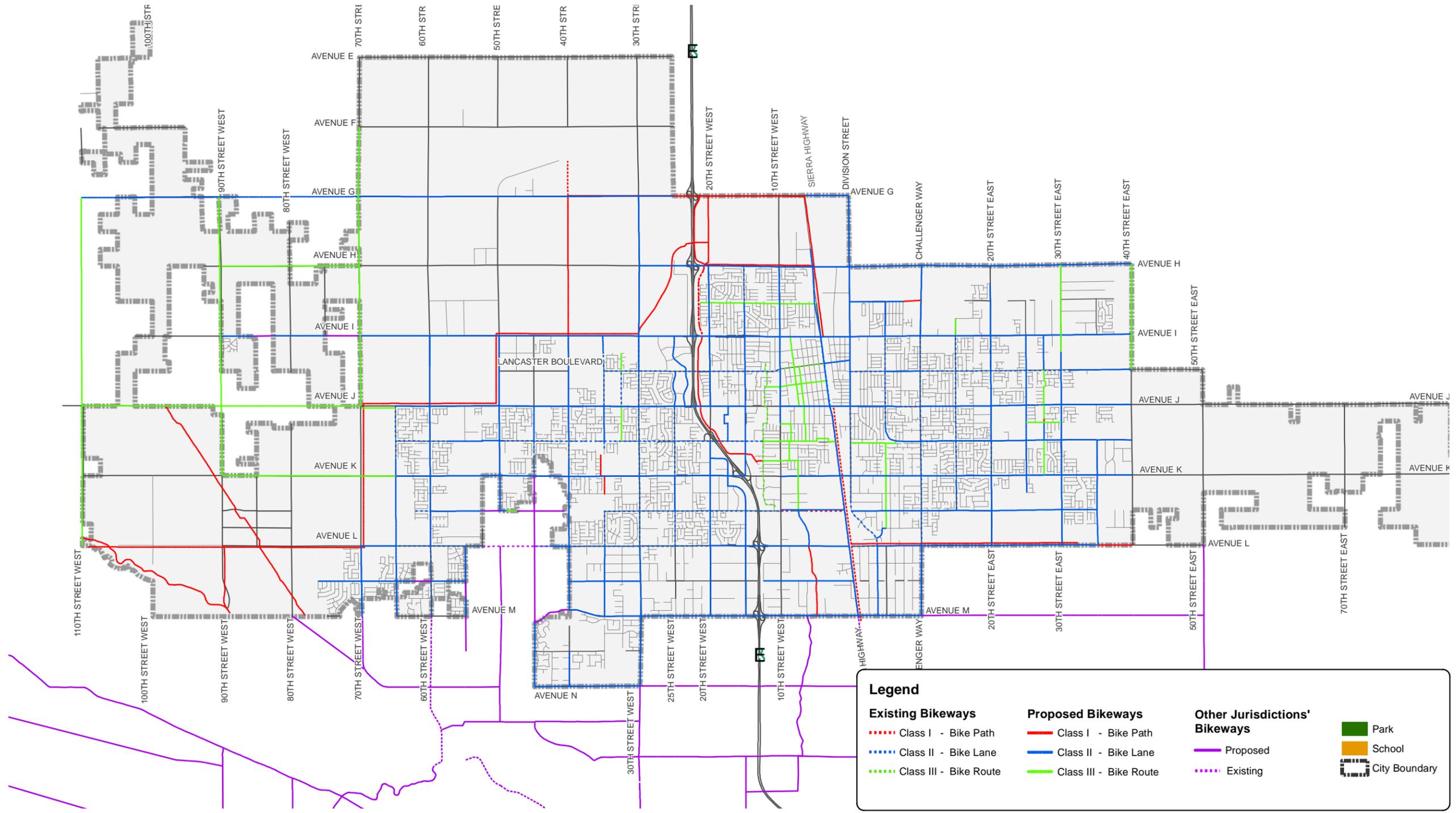
Lancaster Boulevard/Avenue I Loop Multipurpose Path

Starting at Ave. I and 35th St. W pave bike paths:

- Follow along the south side of Ave. I from 35th St. W to 50th St. W
- Follow the east side of 50th St. W from Ave. I to Lancaster Blvd.
- Follow the north side of Lancaster Blvd. from 35th St. W to 50th St. W.
- Follow the alignment of 35th St. W from Lancaster Blvd. to Ave. I

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MAP 6-1: EXISTING AND PROPOSED BIKEWAYS



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Road Diets

This plan recommends a series of “road diets.” A road diet is the removal of at least one travel lane. Road diets are recommended in order to reallocate existing pavement and right-of-way to other uses including bikeways, sidewalks, landscaping, etc. The road diets recommended in this plan are often implemented to accommodate bikeways. The following assumptions guide road diet feasibility:

- Assume that a road diet from 4 lanes to 2 lanes with center-turn lane can be done with little consequence to traffic for a roadway with an Average Daily Traffic volume of 20,000 and under
- Assume that a road diet from 6 lanes to 4 lanes with center-turn lane can be done with little consequence to traffic for a roadway with an Average Daily Traffic volume of 40,000 and under

Map 6-2 shows planned road diets.

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Colored Bike Lanes

Colored bike lanes are simply bike lanes with colored pavement underneath the standard bike lane markings as required by the California MUTCD. The primary goal of colored pavement is to enhance the bikeway by making it more visible. The colored pavement may also narrow the feel of the street, having a slight traffic calming effect.

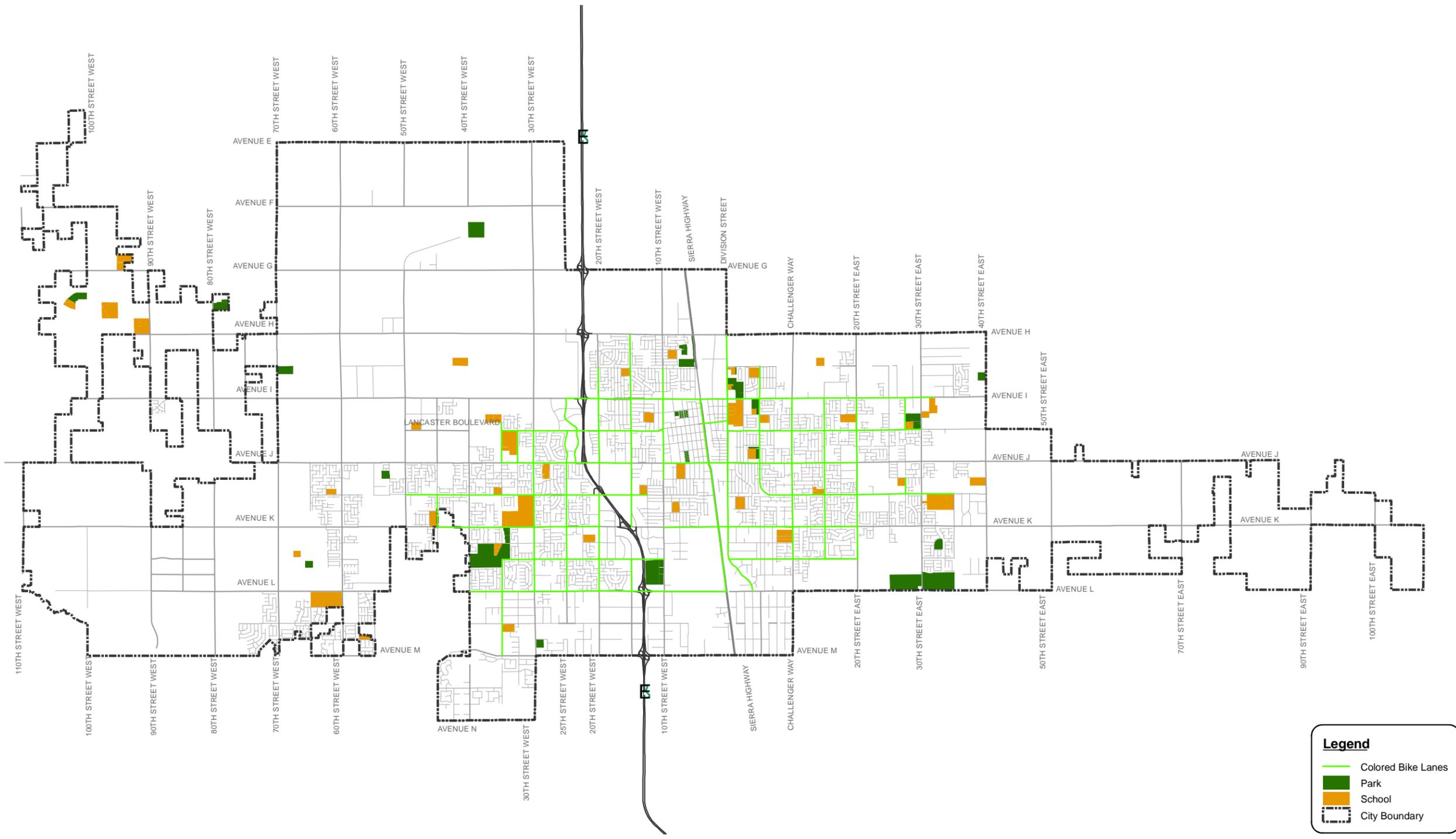
This plan recommends a network of colored bike lanes to enhance the bikeway system. These colored bike lanes are concentrated in the denser parts of Lancaster (city center, downtown area), and are also planned along important routes to schools and parks.

To date, the colored pavement marking is not a standard item per the California MUTCD. The Federal Highway Administration (FHWA) has approved interim use of this device. The California Traffic Control Device Committee (CTCDC) issued statewide interim approval for the optional use of green colored pavement for bike lanes on August 12, 2011. The City will need to submit a written request to the CTCDC to use this device.

Map 6-3 illustrates the network of colored bike lanes.

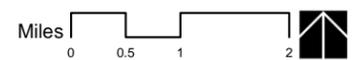
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MAP 6-3: PROPOSED COLORED BIKE LANES



Legend

- Colored Bike Lanes
- Park
- School
- City Boundary



Colored Bike Lanes

Lancaster Master Plan of Trails and Bikeways

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Bicycle Parking

The City currently requires bicycle parking for new developments of a certain size or that will generate a certain amount of employment. These requirements are not providing enough bicycle parking to meet demand.

To address this shortage of bicycle parking, the City will seek funding for bicycle parking. Once funding has been secured, the City will work with employers and business owners to offer bicycle racks for installation right in front of their properties. Lancaster will seek to initially purchase about 400 racks to provide bicycle parking at the locations identified below. As these are installed, the City will seek funding to purchase more and install them at locations as demand shows itself.

The City will also install bicycle parking at facilities where bicycle parking is either inadequate for demand, or missing entirely. This includes parks, schools, and City Hall.

The City will work with volunteer organizations to add attendant bicycle parking at large city-wide events.

Bicycle parking guidelines follow below:

- Lancaster Boulevard (Downtown): Provide inverted U-rack approximately every 75' (approximately 40 racks)
- Elementary Schools: Secure bicycle parking for at least 20 bicycles (10 racks)
- Middle Schools: Secure bicycle parking for at least 30 bicycles (15 racks)
- High School: Secure bicycle parking for at least 30 bicycles (15 racks)
- Parks: inverted U-rack bicycle parking for at least 10 bicycles (5 racks)
- City Hall: inverted U-rack bicycle parking for at least 6 bicycles (3 racks)
- Large grocery stores, and other big-box (Target, Walmart, etc.): Bicycle parking for at least 10 bicycles (5 racks)

Map 6-4 shows existing and proposed bicycle parking locations.

Bicycle Amenities

As described in the “Planning Context” chapter, the City currently requires freestanding buildings in General Commercial Zones not within a shopping center or other commercial center which have a gross floor area of 50,000 square feet to 100,000 square feet to provide one shower for each gender and 0.5 clothing lockers for each required bicycle parking space. An additional shower for each gender shall be provided for each additional 100,000 square feet of gross floor area or portion thereof.

Shopping centers or other commercial centers shall provide showers and lockers at the same rate for the total gross square footage of the center. The center may also consolidate the showers in a common facility within the center rather than providing them by individual use.

These requirements have provided for some showers and clothing lockers. The City may consider revising the code or providing other developer mandates to require showers and clothing lockers. The requirements may use the following as a guide:

- Retail and commercial developments over 25,000 square feet should have at least one shower per gender, and an additional shower per gender for each additional 50,000 square feet
- Industrial developments over 50,000 square feet should have at least one shower per gender, and an additional shower per gender for each additional 100,000 square feet
- Retail and commercial developments over 25,000 square feet should have at least one clothing locker per gender, and an additional clothing locker per gender for each additional 50,000 square feet
- Industrial developments over 50,000 square feet should have at least one clothing locker per gender, and an additional clothing locker per gender for each additional 100,000 square feet
- Showers and clothing lockers should be placed in the same facility
- Signs should direct cyclists to the showers and clothing lockers
- As bicycling and economic development opportunities increase, the City will work with organizations such as Bikestation, to provide showers, clothing lockers, and changing facilities near Downtown Lancaster and the Metrolink station.

Map 6-4 shows existing and proposed bicycle amenities.



Links to Other Transportation Modes

The two primary transportation links in Lancaster are

- Lancaster Metrolink Station at Sierra Highway and Lancaster Boulevard
- AVTA hub at Lancaster City Park, Avenue K-8 and 10th Street West

In addition, there are six park-and-ride lots throughout Lancaster, several that have existing bicycle parking and lockers available, as identified in Chapter 5, Table 5-4.

The City will maintain its existing links at the Metrolink station, at the park-and-ride lots, and at bus stops.

In the last couple of years the City has constructed the following bikeways which serve as links to transit:

- Class 1 bike path on Sierra Highway from Avenue M to Avenue J
- Class 2 bike lane on Sierra Highway from Avenue J to Avenue I
- Class 3 with Sharrows on Lancaster Blvd. from 10th Street West to Sierra Highway

By the end of 2012, the City anticipates completing the following projects:

- Class 2 bike lane on Lancaster Blvd. from Valley Central Way to 10th Street West
- Class 2 bike lane on Lancaster Blvd. from Sierra Highway to Division Street

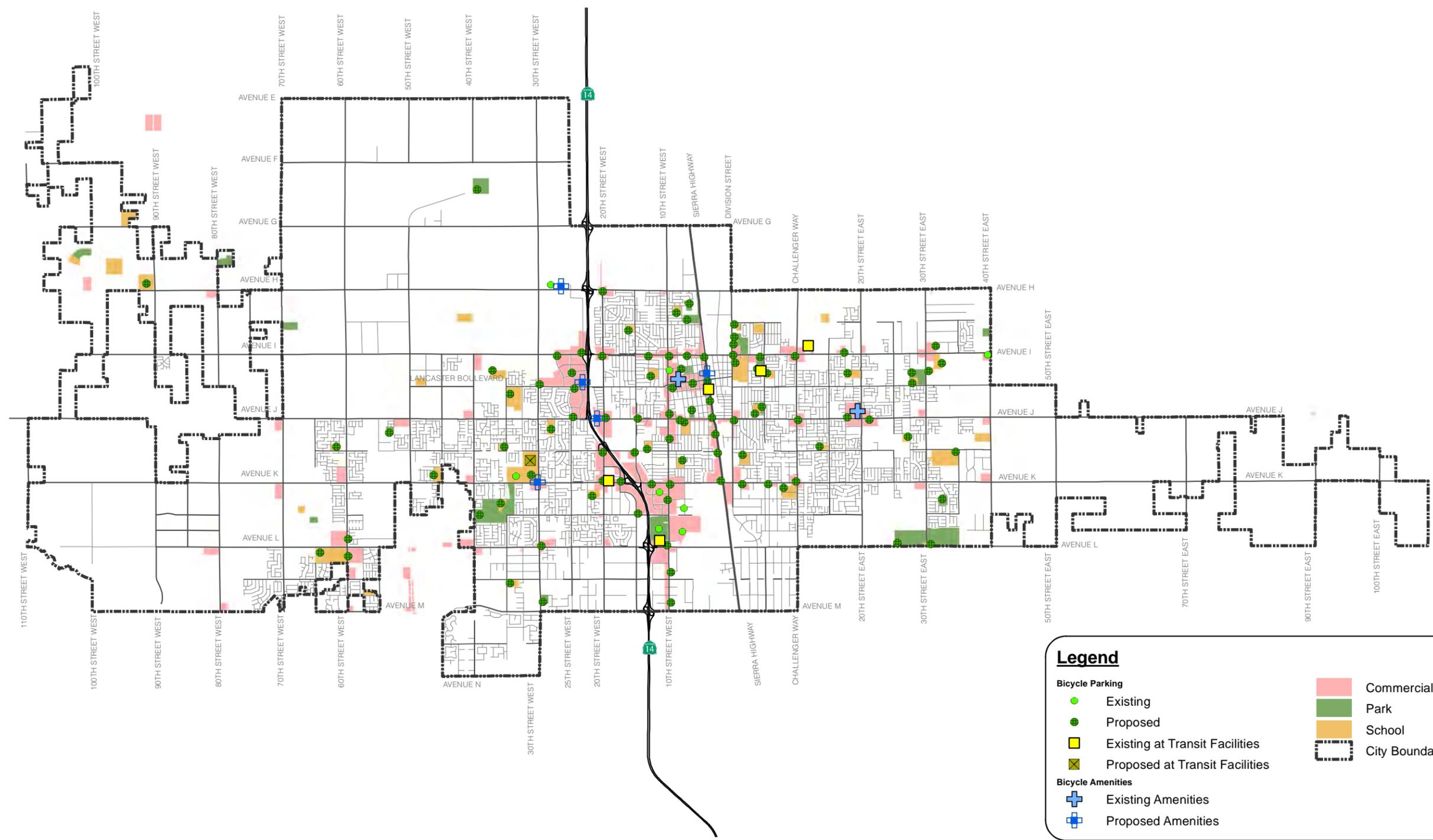
The City is in collaboration with the Southern California Association of Governments on a Compass Blueprint project - Southeast Transit Village Planning Area Vision Plan – which includes the Metrolink Station and across the railroad tracks from Downtown.

The City will coordinate with the Antelope Valley Transit Authority to maintain racks on the front of buses. The City will add bicycle parking at bus stops. Each bus stop should have at least one rack that holds two bikes. The City may add more racks as demand shows itself.

Map 6-4 shows links to other transportation modes.

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MAP 6-4: EXISTING AND PROPOSED BICYCLE PARKING, AMENITIES AND INTERMODAL LINKS



Existing and Proposed Bicycle Parking, Intermodal Links and Amenities

Lancaster Master Plan of Trails and Bikeways

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Education, Encouragement, and Promotional Campaigns

The City has a vision for a Livable Community which includes health, safety, economic vitality, and sustainability. Through an aggressive public outreach effort in developing the Master Plan, residents stated they are supportive in creating and implementing the Master Plan and Complete Streets practices. In addition to changes in the City's physical infrastructure, this plan proposes programs to encourage bicycling, educate citizens about bicycling, enforce bicycle-related laws, and evaluate the effects of bicycle-related initiatives. The City will continue its existing programs and education campaigns, and augment them with the following programs.

ENCOURAGEMENT PROGRAMS

- Each year, Antelope Valley Partners for Health (AVPH) will celebrate a **Healthy Week**. Groups who walk or bike ride will be eligible to enter into a drawing and win prizes.
- A **ciclovía** is a festival of walking, biking, and public space that takes place on city streets that have been temporarily opened to people and closed to cars. All kinds of activities can take place inside the ciclovía, from yoga classes to rollerblading to dodgeball. The City of Los Angeles recently started holding ciclovías on Sundays on about 8 miles of open streets, and these events have been very successful. The City of Lancaster has done street closures for block parties in the past, and would like to expand the street closure program to ciclovías. This program would be dependent on the City's budget and staffing.
- Each year, the City will celebrate **bike-to-work day**. Bike to work day will be publicized in advance, and will include contests and incentives to bike. On bike to work day, bicyclists will receive rewards such as snacks, City bikeways maps, and bicycle accessories. The City should work with Antelope Valley Transit Authority to secure free transit for bicyclists on bike to work day.
- The City will apply for Safe Routes to School grant funding to encourage children to bicycle to school. Programs could include **bicycle rodeos**, classroom competitions with **prizes for most bicycle miles ridden to school**, and designating a **citywide "walk and roll" to school day**.
- The City has partnered with AVPH and Kaiser to encourage active living and using the trails. The City will continue to **partner with nonprofit and community organizations to encourage active living**.

EDUCATION PROGRAMS

- The City will develop **educational posters** about safe bicycling and driving that can be hung at City bus stops, on AVTA buses, and in City parks and public buildings. Messaging on these posters will inform all users about how to safely share the road.
- The City is currently actively pursuing Safe Routes to School grant funding to provide **bicycle skills education and training for elementary and middle school students**.
- The City believes in the need to **continue to provide pedestrian and bicycle safety education to school-age children**. The City's Administration Department will pursue California Office of Traffic Safety (OTS) grant opportunities in order to educate school-aged children to prevent injuries and fatalities. With the assistance of traffic safety education programs, Lancaster hopes to reduce injuries to people under the age of 15.
- The **Bikeways map** will be updated annually on the City's web page and will be available for distribution.
- The **"Bike Safety Tips" brochure** will be listed on the City's web page in an effort to educate all bicyclists on how to stay safe on the road.

ENFORCEMENT PROGRAMS

- The Lancaster Sheriff's Station will conduct **targeted enforcement** at locations that have historically seen a high number of bicycle- and pedestrian-related crashes. Enforcement will target dangerous motorist behaviors such as speeding, and not yielding the right-of-way.
- Design for safety should be the focus for pathways and parking areas. Crime Prevention Through Environmental Design (CPTED) should ensure proper design and effective use of the built environment, which can enhance physical features to maximize visibility.

EVALUATION PROGRAMS

- The City will conduct **bicycle and pedestrian counts** annually to gauge the number of trips that are being made by biking and walking. When feasible, the city will also conduct counts before and after changes in the physical infrastructure, such as the addition of bikeways. These counts can support funding applications and implementation efforts.



Estimated Number of Existing Bike Commuters and Estimated Increase

The 2007-2009 American Community Survey (ACS) from the United States Census Bureau, includes data on some of the travel behaviors of Lancaster residents. It states that 96% of the population travel by vehicle to work. The remaining 4% of workers take public transit, bicycle, or walk to work.

Metro in the 2006 Bicycle Transportation Account Compliance Document estimates the future bicycle commuter ridership if an expanded bikeway network were to be implemented. Based on this bicycle ridership demand estimating methodology, Lancaster is estimated to increase commuter bicycle trips by at least 3.5% when the Plan is fully implemented 20 years from now.

This is an achievable goal based on what other cities have done with ambitious bicycle plans. It will be a significant increase, however, this Plan is strong enough to meet this, given other cities have accomplished this with roughly similar efforts.

CHAPTER 7

TRAILS PLAN

Lancaster will use the following trail categories:

Bike paths - Paved paths for use by bicyclists, pedestrians, and any other non-motorized uses with wheels. They meet Caltrans' standards for bike paths. The proposed bike paths are described in the Bicycle Plan Chapter 6.

Paved Multipurpose Paths - Paved paths for use by bicyclists, pedestrians, and any other non-motorized uses with wheels. They do not necessarily meet Caltrans' standards for bike paths.

Earthen Multipurpose paths - Earthen trails for use by joggers and walkers. These are proposed as improved paths that may consist of a decomposed granite surface. These are identified below. The map entitled "Proposed Pedestrian Trails" illustrates the proposed multipurpose paths.

Equestrian trails - Earthen trails for use by equestrians, joggers and walkers. They may vary from single-track unimproved trails to graded, improved decomposed granite trails with fences. These are identified below. The map entitled "Proposed Pedestrian Trails" illustrates the proposed equestrian trail network.

Jogging trails - Earthen trails or rubber sidewalks that follow a selected course. Jogging trails are described below. The map entitled "Proposed Pedestrian Trails" shows the proposed jogging trail network.

Pedestrian trails - Pedestrian trails are included as other trail types. They follow bike paths, equestrian trails, multi-purpose paths, and jogging trails. The map entitled "Proposed Pedestrian Trails" displays the proposed pedestrian trail network as each of these other trail types.

Text following the description of equestrian trails and jogging paths identifies the location of existing and proposed trailheads.



Equestrian Trails

The City plans to add 48 miles of trails in Lancaster. They are described in more detail below.

PROPOSED EQUESTRIAN TRAILS

Littlerock Wash

North city limit to south city limit

40th/45th Street East

- Ave. H north to Lancaster Blvd. on west side of street
- Along the south side of Lancaster Blvd. to 45th St. E
- Along 45th St. E from Lancaster Blvd. to the south City Limit

90th Street West

- Ave. J north to Ave. G to connect to Los Angeles County trail

Amargosa Creek

- Ave. H north to Ave. G
- Over a new bridge across the Amargosa Creek just north of Ave. H

Avenue G/Division Street

- South side of Ave. G from Amargosa Creek to Division St.
- West side of Division St. from Ave. G to Ave. H

Avenue H

North side from Division St. to 40th St. E

Avenue J Trail

Along Ave. J from 70th St. W to 100th St. W

Avenue K-12 Trail

Along Ave. K-12 from 25th St. E to Littlerock Wash

Westside Trail

The City has a water channel that can be used for both a bike path and an equestrian trail. The trail would follow the channel as follows:

- From the Amargosa Creek bridge (just north of Ave. H) southwesterly to the intersection of 30th St. W and Ave. I
- Along the north side of Ave. I from 30th St. W to 50th St. W
- Along the east side of 50th St. W from Ave. I to Ave. J
- Along the north side of Ave. J from 50th St. W to 70th St. W
- Along the west side of 70th St. W from Ave. J to Ave. L
- Along the north side of Ave. L from 70th St. W to 90th St. W
- Along the 90th St. W right-of-way from Ave. L to the California Aqueduct

SCE Utility Corridor Trail

Along the Southern California Edison utility corridor in the western end of Lancaster that runs NW to SE from a point SW of the rights-of-way for Ave. I and 110th St. W, to a point just east of 80th St. W at the south city limit.

Eastside Channel Trail

- Along the north-south drainage channel from the National Soccer Center to the south side of Eastside High School.
- Along the south side of Eastside High School to the east side of the high school.
- Along the east side of the high school from Ave. J-8 to Ave. K.
- Design a safe crossing at Avenue K.

Landscape Maintenance District Trails

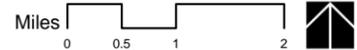
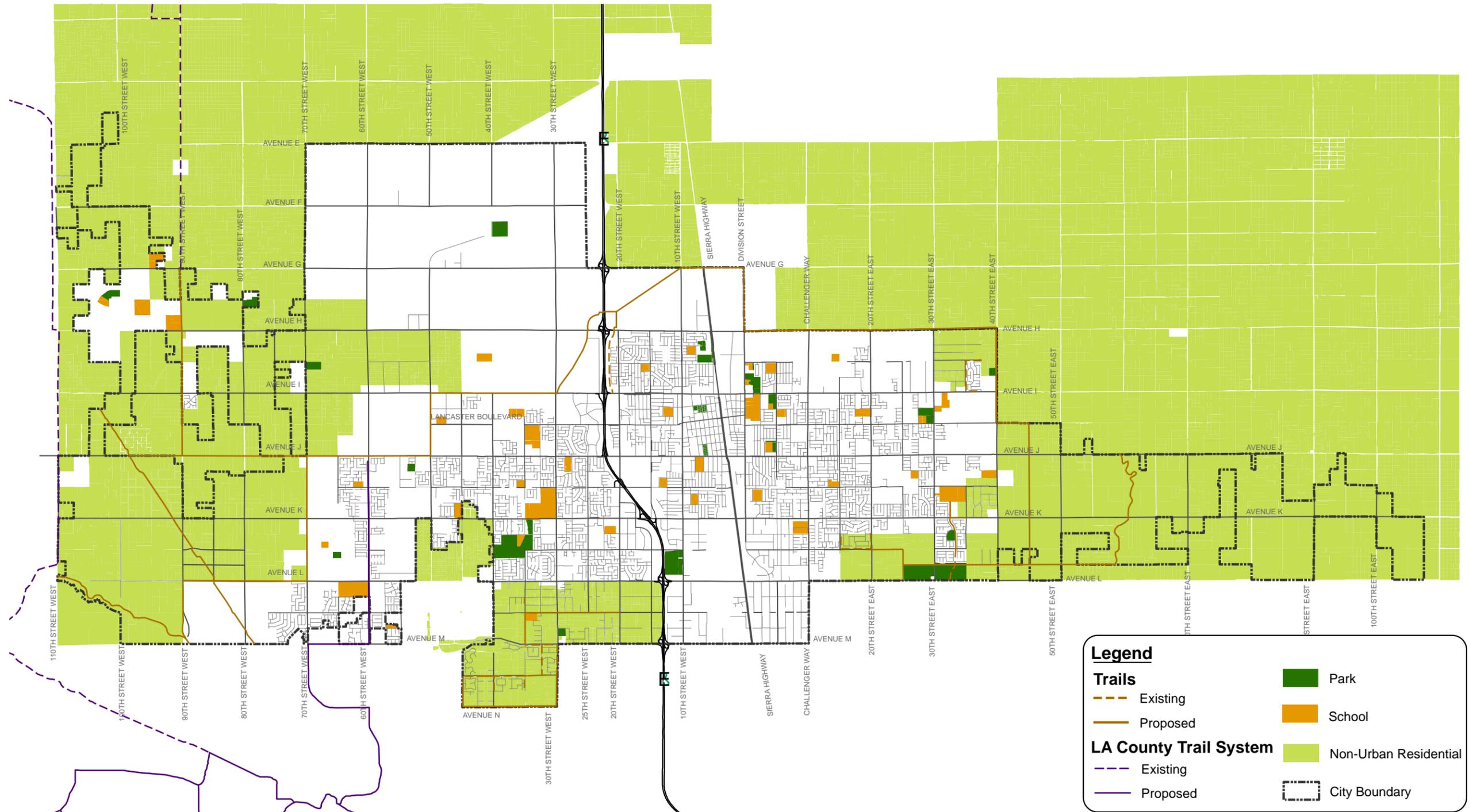
- Along Ave. M-8 from 40th St. W to 42nd St. W
- Along 45th St. W from Ave. M-8 to Ave N
- Along Ave. N from 30th St. W to 45th St. W
- Along 30th St. W from Ave. M-8 to Ave. N
- Along 35th St. W from Ave. L-8 to Ave. M
- Along Ave. L-8 from 20th St. W to 35th St. W
- Along Ave. M-8 from 35th St. W to 32nd St. W
- Along 32nd St W from Ave. M-6 to Ave. M-8
- Along Ave. M from 35th St. W for 55' to close gap

California Aqueduct Trail

Along the California Aqueduct within the Lancaster city limits.

The following map shows existing and proposed equestrian trails.

MAP 7-1: EXISTING AND PROPOSED EQUESTRIAN TRAILS



Existing and Proposed Equestrian Trails

Lancaster Master Plan of Trails and Bikeways

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Proposed Multipurpose Paths

The City plans to add 6 miles of multipurpose paths. They are described below.

35th Street West Earthen Multipurpose Path

- Create an earthen trail parallel to the proposed bike path along the 35th St. right-of-way from Ave. I to Ave. J.
- The path would follow Ave. J-12 to the east side of a housing development (in alignment with Alep Street).
- Follow an alignment parallel to Alep Street on the east side of the housing development from Ave. J-12 to Ave. K.
- Create an earthen trail along the north side of Avenue K to Yew Street. Cross Ave. K at Yew Street. The crossing of Ave. K should have a new user-activated signal, lateral-line crosswalks, countdown signals and audio signals.
- Create an earthen trail through an alignment near the park to Ave. K-4.
- Create an earthen trail through the Prime Desert Woodlands to Ave. K-8.

Lancaster Boulevard / Avenue I Loop Earthen Multipurpose Path

Starting at Ave. I and 35th St. W

- Follow along the south side of Ave. I from 35th St. W to 50th St. W
- Follow the east side of 50th St. W from Ave. I to Lancaster Blvd.
- Follow the north side of Lancaster Blvd. from 35th St. W to 50th St. W.
- Follow the alignment of 35th St. W from Lancaster Blvd. to Ave. I

Avenue K-8

- 35th St. E. to Littlerock Wash
- 20th St. E to 30th St. E
- 30th St. W to 15th St. W

25th Street East

Ave. K-8 to Ave. L

Proposed Jogging Paths

Two jogging loops (24 miles total) are proposed. Where open space exists, these will consist of earthen trails. In other places, the jogging loops follow sidewalks in built-up neighborhoods. These are proposed as rubber sidewalks to make for a better surface to run on than concrete. The proposed jogging paths follow the routes described below:

Loops 1

Starting at Ave. J and Sierra Highway

- Follow Ave. J east to 5th St. E
- Follow 5th St. E to field at the south end just south of Ave. J-5
- Cut diagonal across the field to Ave. J-8 by Rodin Ave
- Follow Ave. J-8 east to 25th St. E
- Cut through open field to J-8 at 27th St. E
- Follow J-8 to 30th St. E
- Turn south on 30th St. E to National Soccer Center
- Path around west, south and east sides of National Soccer Center
- Follow 35th St. E north to Ave. K
- Follow existing path along Ave. K to 32nd St.
- Follow Ave. K to 30th St. E
- Turn north along 30th St. E to Kettering St.
- Follow Kettering St., and cut straight across fields in line with Kettering St. to Fenhold St.
- Follow Fenhold St. to Kildare St. to 13th St. E
- Follow 13th St. E back to Kettering St.
- Follow Kettering St. to Hanstead Ave., to Kildare St. and back to Kettering St. on Logue Ave.
- Follow Kettering St. to 5th St. E
- Turn south and follow 5th St. E back to Ave. J

Loop 2

Starting at Ave. J and Sierra Highway

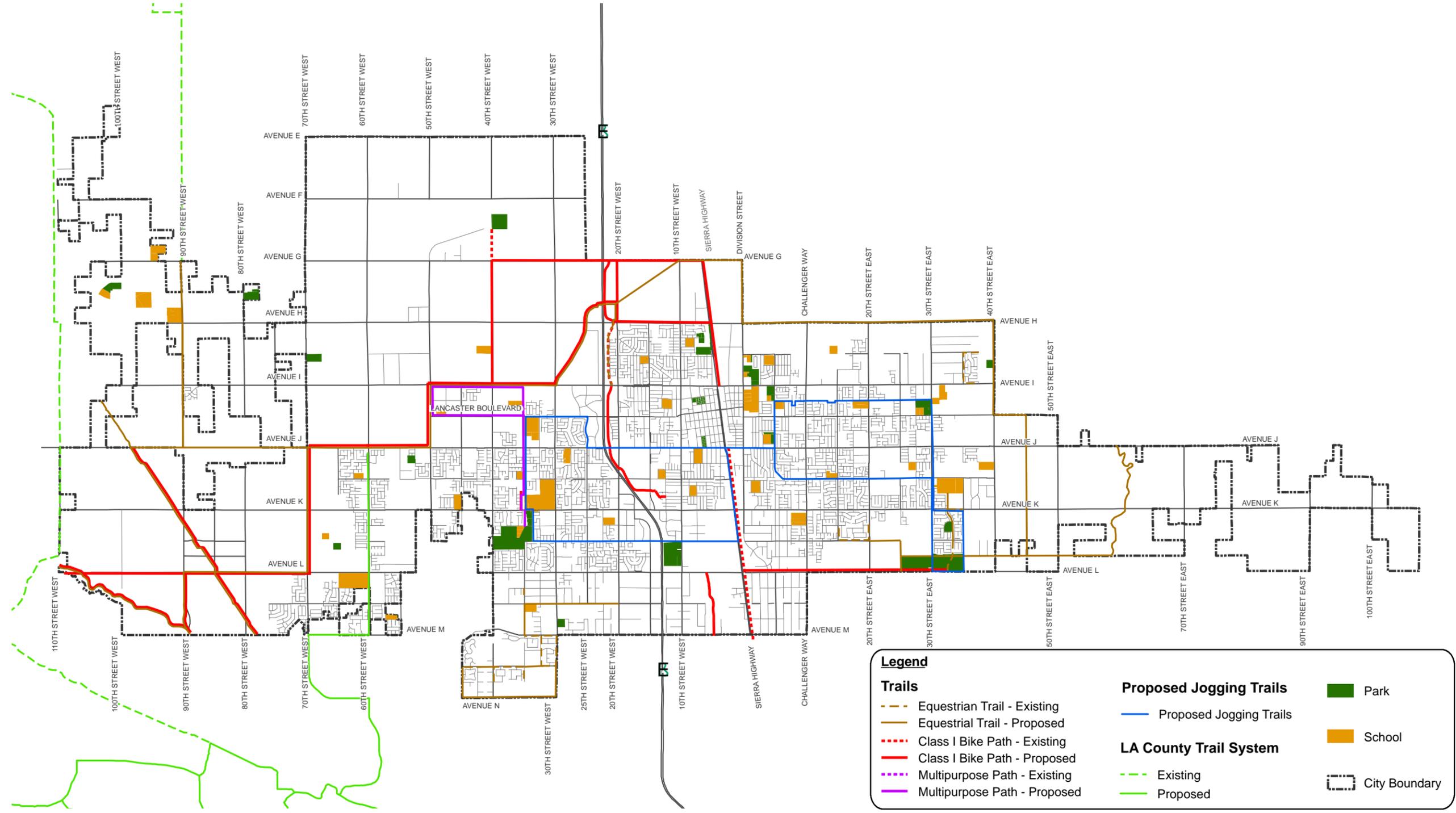
- Follow Ave. J from Sierra Highway west to 25th St. W
- North on 25th St. W to Lancaster Blvd.
- Follow Lancaster Blvd. to 35th St. W
- Follow 35th St. W earthen trail south to Ave. K-8
- Follow Ave. K-8 (and direct line through open space) to Sierra Highway.



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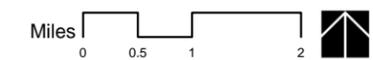
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MAP 7-2: PROPOSED PEDESTRIAN TRAILS



Legend

Trails	Proposed Jogging Trails	Park
- - - Equestrian Trail - Existing	— Proposed Jogging Trails	Park
— Equestrian Trail - Proposed		School
- · - · Class I Bike Path - Existing	LA County Trail System	City Boundary
— Class I Bike Path - Proposed	- - - Existing	
- · - · Multipurpose Path - Existing	— Proposed	
— Multipurpose Path - Proposed		



Proposed Pedestrian Trails

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Trailheads

Trailheads provide a place for trail users to access the trails. They may consist of a variety of amenities to facilitate users from their cars, bicycles or trailers to trail use.

EXISTING TRAILHEADS

County Fairgrounds West of Amargosa Creek - This is a well-improved trailhead that has parking, restrooms, trash receptacles and other amenities. This will connect to the future bridge over Amargosa Creek and the trail along Amargosa Creek.

PROPOSED TRAILHEADS

North side of Ave. H west of 20th Street West - This can be a fully developed trailhead with facilities for equestrian staging and access by bicyclists, pedestrians, joggers, and other non-motorized users.

Other potential trailhead sites - Trail users would be best served by having a few other sites with full trailhead facilities. The actual location would depend on property ownership, cost and other issues. The following are candidates for other trailheads:

- Northwest corner of Avenue J and 60th Street West (or another location along the Westside Trail)
- Northwest corner of Avenue K and 45th Street East (or another location along the 40th Street East Trail)
- Northwest corner of Avenue L-8 and 20th Street West (or another location along one of the Landscape Maintenance District trails in the southern part of Lancaster)
- Littlerock Wash

All of these trailheads are suitable to provide the amenities shown in the Design chapter. These amenities consist of at least the following:

- Auto parking
- Bicycle parking
- Trailer parking
- Equestrian hitching posts
- Staging area for unloading horses
- Pull through trailer parking
- Restrooms
- Drinking fountains for people and horses
- Refuse receptacles
- Trail maps
- Rules and trail etiquette
- Signs

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Promotional Programs

In addition to changes in the City's physical infrastructure, this plan proposes programs to promote and encourage trail use.

- The **Lancaster Trail Days** will celebrate Lancaster's trails. The City will promote Lancaster Trail Days via the internet and fliers in the community. In partnership with community groups, the city will host guided trail walks, hikes, and rides.
- On Earth Day, the Antelope Valley Partners for Health (AVPH) will organize a **community cleanup** of Littlerock Wash or the Amargosa Creek Pathway. This provides an opportunity to have fun and come together while at the same time maintaining the trail and promoting good trail stewardship. As future trails are developed, the city will expand the community cleanup program to include other trails.

CHAPTER 8

PEDESTRIAN PLAN

Guiding Assumptions for Pedestrian Improvements

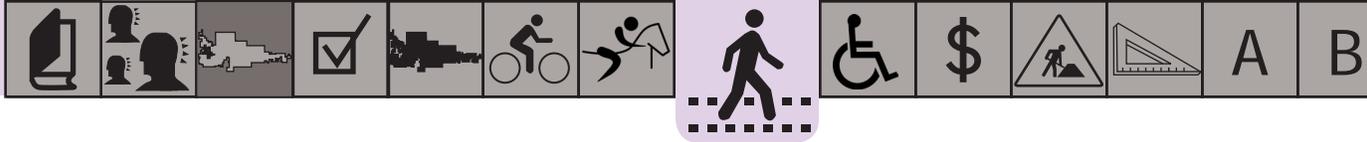
Lancaster can improve the pedestrian environment by incorporating best practices and principles into its policies and design practices. Pedestrian improvements focus first on safety, and second on creating a more pleasant walking environment. Many of the devices that make pedestrian crossings safer can also be enhanced with landscaping, art, and other amenities to encourage walking. These tools are described in more detail in the Design chapter.

Several overarching principles were followed when recommending improvements. The City can incorporate these when conducting other capital improvements including new development and redevelopment, as well as incorporate them into existing or new policies.

- 1. Shorten pedestrian crossings.** Reduced crossing distances create a safer walking environment by reducing the time that pedestrians are exposed to potential conflicts with cars and bicyclists. Road diets, refuge islands, and curb extensions are examples of devices to use.
- 2. Reduce curb radii.** Large curb radii allow cars to speed around corners, creating potential safety hazards for pedestrians crossing the street. By reducing the radii, cars must slow down before turning, and will be more likely to yield to pedestrians in the crosswalks.
- 3. Send pedestrians in the direction of travel:** Ramps at corners in the direction of travel help reduce conflict and shorten crossing distances.
- 4. Create and add buffers to sidewalks:** Buffers can take many shapes and forms including planted parkway strips, street furnishings, on-street parking, bikeways, and others. They provide a barrier between pedestrians on the sidewalk and moving traffic, creating a more comfortable walking environment.
- 5. Provide refuges:** Crossing islands, including median gaps, allow pedestrians to cross one direction of travel at a time, and improve crossing safety.
- 6. Slow traffic speeds:** Pedestrians are very vulnerable users, and have an 85% chance of death if hit at 40 mph.¹ Slow traffic speeds create a more comfortable walking environment, improve safety, and encourage pedestrian activity. The “BLVD” in Downtown Lancaster showcases a fantastic example.
- 7. Create public space:** Bulb-outs, curb extensions, and sidewalk buffers allow for space to enhance the pedestrian environment with public art, landscaping, outdoor dining, and seating. This creates a more interesting walking environment and can promote outdoor activity.

By following these general principles, the City will be able to create a more pedestrian-friendly environment incrementally.

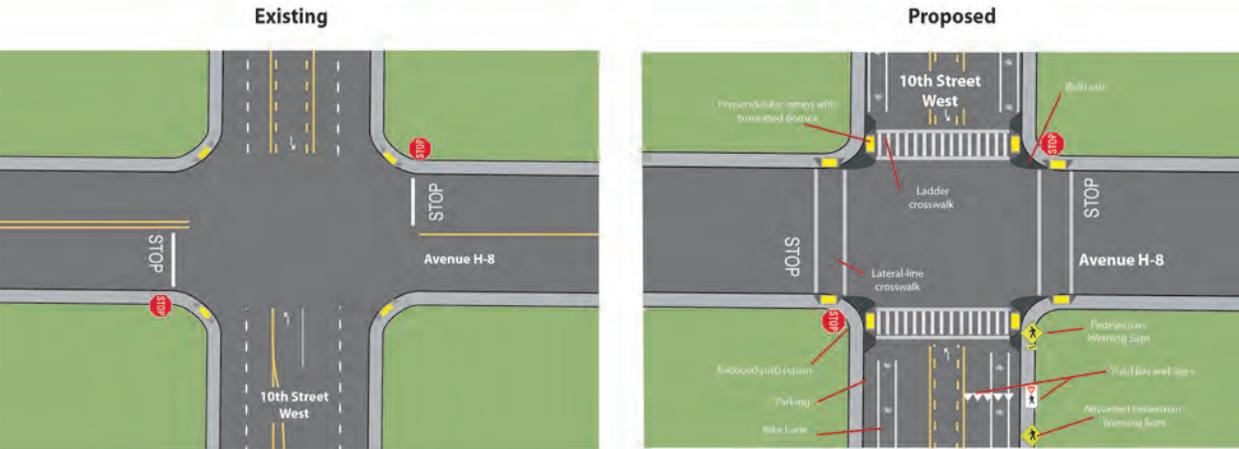
¹ U.K. Department of Transportation, Killing Speed and Saving Lives, London, 1987



Recommended Intersection Improvements for Pedestrians

The following are recommended improvements at the 60 intersections that were surveyed. These locations were chosen based on public input, city staff recommendation, TAC, fieldwork and analysis. Missing sidewalks are identified and discussed in Chapter 9, ADA Transition Plan. The California Public Utilities Commission will need to review proposed improvements at railroad track crossings. All proposed traffic control devices are subject to prior authorization based upon California MUTCD warrants and City guidelines before installation.

(1) AVENUE H-8 / 10TH STREET WEST	
EXISTING	<ul style="list-style-type: none"> Unsignalized intersection No marked crossings Diagonal ramps with truncated domes in all directions Ave. H-8 is 2 lanes, residential area 10th St. W is 4 lanes with center turn lane and high speeds (45 mph)
PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes with center-turn lanes and bike lanes on 10th St. West Add parking on both sides of 10th St. West, south of Ave. H-8 Add 15'-wide ladder crosswalks to cross 10th St. West (2) Add bulb-outs to cross 10th St. West on all corners, with reduced curb return to cross Ave. H-8 (4) Add advanced yield bars (2), pedestrian signage at crosswalk (2), pedestrian signage in advance of crosswalk (2), and advanced yield signs (2) on 10th St. W before marked crossing in both directions Add lateral-line crosswalks to cross Ave. H-8 (2)



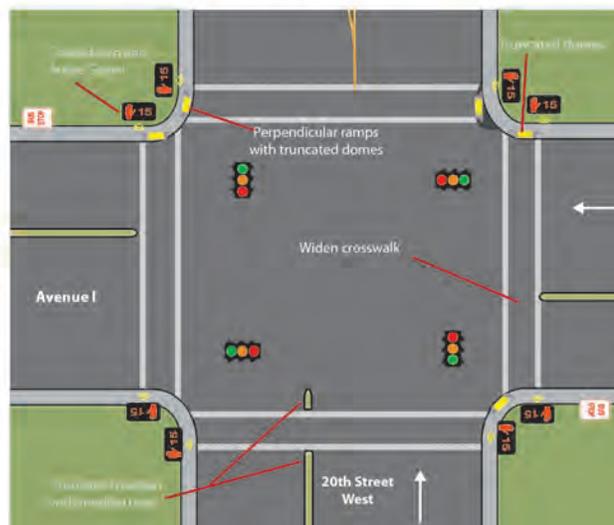
(2) AVENUE I / 20TH STREET WEST

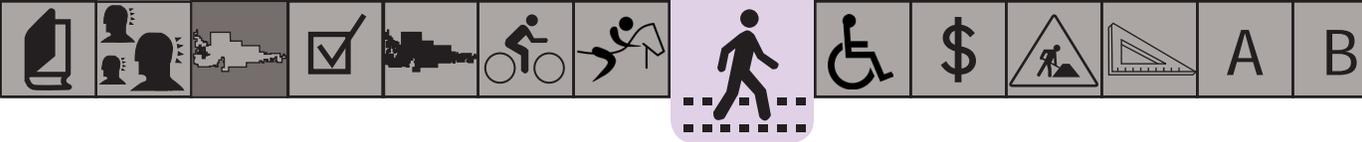
EXISTING	PROPOSED
<ul style="list-style-type: none"> • Signalized intersection <p>20th St. W</p> <ul style="list-style-type: none"> • North of Ave. I: 3 lanes northbound; 2 lanes southbound with right and left-turn lanes; center median • South of Ave I: 2 lanes northbound with right and left-turn lanes; 2 lanes southbound; center median <p>Ave I</p> <ul style="list-style-type: none"> • East of 20th St. W: 3 lanes westbound with right and left-turn lanes; 3 lanes eastbound; center median • West of 20th St. W: 3 lanes westbound; 3 lanes with right and left-turn lanes eastbound; center median <ul style="list-style-type: none"> • Lateral-line crosswalks on all crossings • No ramp on northwest corner • No landing area on southwest and southeast corners • Bus stops on Avenue I, eastbound, east of 20th St. W; westbound, west of 20th St. W • Median on 20th St. W, south of Avenue I is partially in crosswalk • Existing bulb-out on northeast corner to cross 20th St. W 	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add perpendicular curb ramps to northwest corner (2) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Ensure that pedestrian crossing times are compliant with the latest requirements of the CA MUTCD • Truncate median on 20th St. W, south of Ave. I at crosswalk and add median nose • Add truncated domes to existing ramps (4) <p>If Road Diet on Ave. I</p> <ul style="list-style-type: none"> • Add curb extension to northwest corner to cross Ave. I and reduce curb return on 20th St. W • Reduce curb return on southwest corner to cross Ave. I and 20th St. W • Reduce curb return on 20th St. W and add curb extension to cross Ave. I on southeast corner

Existing



Proposed





(3) AVENUE I / 10TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Lateral-line crosswalks on all crossings • Pedestrian signals • Diagonal curb ramps with no truncated domes • Ave. I is 6 lanes with right and left-turn lanes • Ave. I is 110' wide east of 10th St. W • Ave. I is 98' west of 10th St. W • 10th St. W is 84' wide with 4 lanes with 2 left-turn lanes; and right-turn lane south of Ave. I 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add time to signal for all crossings of 3' of travel per second • Add truncated domes to all corner ramps (4) • Relocate push buttons (8) • Add pedestrian refuge islands at all corners except NW (3) • Road diet on Ave. I and add bike lanes; 76' wide curb to curb • Remove one of two left-turn lanes on 10th St. W southbound, north of Ave. I • Add bike lanes on 10th St. W; 64' wide
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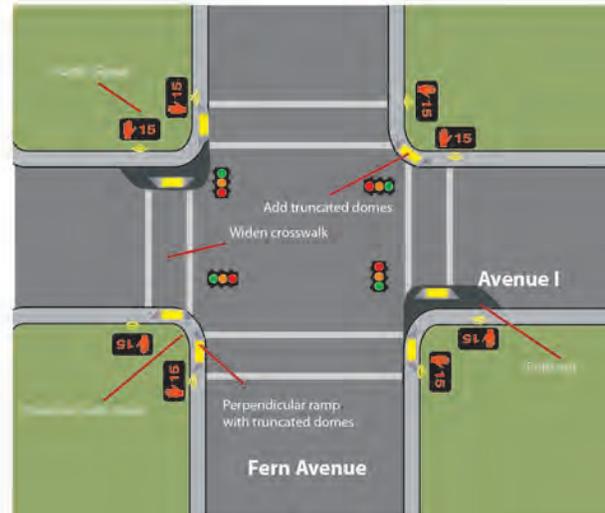
(4) AVENUE I / FERN AVENUE

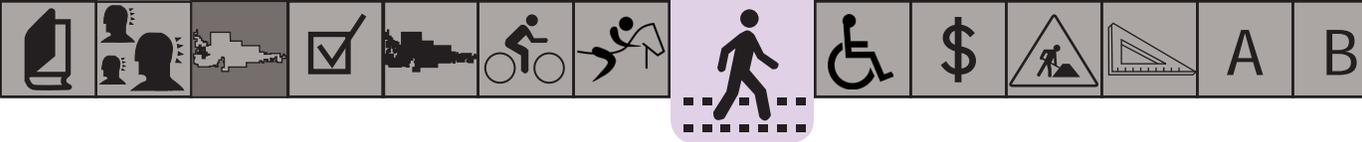
EXISTING		PROPOSED	
	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian countdown signals • Lateral-line crosswalks on all crossings, except across Fern Ave., north of Ave. I • Diagonal ramps with no truncated domes on all corners • Northwest and southwest corners have no landing areas • Poor push button placement 		<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add audio signals to all crossing faces (8) • Add 3' x 3' landing area on southwest corner for ADA compliance (1) • Relocate push buttons (8) • Reduce curb return radius on southwest corner (1) and add perpendicular ramps or one long ramp (2) • Add bulb-outs to cross Avenue I on northwest and southeast corners (2) • Add truncated domes to northeast corner (1)

Existing



Proposed





(5) AVENUE I / SIERRA HIGHWAY

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Diagonal ramps with truncated domes (4) • Lateral-line crosswalks (4) • Center median on Sierra Highway south of Ave. I partially in crosswalk • Center median on Ave. I, east of Sierra Highway • Inaccessible railroad crossing • Poor push button placements on northwest corner • Wide pockets on Avenue I westbound and eastbound, east of Sierra Highway at corners 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add sidewalk at railroad crossing, south of Ave. I (150 feet) and north of Ave. I (135 feet) • Relocate push buttons on northwest corner (2) • Add median noses (2) • Add truncated domes between noses and medians (4) • Add curb extensions to northeast and southeast corners to fill wide pockets facing Ave. I • Add truncated domes on both sides of tracks, on both sidewalks (4) • Add W82-1 signs on either side of tracks on both sidewalks (4) • Add edge lines across tracks on both sidewalks (2) • Add pedestrian gates on either side of tracks, on both sidewalks (4) • Add flashing lights and audible signals on both sidewalks (4)
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Existing

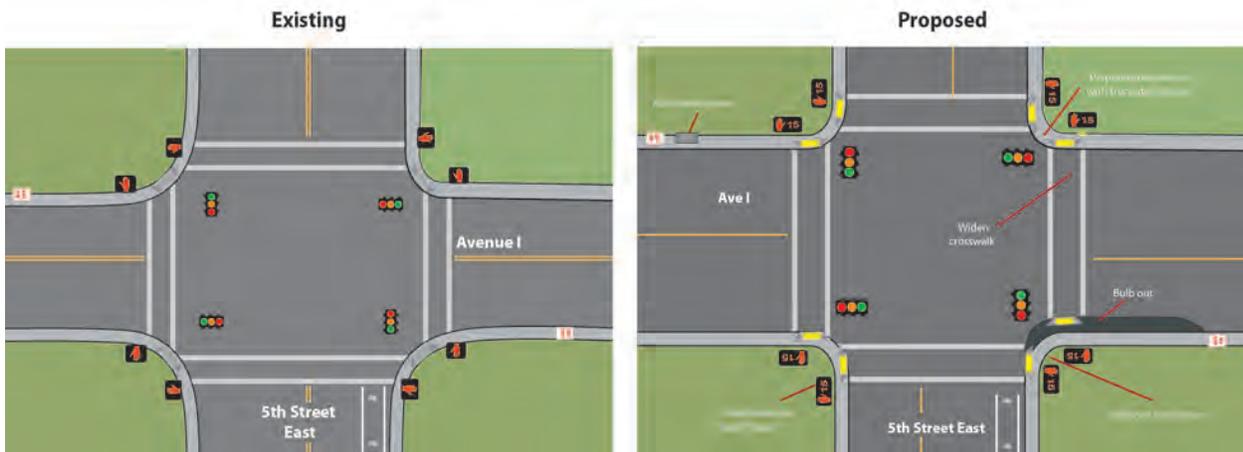


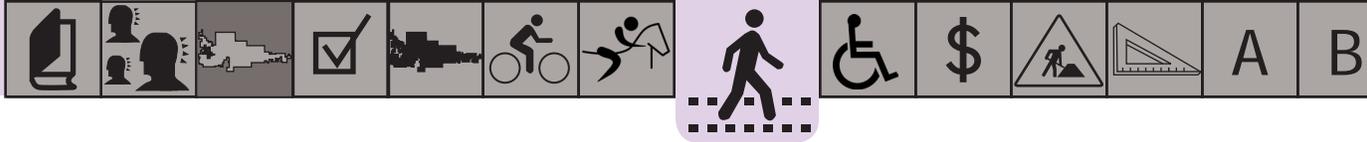
Proposed



(7) AVENUE I / 5TH STREET EAST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Diagonal ramps • Lateral-line crosswalks (4) • Northwest, southwest and southeast corner ramps have no landings • Northeast corner landing area is not flat • Bike lanes on 5th St. E, south of Ave. I • Bus stops on Ave. I 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) signals • Reduce curb return on southwest, northeast, and northwest corners (3) • Add bulb out to cross Ave. I with reduced curb return to cross 5th St. E on southeast corner (1). Extend bulb out to bus stop on south side of Ave. I, east of 5th St. E (1) • Relocate garbage can to create 5' x 8' ADA compliant landing area at bus stop on north side of Ave. I, west of 5th St. E (1)
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(8) AVENUE I / 15TH STREET EAST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks on all crossings except across Ave. I, west of 15th St. E (no marked crossing) • Diagonal ramps with truncated domes • Bus stop on Ave. I, east of 15th St. E • Poor push button placement • Only northeast and northwest ramps have landing area • No sidewalks on Ave. I south side and north side, west of 15th St. E and on 15th St. E on west side, south of Ave. I 	PROPOSED	<ul style="list-style-type: none"> • Add 15'-wide crosswalk to cross Ave. I, west of 15th St. E (1) • Widen all crosswalks to 15' (3) • Add curb extension to southeast corner to cross Ave. I with reduced curb return to cross 15th St. E (1) • Add curb extension to northwest corner to cross Ave. I with reduced curb return to cross 15th St. E (1) • Add bulb-outs to southwest corner (2) • Add pedestrian countdown (8) signals to all crossing faces • Ensure bus stops have 5' x 8' landing area for ADA compliance • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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Existing



Proposed



(9) AVENUE I BETWEEN 10TH STREET WEST AND KINGTREE AVENUE

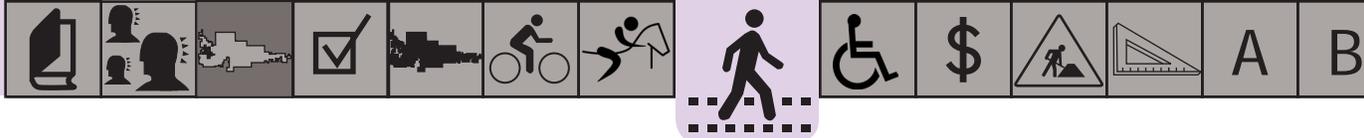
EXISTING	<ul style="list-style-type: none"> • Mid block • No existing marked crosswalks or signals • Ave. I is 5 to 6 lanes with center turn lane • People cross Ave. I at various points • Bus stop on westbound Avenue I, west of 10th St. W 	PROPOSED	<ul style="list-style-type: none"> • Widen sidewalks by 5' on both sides (2,112 ft.) • Add solid median with turn pockets for driveways in place of center-turn lane from Kingtree Ave. to right-turn lane on eastbound 10th St. W • Relocate bus stop on Avenue I closer to 10th St. W • Consolidate shopping center driveways <p>Option:</p> <ul style="list-style-type: none"> • Add mid-block crossing with half signal east of driveway to Lancaster Village
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Existing



Proposed





(10) AVENUE I BETWEEN 30TH STREET EAST AND 20TH STREET EAST

EXISTING	<ul style="list-style-type: none"> No sidewalk on both sides from 30 E to 27 E Sidewalk on south side only from 27 E to 26 E Sidewalk both sides from 26 E to 23 E Sidewalk on north side only from 23 E to 21 E Sidewalk both sides from 21 E to 20 E with small missing section on north side Inaccessible bus stop on north side at 27 E with no sidewalk, no landing area Inaccessible bus stop on north side, just west of 26 E has no landing area 	PROPOSED	<ul style="list-style-type: none"> Add sidewalks where they are missing (4,780 ft.) Ensure new sidewalk is 5' x 8' at the bus stop on north side at 27th St. E for ADA compliance Add 1' x 5' area of sidewalk at bus stop west of 26th St. E to create 5' x 8' ADA compliant landing area
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(11) JACKMAN AVENUE / FERN AVENUE

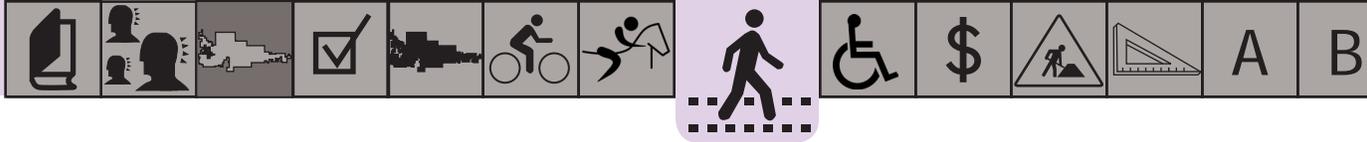
EXISTING	<ul style="list-style-type: none">• 4-way stop• Lateral-line crosswalks on all crossings• Diagonal ramps; truncated domes on southeast and northwest corners only• Accessible bus stop on Jackman Ave.	PROPOSED	<ul style="list-style-type: none">• Reduce curb return on all corners (4)
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Existing



Proposed



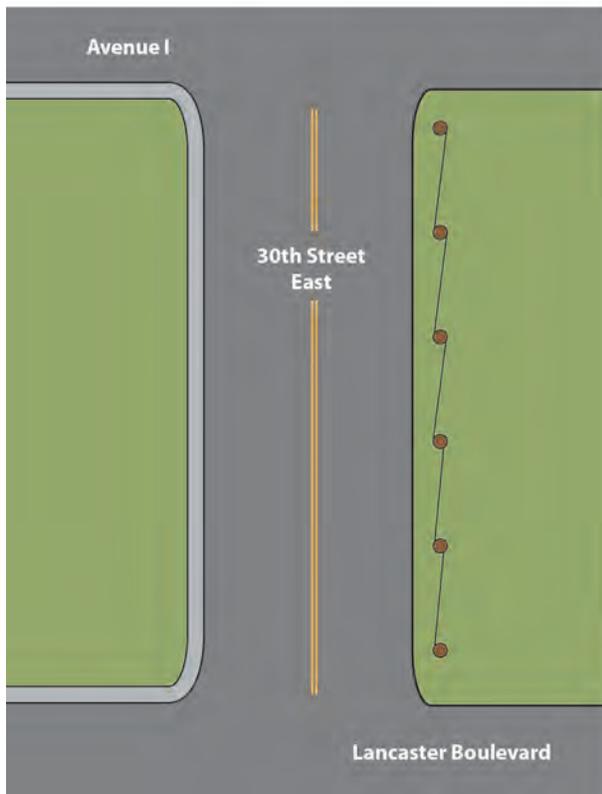


(12) 30TH STREET EAST BETWEEN LANCASTER BOULEVARD AND AVENUE I

EXISTING	<ul style="list-style-type: none"> Sidewalk on west side No sidewalk and paved shoulder on east side 	PROPOSED	<ul style="list-style-type: none"> Add sidewalk with parkway on east side May need to relocate sidewalk because of utilities Option: Add curbless sidewalk east of utilities
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Existing

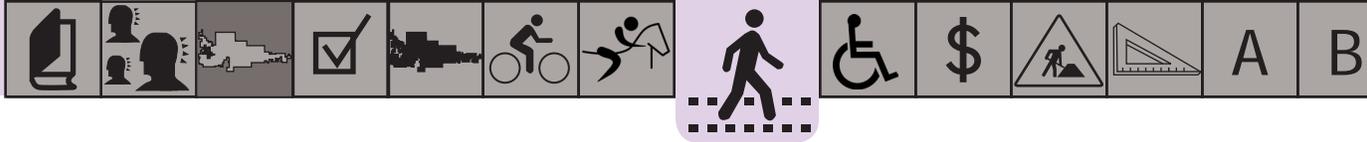
Proposed



(13) LANCASTER BOULEVARD / 30TH STREET WEST

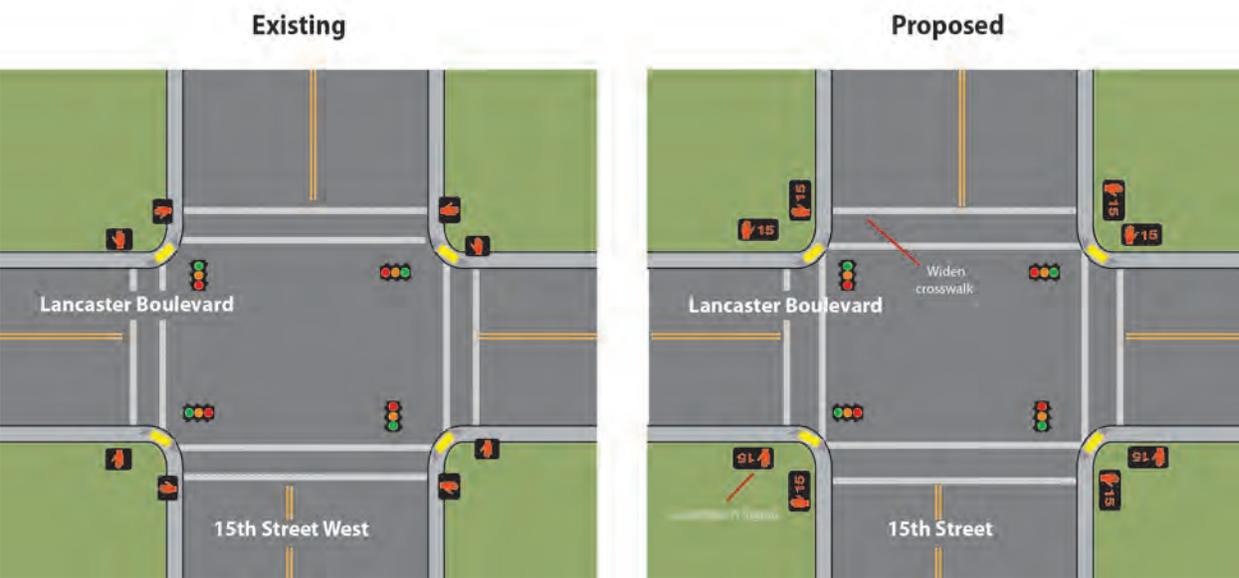
EXISTING	<ul style="list-style-type: none"> • Both streets have 4 lanes with right and left-turn lanes • Lateral-line crosswalks on all crossings • Diagonal ramps, one has truncated domes • Signalized intersection • Pedestrian signals 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add tapered curb extension to cross Lancaster Boulevard on northeast corner • Add bulb-out to cross Lancaster Boulevard on southeast corner • Add pedestrian countdown (8) signals to all crossing faces • Add truncated domes to ramps where they are missing (1) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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(14) LANCASTER BOULEVARD / 15TH STREET WEST

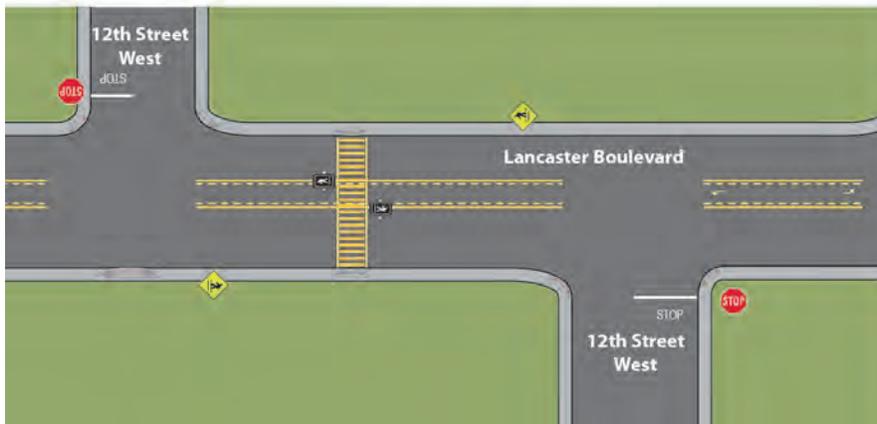
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Lateral-line crosswalks on all crossings • Diagonal ramps with truncated domes • Pedestrian signals • Poor push button placement • All ramps have landing areas 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) signals to all crossing faces • Relocate push buttons (8) <p>Long-term:</p> <ul style="list-style-type: none"> • Reduce to 2 lanes with center-turn lane on Lancaster Boulevard
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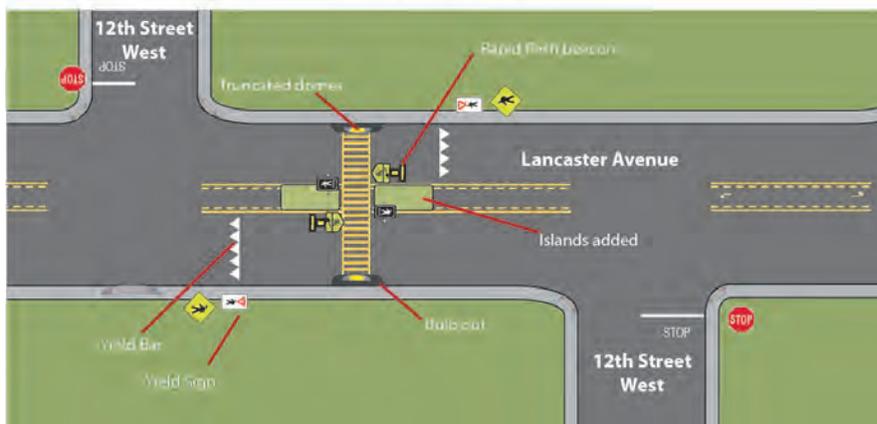
(15) LANCASTER BOULEVARD / 12TH STREET WEST

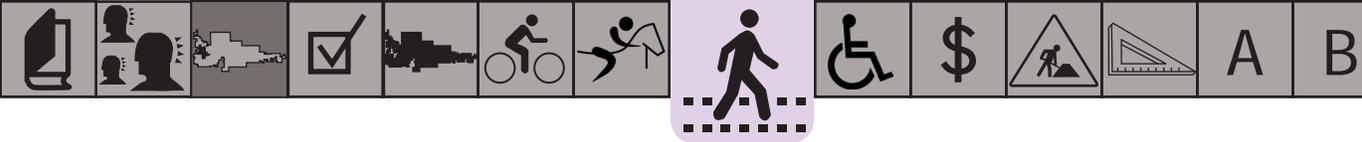
EXISTING	<ul style="list-style-type: none"> • Mid-block crossing • Yellow ladder crosswalk across Lancaster Bd. between two 12th St. W (break in street at Lancaster Bd.) • Perpendicular ramps; no truncated domes • School crossing sign • Pedestrian overhead flasher • Advanced pedestrian warning sign • Crossing guard on duty during school hours 	PROPOSED	<ul style="list-style-type: none"> • Add advanced yield bars (2) and advanced yield signs (2) • Add islands in center turn lane on either side of crosswalk (2) • Add truncated domes to ramps (2) • Consider rapid flash beacon • Add bulb-outs (2)
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Existing



Proposed





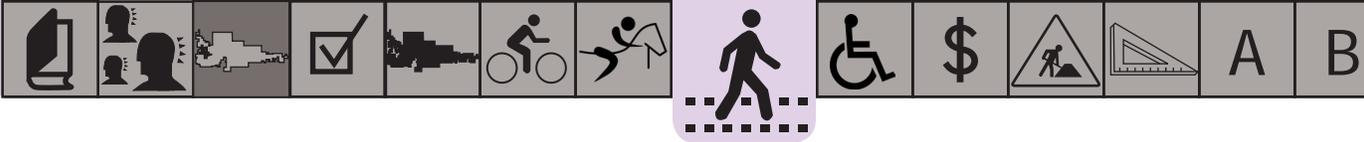
(16) LANCASTER BOULEVARD / SIERRA HIGHWAY	
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks (4) • Diagonal ramps • Truncated domes on northwest and southwest ramps • Center medians on Lancaster Bd. • Southern railroad crossing is inaccessible • Poor push button placements on northeast, southwest and northwest corners • Bus stops on Lancaster Bd. on north and south sides, east of Sierra Highway
PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add median noses (2) to both medians on Lancaster Bd. • Truncate median east of Sierra Highway at crosswalk • Add bus bulb that is 5' x 8' on southeast corner of Lancaster Bd. (1) and redo both ramps (2) for ADA compliance • Relocate push buttons on northeast, southwest and northwest corners (6) • Add truncated domes to northeast ramp (1) • Reconstruct sidewalk and driveway to cross railroad south of Lancaster Bd. (60 feet) • Add sidewalk north of Lancaster at railroad crossing (8') • Add truncated domes on both sides of tracks, on both sidewalks (4) • Add W82-1 signs on either side of tracks on both sidewalks (4) • Add edge lines across tracks on both sidewalks (2) • Add pedestrian gates on either side of tracks, on both sidewalks (4) • Add flashing lights and audible signals on both sidewalks (4) • Add bus pad with shelter and solar lighting to NE and SE corners (2)

Existing



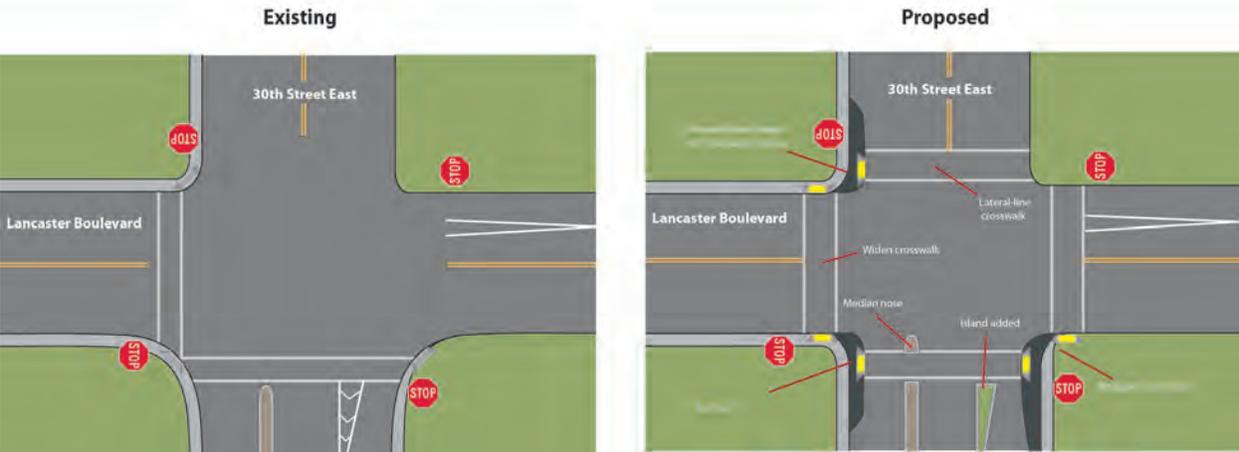
Proposed





(17) LANCASTER BOULEVARD / 30TH STREET EAST

EXISTING	<ul style="list-style-type: none"> • 4-way stop • 30th St. E, south of Lancaster Bd. is 2 lanes southbound, 1 lane northbound, right and left-turn lanes northbound, center median, painted island between through lane and right-turn lane northbound • 30th St. E, north of Lancaster Bd. is 1 lane northbound, 2 lanes southbound with left-turn lane • Lancaster Bd. east of 30th St. E is 2 lanes eastbound, 1 lane with left-turn lane westbound • Lancaster Bd. west of 30th St. E is 2 lanes westbound, 1 lane with right and left-turn lanes eastbound • Lateral-line crosswalk across 30th St. E, south of Lancaster Bd. and across Lancaster Bd., west of 30th St. E • Diagonal ramps on all corners except northeast corner • Southeast corner ramp has no landing area • No sidewalk on 30th St. E on east side, north of Lancaster Bd; no sidewalk on Lancaster Bd. on south side, east of 30th St. E; no sidewalk on Lancaster Bd. on north side, east of 30th St. E 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add tapered curb extension to cross 30th St. E on southeast corner (1) with reduced curb return to cross Lancaster Bd. (1) • Add bulb-out to cross 30th St. E on southwest corner (1) with reduced curb return to cross Lancaster Bd. (1) • Add new curb on northwest corner with tapered curb extension to cross 30th St. E and with tight curb return to cross Lancaster Bd. (1) • Add islands in painted island on 30th St. E, south of Lancaster Bd. (1) • Add median nose on 30th St. E, south of Lancaster Bd. (1) • Long-term: Add sidewalks where they do not exist
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(18) AVENUE J / 20TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks on all crossings • Diagonal ramps; only southeast corner has truncated domes • No landing area on southwest and northeast corners • Poor push button placement on southwest and northwest corners • Bus stop on northbound 20th St. W, north of Ave. J • Bus stop on eastbound Ave. J, east of 20th St. W 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add time to all pedestrian signals of 3' of travel per second • Reduce curb return on southwest and northwest corners (2) • Add 3' x 3' landing area on northeast corner for ADA compliance (1) • Relocate push buttons on southwest and northwest corners (4)
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(19) AVENUE J / 15TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks on all crossings • Diagonal ramps • No landing area on southwest corner • Poor push button placement 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and signals to all crossing faces • Relocate push buttons (4) • Reduce curb return on all corners (4)
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Existing



Proposed



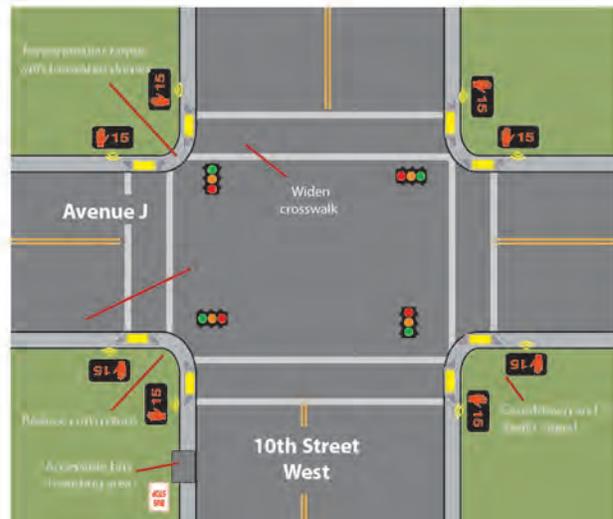
(20) AVENUE J / 10TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks on all crossings • Diagonal ramps • Poor push button placement • Bus stop southbound 10th St. W, south of Ave. J • Inadequate landing areas on all corners 	PROPOSED	<ul style="list-style-type: none"> • Add 1' x 5' pad to bus stop on southbound 10th St. W, south of Ave. J to create 5' x 8' landing area for ADA compliance • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Reduce curb return on all corners (8) • Relocate push buttons (8)
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Existing

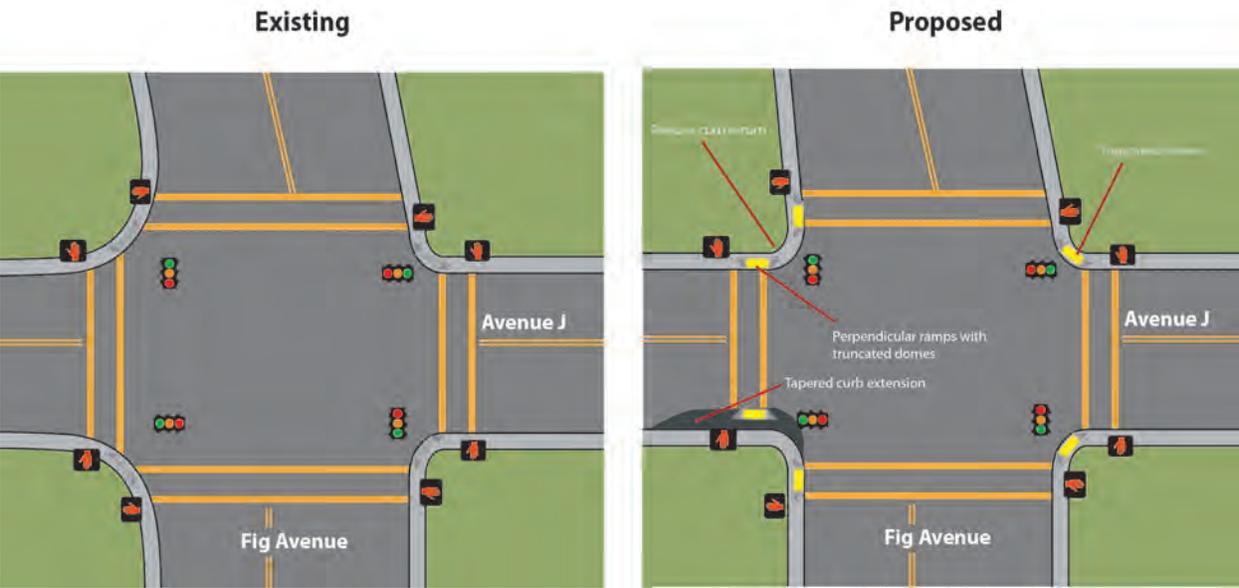


Proposed



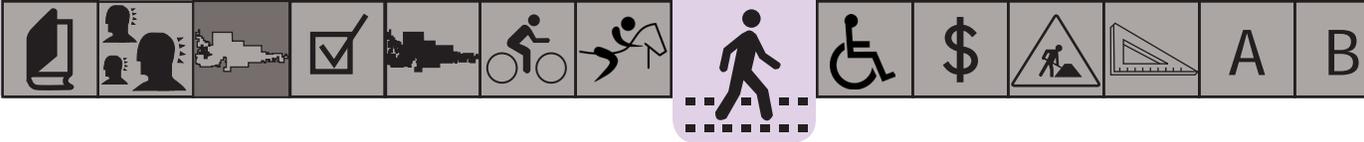
(21) AVENUE J / FIG AVENUE

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signal • Lateral-line crosswalks on all crossings • Diagonal ramps • No landing area on northeast corner • Ramp on southwest corner is broken up and inaccessible • Poor push button placement 	PROPOSED	<ul style="list-style-type: none"> • Add tapered curb extension to southwest corner to cross Ave. J (1) • Reduce curb return on southwest and northwest corners (2) • Add truncated domes to northeast and southeast ramps (2) <p>Long-term:</p> <ul style="list-style-type: none"> • Reduce to 2 lanes with center-turn lane on Ave. J
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(22) AVENUE J / SIERRA HIGHWAY

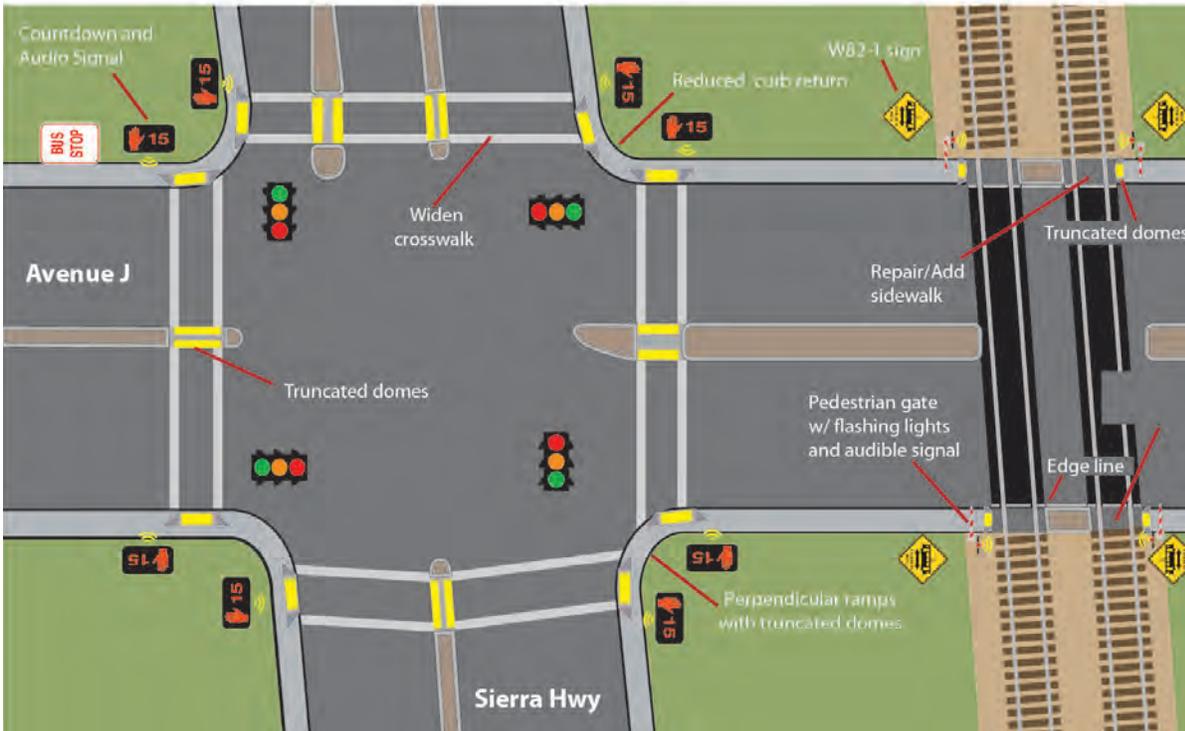
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks (4) • Median nose on Sierra Highway, south of Ave. J • Median nose on Ave. J, east of Sierra Highway • Islands mid-walk on Ave. J, west of Sierra Highway • Island between right-turn slip lane and through lanes on Sierra Highway, north of Ave. J with nose • Southwest corner has perpendicular ramps • No landing area on southwest corner ramp to cross Ave. J • All other corners have diagonal ramps (3) • Poor push button placements on southwest and northeast corners • Bus stop on Ave. J, west of Sierra Highway • Existing sidewalk to cross railroad tracks 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add time to signal to all crossings of 3' of travel per second • Add truncated domes between islands, and median noses and medians (10), and to southwest corner ramps (2) • Add landing area to cross Ave. J on southwest corner ramp • Relocate push buttons on southwest and northeast corners (4) • Reduce curb return on southeast, northwest, and northeast corners (3) • Add truncated domes on both sides of tracks, on both sidewalks (4) • Add W82-1 signs on either side of tracks on both sidewalks (4) • Add edge lines across tracks on both sidewalks (2) • Add pedestrian gates on either side of tracks, on both sidewalks (4) • Add flashing lights and audible signals on both sidewalks (4) • Add sidewalk where missing and repair existing near railroad tracks crossing (100 sq. ft. south of Ave. J and 110 sq. ft. north of Ave. J) • Option: Add roundabout with 2 lanes in each direction
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Existing



Proposed



(23) AVENUE J / CHALLENGER WAY

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks (4) • Diagonal ramps (4) • All have truncated domes except northeast corner • No landing area on northeast corner ramp • Medians on Ave. J • Ave. J median, east of Challenger Way is in crosswalk • Bus stops on south side Ave. J, east of Challenger Way, and north side Ave. J, west of Challenger Way • Bike lanes on Challenger Way; bike route on Ave. J • Intersection is offset with east side of Ave. J wider than west side of Ave. J 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add median noses (2) with truncated domes (4) • Truncate median at crosswalk • Reduce curb return on northeast, northwest, and southwest corners (3) • Relocate garbage can at bus stop on north side Ave. J, west of Challenger Way to create 5' x 8' ADA compliant landing area (1) • Relocate bus stop on northwest corner closer to intersection • Add curb extension to southeast corner to realign intersection and travel for Ave. J eastbound
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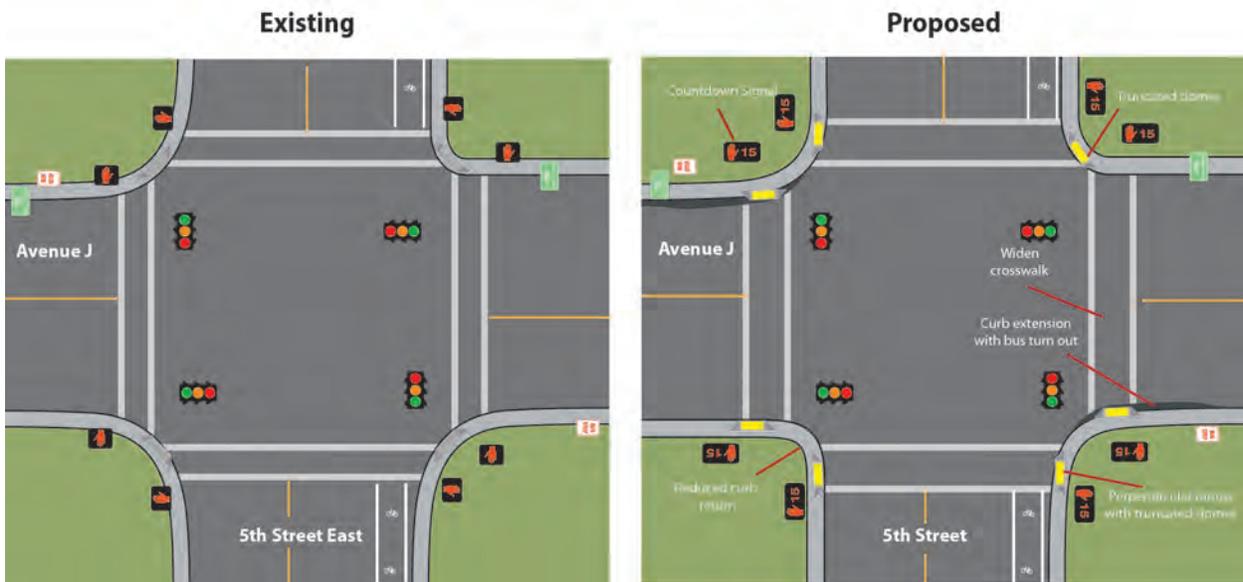
(24) AVENUE J / DIVISION STREET

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Diagonal ramps with truncated domes • Lateral-line crosswalks (4) • Small painted buffer in center turn lane (gap between set of double yellow lines) west of Division St. on Ave. J • Bus stops on Ave. J, both east of Division St. 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Add crossing islands in buffer (2) with truncated domes (2) • Add large curb extension to cross Ave. J on southwest corner to narrow right-turn lane and create smaller curb return (1) • Reduce curb return on northwest, northeast and southeast corners (3) • Reconstruct sidewalk on south side of Ave. J, east of Division St. near bus stop (40' x 10')
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(25) AVENUE J / 5TH STREET EAST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signal • Lateral-line crosswalks (4) • Diagonal ramps • Inadequate landing area on northwest corner ramp • Poorly placed push buttons to cross 5th St. E on northwest corner • Bus stops on north side Ave. J, west of 5th St. E, and on south side of Ave. J, east of 5th St. E • Bike lanes on 5th St. E; bike route on Ave. J 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) signals to all crossing faces • Add curb extension to cross Ave. J with bus turn out and reduced curb return to cross 5th St. E on southeast corner; add curb extension to cross Ave. J with bus turn out and reduced curb return to cross 5th St. E on northwest corner (2) • Add truncated domes to northeast ramp (1) • Reduce curb return on southwest corner (1) • Relocate push button on northwest corner (1) • Relocate trash can at bus stop on north side Ave. J, west of 5th St. E to create 5' x 8' ADA compliant landing area (1)
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(27) AVENUE J-8 / 30TH STREET WEST

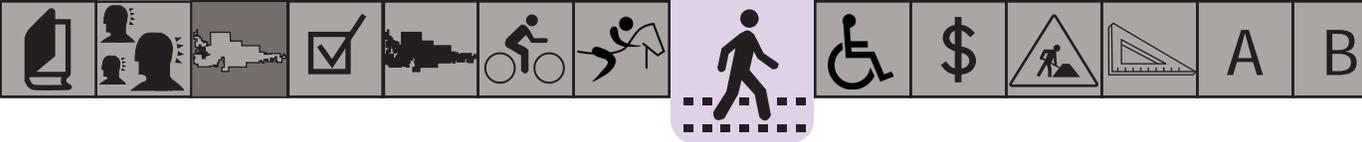
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Ave. J-8 is 4 lanes • 30th St. W is 4 lanes with left and right-turn lanes • Lateral-line crosswalks • Pedestrian signals • No landing area on all 4 corners • Poor push button placement • Bus stops on 30th St. W, northbound, north of Ave. J-8 and southbound, south of Ave. J-8 • Both bus stops are inaccessible 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) signals to all crossing faces • Relocate push buttons (7) • Add tapered curb extensions on northwest and southeast corners to cross 30th St. W with reduced curb returns to cross Ave. J-8 (4) • Add bulb-outs on southwest and northeast corners to cross 30th St. W; reduce curb return to cross Ave. J-8 (4) • Extend bulb-outs and curb extensions to bus stops to create 5' x 8' landing area for ADA compliance (2) • Add 2' x 5' concrete pad to 6' wide sidewalk at bus stop on 30th St. W, south of Ave. J-8 to create 5' x 8' landing area for ADA compliance • Relocate catch basins on northeast, northwest, and southeast corners (3) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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Existing



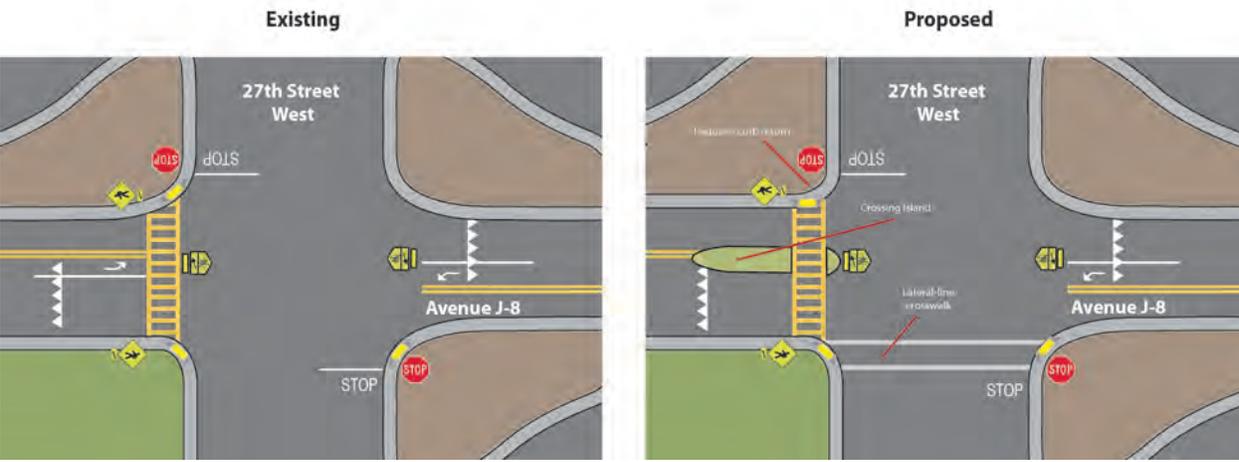
Proposed





(28) AVENUE J-8 / 27TH STREET WEST

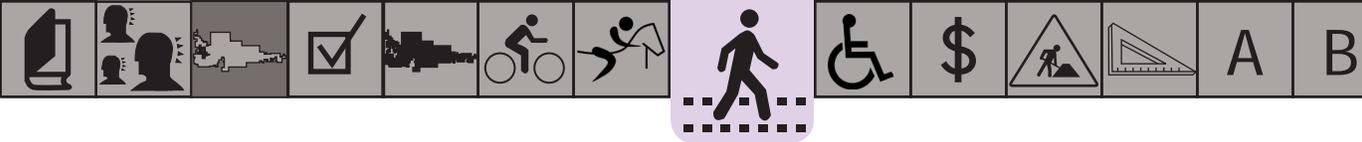
EXISTING	<ul style="list-style-type: none"> • Unsignalized crossing to cross Ave. J-8 • Pedestrian overhead flashing beacon • Ladder crosswalk • Pedestrian sign at crosswalk • Advanced yield markings • High speeds on Ave. J-8 	PROPOSED	<ul style="list-style-type: none"> • Replace left-turn pocket on Ave. J-8 with crossing islands on eastbound approach (2) • Reduce curb return on northwest corner (1) • Add lateral-line crosswalk south of Ave. J-8 to cross 27th St. W (1) <p>Long-term:</p> <ul style="list-style-type: none"> • Reduce to 1 lane in each direction
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(29) AVENUE J-8 / 20TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Diagonal ramps • Truncated domes on all ramps except for southwest corner • No landing area on southwest corner • Lateral-line crosswalks on all crossings • Poor push button placement 	PROPOSED	<ul style="list-style-type: none"> • Widen sidewalks to 15' • Add pedestrian countdown (8) and add audio (8) signals to all crossing faces • Add bulb-out on southwest corner to cross 20th St. W, and ensure adequate landing area to create 3' x 3' area for ADA compliance with perpendicular ramps with truncated domes (1) • Relocate push buttons (8)
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(30) AVENUE J-8 / 10TH STREET WEST	
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks on all crossings • Diagonal ramps with truncated domes • Landing areas are flat at ground level • Gap in median alongside frontage road to cross to sidewalk • Frontage road along 10th St. W, southbound • Bus stop on southbound 10th St. W, south of Ave. J is inaccessible
PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add time to signal to cross 10th St. W of 3' of travel per second • Reduce curb return on northeast and southeast corners (2) • Relocate push buttons (8) • Add truncated domes in median gap • Bus stop on southbound 10th St. W, south of Ave. J • Widen bus stop island from Ave. J-8 to Ave. J-9 by 6' to create 5' x 8' ADA compliant bus stop (1680 sq. ft.) • Add ladder crosswalk at Ave. J-9 to cross frontage road (1) • Add curb ramps on frontage road sidewalk and on island (5) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD

(31) AVENUE J-8 / SIERRA HIGHWAY

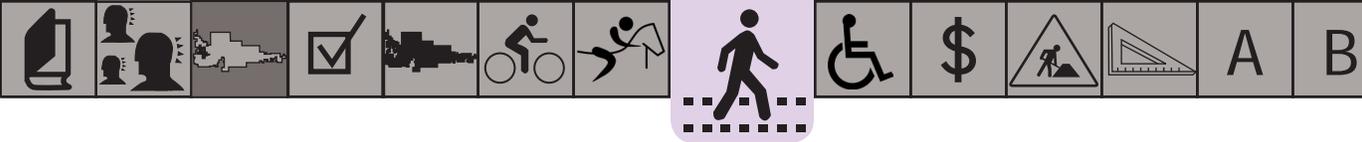
EXISTING	<ul style="list-style-type: none"> • Unsignalized, T-intersection • Stop sign on Avenue J-8 • Avenue J-8 ends at Sierra Highway • No marked crosswalks • Diagonal ramps on northwest and southwest corners 	PROPOSED	<ul style="list-style-type: none"> • Add traffic signal for both Sierra Highway and Ave. J-8 if meets signal warrants • Add 15'-wide lateral-line crosswalks to all crossings (3) • Add pedestrian countdown (6) and audio (6) signals to all crossing faces (2) • Add truncated domes to existing ramps (2) • Add perpendicular ramps on east side of Sierra Highway (2) <p>Option:</p> <ul style="list-style-type: none"> • Add user-activated signal to cross Sierra Highway north of Ave. J-8 • Add right-turn only on Ave. J-8 • Add lateral-line crosswalk to cross Sierra Highway north of Ave. J-8 (1) • Add pedestrian countdown (2) and audio (2) signals to both crossing faces of Sierra Highway crossing • Add truncated domes to northwest corner ramp (1) • Add perpendicular ramp on northeast corner of Sierra Highway (1)
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Existing



Proposed





(32) AVENUE J-8 / 15TH STREET EAST

EXISTING	<ul style="list-style-type: none"> • Lincoln School on northwest corner • 4-way stop • Yellow lateral-line crosswalks on all crossings • Diagonal ramps with no truncated domes on all corners • Ramp on southwest corner has no landing area 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Reduce curb return on all corners (4) • Add bulb-out to cross Ave J-8 with reduced curb return to cross 15th St. E on northwest corner (1) • Add truncated domes to existing ramps on NE, SE, and SW corners (3)
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Existing



Proposed



(33) AVENUE J-8 / 30TH STREET EAST

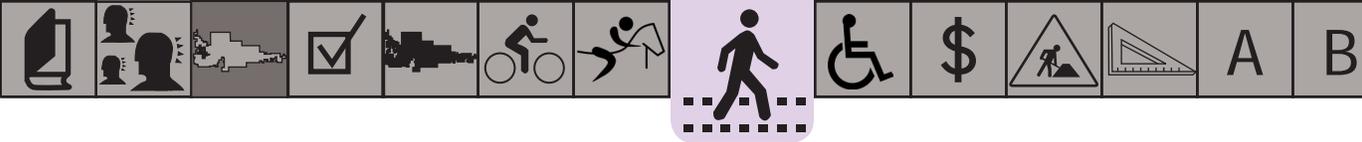
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalk to cross 30th St. E, south of Ave J-8 • Diagonal ramps on southwest and southeast ramps • Southwest ramp is inaccessible • Poor push button placement • No sidewalks except along 30th St. E, south of Ave. J-8, on west side; and along Ave. J-8, east of 30 E, on south side 	PROPOSED	<ul style="list-style-type: none"> • Add 15'-wide lateral-line crosswalks to 3 missing legs (3) • Widen existing crosswalk to 15' (1) • Add pedestrian countdown (8) signals to all crossing faces • Reduce curb return on southwest corner (1) • Add sidewalk on east side of 30th St. E from Ave. J-8 to Ave. J-4 (1320 ft.) • Relocate push button (1)
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Existing

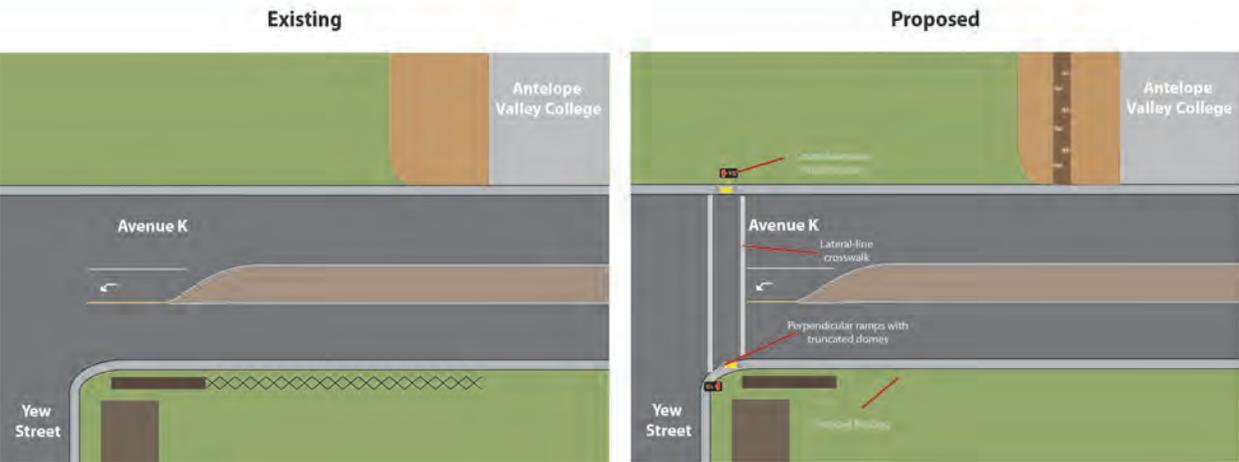


Proposed





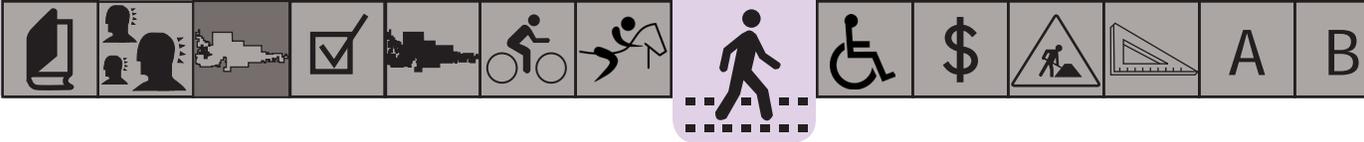
(34) AVENUE K / YEW STREET		
EXISTING	<ul style="list-style-type: none"> Unsignalized, mid-block crossing Ave. K is 4 lanes with center median and left-turn lanes Yew St. does not continue north of Ave. K Stop sign on Yew St. south of Ave. K 	PROPOSED
		<ul style="list-style-type: none"> Add user-activated signal with pedestrian countdown (2) and audio (2) signals on north side of Ave. K at the end of proposed path Add 15'-wide lateral-line crosswalk to cross Ave. K (1) Add perpendicular curb ramps with truncated domes on east side of Yew St. (2) Open fence along north side and east side of housing adjacent to Yew St, south of Ave. K to allow for pedestrians and cyclists



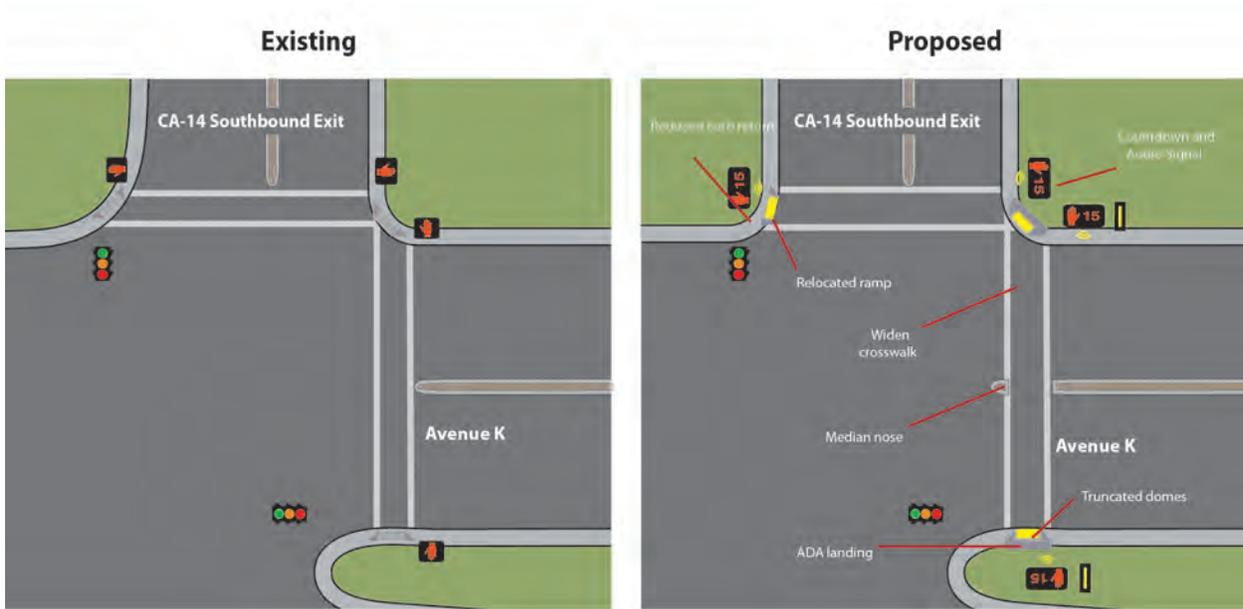
(35) AVENUE K / 30TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Corner of Antelope Valley College • Bus stop on Ave. K, east of 30th St. W • Bus stop on 30th St. W, north of Ave. K • Bus stops are inaccessible • 6 lanes each • Signalized intersection • Lateral-line crosswalks on all crossings • No landing areas for disabled users on northeast, southeast, and southwest ramps • Poor push button placements 	PROPOSED
		<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) to all crossing faces • Relocate pedestrian push buttons (8) • Add bulb-outs on southwest and northeast corners to cross 30th St. W; reduce curb return on Ave. K faces of bulb-outs (2) • Reduce curb return on northwest corner (1) • Relocate trash can at bus stop on 30th St. W, north of Ave. K to create 5' x 8' accessible landing area for ADA compliance (1) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD



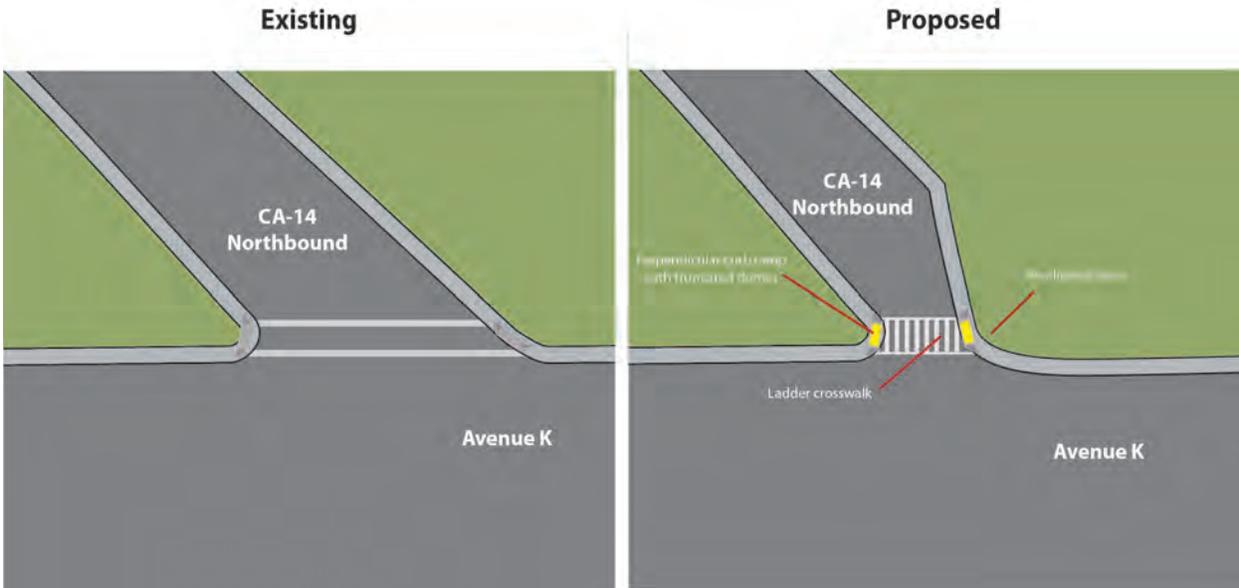


(36) AVENUE K (NORTH SIDE) / CA-14 SOUTHBOUND EXIT	
EXISTING	<ul style="list-style-type: none"> Signalized intersection Pedestrian signals Lateral-line crosswalks to cross exit and to cross Ave. K east of off-ramp (2) Off-ramp is 2 lanes southbound, 1 lane northbound, center median Ave. K is 6 lanes with center median Diagonal curb ramps (3) Northeast and southeast corner ramps missing landings
PROPOSED	<ul style="list-style-type: none"> Widen crosswalks to 15' (2) Add median nose on Avenue K (1) Add pedestrian countdown (4) and audio (4) signals at both crossings Relocate northeast corner push button to cross Ave. K (1) Coordinate with Caltrans and Public Utilities Commission to reduce curb return on northwest corner and reconfigure ramp to cross CA-14 Add landing area to northeast and southeast corner ramps (2) Add truncated domes to southeast and northeast ramps (2) Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD



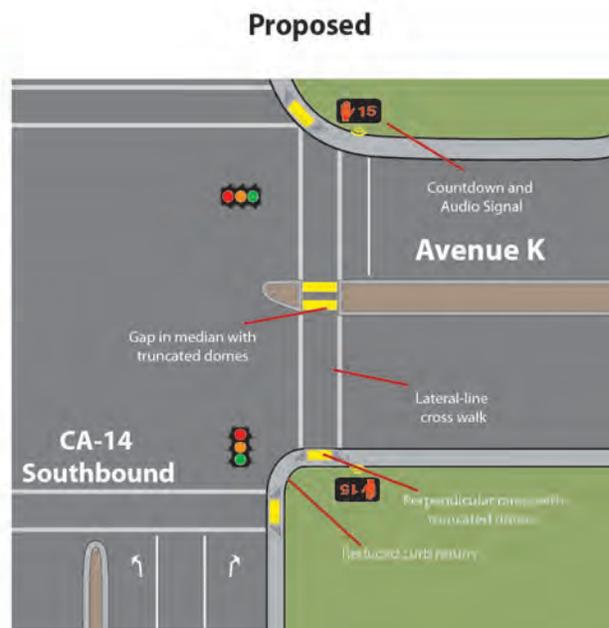
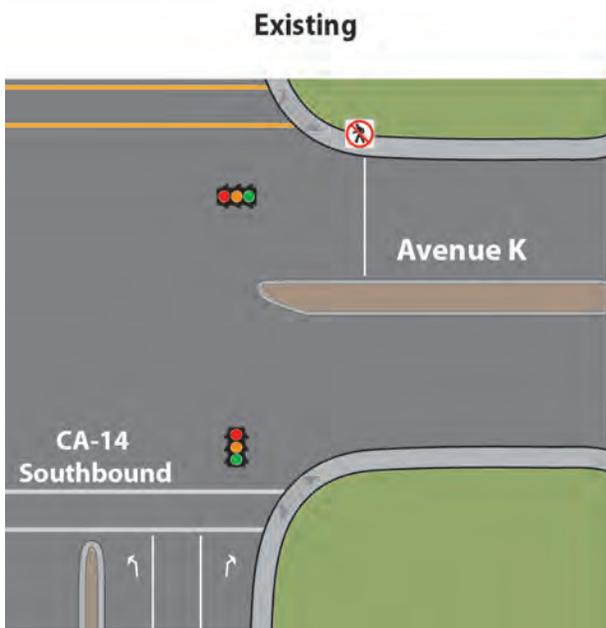
(37) AVENUE K (NORTH SIDE) / CA-14 NORTHBOUND RAMP

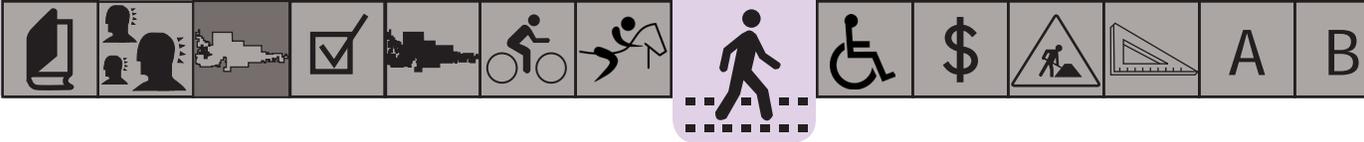
EXISTING	<ul style="list-style-type: none"> • Unsignalized intersection • Lateral-line crosswalk • Ramps (2) • Obtuse angle ramp 	PROPOSED	<ul style="list-style-type: none"> • Add ladder crosswalk (1) at crossing • Realign CA-14 ramp to create closer to right-angle turn • Relocate catch basin (1) • Add perpendicular ramps (2) • Reduce NE corner radius
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**(39) AVENUE K / CA-14 NORTHBOUND OFF-RAMP (15TH ST. WEST)
(AVENUE K CROSSING, EAST SIDE)**

EXISTING	<ul style="list-style-type: none"> • No marked crosswalk • No pedestrians allowed sign • Diagonal curb ramps • Center median • Signalized intersection 	PROPOSED	<ul style="list-style-type: none"> • Reduce curb return on southeast corner (1) • Add pedestrian countdown (2) and audio (2) signals • Add wide lateral-line crosswalk (1) • Reconfigure median to provide gap for pedestrian crossing (1) and add truncated domes in median gap (2) • Add truncated domes to northeast corner ramp (1)
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(40) AVENUE K / 20TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signal • Several large shopping centers at this area • Lateral-line crosswalks • Diagonal curb ramps with no truncated domes • Median on 20th St. W, south of Ave. K goes into crosswalk • Poor push button placement 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Reduce curb return on northeast and southeast corners (2) • Add perpendicular curb ramps to northwest and southwest corners (4) • Relocate push buttons (8) • Consolidate and close driveways • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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Existing



Proposed



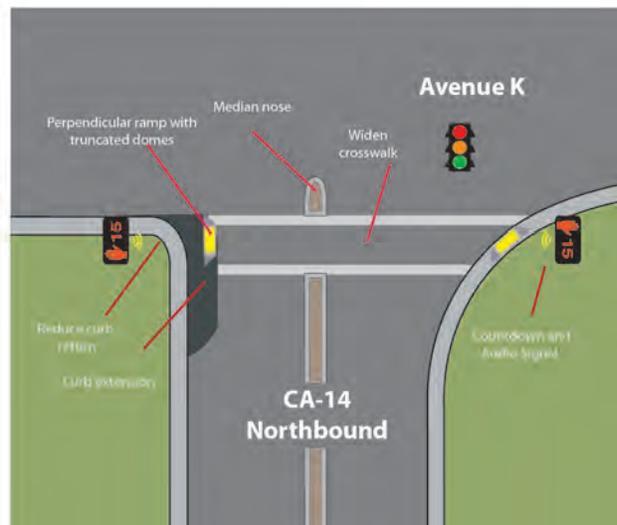
(41) AVENUE K / CA-14 (15TH STREET WEST)

EXISTING	<ul style="list-style-type: none"> • Crossing of on/off-ramp on south side of Ave. K • Signalized intersection • Lateral-line crosswalk to cross CA-14 northbound off-ramp/on-ramp • Pedestrian signal • Diagonal ramps (2) • CA-14 on/off-ramp is 3 lanes northbound, 1 lane southbound, center median • Poor push button placement 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalk to 15' (1) • Add pedestrian countdown (2) and audio (2) signals on both crossing faces to cross CA-14 on/off-ramp • Add median nose (1) • Add curb extension to cross CA-14 on-ramp and reduce curb return to cross Ave. K on southwest corner • Relocate southwest and southeast corner push buttons (2) • Add truncated domes to southeast corner ramp (1)
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Existing

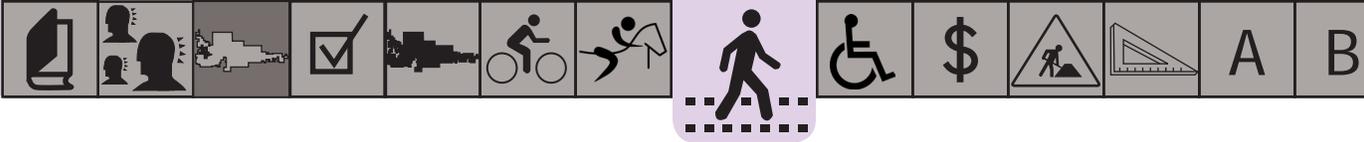


Proposed

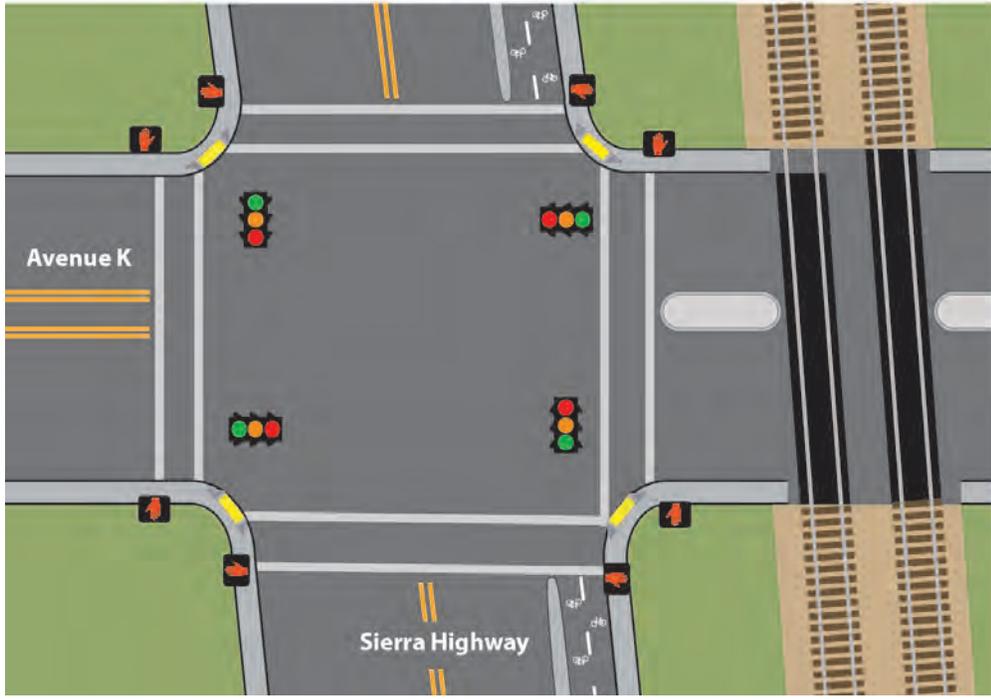


(43) AVENUE K (WEST OF RAILROAD) / SIERRA HIGHWAY

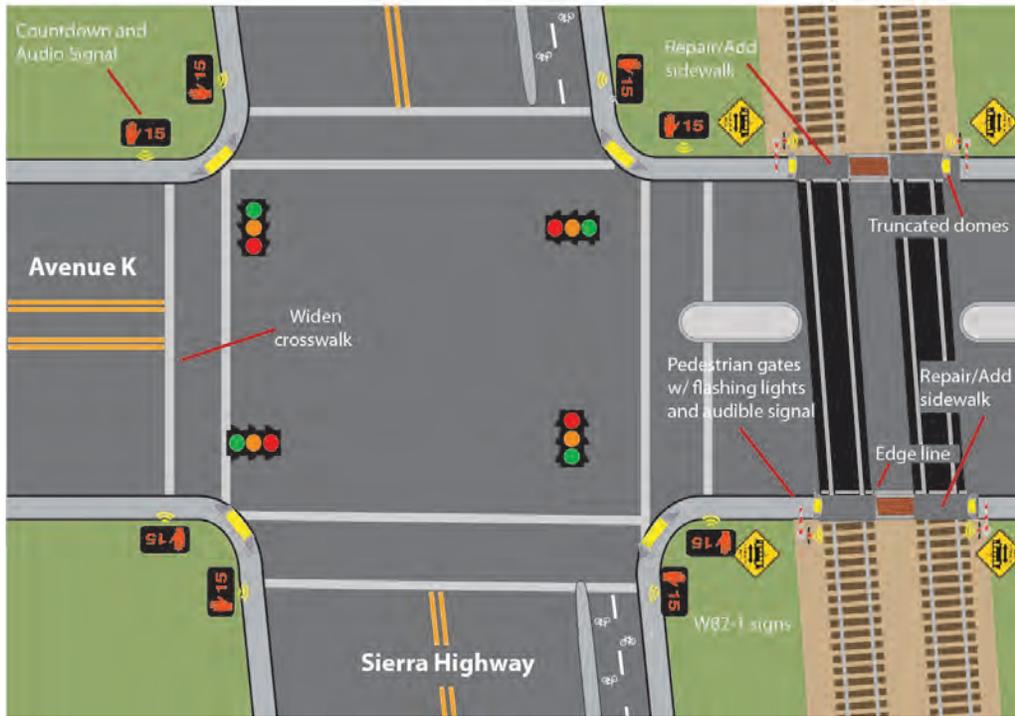
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks (4) • Diagonal ramps with truncated domes on all corners • Poor push button placement on southeast and northeast corners to cross Ave. K; and on northwest and southwest corners both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) and audio (8) signals to all crossing faces • Relocate push buttons on southeast and northeast corners to cross Ave. K (2), and on northwest and southwest corners to cross both directions (4) • Add sidewalk on south and north sides of Ave. K to cross railroad tracks (150 feet north of Ave. K; 150 feet south of Ave. K) • Add truncated domes on both sides of tracks, on both sidewalks (4) • Add W82-1 signs on either side of tracks on both sidewalks (4) • Add edge lines across tracks on both sidewalks (2) • Add concrete so crossing is flush with tracks south of Ave. K (36 sq. ft.) • Add pedestrian gates on either side of tracks, on both sidewalks (4) • Add flashing lights and audible signals on both sidewalks (4) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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Existing



Proposed



(44) AVENUE K / 5TH STREET EAST

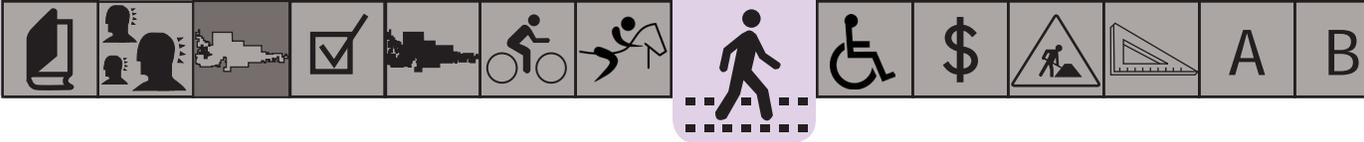
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian signals • Lateral-line crosswalks (4) • Diagonal ramps • Southeast corner ramp has truncated domes • Northeast and northwest corner ramps are non-compliant (missing landing areas; steep ramps) • Poor push button placement on southwest corner to cross Ave. K; on northwest corner to cross Ave. K; on northeast corner to cross 5th St. E; and on southeast corner to cross both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) signals to all crossing faces • Add median nose to median on Ave. K, east of 5th St. E • Add truncated domes to southwest corner ramp (1) • Reduce curb return on northwest and northeast corners and create ADA compliant ramps (2) • Relocate push buttons to cross Ave. K on southwest ramp; on northwest corner to cross Ave. K; on northeast corner to cross 5th St. E; and on southeast corner to cross both directions (5)
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Existing



Proposed





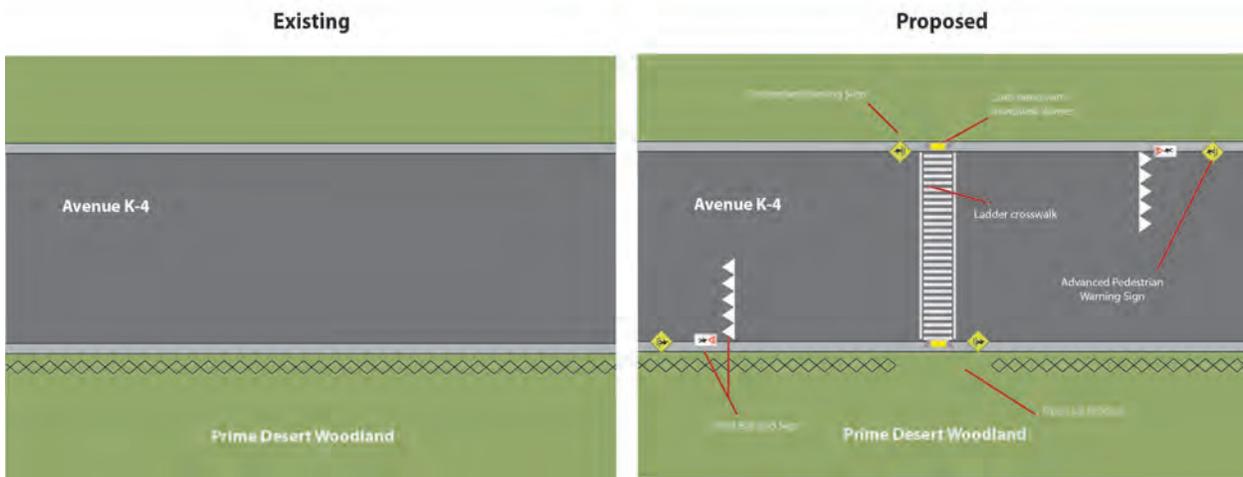
(45) AVENUE K / CHALLENGER WAY

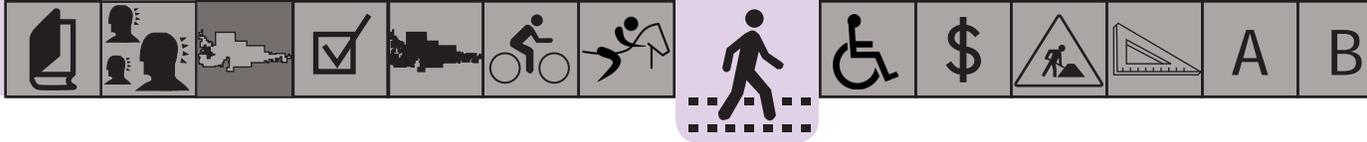
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Pedestrian countdown signals • Yellow lateral-line crosswalks • Center median on Ave. K • Bus stops on Ave. K north side, west of Challenger Way; and on Ave. K on north side, east of Challenger Way • Diagonal ramps • Truncated domes on northwest and northeast corners 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Reduce curb return on all corners (4) • Add refuge islands at turn lanes on northeast and northwest corners (2) • Relocate push button on northeast corner to cross Challenger Way and on southwest corner to cross Ave. K (2) • Add audio signals to all crossing faces (8) • Add 1' x 5' area to bus stop on Ave. K on north side, east of Challenger Way to create 5' x 8' landing area for ADA compliance • Add median noses on Ave. K (2) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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(46) AVENUE K-4 / PRIME DESERT WOODLAND

EXISTING	<ul style="list-style-type: none"> • Mid-block crossing to enter Prime Desert Woodland • Park is fenced in 	PROPOSED	<ul style="list-style-type: none"> • Add ladder crosswalk to crossing (1) • Add perpendicular curb ramps with truncated domes (2) • Add pedestrian warning signs in advance of crosswalk (2) and at crosswalk (2) • Add advanced yield bars (2) with signs (2) • Open fencing to allow for pedestrians and cyclists to connect with proposed paths
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(47) AVENUE K-8 / 10TH STREET WEST

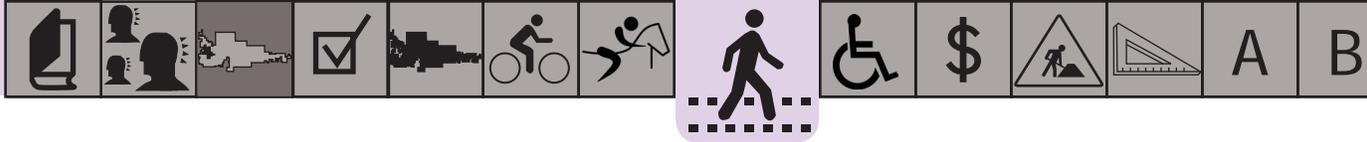
EXISTING	<ul style="list-style-type: none"> • Signalized, T-intersection (Ave. K-8 ends at 10th St. W) • Pedestrian signals (5) • Lateral-line crosswalks to cross Ave. K-8 and south of Ave. K-8 to cross 10th St. W (2) • Diagonal ramps • Ramps on northwest and southeast corners have no landings • Poor push button placements on northwest corner • Bus stop on west side of 10th St. W, north of Ave. K-8 	PROPOSED	<ul style="list-style-type: none"> • Add 15'-wide lateral-line crosswalk north of Ave. K-8 to cross 10th St. W (1) • Widen crosswalks to 15' (2) • Add pedestrian countdown (6) and audio (6) signals to all crossing faces • Reduce curb return on northwest and southwest corners (2) • Relocate push buttons on northwest and southwest corners (4) • Add new ramp on northeast corner (1) • Pave 3' x 3' ADA compliant landing area and add truncated domes on southeast corner (1) • Add 5' x 6" to sidewalk and relocate garbage can at bus stop on west side of 10th St. W, north of Ave. K-8 to create 5' x 8' landing area for ADA compliance • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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(48) AVENUE L / 60TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Corner entrance to Quartz Hill High School • Ave. L is 4 lanes with center median and right and left-turn lanes • Painted hatched area between right-turn slip lane westbound on Ave. L, east of 60th St. W • 60th St. W is 4 lanes with left-turn lane • No curbs on southeast and northwest corners • Missing sidewalk on 60th St. W southbound, north of Ave. L • Missing sidewalk on Ave. L westbound, west of 60th St. W • Lateral-line crosswalks except to cross 60th St. W, north of Ave. L • Pylons on northwest corner creating waiting area for pedestrians • Diagonal ramp on northeast and southwest corners only • Drainage problems • Bus stops on 60th St. W northbound, north of Ave. L and southbound, south of Ave. L 	<ul style="list-style-type: none"> • Widen crosswalks to 15' (3) • Add pedestrian countdown (8) signals to all crossing faces • Add islands between right-turn slip lane and travel lanes on either side of crosswalk in painted hatched area to cross Ave. L, east of 60th St. W (1 pair) • Add median nose on Ave. L, east of 60th St. W (1) • Add truncated domes to southwest corner (1) • Add sidewalk with curb and gutter on west side 60th St. W from Ave. K-10 to Ave. L, including curb with tight curb return northwest corner (2,640 feet) • Add 2' x 5' landing area for both bus stops on 60th St. W (20 sq. ft.) to create 5' x 8' landing area for ADA compliance • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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(49) AVENUE L / 20TH STREET WEST

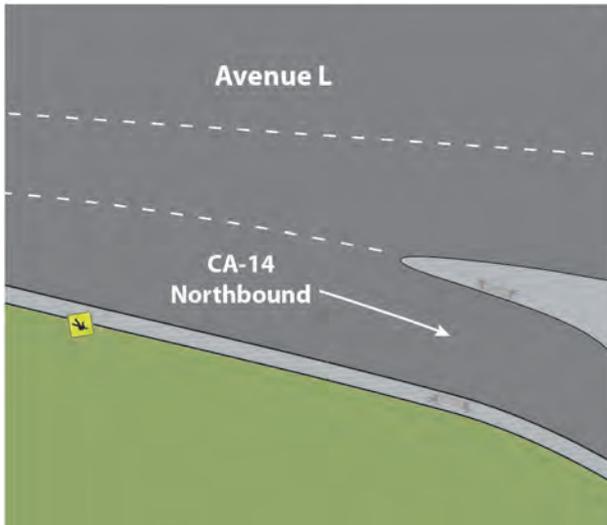
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • 20th St. W is 2 lanes south of Ave. L; 4 lanes with left-turn lanes and center median north of Ave. L • Ave. L is 6 lanes with left-turn pockets and center median east of 20th St. W • Lateral-line crosswalks on all crossings • Pedestrian signals • Curb ramps; one has truncated domes • No landing area on 3 of the ramps • Poor push button placement • No sidewalk on 20th St. W, south of Ave. L • No sidewalk on Ave. L, east of 20th St. W and west of 20th St. W • Painted island on southbound 20th St. W, north of Ave. L • Bus stops on Ave. L eastbound, east of 20th St. W, and westbound, west of 20th St. W 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalks to 15' (4) • Add pedestrian countdown (8) to all crossing faces • Add 8' x 5' concrete pad to bus stop on eastbound Ave. L, east of 20th St. W for ADA compliance • Add tapered curb extension (1) to the northwest corner to cross Ave. L and add bulb-out (1) to cross 20th St. W • Replace painted island with curbed island on southbound 20th St. W, north of Ave. L (1) • Add small tapered curb extension to southwest corner to cross Ave. L to make ramp ADA accessible (1) • Relocate bus stop on Ave. L eastbound, east of 20th St. W closer to intersection • Add sidewalk on Ave. L, east of 20th St. W to bus stop in eastbound direction (75 ft) • Reduce curb return on southeast corner (1) • Add truncated domes to southwest corner (1) • Ensure pedestrian signal crossing times are compliant with the latest requirements of CA MUTCD
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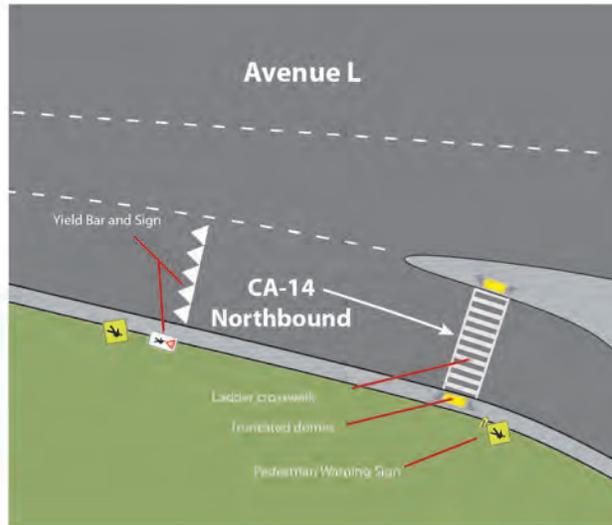
(51) AVENUE L (EASTBOUND) / CA-14 NORTHBOUND ON-RAMP

EXISTING	<ul style="list-style-type: none"> • Right-turn slip lane for freeway • Unsignalized • Ramps to cross on-ramp (2) • Advanced pedestrian warning sign • No marked crosswalk • Obtuse angle for on-ramp (high-speed vehicle approach) 	PROPOSED	<ul style="list-style-type: none"> • Add ladder crosswalk between existing ramps (1) • Add advanced yield marking (1) and sign (1) • Add pedestrian sign at crosswalk (1) • Add truncated domes to existing ramps (2) <p>Long-term:</p> <ul style="list-style-type: none"> • Coordinate with Caltrans to re-align on-ramp to make right angle (slow vehicle approach)
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Existing

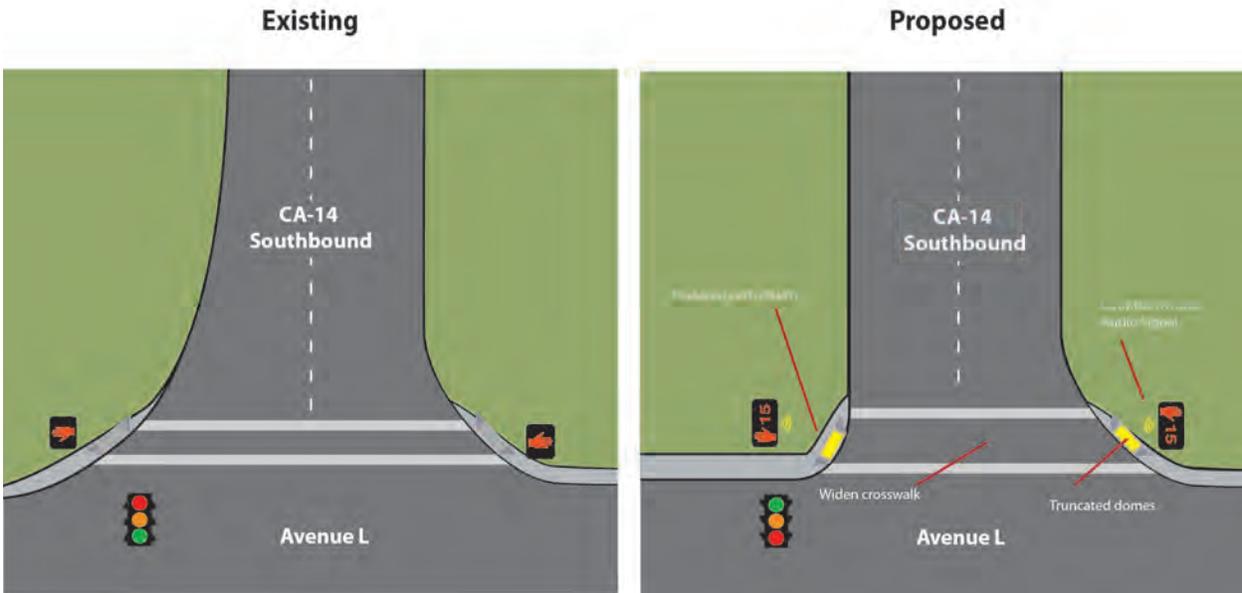


Proposed



(52) AVENUE L (WESTBOUND) / CA-14 SOUTHBOUND OFF-RAMP

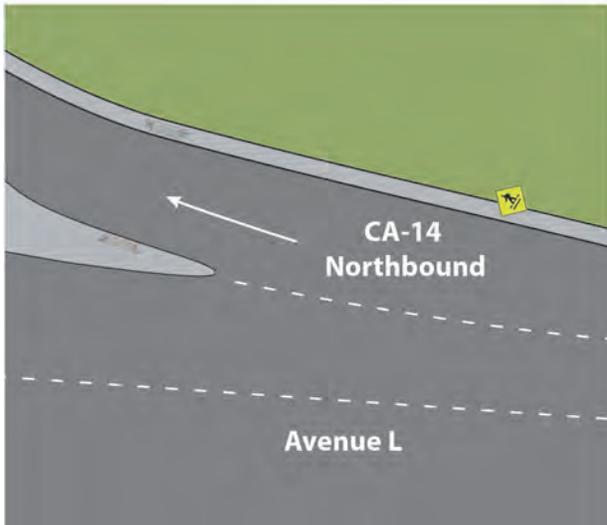
EXISTING	<ul style="list-style-type: none"> • Crossing of CA-14 off-ramp, north side of Ave. L • Signalized intersection • Pedestrian signals • Lateral-line crosswalk to cross off-ramp, not to cross Ave. L • Diagonal ramps (2) 	PROPOSED	<ul style="list-style-type: none"> • Widen crosswalk to 15' (1) • Add pedestrian countdown (2) and audio (2) signals to both crossing faces • Add truncated domes to northeast corner ramp (1) • Coordinate with Caltrans to reduce curb return significantly to cross freeway off-ramp on northwest corner (1)
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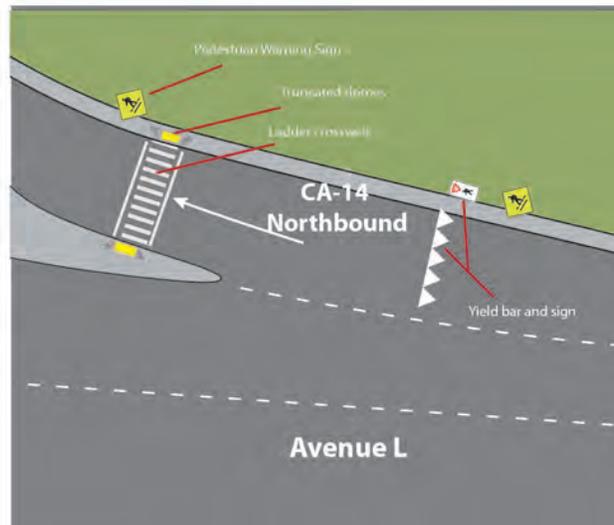
(54) AVENUE L (WESTBOUND) / CA-14 NORTHBOUND ON-RAMP

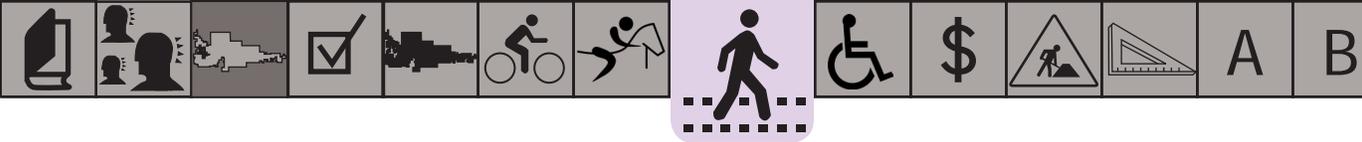
EXISTING	<ul style="list-style-type: none"> • Right-turn slip lane for freeway • Unsignalized • Ramps to cross on-ramp (2) • Pedestrian warning sign at crosswalk • No marked crosswalk • Obtuse angle for on-ramp (high-speed vehicle approach) 	PROPOSED	<ul style="list-style-type: none"> • Add ladder crosswalk between existing ramps (1) • Add advanced yield marking (1) and sign (1) • Add advanced pedestrian warning sign (1) • Add truncated domes to ramps (2) <p>Long-term:</p> <ul style="list-style-type: none"> • Coordinate with Caltrans to re-align on-ramp to make right angle (slow vehicle approach)
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Existing



Proposed

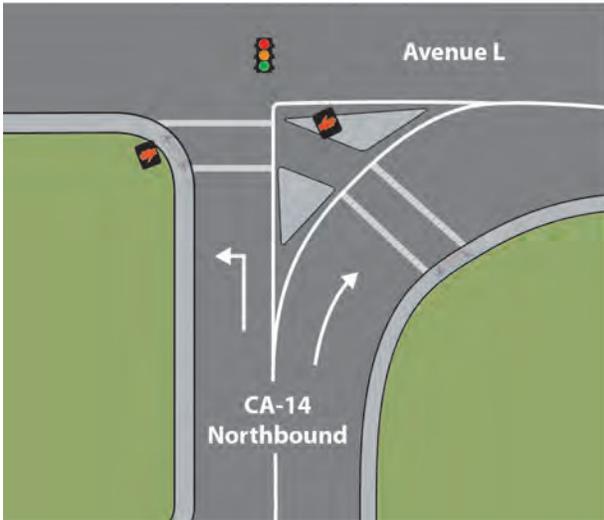




(55) AVENUE L (EASTBOUND) / CA-14 NORTHBOUND OFF-RAMP

EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Two-part crossing with curbed island in between left- and right-turn lanes (island has cut-through for pedestrians) to cross off-ramp • Pedestrian signal to cross off-ramp's left-turning vehicles • No pedestrian signal to cross off-ramp's right-turning vehicles • Lateral-line crosswalks to cross both right- and left-turn lanes of off-ramp (2) • Diagonal ramps (2) 	PROPOSED	<ul style="list-style-type: none"> • Add ladder crosswalk to cross unsignalized right-turn lane (1) • Widen crosswalk to cross left-turn lane (signalized) to 15' (1) • Add advanced yield bar (1) and sign in right-turn lane (1) • Add pedestrian countdown (2) and audio (2) signals to signalized crossing face in left-turn lane • Add truncated domes in between islands and to southwest corner ramp (3) • Coordinate with Caltrans to reduce curb return on southeast corner significantly <p>Long-term:</p> <ul style="list-style-type: none"> • Coordinate with Caltrans to re-align eastbound off-ramp to right angle
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Existing



Proposed



(56) AVENUE L EASTBOUND / SIERRA HIGHWAY ON- AND OFF-RAMPS

EXISTING	<ul style="list-style-type: none"> • On- and off-ramps on Avenue L in eastbound directions • Oblique angle ramps • No marked crosswalks • Avenue L is 3 lanes in each direction • Center median on Avenue L • Wide painted hatched buffers at on- and off-ramps on Avenue L eastbound • No sidewalk on south side of Avenue L from trailer park to Sierra Highway on/off-ramp • Diagonal ramps on southeast and southwest side of Avenue L / Sierra Highway on- and off-ramps 	PROPOSED	<ul style="list-style-type: none"> • Add ~1,400 feet sidewalk on south side of Avenue L from trailers to Sierra Highway on/off-ramp • Square on-ramp entrance • Add curbed pedestrian islands in existing painted hatched area (2) • Add ladder crosswalk in on-ramp to pedestrian islands (1) • Add advanced yield markings (2) and signs (2) • Add advanced pedestrian crossing signs (2) and sign at crossings (2) • Add truncated domes in between islands (2) • Add ladder crosswalk in off-ramp further south (1) • Replace diagonal ramps with perpendicular curb ramps with truncated domes west of on-ramp and east of off-ramp (2)
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Existing

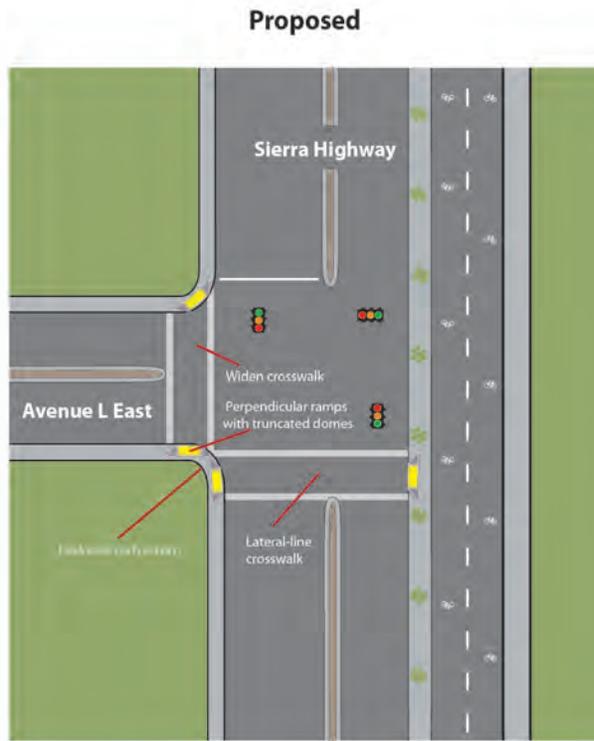
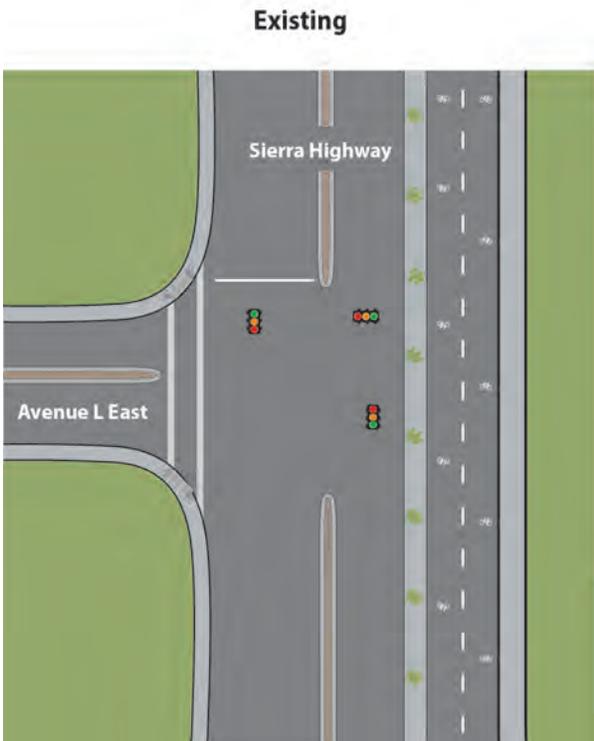


Proposed



(58) AVENUE L EASTBOUND ON-RAMP (WEST OF RAILROAD) / SIERRA HIGHWAY

EXISTING	<ul style="list-style-type: none"> • Signalized, T-intersection • Lateral-line crosswalk to cross Ave. L • Diagonal ramps on northwest and southwest corners • Neither ramps have landing areas 	PROPOSED	<ul style="list-style-type: none"> • Add ramp on southeast corner to access Sierra Highway Bicycle Path • Add new 15'-wide lateral-line crosswalk to cross Sierra Highway south of Ave. L to provide access to bike path (1) • Widen Ave. L crosswalk to 15' (1) • Reduce curb return on southwest and northwest corners (2)
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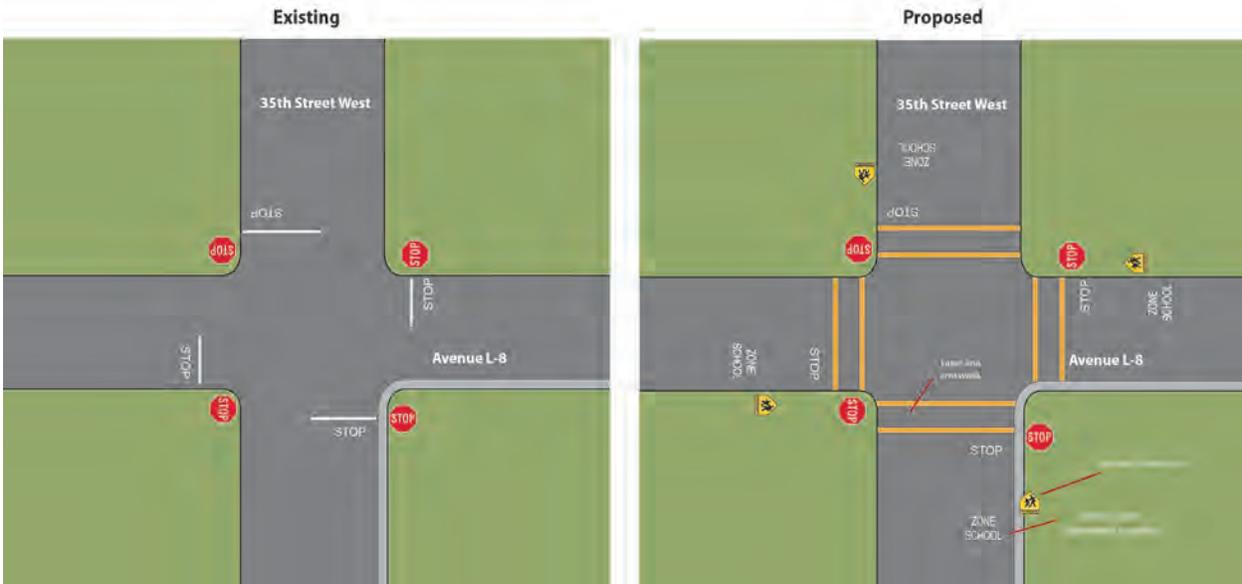
(59) AVENUE L WESTBOUND ON-RAMP (WEST OF RAILROAD) / SIERRA HIGHWAY

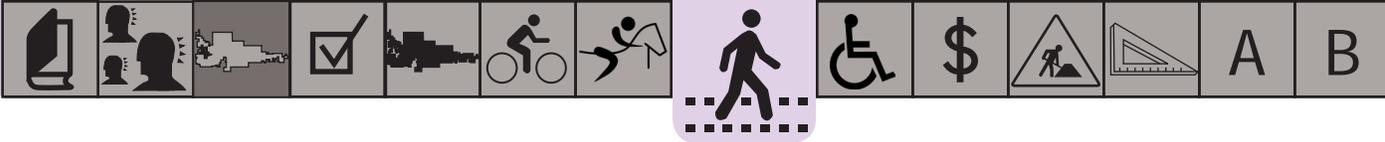
EXISTING	<ul style="list-style-type: none"> • Signalized intersection • Lateral-line crosswalks to cross Sierra Highway south of Ave. L West and to cross Ave. L West • Diagonal ramps on northwest, southwest and southeast corners 	PROPOSED	<ul style="list-style-type: none"> • Add 15'-wide lateral-line crosswalk north of Ave. L West (1) to connect bike path for westbound cyclists and pedestrians • Widen existing crosswalks to 15' (2) • Add perpendicular ramp on northeast corner to cross Sierra Highway to bicycle path (1) • Add truncated domes to northwest and southwest corner ramps (2)
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(60) AVENUE L-8 / 35TH STREET WEST

EXISTING	<ul style="list-style-type: none"> • Valley View Elementary School • No sidewalks except for in front of school • 4-way stop • 2 lanes in both directions 	PROPOSED	<p>Short-term</p> <ul style="list-style-type: none"> • Add 15'-wide lateral line crosswalks (4) • Add school zone signs (4) and pavement markings (4) along both streets <p>Long-term</p> <ul style="list-style-type: none"> • Add bulb-outs to all crossing faces to shorten crossing distances if development occurs • Add wide sidewalks with parkways if development occurs
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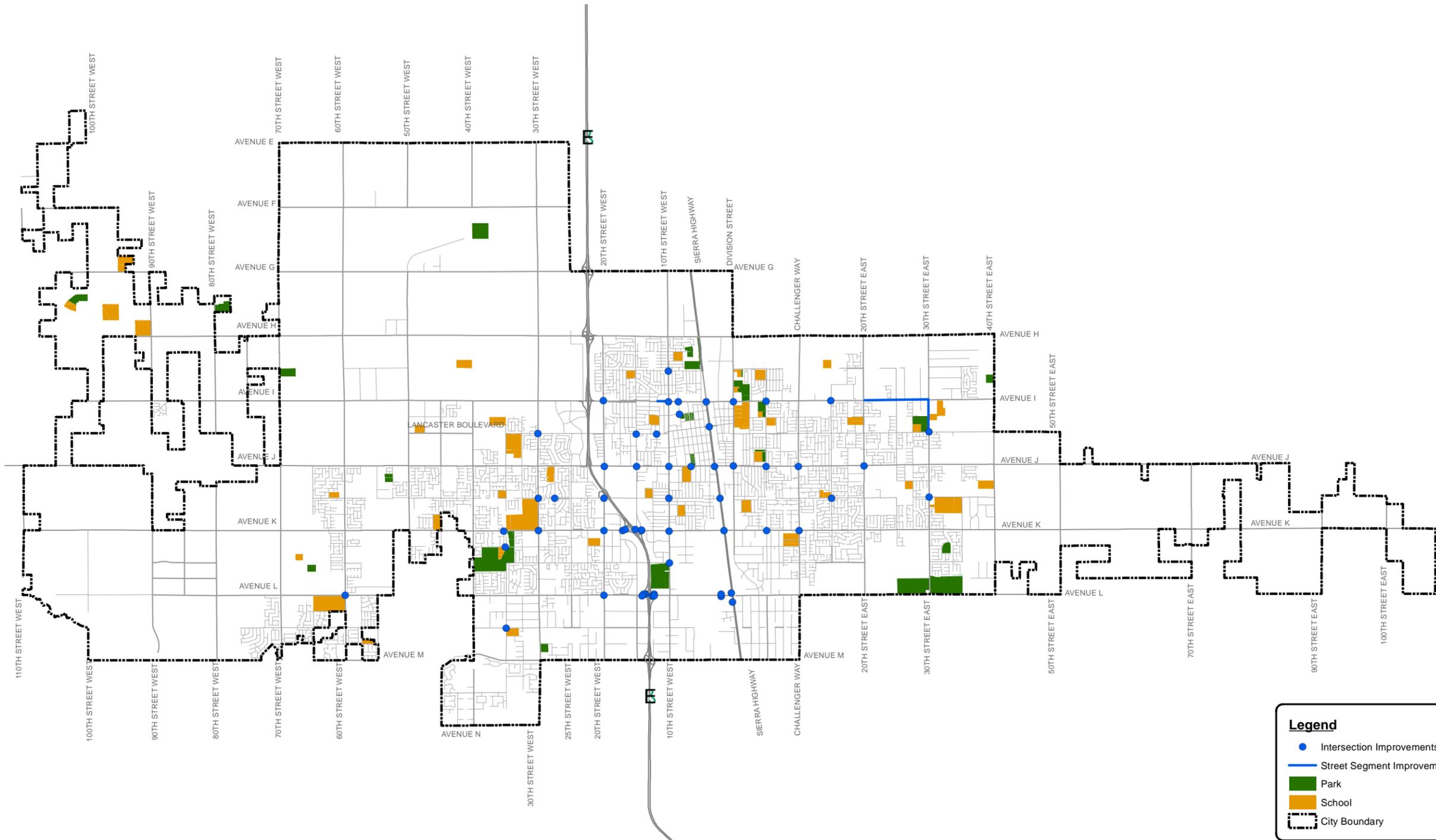


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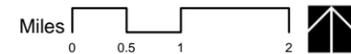


MAP 8-1: PROPOSED PEDESTRIAN IMPROVEMENT LOCATIONS



Legend

- Intersection Improvements
- Street Segment Improvements
- Park
- School
- City Boundary

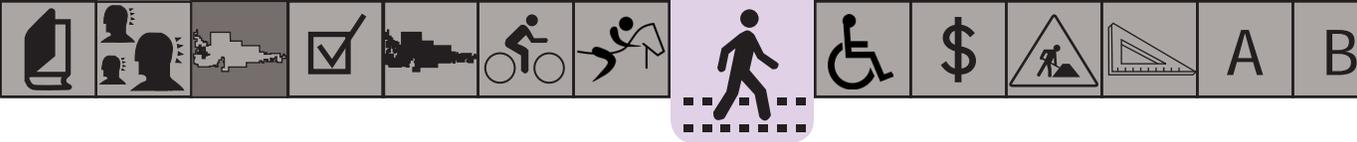


Pedestrian Plan Improvements

Lancaster Master Plan of Trails and Bikeways



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Pedestrian and Disability-Related Program Recommendations

Capital improvements are necessary to facilitate safe pedestrian travel; however, in order to ensure long-lasting behavior changes and increase the number of people walking, the City should consider implementing programs. Programs that encourage, educate, enforce and evaluate pedestrians complement engineering changes to provide for a behavioral and cultural shift. The City will continue to support and facilitate existing programs. The following additional programs can be implemented to help encourage active living and use of new pedestrian infrastructure. These serve as examples, and can be further tailored to specific audiences, as well as incorporated into existing citywide events.

Encouragement Programs

- The City, in conjunction with various community groups, will encourage **walking groups**. Partners will include the Antelope Valley Partners for Health, existing neighborhood watch groups, and City schools and various other groups.
- Each year, the city partners will celebrate a **Healthy Week**. Groups who walk or bike ride will be eligible to enter into a drawing and win prizes.
- A **ciclovía** is a festival of walking, biking, and public space that takes place on city streets that have been temporarily opened to people and closed to cars. All kinds of activities can take place inside the ciclovía, from yoga classes to rollerblading to dodgeball. The City of Los Angeles recently started holding ciclovías on Sundays on about 8 miles of open streets, and these events have been very successful. The City of Lancaster has permitted the closure of streets for block parties in the past, and would like to expand the street closure program to ciclovías. This program would be dependent on the City’s budget and staffing.
- To encourage and enable travel by the blind, the City will contribute spatial data for points of interest, transportation system features such as crosswalks, and etc into a **cell-phone based GPS navigation system**. These systems use the cell phone’s current location and a spatial database to give directions and announce points of interest.

Education Programs

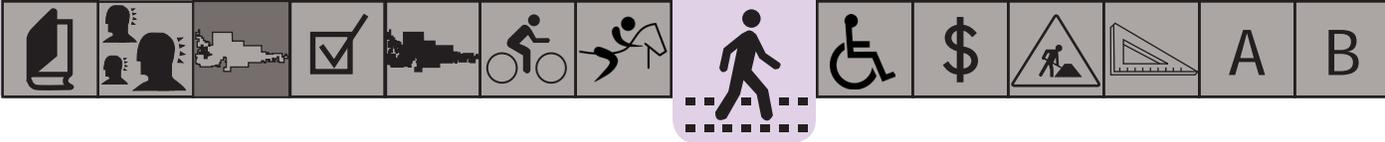
- The City will conduct **focused educational programs for mobility-impaired populations**. These programs can be delivered at senior centers and other locations where there are many people who are mobility impaired, such as schools for the blind. The City will develop brochures, presentations, and other materials for these education campaigns. These materials will include information on how to file a formal written grievance related to ADA compliance, and how to contact the ADA coordinator.

Enforcement Programs

- The Lancaster Sheriff’s Station will be engaged in **targeted enforcement** at locations that have historically seen a high number of bicycle- and pedestrian-related crashes. Enforcement will target dangerous motorist behaviors such as speeding and failure to yield to pedestrians crossing.
- Design for safety should be the focus for pathways and parking areas. Crime Prevention Through Environmental Design (CPTED) should ensure proper design and effective use of the built environment, which can enhance physical features to maximize visibility.

Evaluation Programs

- The City will conduct **bicycle and pedestrian counts** annually to gauge the number of trips that are being made by biking and walking. When feasible, the city will also conduct counts before and after changes in the physical infrastructure, such as the construction of intersection improvements. These counts can support funding applications and implementation efforts.



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CHAPTER 9

ADA TRANSITION PLAN



The Americans with Disabilities Act (ADA), passed in 1990, prohibits discrimination against people who have disabilities. Title II of the Act addresses the subject of making public facilities accessible. The Act specifies that constructing inaccessible public facilities constitutes discrimination. Under ADA, public agencies are required to create Transition Plans to do the following:

1. Identify physical obstacles that limit accessibility
2. Describe methods to make the facilities accessible
3. Allocate budget to the needed improvements
4. Provide a schedule for change
5. Identify someone within the agency responsible for coordinating implementation

The Transition Plan includes all facilities in the public right-of-way such as sidewalks, pedestrian paths, curb ramps, transit stop accommodations, driveway crossings, and pedestrian signals, but also buildings owned by the City, such as City Hall, and off-site facilities.

This chapter serves as the City of Lancaster's ADA Transition Plan. This Plan will be updated every ten years until all accessibility barriers are removed.

Disabled Stakeholders Outreach

Ensuring adequate response from the disabled community called for ample advance notification of the planned workshops. The City held two workshops: one at City Hall, and another at the Antelope Valley Senior Center. The following describes the effort in detail.

MEETING NOTICE

The public was notified about the meetings through the following multiple channels:

- Antelope Valley Press' Community Section advertisements
- Television Channel 3's "Local Edition" program
- Flyer and literature distribution at Health and Resource Fairs
- Announcements at chamber group meetings including Antelope Valley Chamber (Lancaster), Palmdale Chamber, Hispanic Chamber, African American Chamber and the Quartz Hill Chamber
- Targeted agencies and businesses for interested parties for flyer and literature distribution including bicycle shops, Easter Seals, Desert Haven, and Senior Centers
- E-mail blast to non-profit groups in the community, City's e-mail listserv, and interested parties that filled out the information section of the survey



WORKSHOPS

Workshop 1: November 1, 2010

Nineteen community members attended the first disabled stakeholders workshop. The City provided sign-language translation for hearing-impaired attendees. The consultant team did a brief presentation about the overall scope of the Master Plan of Trails and Bikeways, and then presented in detail the scope for the ADA Transition Plan. This included a discussion of the purpose of the transition plan, barriers to disabled travel including lack of sidewalks, poor push button placement, inaccessible ramps, lack of truncated domes, etc. Attendees then engaged in discussion about barriers in the City.

Workshop 2: August 11, 2011

The Antelope Valley Senior Center hosted the second workshop to address barriers to disabled travel. Twenty-five community members, including seniors, disabled residents, staff, assistants, and others. The consultant team presented the purpose of the ADA Transition Plan, the sections of a compliant transition plan, types of barriers (missing ramps, sidewalks, audio signals, etc.), how to create compliant facilities, and the purpose of the workshop, including asking for feedback and prioritization. Comments included:

- Avenue J and Sierra Highway there are meter covers missing making sidewalk discontinuous
- Avenue I and 17th St. W has poorly placed push buttons
- 20th St. W has a grocery store that is difficult to access
- Need for better crosswalks at Fern Avenue and Jackman Street

The results of this prioritization exercise can be found in Chapter 2, Public Outreach.

Self Evaluation

The City of Lancaster, as required by Title II of ADA, must conduct a self-evaluation of physical assets, and current policies and practices. The City has identified several areas that will need to have and maintain inventories. As inventories are completed, they will be included as appendices to this transition plan.

Lancaster recognizes that a self evaluation of pedestrian facilities within its public right-of-way is a key element to a comprehensive and successful transition plan. At this time, the City has created an inventory of much of its infrastructure on major arterials and collectors, and some of its local streets.

To create a more complete transition plan, Lancaster will conduct a self evaluation of the location and condition of pedestrian facilities using a two-phase approach. First, Lancaster will collect information on intersections; second, it will focus on sidewalks. Lancaster will also prioritize its inventory in areas with sensitive populations: around senior centers, hospitals and medical facilities, dense residential neighborhoods, commercial areas, and others.

As part of the Pedestrian Master Plan, many of Lancaster's major intersections were evaluated as well as sidewalks for ADA compliance. The following were catalogued:

- Missing sidewalks
- Non-compliant / Missing curb ramps
- Missing audio signals
- Inaccessible pedestrian push buttons
- Non-compliant bus stops

Locations of these specific barriers are outlined in detail below.



MISSING SIDEWALKS

TABLE 9-1: MISSING SIDEWALKS OF EAST / WEST STREETS

Street	From	To	Northside	Southside
Avenue E	30th St. W	25th St. W	X	X
Avenue F	70th St. W	25th St. W	X	X
Avenue G	70th St. W	50th St. W	X	X
Avenue G	50th St. W	45th St. W		X
Avenue G	45th St. W	Sierra Highway	X	X
Avenue H	95th St. W	Mid-block 40th St. W / 35th St. W	X	X
Avenue H	Mid-block 40th St. W / 35th St. W	35th St. W		X
Avenue H	35th St. W	30th St. W	X	X
Avenue H	30th St. W	25th St. W		X
Avenue H	25th St. W	20th St. W	X	X
Avenue H	20th St. W	10th St. W	X	
Avenue H	10th St. W	Mid-block 10th St. W / 7th St. W	X	
Avenue H	Trevor Avenue	40th St. E	X	X
Avenue H-8	17th St. W	Saigon Ave.	X	X
Avenue H-8	Saigon Ave.	15th St. W	X	
Avenue H-8	13th St. W	10th St. W	X	X
Avenue H-8	Carrousel Dr.	3rd St. E	X	
Avenue H-8	3rd St. E	Foxtan Ave.	X	X
Avenue H-8	Foxtan Ave.	5th St. E	X	
Avenue H-8	5th St. E	7th St. E		X
Avenue H-8	7th St. E	Challenger Way	X	X
Avenue I	100th St. W	90th St. W	X	X
Avenue I	90th St. W	87th St. W	X	
Avenue I	87th St. W	32nd St. W	X	X
Avenue I	32nd St. W	30th St. W		X
Avenue I	30th St. W	27th St. W	X	X
Avenue I	27th St. W	Valley Central Way	X	
Avenue I	20th St. W	17th St. W		X
Avenue I	17th St. W	15th St. W	X	X

Street	From	To	Northside	Southside
Avenue I	15th St. W	13th St. W	X	
Avenue I	10th St. E	7th St. E		X
Avenue I	Challenger Way	15th St. E		X
Avenue I	18th St. E	20th St. E	X	
Avenue I	23rd St. E	Mid-block 23rd St. E / 20th St. E		X
Avenue I	23rd St. E	27th St. E	X	
Avenue I	27th St. E	35th St. E	X	X
Avenue I	37th St. E	40th St. E	X	X
Lancaster Blvd.	CA-14 on-ramp	20th St. W		X
Lancaster Blvd.	5th St. E	Rodin Ave.		X
Lancaster Blvd.	Rodin Ave.	Challenger Way	X	X
Lancaster Blvd.	17th St. E	18th St. E		X
Lancaster Blvd.	18th St. E	20th St. E	X	
Lancaster Blvd.	20th St. E	23rd St. E	X	X
Lancaster Blvd.	25th St. E	27th St. E	X	
Lancaster Blvd.	30th St. E	Cajun St.		X
Lancaster Blvd.	Cajun St.	50th St. E	X	X
Avenue J	90th St. W	65th St. W	X	X
Avenue J	65th St. W	57th St. W	X	
Avenue J	57th St. W	53rd St. W	X	X
Avenue J	53rd St. W	52nd St. W	X	
Avenue J	52nd St. W	50th St. W	X	X
Avenue J	50th St. W	45th St. W	X	
Avenue J	45th St. W	42nd St. W	X	X
Avenue J	42nd St. W	40th St. W	X	
Avenue J	36th St. W	32nd St. W	X	
Avenue J	31st St. W	30th St. W	X	
Avenue J	Valley Central Way	22nd St. W		X
Avenue J	Leatherwood Ave.	Loneoak Ave.	X	



Street	From	To	Northside	Southside
Avenue J	Division St.	Foxtan Ave.	X	X
Avenue J	Foxtan Ave.	5th St. E		X
Avenue J	5th St. E	Andale Ave.	X	
Avenue J	Andale Ave.	Hamstead Ave.		X
Avenue J	11th St. E	Palm Vista Ave.		X
Avenue J	20th St. E	21st St. E	X	X
Avenue J	21st St. E	25th St. E		X
Avenue J	25th St. E	26th St. E	X	
Avenue J	26th St. E	27th St. E		X
Avenue J	27th St. E	32nd St. E	X	
Avenue J	32nd St. E	70th St. E	X	X
Avenue J-4	25th St. E	26th St. E		X
Avenue J-4	26th St. E	27th St. E	X	
Avenue J-4	30th St. E	Rocker St.		X
Avenue J-8	60th St. W	56th St. W	X	
Avenue J-8	55th St. W	50th St. W		X
Avenue J-8	50th St. W	47th St. W		X
Avenue J-8	47th St. W	46th St. W		X
Avenue J-8	46th St. W	45th St. W	X	
Avenue J-8	40th St. W	37th St. W		X
Avenue J-8	37th St. W	35th St. W		X
Avenue J-8	35th St. W	33rd St. W	X	
Avenue J-8	27th St. W	25th St. W	X	X
Avenue J-8	15th St. W	14th St. W	X	
Avenue J-8	12th St. W	10th St. W		X
Avenue J-8	Adler Ave.	Sierra Highway		X
Avenue J-8	Division St.	2nd St. E		X
Avenue J-8	Stanridge Ave.	3rd St. E	X	
Avenue J-8	7th St. E	10th St. E	X	
Avenue J-8	20th St. E	25th St. E	X	
Avenue J-8	Mid-block 27th St. E / 30th St. E	35th St. E	X	
Avenue J-8	35th St. E	40th St. E	X	X
Avenue K	90th St. W	Mid-block 65th St. W / 62nd St. W	X	X

Street	From	To	Northside	Southside
Avenue K	Mid-block 62nd St. W / 60th St. W	60th St. W	X	
Avenue K	60th St. W	57th St. W		X
Avenue K	57th St. W	50th St. W	X	X
Avenue K	50th St. W	Blossom Dr.		X
Avenue K	Blossom Dr.	45th St. W	X	
Avenue K	45th St. W	42nd St. W		X
Avenue K	42nd St. W	40th St. W	X	X
Avenue K	Mid-block 37th St. W / Buena Vista Way	Buena Vista Way	X	
Avenue K	Buena Vista Way	36th St. W	X	X
Avenue K	27th St. W	25th St. W	X	X
Avenue K	25th St. W	20th St. W	X	
Avenue K	Westfield Dr.	22nd St. W		X
Avenue K	Gadsden Ave.	Fig Ave.	X	
Avenue K	Elm Ave.	Park Ave.	X	
Avenue K	7th St. E	8th St. E	X	
Avenue K	Steif Dr.	15th St. E	X	
Avenue K	15th St. E	20th St. E	X	
Avenue K	20th St. E	Mid-block 20th St. E / 22nd St. E		X
Avenue K	22nd St. E	25th St. E		X
Avenue K	32nd St. E	35th St. E	X	
Avenue K	35th St. E	50th St. E	X	X
Avenue K-8	50th St. W	47th St. W	X	X
Avenue K-8	28th St. W	Fanchon Ave.		X
Avenue K-8	25th St. W	Sunny Lane	X	
Avenue K-8	20th St. W	18th St. W	X	
Avenue K-8	15th St. W	Driver's Way	X	
Avenue K-8	10th St. W	West of Gadsden Ave.	X	X
Avenue K-8	Venture St.	Gingham Ave.	X	
Avenue K-8	5th St. E	First View St.	X	X
Avenue K-8	8th St. E	Challenger Way		X
Avenue K-8	Carol Dr.	20th St. E		X
Avenue L	90th St. W	72nd St. W	X	X
Avenue L	72nd St. W	70th St. W	X	



Street	From	To	Northside	Southside
Avenue L	70th St. W	65th St. W	X	X
Avenue L	65th St. W	60th St. W	X	
Avenue L	60th St. W	57th St. W		X
Avenue L	57th St. W	55th St. W	X	
Avenue L	55th St. W	52nd St. W	X	X
Avenue L	45th St. W	37th St. W		X
Avenue L	35th St. W	30th St. W		X
Avenue L	27th St. W	22nd St. W	X	X
Avenue L	22nd St. W	19th St. W		X
Avenue L	19th St. W	Cinema Ave.	X	X
Avenue L	Cinema Ave.	15th St. W		X
Avenue L	8th St. W	Mid-block 8th St. W / 6th St. W	X	
Avenue L	6th St. W	Sierra Highway	X	X
Avenue L	6th St. E	25th St. E	X	X
Avenue L	25th St. E	30th St. E		X
Avenue L	30th St. E	Mid-block 30th St. E / 35th St. E		X
Avenue L	Mid-block 30th St. E / 35th St. E	35th St. E	X	X
Avenue L	40th St. E	50th St. E	X	X
Avenue L-8	76th St. W	72nd St. W	X	
Avenue L-8	60th St. W	57th St. W	X	
Avenue L-8	40th St. W	35th St. W	X	X
Avenue L-8	35th St. W	Mid-block 35th St. W / 32nd St. W	X	
Avenue L-8	Mid-block 35th St. W / 32nd St. W	30th St. W	X	X
Avenue L-8	12th St. W	10th St. W	X	X
Avenue L-8	10th St. W	Mid-block 10th St. W / 7th St. W		X
Avenue L-8	Mid-block 10th St. W / 7th St. W	7th St. W	X	X
Avenue L-8	7th St. W	Sierra Highway	X	
Avenue M	40th St. W	32nd St. W	X	X
Avenue M	32nd St. W	30th St. W	X	
Avenue M	30th St. W	CA-14 off-ramp	X	X
Avenue M	10th St. W	4th St. W		X

Street	From	To	Northside	Southside
Avenue M	4th St. W	Sierra Highway	X	X
Avenue M	Sierra Highway	4th St. E		X
Avenue M	4th St. E	Challenger Way	X	X
Pillsbury St.	12th St. W	Kingtree Ave.	X	X



TABLE 9-2: MISSING SIDEWALKS OF NORTH / SOUTH STREETS

Street	From	To	Westside	Eastside
90th St. W	Ave. G	North end of Del Sur Elementary	X	X
90th St. W	North end of Del Sur Elementary	Ave. H		X
90th St. W	Ave. H	Ave. I	X	X
90th St. W	Ave. I	Jackman St.	X	
90th St. W	Jackman St.	Ave. L	X	X
80th St. W	Northern City Limit	Ave. L	X	X
70th St. W	Ave F.	North end of Good Shepherd Cemetery	X	X
70th St. W	North end of Good Shepherd Cemetery	South end of Good Shepherd Cemetery		X
70th St. W	South end of Good Shepherd Cemetery	Ave. L	X	X
70th St. W	Ave. L	Ave. L-8		X
70th St. W	Ave. L-12	Mojave Rose Dr.	X	X
70th St. W	Mojave Rose Dr.	Ave. M	X	
65th St. W	Ave. J	Ave. J-12	X	
65th St. W	Ave. L	Mid-block Ave. L / Ave. L-4	X	X
65th St. W	Mid-block Ave. L / Ave. L-4	Ave. L-4		X
65th St. W	Ave. L-12	Ave. M		X
60th St. W	Ave. F	Ave. J	X	X
60th St. W	Ave. K-4	Ave. M	X	X
50th St. W	Apollo County Park	Ave. J	X	X
50th St. W	Ave. J	Ave. J-4	X	
50th St. W	Ave. J-8	Ave. K	X	X
50th St. W	Ave. K	Ave. K-8	X	
45th St. W	Ave. J	Ave. J-6		X
45th St. W	Ave. J-6	Ave. J-8	X	
40th St. W	Ave. I	Ave. J	X	X
40th St. W	Ave. J-12	Ave. L-8	X	X

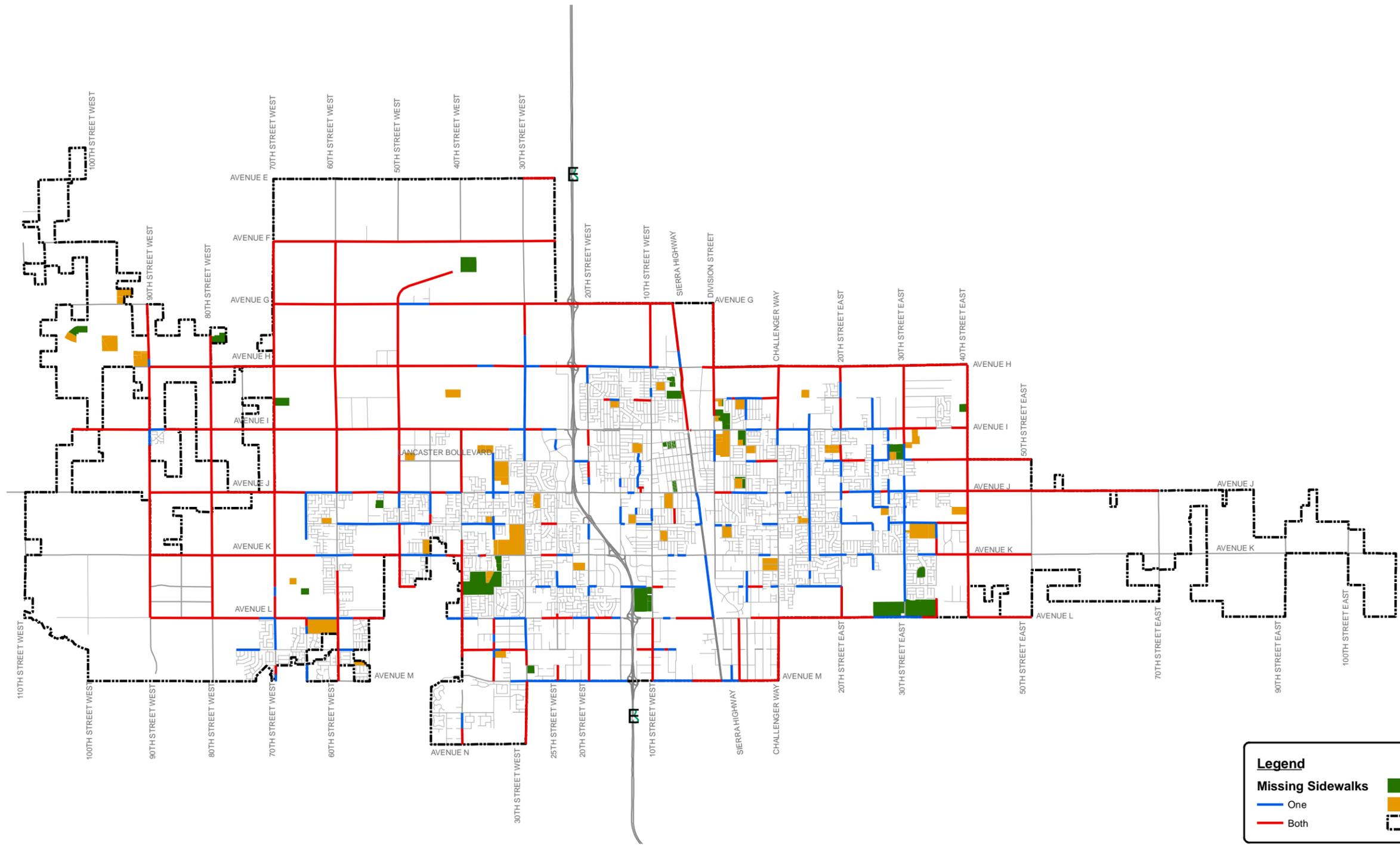
Street	From	To	Westside	Eastside
40th St. W	Ave. L-8	Vancouver Lane	X	
40th St. W	Ave. M-8	Derby Lane	X	
40th St. W	Derby Lane	Ave. N	X	X
35th St. W	Kildare St.	Marilynn Place	X	
35th St. W	Ave. J-6	Ave. J-9	X	
35th St. W	Ave. L	Ave. L-4	X	X
35th St. W	Ave. L-4	Ave. L-6		X
35th St. W	Ave. L-6	Ave. L-8	X	X
35th St. W	Ave. L-8	Ave. L-10		X
35th St. W	Ave. L-10	Ave. M	X	X
30th St. W	Ave. G	Jackman St.	X	X
30th St. W	Jackman St.	Lancaster Blvd.		X
30th St. W	Ave. L	Ave. L-8	X	
30th St. W	Ave. L-8	Mid-block Ave. L-8 / Ave. M	X	X
30th St. W	Ave. M	Ave. N		X
Valley Central Way	Double Play Way	Mall Loop Dr.	X	
20th St. W	Ave. H	Ave. H-4	X	
20th St. W	Ave. I	Linda Ave.	X	X
20th St. W	Lancaster Blvd.	Newgrove St.	X	X
20th St. W	Newgrove St.	Ave. J	X	
20th St. W	Ave. J-8	Ave. J-12	X	
20th St. W	Ave. K-8	Ave. K-10	X	
20th St. W	Ave. L	Ave. M	X	X
15th St. W	Norberry St.	Pillsbury St.	X	
15th St. W	Ave. J-4	Ave. J-8		X
12th St. W	Kettering St.	Pillsbury St.	X	
12th St. W	Ave. J-4	Ave. J-5	X	
Kingtree Ave.	Pillsbury St.	Ave. J	X	X
10th St. W	Ave. G	Ave. H	X	X
10th St. W	Ave. H-6	Holguin St.		X
10th St. W	Ave. J-4	Ave. J-7	X	
10th St. W	Ave. L	Ave. M	X	X
Fig Ave.	Ave. J-4	Ave. J-8	X	X
Sierra Highway	Ave. G	Ave. G-12	X	X



Street	From	To	Westside	Eastside
Sierra Highway	Ave. G-12	Ave. H		X
Sierra Highway	Ave. H	Ave. I	X	X
Sierra Highway	Ave. J	Ave. J-8	X	
Sierra Highway	Ave. K	Ave. L	X	
Division St.	Ave. G	Ave. H-8	X	X
Division St.	Ave. H-8	Mid-block Ave. H-8 / Ave. I	X	
Division St.	Ave. I	Lancaster Blvd.	X	
4th St. E	Ave. L	Ave. L-4	X	X
4th St. E	Ave. L-12	Ave. M	X	X
5th St. E	Ave. H-8	Ave. H-14		X
5th St. E	Ave. K-4	Ave. K-12		X
Challenger Way	Ave. H	Ave. I	X	X
Challenger Way	Ave. I	Kettering St.		X
Challenger Way	Ave. L	Ave. M	X	X
15th St. E	Ave. H-12	Marion Ave.	X	
15th St. E	Ave. K-4	Ave. K-6	X	
20th St. E	Ave. H	Ave. H-4	X	X
20th St. E	Ave. H-4	Ave. H-8		X
20th St. E	Ave. H-8	Ave. I	X	X
20th St. E	Kettering St.	Lancaster Blvd.	X	X
20th St. E	Lancaster Blvd.	Nugent St.		X
20th St. E	Orchid Lane	Ave. J-2		X
20th St. E	Ave. J-4	Ave. J-8		X
20th St. E	Ave. K-8	Ave. L	X	X
25th St. E	Ave. H-8	Ave. I		X
25th St. E	Kettering St.	Lancaster Blvd.		X
25th St. E	Lancaster Blvd.	Nugent St.	X	
25th St. E	Nugent St.	Ave. J		X
25th St. E	Ave. J	Ave. J-4	X	
25th St. E	Ave. J-8	Ave. J-10		X
25th St. E	Ave. K	Ave. K-4	X	

Street	From	To	Westside	Eastside
27th St. E	Ave. I	Regal Court		X
27th St. E	Kettering St.	Lancaster Blvd.	X	
27th St. E	Via Genova	Ave. J		X
27th St. E	Ave. J	Garnet Ln.	X	
27th St. E	Ave. J-6	Ave. J-8	X	
27th St. E	Ave. J-8	Ave. J-10	X	
30th St. E	Ave. H	Kettering St.	X	X
30th St. E	Kettering St.	Lancaster Blvd.		X
30th St. E	Nugent St.	Ave. J		X
30th St. E	Ave. J	Ave. J-4	X	
30th St. E	Ave. J-4	Ave. J-8		X
30th St. E	Ave. J-8	Ave. K-12	X	
35th St. E	Ave. J-8	Eastside High School		X
35th St. E	Eastside High School	Ave. K	X	X
35th St. E	James Court	Ave. L	X	X
40th St. E	Ave. H	Ave. L	X	X

MAP 9-1: MISSING SIDEWALKS



Legend

Blue line	One	Green square	Park
Red line	Both	Yellow square	School
Dashed line		Dashed line	City Boundary



Pedestrian Plan Missing Sidewalks

Lancaster Master Plan of Trails and Bikeways

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Intersection	Bus Stop(s)	Barrier(s)	Solution
Lancaster Boulevard / Sierra Highway	Lancaster Boulevard eastbound, east of Sierra Highway	Landing area is not large enough	Add bus bulb that is 5' x 8' for clear landing area
Avenue I / 5th St. E	Ave. I westbound, west of 5th St. E	Obstacle obstructing landing area	Relocate garbage can out of landing area
Division Street / Avenue I	Ave. I eastbound, east of Division St.	Obstacle obstructing landing area	Relocate garbage can out of landing area
Challenger Way / Avenue J	Ave. J westbound, west of Challenger Way	Obstacle obstructing landing area	Relocate garbage can out of landing area
Avenue J / 5th St. E	Ave. J westbound, west of 5th St. E	Obstacle obstructing landing area	Relocate trash can out of landing area



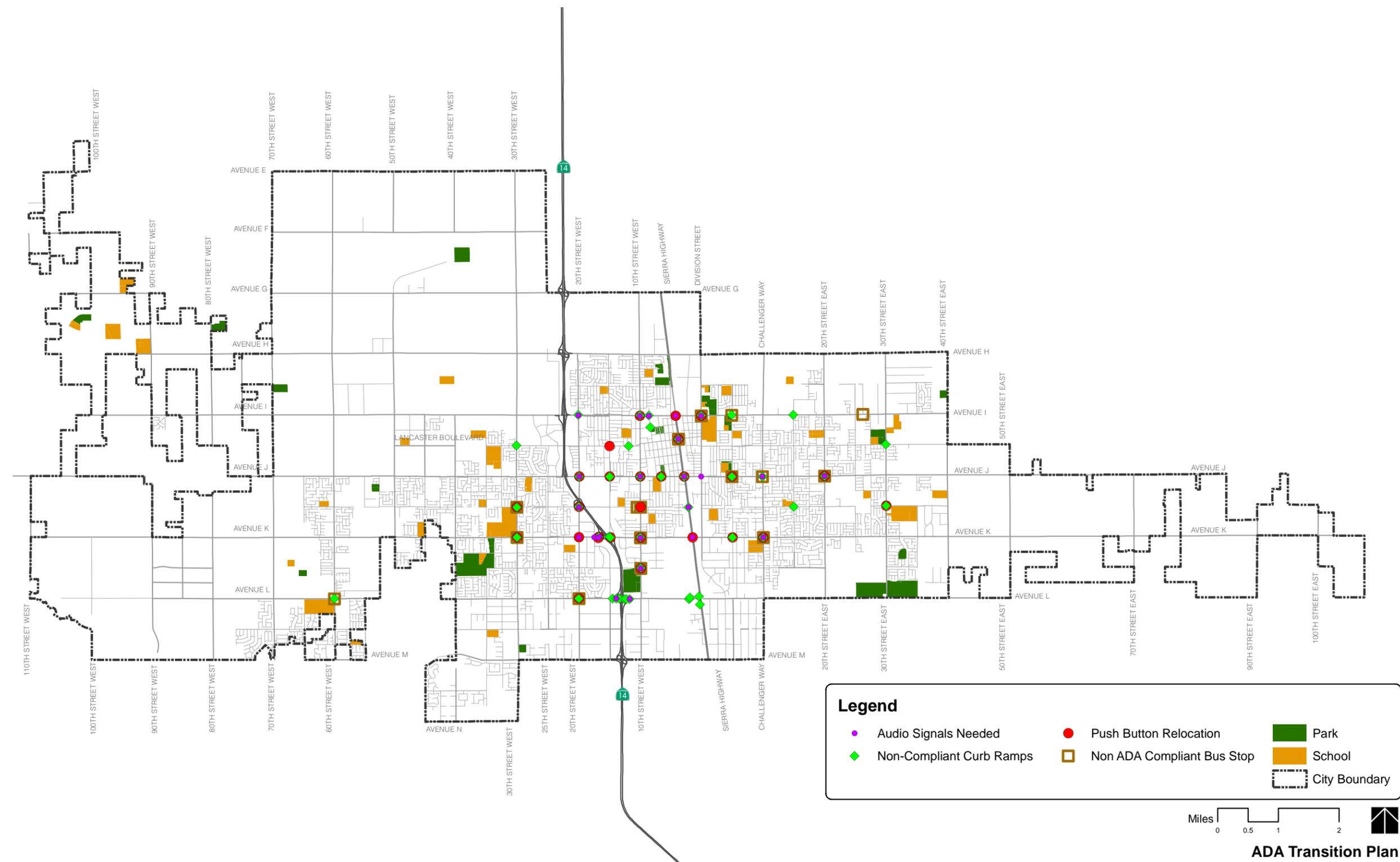
TABLE 9-4: MISSING AUDIO SIGNALS

Intersection	Number Needed
Avenue I / 20th St. West	8
Avenue K / 20th St. West	8
Avenue J-8 / 20th St. West	8
Avenue J / 20th St. West	8
Avenue I / Fern Avenue	8
Avenue I / 10th St. West	8
Avenue J / 10th St. West	8
Avenue J / 20th St. East	8
Avenue K / Challenger Way	8
CA-14 Southbound Exist / Avenue K (North Side)	1
CA-14 (15th St. West) / Avenue K	2
10th St. West / Avenue K	8
Avenue K-8 / 10th St. West	6
CA-14 Southbound Off-ramp / Avenue L (Westbound)	2
CA-14 Northbound Off-ramp / Avenue L (Eastbound)	2
Sierra Highway / Avenue K (West of Railroad)	8
Avenue J-8 / Sierra Highway	6
Avenue J / Sierra Highway	6
Lancaster Boulevard / Sierra Highway	8
Avenue I / Sierra Highway	8
Avenue I / Division Street	8
Challenger Way / Avenue J	8
Avenue J / Division Street	8
Avenue K / CA-14 Southbound On-ramp	2
Avenue K / CA-14 Northbound Off-ramp (15th Street West) (Avenue K crossing, East side)	2

TABLE 9-5: PUSH BUTTON RELOCATIONS

Intersection	Number
Avenue K / 30th St. West	8
Avenue J-8 / 30th St. West	7
Avenue L / 20th St. West	8
Avenue K / 20th St. West	8
Avenue J-8 / 20th St. West	8
Avenue J / 20th St. West	4
Avenue I / 10th St. West	8
Lancaster Boulevard / 15th St. West	8
Avenue J / 15th St. West	4
Avenue J / 10th St. West	8
Avenue J / Fig Avenue	8
Avenue J-8 / 10th St. West	8
Avenue J-8 / 30th St. East	1
Avenue J / 20th St. East	2
Avenue K / Challenger Way	2
CA-14 Southbound Exit / Avenue K (North Side)	4
CA-14 (15th St. West) / Avenue K	2
10th St. West / Avenue K	8
Avenue K-8 / 10th St. West	4
Sierra Highway / Avenue K (West of Railroad)	6
Avenue K / 5th St. East	5
Avenue J / Sierra Highway	4
Lancaster Boulevard / Sierra Highway	6
Avenue I / Sierra Highway	2
Avenue I / Division Street	2
Avenue J / 5th St. East	1
Avenue K / CA-14 Southbound On-ramp	2

MAP 9-2: OTHER BARRIERS TO DISABLED TRAVEL



Legend

- Audio Signals Needed
- Push Button Relocation
- Park
- ◆ Non-Compliant Curb Ramps
- Non ADA Compliant Bus Stop
- School
- ▭ City Boundary



ADA Transition Plan

Lancaster Master Plan of Trails and Bikeways

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Intersection	Missing Ramps	Missing Landing Areas	Missing Truncated Domes
CA-14 Southbound Off-ramp / Avenue L (Westbound)			W, E
CA-14 Southbound On-ramp / Avenue L (Westbound)			N, S
CA-14 Northbound On-ramp / Avenue L (Westbound)			N, S
CA-14 Northbound Off-ramp / Avenue L (Eastbound)			E, W
Sierra Highway / Avenue L Eastbound On-Ramp (west of Railroad)		N, S	N, S
Sierra Highway / Avenue L Westbound On-ramp (West of Railroad)		SE	NW, SW, SE
Avenue K / 5th St. East		NE, NW	NE, NW, SW
Avenue J-8 / Sierra Highway			NW, SW
Avenue J / Sierra Highway		SW	NW, SW, NE, SE
Lancaster Boulevard / Sierra Highway			NE, SE
Avenue I / 5th St. East		NE, NW, SW	NW, NE, SW, SE
Avenue I / Division Street			NE, NW, SW
Avenue J / Challenger Way			NW, NE, SW, SE
Avenue J / 5th St. East		NW	NW, SW, SE, NE
Avenue L Eastbound / Sierra Highway On- and off-ramps			SE, SW
Avenue L Westbound / Sierra Highway On- and off-ramps			NE
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)			NE, SE



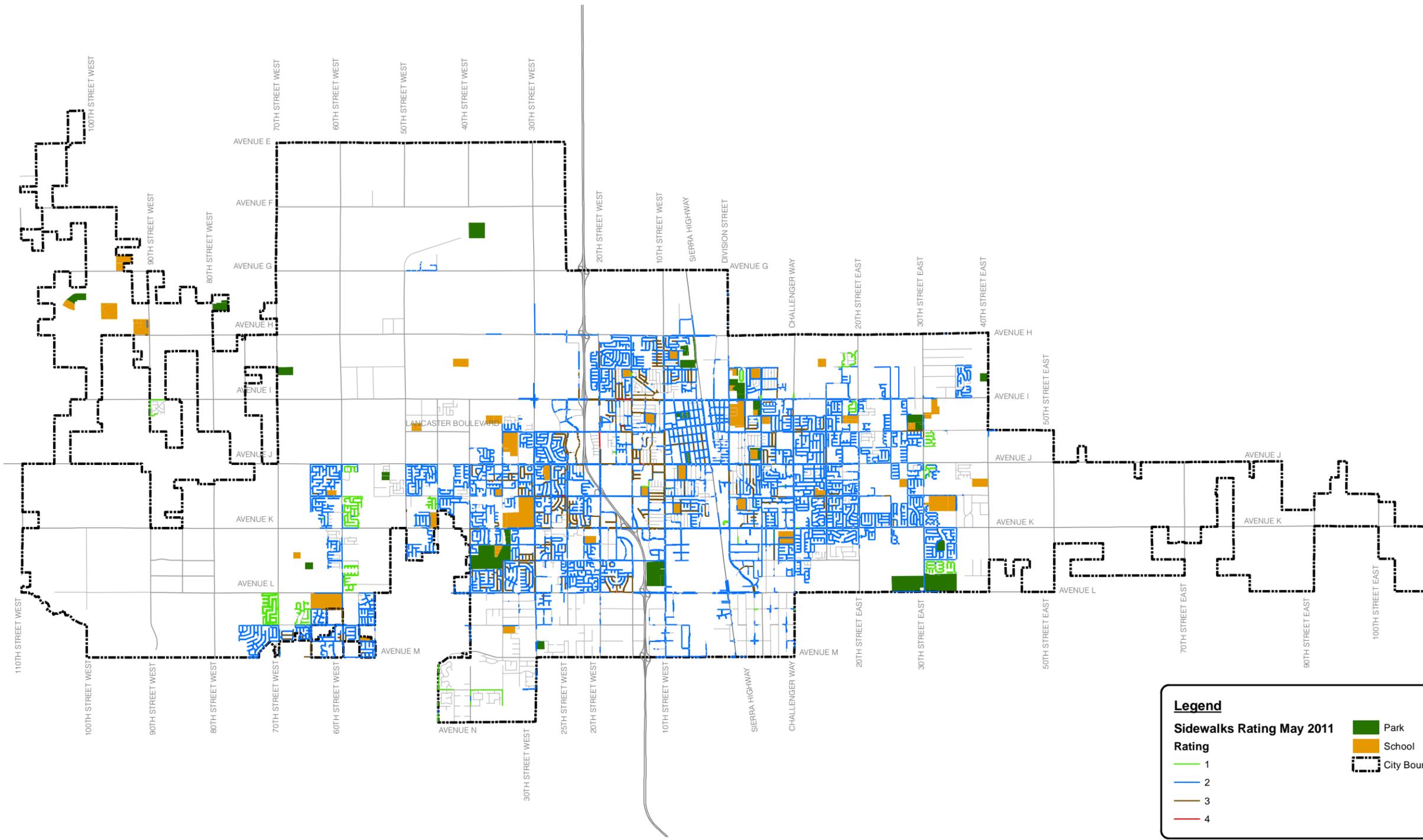
EXISTING CITY INVENTORY

Lancaster has been in the process of conducting a self-evaluation prior to the production of this Plan. The City has evaluated many of its own sidewalks and curb ramps with a rating of 1 to 5. One is defined as a facility in great condition, while five is considered a poor score, with the facility in need of work.

The following map shows curb ramps that received a rating of 4 or 5, indicating a need for upgrading, and likely to have barriers to disabled travel. An additional map shows all sidewalk ratings. Out of sidewalks inventoried thus far, none have received a 5. The missing sidewalk data collected as part of this planning process will augment this existing data.

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MAP 9-3: SIDEWALK RATINGS



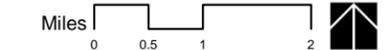
Legend

Sidewalks Rating May 2011

Rating

- 1 (Green line)
- 2 (Blue line)
- 3 (Orange line)
- 4 (Red line)

- Park (Dark Green square)
- School (Yellow square)
- City Boundary (Dashed line)



Sidewalk Ratings May 2011

Lancaster Master Plan of Trails and Bikeways

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Plan to Eliminate Barriers

Lancaster is committed to addressing the barriers identified in the self evaluation. As this plan is updated, and further self evaluations are completed, facilities that are inaccessible will be prioritized.

Budget

The City of Lancaster's Council has committed \$250,000 per year (in 2011 dollars) in Capital Improvement Projects toward ADA compliance. Many of the missing sidewalks which pose barriers to disabled travel are in undeveloped areas with two-lane highways. Without including the provision of sidewalks on rural and these types of streets, the City will need to spend an estimated \$17,216,980 to achieve compliance.

It will take a significantly greater amount of time and expense to provide sidewalks on all streets within Lancaster. Providing sidewalks on every single street that has been evaluated to date would cost an additional \$81,350,500. Many of these streets have wide shoulders that accommodate pedestrians and disabled persons. Sidewalks will be installed as these areas develop so the City doesn't need to allocate budget for these.

The breakdown of this cost estimate is below. The first table enumerates the costs by improvement type, and the second tables enumerates the costs by project location.

TABLE 9-7: ADA TRANSITION PLAN COST ESTIMATE

Improvement	Units	Per Unit Cost	Proposed Units	Total Proposed Cost
Curb ramps	number	\$3,500	9	\$31,500
Add curb landing area	number	\$2,000	43	\$86,000
Truncated domes	number	\$400	104	\$41,600
Relocate push buttons	number	\$2,000	138	\$276,000
Audio Signals	number	\$1,000	157	\$157,000
Relocate garbage can	number	\$400	6	\$2,400
New concrete	square feet	\$12	1790	\$21,480
Bus bulb	number	\$7,500	1	\$7,500
New sidewalks with curb and gutter in urban areas	linear feet	\$70	237,050	\$16,593,500
Total for ADA Transition				\$17,216,980
New sidewalks with curb and gutter in undeveloped areas	linear feet	\$70	1,162,150	\$81,350,500
Total for ADA Transition (including rural missing sidewalks)				\$98,567,480



TABLE 9-8: ADA TRANSITION PLAN INTERSECTION IMPROVEMENTS

Location	Curb Ramps	Bus Stops	Audio Signals	Push Buttons	Total Cost
Avenue I / 10th St. West	X		X	X	\$25,600
Avenue I / 15th St. East	X				\$4,000
Avenue I / 20th St. West	X		X		\$15,500
Avenue I / 5th St. East	X	X			\$8,000
Avenue I / Division Street	X	X	X	X	\$13,600
Avenue I / Fern Avenue	X		X		\$13,600
Avenue J / 10th St. West	X	X	X	X	\$33,660
Avenue J / 15th St. West	X			X	\$11,600
Avenue J / 20th St. East	X	X	X	X	\$19,060
Avenue J / 20th St. West	X		X	X	\$21,200
Avenue J / 5th St. East	X	X		X	\$6,000
Avenue J / Challenger Way	X	X	X		\$10,000
Avenue J / Fig Avenue	X			X	\$23,100
Avenue J / Sierra Highway	X		X	X	\$17,600
Avenue J-8 / 15th St. East	X				\$3,600
Avenue J-8 / 20th St. West	X		X	X	\$26,400
Avenue J-8 / 30th St. East	X			X	\$12,900
Avenue J-8 / 30th St. West	X	X		X	\$22,120
Avenue J-8 / Sierra Highway	X		X		\$6,800
Avenue K (north side) / CA-14 Northbound Ramp	X				\$800
Avenue K (north side) / CA-14 Southbound Exit	X		X	X	\$13,800
Avenue K / 10th St. West	X	X	X	X	\$30,000
Avenue K / 30th St. West	X	X		X	\$22,400
Avenue K / 5th St. East	X			X	\$15,200
Avenue K / CA-14 (15th St. West)	X		X	X	\$6,800
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)	X		X		\$2,800
Avenue K / Challenger Way	X	X	X	X	\$12,860
Avenue K-8 / 10th St. West	X	X	X	X	\$19,560
Avenue L (eastbound) / CA-14 Northbound off-ramp	X		X		\$2,800

Location	Curb Ramps	Bus Stops	Audio Signals	Push Buttons	Total Cost
Avenue L (eastbound) / CA-14 Northbound on-ramp	X				\$800
Avenue L (eastbound) / CA-14 Southbound on-ramp	X				\$800
Avenue L (westbound) / CA-14 Northbound on-ramp	X				\$800
Avenue L (westbound) / CA-14 Southbound off-ramp	X		X		\$2,800
Avenue L (westbound) / CA-14 Southbound on-ramp	X				\$800
Avenue L / 20th St. West	X	X		X	\$23,680
Avenue L / 60th St. West	X	X			\$3,620
Avenue L Eastbound / Sierra Highway on- and off-ramps	X				\$800
Avenue L Eastbound On-ramp (west of railroad) / Sierra Highway	X				\$4,800
Avenue L Westbound / Sierra Highway on- and off-ramps	X				\$400
Avenue L Westbound On-ramp (west of railroad) / Sierra Highway	X				\$3,200
Jackman Avenue / Fern Avenue	X				\$800
Lancaster Boulevard / 12th St. West	X				\$800
Lancaster Boulevard / 30th St. East	X				\$6,700
Lancaster Boulevard / 30th St. West	X				\$800
Lancaster Boulevard / Sierra Highway	X	X	X	X	\$28,300
Avenue I / Sierra Highway			X	X	\$12,000
Avenue I between 30th St. East and 20th St. East		X			\$60
Avenue J / Division Street			X		\$8,000
Avenue J-8 / 10th St. West		X		X	\$36,160
Avenue K (west of railroad) / Sierra Highway			X	X	\$20,000
Avenue K / 20th St. West			X	X	\$24,000



Location	Curb Ramps	Bus Stops	Audio Signals	Push Buttons	Total Cost
Avenue K / CA-14 southbound on-ramp			X	X	\$6,000
Lancaster Boulevard / 15th St. West				X	\$16,000
Total Cost					\$623,480

TABLE 9-9: ADA TRANSITION PLAN SIDEWALKS SHORT-TERM PRIORITY

Street	Section	Linear Feet	Total Cost
Sierra Highway	North	11,000	\$770,000
Avenue J	Central	7,700	\$539,000
70th St. W	South	6,000	\$420,000
Lancaster Boulevard	Central	7,200	\$504,000
Avenue I	Central	5,000	\$350,000
Avenue I	West	4,000	\$280,000
Avenue K-8	Central	9,000	\$630,000
Sierra Highway	Central	8,250	\$577,500
Total Short-Term		58,150	\$4,070,500

TABLE 9-10: ADA TRANSITION PLAN SIDEWALKS MEDIUM-TERM PRIORITY

Street	Section	Linear Feet	Total Cost
Avenue L	West	23,000	\$1,610,000
Avenue K	East	6,200	\$434,000
Challenger Way	North	10,550	\$738,500
15th St. E	North	1,400	\$98,000
60th St. W	South	10,550	\$738,500
10th St. W	Central	1,300	\$91,000
Avenue L	Central	26,400	\$1,848,000
Valley Central Way	Central	1,300	\$91,000
90th St. W	South	6,000	\$420,000
Division Street	Central	2,650	\$185,500
15th St. W	Central	13,200	\$924,000
Avenue J-8	Central	5,000	\$350,000
Avenue K	Central	5,000	\$350,000
Fig Avenue	Central	2,650	\$185,500
35th St. W	Central	6,000	\$420,000
20th St. W	Central	8,300	\$581,000
12th St. W	Central	4,500	\$315,000
Challenger Way	Central	1,300	\$91,000
15th St. E	Central	10,550	\$738,500
20th St. E	Central	7,000	\$490,000
25th St. E	Central	9,000	\$630,000
27th St. E	Central	6,500	\$455,000
30th St. E	Central	10,550	\$738,500
Total Medium Term		178,900	\$12,523,000

The costs listed here include only the improvements that are needed to bring the identified facilities into ADA compliance. The pedestrian plan includes all of these improvements, as well as many more improvements that will make disabled travel safer and more pleasant. Implementation of the pedestrian plan will achieve ADA compliance and also improve the safety, convenience, and comfort of all pedestrians.



Schedule

This Plan will be updated every five years. With the proposed budget toward ADA compliance, and estimated cost to date to bring the City toward compliance, Lancaster expects to address barriers related to bus stops, curb ramps, and push buttons, missing audio signals, and missing sidewalks within the urban area, by 2080. The schedule assumes that installation of new sidewalks outside of the City's urban area will take place in the long-term, accompanying new development.

In the first three years, the City intends to address all of the barriers at intersections. The cost to address these barriers is \$623,480. With \$250,000 budgeted each year, the City could achieve compliance in this area by 2015. Tables 9-11 through 9-13 below identify the projects to be completed in the first year, second year, and third year of the program respectively.

After the intersection improvements are completed, the City intends to proceed with addressing missing sidewalks within the urban areas, beginning with the Short-Term Priority Sidewalks listed in Table 9-9 and then proceeding to the Medium-Term Priority Sidewalks listed in Table 9-10. Based on their costs, the Short-Term Priority Sidewalks are scheduled to be completed in years 4-20 and the Medium-Term Priority Sidewalks are scheduled to be completed in the years following.

TABLE 9-11: ADA TRANSITION PLAN SCHEDULE, FIRST YEAR

Location	Cost
Avenue K / Challenger Way	\$12,860
Avenue L / 20th St. West	\$23,680
Avenue L / 60th St. West	\$3,620
Lancaster Boulevard / Sierra Highway	\$28,300
Avenue J / Sierra Highway	\$17,600
Avenue J-8 / 30th St. East	\$12,900
Avenue I / Division Street	\$13,600
Avenue L (eastbound) / CA-14 Southbound on-ramp	\$800
Avenue L (westbound) / CA-14 Northbound on-ramp	\$800
Avenue K (west of railroad) / Sierra Highway	\$20,000
Lancaster Boulevard / 15th St. West	\$16,000
Avenue I / Fern Avenue	\$13,600
Avenue J / 20th St. East	\$19,060
Avenue L (eastbound) / CA-14 Northbound on-ramp	\$800
Avenue I / Sierra Highway	\$12,000
Total Cost, First Year	\$195,620

TABLE 9-12: ADA TRANSITION PLAN SCHEDULE, SECOND YEAR

Location	Cost
Avenue I / 15th St. East	\$4,000
Avenue J / 20th St. West	\$21,200
Avenue J-8 / 20th St. West	\$26,400
Avenue K (north side) / CA-14 Northbound Ramp	\$800
Avenue K (north side) / CA-14 Southbound Exit	\$13,800
Avenue K / 5th St. East	\$15,200
Avenue K / CA-14 (15th St. West)	\$6,800
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)	\$2,800
Avenue K / CA-14 southbound on-ramp	\$6,000
Avenue J / Fig Avenue	\$23,100
Lancaster Boulevard / 12th St. West	\$800
Avenue I / 10th St. West	\$25,600
Avenue J / 10th St. West	\$33,660
Avenue J / Challenger Way	\$10,000
Lancaster Boulevard / 30th St. West	\$800
Total Cost, Second Year	\$190,960

TABLE 9-13: ADA TRANSITION PLAN SCHEDULE, THIRD YEAR

Location	Cost
Avenue I / 20th St. West	\$15,500
Avenue I / 5th St. East	\$8,000
Avenue J / 15th St. West	\$11,600
Avenue J / 5th St. East	\$6,000
Avenue J-8 / 15th St. East	\$3,600
Avenue J-8 / 30th St. West	\$22,120
Avenue J-8 / Sierra Highway	\$6,800
Avenue K / 10th St. West	\$30,000
Avenue K / 30th St. West	\$22,400
Avenue K-8 / 10th St. West	\$19,560
Avenue L (eastbound) / CA-14 Northbound off-ramp	\$2,800
Avenue L (westbound) / CA-14 Southbound off-ramp	\$2,800
Avenue L (westbound) / CA-14 Southbound on-ramp	\$800



Location	Cost
Avenue L Eastbound / Sierra Highway on- and off-ramps	\$800
Avenue L Eastbound On-ramp (west of railroad) / Sierra Highway	\$4,800
Avenue L Westbound / Sierra Highway on- and off-ramps	\$400
Avenue L Westbound On-ramp (west of railroad) / Sierra Highway	\$3,200
Jackman Avenue / Fern Avenue	\$800
Lancaster Boulevard / 30th St. East	\$6,700
Avenue I between 30th St. East and 20th St. East	\$60
Avenue J / Division Street	\$8,000
Avenue J-8 / 10th St. West	\$36,160
Avenue K / 20th St. West	\$24,000
Total Cost, Third Year	\$236,900

Coordinator

Craig Earl, Principal Plans Examiner, Department of Public Works, currently reviews plans for accessibility issues. He has been designated as the ADA Coordinator for the City of Lancaster.

Grievance Procedure

The City will add a page to its website to make this transition plan and its updates available to the public. The Grievance Procedure outlined here will also be available on the website.

The procedure to file a grievance is as follows:

1. A formal written grievance should be filed on ADA Grievance Form. An oral grievance can be filed by contacting ADA Coordinator. The oral grievance will be reduced to writing by ADA Coordinator utilizing ADA Grievance Form. Additionally, individuals filing a grievance are not required to file a grievance with the City of Lancaster, but may instead exercise their right to file a grievance with the Department of Justice.
 - The name, address, and telephone number of the person filing the grievance.
 - The name, address, and telephone number of the person alleging ADA violation, if other than the person filing the grievance.
 - A description and location of the alleged violation and the remedy sought.
 - Information regarding whether a complaint has been filed with the Department of Justice or other federal or state civil rights agency or court.
 - If a complaint has been filed, the name of the agency or court where the complaint was filed, and the date the complaint was filed.
2. The grievance will be either responded to or acknowledged within 10 working days of receipt. If the grievance filed does not concern a Lancaster facility, it will be forwarded to the appropriate agency and the grievant will be notified.
3. Within 60 calendar days of receipt, the ADA Coordinator will conduct the investigation necessary to determine the validity of the alleged violation. If appropriate, ADA Coordinator will arrange to meet with the grievant to discuss the matter and attempt to reach a resolution of the grievance. Any resolution of the grievance will be documented in Lancaster's ADA Grievance File.
4. If a resolution of the grievance is not reached, a written determination as to the validity of the complaint and description of the resolution, if appropriate, shall be issued by ADA Coordinator and a copy forwarded to the grievant no later than 90 days from the date of Lancaster's receipt of the grievance.
5. If the grievant is dissatisfied with Lancaster's handling of the grievance at any stage of the process or does not wish to file a grievance through the Lancaster's ADA Grievance Procedure, the grievant may file a complaint directly with the United States Department of Justice or other appropriate state or federal agency.

The resolution of any specific grievance will require consideration of varying circumstances, such as the specific nature of the disability; the nature of the access to services, programs, or facilities at issue and the essential eligibility requirements for participation; the health and safety of others; and the degree



to which an accommodation would constitute a fundamental alteration to the program, service, or facility, or cause an undue hardship to Lancaster. Accordingly, the resolution by the City of Lancaster of any one grievance does not constitute a precedent upon which the City of Lancaster is bound or upon which other complaining parties may rely.

File Maintenance

- Lancaster's ADA Coordinator shall maintain ADA grievance files for a period of three years.

Website text regarding the procedure is as follows:

If you have a complaint about accessibility at a City of Lancaster owned facility, street, program or event, employment discrimination at the City of Lancaster, or inaccessible communication on Lancaster's website, please fill out the Lancaster Complaint Form below. If you require a different format to file your complaint, please contact:

Mr. Craig Earl
City of Lancaster
(661) 723-5892
cearl@cityoflancafterca.org

ADA Complaint Form

- Name:
- Street Address:
- City:
- State:
- Zip Code:
- Phone:
- E-mail Address:
- Date of Incident:
- Where is the location of the problem? Please include roadway name, intersection (if applicable) facility name, and/or location if other than a roadway, i.e., rest area, bridge, etc:
 - Please provide a detailed description of the problem:
 - Additional information:

If you have a concern about facilities on a county or other jurisdiction road, you may prefer to contact the proper authorities directly.

CHAPTER 10

FUNDING



Photo Credit: Rob Morache

A variety of potential funding sources, including local, state, regional, and federal funding programs, may be used to construct bicycle, pedestrian and trail improvements or to institute programs. Most of the Federal and State programs are competitive, and involve the completion of extensive applications with clear documentation of the project needs, costs, and benefits. Local funding for projects can come from sources within jurisdictions that compete only with other projects in each jurisdiction’s budget.

A detailed program-by-program explanation of available funding along with the latest relevant information follows.

Federal Funding Programs

SAFETEA-LU

The Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) sets the framework for spending federal transportation revenue. SAFETEA-LU expired with the federal fiscal year in 2009; however, Congress has extended its provisions until a new bill can be passed. Many of the programs described in this section may remain once there is a new transportation bill.

SAFETEA-LU currently contains four major programs that fund bikeway, pedestrian and trails projects: Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), Transportation Enhancement Activities (TE), and Congestion Mitigation and Air Quality Improvement (CMAQ), along with other programs such as the National Recreational Trails Fund, Section 402 (Safety) funds, Scenic Byways funds, Transportation, Community, and System Preservation Program (TCSP), and Federal Lands Highway funds.

SAFETEA-LU funding is administered through the California Department of Transportation (Caltrans), and the Los Angeles County Metropolitan Transportation Authority (Metro), and varies depending upon the program.

Each of the four main programs' funding processes are outlined in detail below. Generally, Caltrans distributes funding through each district's Local Assistance Program. Metro is responsible for allocating all discretionary federal, state and local transportation funds to improve all modes of transportation for Los Angeles County. Metro does so primarily through the Call for Projects (CFP) program. The CFP is a competitive process by which these discretionary funds are distributed to regionally significant projects every other year. There are seven categories in which projects are competitively ranked, including categories for bikeways improvements and pedestrian improvements. The CFP process is part of the larger Los Angeles County Transportation Improvement Program.

The federal government apportions STP funding to each state based upon total lane miles of Federal-aid highways, vehicle miles traveled on Federal-aid highways, and highway users' tax payments within that state. Each state has its own method for distributing these funds to each jurisdiction. In California, 10% of funds is set aside in California's Surface Transportation Improvement Program as TE funding. Of the remaining funds, 27.5% goes to Caltrans for discretionary use (Caltrans programs this) and 62.5% is divided among each region by population for the Regional Surface Transportation Programs (RSTPs).

As mentioned above, TE funds come from the set aside in the STP funding. The TE program is a reimbursable capital-improvement program, where eligible projects must impact the surface transportation system. California typically has about \$75 million per year in TE funds. Caltrans divides the TE funding, allocating three-quarters to the Regional Transportation Planning Agencies (in Los Angeles County, this is Metro), and the rest to each of the



twelve Caltrans districts. Metro allocates the share of Los Angeles County's TE funds through the CFP and other Metro Board actions. The rest which goes to Caltrans is used for statewide TE projects. These projects are available to local agencies and administered by Caltrans.

State statutes established the Regional Surface Transportation Program to program the 62.5% leftover STP funding after TE and Caltrans set asides. Caltrans apportions approximately \$320 million annually to each region, and about 76% of these RSTP funds must be spent within the 11 urbanized areas in California with populations of 200,000 or more. Regional projects such as roadway construction, rehabilitation, bicycle and pedestrian walkways, among others, are eligible for this type of funding. Metro programs the Los Angeles County share of the RSTP. Metro first allocates \$30.7 million per year of RSTP funds on a per capita basis to the County and each jurisdiction in the County for discretionary use. Metro allocates the rest of the funding to itself and to other agencies through the CFP.

The CMAQ program (separate from the STP) funds transportation projects or programs that will contribute to the attainment or maintenance of air quality standards for ozone and carbon monoxide. Federal funds are apportioned to each State according to the severity of these problems. Caltrans apportions funds to the various Metropolitan Planning Organizations (MPOs). SCAG, the MPO for Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial Counties, then apportions these funds to the various County Transportation Commissions (CTCs). The CTCs then determine how funds are allocated. Los Angeles County typically receives around \$137 million. Metro programs these funds to itself and other agencies or jurisdictions through the Call for Projects or other Metro board actions.

Caltrans distributes Highway Safety Improvement Program funds through the Local Assistance program; more details follow in the separate HSIP section below.

More information can be found at:

<http://www.dot.ca.gov/fedliaison/safetealu.shtml>

<http://safety.fhwa.dot.gov/safetealu/>

http://www.metro.net/projects/call_projects/

http://www.bikeleague.org/resources/reports/pdfs/lab_cmaq.pdf

http://www.bikeleague.org/resources/reports/pdfs/section_402.pdf

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP), a SAFETEA-LU program, aims to achieve a significant reduction in traffic fatalities and serious accidents through the implementation of infrastructure-related highway safety improvements. These improvements may be on any public road or publicly owned bicycle and pedestrian pathway or trail, and can include the use of devices such as traffic signals, curb extensions, crosswalks, among others. In 2009, \$1.296 billion in funds was available nationwide.

For the state portion, SAFETEA-LU allows each state to use HSIP funds for education and enforcement activities, as long as those activities are consistent with the state's Strategic Highway Safety Plan (SHSP). California completed its SHSP in September 2006, and created an Implementation Plan in April 2008.

Applications are submitted electronically, and must demonstrate that the proposed engineering improvements will increase the safety of the proposed project area. These are calculated in the application program using Crash Reduction Factors with accompanying financial values. Project areas which have a prior history of injuries or fatalities are more likely to be funded.

More information can be found at:

<http://www.dot.ca.gov/hq/LocalPrograms/hsip.htm>

http://safety.fhwa.dot.gov/safetealu/fact_sheets/ftsht1401.cfm

http://www.bikeleague.org/resources/reports/pdfs/highway_safety_improvement_program.pdf

Recreational Trails Program

The California State Parks and Recreation Department administers Recreational Trails Program (RTP) funds. RTP annually funds recreational trails, including bicycle and pedestrian paths. Cities, counties, districts, state agencies, federal agencies and non-profit organizations may apply, but not Councils of Governments. A 12 percent match is required. Federal, state, local and private funds may be used to match the grant. There is no limit to the grant request; however, there are different requirements within the grant application depending on whether the project requires more or less than \$100,000.

More information can be found at:

Tel. (916) 653-7423

localservices@parks.ca.gov

http://www.parks.ca.gov/?Page_id=24324

<http://www.fhwa.dot.gov/environment/rectrails/>



Transportation, Community, and System Preservation Program (TCSP)

TCSP is another SAFETEA-LU program that provides federal funding for projects that improve the efficiency of the transportation system, reduce the impact on the environment, and generally investigate the relationships between transportation, community and system preservation. Eligible projects include improving conditions for bicycling and walking, better and safer operations of existing roads, new signals, and development of new programs. States, MPOs and local jurisdictions are eligible to apply for the discretionary grants. Grantees must annually report on the status of the project and the degree to which the project is attaining the stated goals. The report must include quantitative and qualitative assessments.

More information can be found at:
<http://www.fhwa.dot.gov/tcsp/index.html>

Safe Routes to School (SRTS)

As of 2006, the federal Safe Routes to School program offers grants to local agencies and others for facilities and programs. Non-traditional agencies may apply such as, school districts, Council of Governments, health departments, non-profit organizations, education departments, hospitals, and federally-recognized Native American tribes may apply but must partner with a City/County/Metropolitan Planning Organization/Regional Transportation Planning Organization that serves as the responsible agency. Bikeways, sidewalks, intersection improvements, traffic calming, and other projects that enhance bicycle and pedestrian safety to elementary and middle schools are eligible. Safety education, enforcement, and promotional programs are also eligible.

Caltrans administers this grant and releases the funds in multi-year cycles through its district offices. The funds are distributed to each Caltrans district according to school enrollment. Local jurisdictions, school districts, and other agencies compete for these funds. This program will have to be reauthorized with the upcoming federal transportation bill. Federal Cycle 3 was completed in June 2011.

More information can be found at:
<http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm>

Land and Water Conservation Fund (LWCF)

States receive individual allocations of LWCF grant funds based upon a national formula, with state population being the most influential factor. States initiate a statewide competition for the amount available annually. The State then receives, scores and ranks applications according to certain project selection criteria so that only the top-ranked projects (up to the total amount available that year) are chosen for funding. Chosen applications are then forwarded to the National Park Service for formal approval and obligation of federal grant monies. Bike paths and recreational trails are eligible uses of this money. Cities, counties, recreation and park districts, and any other entity that has the authority to develop or maintain a public park is eligible to apply. This program is a reimbursement program, and the applicant is expected to initially finance the entire project. A one for one match is required, and federal funds cannot be used as a match, except Community Development Block Grants. The California State Parks Department administers the funds.

More information can be found at:
http://www.parks.ca.gov/?Page_id=21360

Community Development Block Grants (CDBG)

The CDBG entitlement program allocates annual grants to larger cities and urban counties to develop viable communities by providing decent housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons. Every year the local governments receive federal money for a wide variety of community improvements in the form of CDBG funds. Bicycle and pedestrian facilities are eligible uses of these funds. CDBG funds only pay for projects in areas of economic need. COGs are not eligible to receive CDBG funds, and no match is required.

More information can be found at:
<http://www.hud.gov/offices/cpd/communitydevelopment/programs/>



Economic Stimulus Funds (American Recovery and Reinvestment Act of 2009)

Starting in 2009, the Federal government has given significant funds to local governments for a wide array of projects, many transportation related. Bikeways, trails, and pedestrian improvements have been eligible. Some of these have been funded by Transportation Investment Generating Economic Recovery (TIGER) grants. Other projects have been funded by the Energy Efficiency and Conservation Block Grant Program, administered by the California Energy Commission. Altogether, \$37.3 million is available for EECBG grants. Projects that have completed environmental review and design, deemed to be “shovel ready” have been favored. These have been short-term programs with expiration dates. As of September 2011, 16,711 grants have been awarded in California, totaling over \$22.53 billion. Nationally, there is \$275 billion available in the form of federal contracts, grants and loans.

More information can be found at:

<http://www.recovery.gov>

<http://www.dot.gov/documents/finaltigergrantinfo.pdf>

<http://www.energy.ca.gov/recovery/blockgrant.html>

Rivers, Trails, and Conservation Assistance Program (RTCA)

The Rivers, Trails, and Conservation Assistance Program is the community assistance arm of the National Park Service. RTCA provides technical assistance to communities in order to preserve open space and develop trails. The assistance that RTCA provides is not for infrastructure, but rather building plans, engaging public participation, and identifying other sources of funding for conservation and outdoor recreation projects.

More information can be found at:

<http://www.nps.gov/ncrc/programs/rtca/index.htm>

http://www.nps.gov/ncrc/programs/rtca/contactus/cu_apply.html

State Funding Programs

Transportation Development Act (TDA) Article 3 (SB 821)

TDA Article 3 funds—also known as the Local Transportation Fund (LTF)—are used by cities within Los Angeles County for the planning and construction of bicycle and pedestrian facilities. Each city in Los Angeles County receives TDA Article 3 funds from Metro according to population.

TDA Article 3 funds may be used for the following activities related to the planning and construction of bicycle and pedestrian facilities:

- Engineering expenses leading to construction.
- Right-of-way acquisition.
- Construction and reconstruction.
- Retrofitting existing bicycle facilities to comply with the Americans with Disabilities Act (ADA).
- Route improvements, such as signal controls for cyclists, bicycle loop detectors, rubberized rail crossings, and bicycle-friendly drainage grates.
- Purchase and installation of bicycle facilities, such as improved intersections, secure bicycle parking, benches, drinking fountains, changing rooms, rest rooms, and showers adjacent to bicycle trails, employment centers, park-and-ride lots, and/or transit terminals accessible to the general public.

Bicycle Transportation Account (BTA)

The State Bicycle Transportation Account (BTA) is an annual statewide discretionary program that is available through the Caltrans Bicycle Facilities Unit for funding bicycle projects. Available as grants to local jurisdictions, the BTA emphasizes projects that benefit bicycling for commuting purposes. Agencies may apply for these funds through the Caltrans Office of Bicycle Facilities. Applicant cities and counties are required to have an approved bicycle plan that conforms to Streets and Highways Code 891.2 to qualify and compete for funding on a project-by-project basis. Cities may apply for these funds through the Caltrans Office of Bicycle Facilities. A local match of 10 percent is required for all awarded funds. Every year \$7.2 million is allocated for bicycle projects statewide. The Non-motorized Transportation Plan establishes a regional network from which local plans can build upon for local-serving bicycle and pedestrian routes. Once a jurisdiction has an approved bicycle plan that meets the requirements of the Street and Highways Code 891.2, they may apply for the Caltrans grant.

More information can be found at:

<http://www.dot.ca.gov/hq/MassTrans/State-TDA.html>

<http://www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm>



Safe Routes to School (SR2S)

The Safe Routes to School (SR2S) program is separate from the federal Safe Routes to School Program. This program, initiated in 2000, is meant to improve school commute routes by improving safety to bicycle and pedestrian travel through bikeways, sidewalks, intersection improvements, traffic calming, and ongoing programs. This program funds improvements for elementary, middle, and high schools. A local match of 10 percent is required for this competitive program, which allocates approximately \$24.25 million annually, or \$40 million to \$50 million in two-year cycles. Each year the state legislature decides whether to allocate funds to the program. Caltrans administers SR2S funds through its district offices. Applications for Cycle 10 funds are due in March 2012.

More information can be found at:

<http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm>

Office of Traffic Safety (OTS)

The California Office of Traffic Safety (OTS) seeks to reduce motor vehicle fatalities and injuries through a national highway safety program. Priority areas include police traffic services, alcohol and other drugs, occupant protection, pedestrian and bicycle safety, emergency medical services, traffic records, roadway safety, and community-based organizations. The OTS provides grants for one to two years. The California Vehicle Code (Sections 2908 and 2909) authorizes the apportionment of federal highway safety funds to the OTS program. Bicycle safety programs are eligible programs for OTS start-up funds. City and county agencies are eligible to apply, as well as COGs. There is no set maximum for grants, and no match is required; however, contributions of other funds may make projects more competitive.

More information can be found at:

http://www.ots.ca.gov/Grants/Apply/Proposals_2011.asp

<http://www.dot.ca.gov/hq/traffops/saferesr/>

Environmental Enhancement and Mitigation Program (EEMP)

EEMP funds are allocated to projects that offset environmental impacts of modified or new public transportation facilities, including streets, mass transit guideways, park-n-ride facilities, transit stations, tree planting to mitigate the effects of vehicular emissions, off-road trails, and the acquisition or development of roadside recreational facilities. Every year \$10 million dollars is available with individual grants limited to \$350,000. Cities, counties, COGs, state agencies and non-profit organizations may apply. No match is required; however, additional points will be given for matching funds. The State Resources Agency administers the funds.

More information can be found at:

<http://www.resources.ca.gov/eem/>

Per Capita Grant Program

The Per Capita Grant Program is intended to maintain a high quality of life for California's growing population by providing a continued investment in parks and recreational facilities. Specifically it is for the acquisition and development of neighborhood, community, and regional parks and recreation lands and facilities in urban and rural areas.

Eligible projects include acquisition, development, improvement, rehabilitation, restoration, enhancement, and the development of interpretive facilities for local parks and recreational lands and facilities. Per Capita grant funds can only be used for capital outlay, such as bike paths and trails. This grant is given to local governments based on their population. Some cities have used up their full allocation, while others have not. Regional parks and open space districts also receive these funds. COGs are not eligible to receive Per Capita Grant funds. The California State Parks Department administers the grant funds.

More information can be found at:

http://www.parks.ca.gov/?page_id=22333

Roberti-Z'berg-Harris (RZH) Grant Program - Proposition 40

Funds for this grant program are to be allocated for projects pursuant to the Roberti-Z'berg-Harris Urban Open Space and Recreational Grant Program and are to be used for:

- High priority projects that satisfy the most urgent park and recreation needs, with emphasis on unmet needs in the most heavily populated and most economically disadvantaged areas within each jurisdiction.
- Projects for which funding supplements--rather than supplants--local expenditures for park and recreation facilities and does not diminish a local jurisdiction's efforts to provide park and recreation services.
- Block grants allocated on the basis of population and location in urbanized areas.
- Need-basis grants to be awarded competitively to eligible entities in urbanized areas and in non-urbanized areas.

Eligible projects include:

- Acquisition of park and recreation lands and facilities
- Development/rehabilitation of park and recreation lands and facilities
- Special Major Maintenance of park and recreation lands and facilities
- Innovative Recreation Programs

Bike paths and recreational trails are eligible uses of this money. Cities, counties and recreation and parks districts may apply for these funds, but not COGs. The maximum grant request is \$250,000 per project, and no match is required. The California State Parks Department administers the funds.

More information can be found at:

http://www.parks.ca.gov/default.asp?page_id=22329



Proposition 84 - Statewide Park Program

The Statewide Park Act awards grants on a competitive basis to the most critically under-served communities across California for the creation of new parks and new recreational facilities. Altogether, \$368 million will be given in two funding cycles. The first funding cycle in 2009 awarded \$184 million. The deadline for the second cycle ended in June 2011; the third cycle has not yet been announced. Grants range from \$100,000 to \$5 million. No match is required. Bikeways and trails can be funded through this program. They do not have to be in a park.

The creation of new parks in neighborhoods where none currently exist will be given priority. These new parks will meet the recreational, cultural, social, educational, and environmental needs of families, youth, senior citizens, and other population groups.

Cities, counties, districts with a park and recreation director, COGs, joint power authorities, or nonprofit organizations are eligible to apply for these funds. The California State Parks Department administers the Statewide Park Program funds.

More information can be found at:
http://www.parks.ca.gov/?Page_id=26025

Proposition 84 – Urban Greening Project Grants

In 2006 California voters passed Proposition 84 to expand recreational facilities and to fund environmental quality projects. Of this, \$70 million was set aside to fund urban greening projects that reduce energy consumption, conserve water, improve air and water quality, and reduce global warming gases. This money will be dispersed in three funding cycles. The first cycle ended in April 2010. Cities, counties, and nonprofit organizations (but not COGs) are eligible to apply for these funds. No matching funds are required, but they are encouraged. Bike paths and recreational trails are eligible uses of this money. The State of California Strategic Growth Council administers this program.

More information can be found at:
http://www.resources.ca.gov/bonds_prop84_urbangreening.html
http://sgc.ca.gov/urban_greening_grants.html

Caltrans Disabled Rights Court Settlement

Caltrans has reached an agreement to settle a class action suit brought by Californians for Disability Rights and the California Council for the Blind. The court decision was finalized in April 2010. The agreement calls for Caltrans to spend \$1.1 billion over the next 30 years, removing barriers to disabled pedestrians along state highways and at Caltrans park-and-ride facilities. Caltrans will administer the funds. The funds will be dispersed annually in the following amounts:

- \$25 million for the first five years
- \$35 million for the next 10 years
- \$40 million for the following 10 years
- \$45 million for the last five years

More information can be found at:

<http://www.dot.ca.gov/hq/paffairs/news/pressrel/09pr28.htm>

Wildlife Conservation Board Public Access Program

The Wildlife Conservation Board (WCB) provides grants for the development of facilities for public access to hunting, fishing, or other wildlife-oriented recreation. These monies can be used for trail head development, boardwalks, among others. Support facilities such as restrooms and parking areas are also eligible for funding. A 50% match is the preferred amount for the funds. The program typically has \$1 million for local assistance grants available annually.

More information can be found at:

<http://www.wcb.ca.gov/Access/index.html>

Transportation Planning Grant Program

The Transportation Planning Grant Program has two grant programs which can aide the planning and development of bicycle and pedestrian facilities. The Environmental Justice: Context Sensitive Planning Grant is to promote the involvement of low-income and minority groups in the planning of transportation projects. The program requires a local match of 10% with a 5% in-kind contribution maximum. The Community Based Transportation Planning program funds coordinated transportation and land use planning projects that encourage community involvement and partnerships. These projects must support livable and sustainable community concepts. The Office of Community Planning, part of Caltrans Division of Transportation Planning, is responsible for managing the program and receives approximately \$3 million annually for each program. Grants are available up to \$300,000 for the Community Based Transportation Planning grant, and \$250,000 for the Environmental Justice Context Sensitive Planning Grant. MPOs, Regional Transportation Planning Agencies, cities, counties, and transit agencies are all eligible to apply for funding.

More information can be found at:

<http://www.dot.ca.gov/hq/tpp/grants.html>

For EJ CTS - Tel. (916) 651-6889

For CBTP - Tel. (916) 651-6886



Local Funding

Proposition C Local Return

County-wide, 20 percent of Proposition C funds, Los Angeles County ½ cent sales tax revenue, returns to the cities according to population. The money may be spent on a variety of transportation projects, including bicycle projects. Some of the Proposition C funding is programmed through the Metro Call for Projects (see SAFETEA-LU section above).

Measure R Local Return

A portion of this Los Angeles County ½ cent sales tax revenue returns to the cities according to population. The money may be spent on a variety of transportation projects, including bicycle projects. Of the \$40 billion, which will be collected over the next 30 years from Measure R's passage in 2008, \$5.91 billion (approximately 15%) will be returned to local jurisdictions for improvements such as street resurfacing, rehabilitation and reconstructions, bikeways, pedestrian improvements, and streetscapes. Cities may spend this money as they choose from these categories. The distribution of funds varies by year.

More information can be found at:
<http://www.metro.net/projects/measurer/>

Resurfacing and Repaving

Local jurisdictions should take advantage of opportunities to add bicycle lanes and other markings upon resurfacing and repaving of streets. While lanes are re-stripped, the bike facilities can be painted as well. This requires close coordination with the Planning and Public Works so that low cost bicycle upgrades are included in street maintenance projects.

New Construction

Future road widening and construction projects are one means of providing bike lanes, pedestrian improvements and trails. To ensure that roadway construction projects provide appropriate measures where needed, it is important that an effective review process or ordinance is in place to ensure that new roads meet the standards and guidelines presented in this master plan. Developers may also be required to dedicate land toward the widening of roadways in order to provide for enhanced bicycle mobility.

Impact Fees and Developer Mitigation

Impact fees may be assessed on new development to pay for transportation projects, typically tied to vehicle trip generation rates and traffic impacts generated by a proposed project. A developer may reduce the number of trips (and hence impacts and cost) by paying for on- or off-site bikeway improvements that will encourage residents to bicycle rather than drive. In-lieu parking fees may also be used to contribute to the construction of new or improved bicycle parking facilities. Establishing a clear nexus or connection between the impact fee and the project's impacts is critical in avoiding a potential lawsuit. Local jurisdictions have the option to create their own impact fee and mitigation requirements.

Benefit Assessment Districts

Bike paths, bicycle lanes, bicycle parking, and related facilities can be funded as part of a local benefit assessment district. However, defining the boundaries of the benefit district may be difficult since the bikeways will have citywide or regional benefit. Sidewalks, trails, intersection crossings and other pedestrian improvements can also be funded through benefit assessments.

Property Taxes and Bonds

Cities and counties can sell bonds to pay for bikeways, pedestrian facilities, as well as any amenities related to these facilities. A super-majority of two-thirds of voters in that jurisdiction must vote to levy property taxes to repay the bonds.

Business Improvement Districts

Bicycle and pedestrian improvements can often be included as part of larger efforts of business improvement and retail district beautification. Similar to benefit assessments, Business Improvement Districts (BIDs) collect levies on businesses in order to fund area-wide improvements that benefit businesses and improve access for customers. These districts may include provisions for bicycle improvements such as bicycle parking or shower and clothing locker amenities, sidewalk improvements and pedestrian crossing enhancements.

User Fees

Bicycle lockers and automated bicycle parking could be paid for with a user fee. Not being able to project how much revenue the fee would generate, this funding source would require an alternative backup source.

Parking Meter Revenues

Cities can fund various improvements through parking meter revenues. The ordinance that governs the use of the revenues would specify eligible uses. Cities have the option to pass ordinances that specify bicycle or pedestrian facilities as eligible expenditures.



Adopt-a-Path Program

Maintenance of bicycle paths and recreational trails could be paid for from private funds in exchange for recognition, such as signs along the path saying “Maintained by (name)”. In order for this to consistently work, a special account could be set up for donors to pay into.

General Funds

Cities and counties may spend general funds as they see fit. Any bicycle, pedestrian, or trails project could be funded through general funds and then matched with other funds.

CHAPTER 11

IMPLEMENTATION



Photo Credit: Chicago Bicycle Program

The implementation of this plan will take years, and will be dependent upon numerous factors including the general economy, budget, and state of development, among others. Although projects will be prioritized here, the City will take advantage of opportunities to implement projects through maintenance scheduled street re-surfacings and re-stripings, where there is little additional cost for such an addition. Improvements may also occur through developer mitigations. Additionally, before new facilities are implemented, the City will ensure budget to maintain the new facilities.

Financing

PAST EXPENDITURES

The City has successfully attracted grants to fund bikeway projects and has also contributed its own funds to existing bikeways. The following describes those projects.

- \$52,400 for Avenue J-8 Class II Bike Lanes, Challenger Way to 20th Street East (90% is BTA funded)
- \$55,200 for Sierra Highway Class II Bike Lanes, Avenue J to Avenue I (90% is BTA)
- \$16,300 for 70th Street West Class II Bike Lanes, Avenue M to Avenue L-8 (All Local Transportation Funds)
- \$14,000 for Avenue I Class II Bike Lanes, 15th Street East to 20th Street East (All Local Transportation Funds)

Projects that are funded and to be completed in 2012 are as follows:

- \$270,000 for Lancaster Blvd. Class II Bike Lane Improvements, 10th Street West to Valley Central Way (90% is BTA funded)
- \$225,365 for 20th Street West Class II Bike Lanes, Avenue J-8 to Avenue L (90% is BTA funded)
- \$50,000 for Valley Central Way Class II Bike Lanes, Avenue J to Lancaster Blvd. (90% is HSIP funded)
- \$56,000 for 25th Street West Class II Bike Lanes, Avenue J to Lancaster Blvd. (90% is HSIP funded)
- \$110,350 for Avenue J-8 Class II Bike Lanes, 20th Street East to 22nd Street East (90% is BTA funded)

The City does not currently set aside past expenditure data on trails, pedestrian, or removing barriers to disabled travel.



FUTURE FINANCIAL NEEDS

Altogether, the City seeks funds for 40 miles of Class I bike path, 137 miles of new or improved Class II bike lanes, and 37 miles of new or improved Class III bike routes. The total estimated cost for Lancaster's on-street bikeways is \$30,928,750, with an additional \$44,034,000 for bike paths. This includes the cost of coloring bike lanes, conducting road diets, or widening the shoulder to add facilities. Appendix B contains detailed cost estimates for on-street bikeways.

Lancaster may decide to install other devices to improve its bikeways. Full roundabouts cost approximately \$200,000 each, whereas mini-roundabouts and mini-circles will cost about \$15,000 each.

Lancaster intends to begin a bicycle parking program, and will seek funding to kick start this program. With recommended number of racks as identified in the Bicycle Plan, there are a total of 688 U-rack bicycle parking units required. To jump-start this program, the City would purchase 400 inverted U-racks for distribution and installation. U-racks typically cost \$500 / rack. Additional bicycle lockers are likely needed at large employment sites. Bicycle lockers typically cost \$3,000 / locker, which hold two bicycles. The estimated total cost of the bicycle parking program will be \$344,000. Additional bicycle parking will need to be added, maintained, and replaced over time as cycling increases throughout Lancaster.

The City plans to add 48 miles of equestrian trails. These trails will require different treatments that vary greatly in cost. Unimproved equestrian trails will require little improvements and maintenance. Improved equestrian trails may require surface enhancements, and may be composed of decomposed granite with fences. The costs will vary depending upon the location and type of trail. Per mile costs for equestrian trails vary between \$5,000 per mile to \$150,000 per mile for the most developed with fences.

The City plans to add 6 miles of multipurpose paths. These paths will be a combination of paved and unpaved for use by wheeled non-motorized users as well as pedestrians. For decomposed granite paths, costs are approximately \$100,000 per mile.

This plan includes 24 miles of jogging loops. These jogging loops will could take the form or rubberized sidewalk, paved surface, or earthen trail. The costs will vary accordingly. Rubberized sidewalk is approximately \$320,000 per mile.

Lancaster will remove barriers to disabled travel throughout the City. The total estimated cost to remove these barriers is \$17,216,980, including priority missing sidewalks. The total cost for additional sidewalks in rural and undeveloped areas is \$81,350,500.

The City plans to enhance 60 pedestrian intersections throughout Lancaster, and add approximately 45 linear miles of new sidewalk.

There will also be ongoing costs associated with each component of this plan. This includes bicycle parking, planning, trails amenities, education, encouragement, and enforcement programs.

It is important to note many of these improvements can be made along with other projects. The bike lanes can be striped when streets are resurfaced at marginal extra cost. A significant majority of the mileage of missing sidewalks lie along streets that have not been developed. Sidewalks will be put in as new development occurs. Most of the budget the City will need will be used for the following:

- ADA retrofits for curb ramps, bus stops, moving push buttons, audio signals
- Bike paths
- Equestrian trails
- Multipurpose paths
- Jogging trails
- Missing sidewalks in existing developed areas
- Coloring of bike lanes
- Bicycle parking
- Trail amenities

Further, some of the paths and trails can be installed as part of new development.



Project Priorities

PRIORITIZATION PROCEDURE

Prioritizing capital improvements projects requires context sensitive analysis that no model will be able to predict. However, Lancaster can use certain criteria to ensure that projects which support active transportation receive priority.

This Plan will be implemented as funds become available to the City. Projects are prioritized into three categories: short-term, medium-term, and long-term. Criteria used in order to prioritize these projects include:

- Preferences expressed by local cyclists, equestrians, pedestrians, disabled, and seniors at the public workshops and through comments received from the public via e-mail and personal contact
- Preferences expressed by the Technical Advisory Committee
- Priorities established in the Master Plan survey (see Public Outreach chapter)
- City staff preferences
- Destinations served
- Completion of a network
- History of bicycle-involved or pedestrian-involved crashes
- Improvement that serves and immediate safety need
- Current availability and/or suitability of right-of-way
- Likelihood of attracting a large number of users
- Connectivity with other jurisdiction bikeways and trails
- Land uses that support facilities
- Cost effectiveness
- Links to other transportation modes

The City will seek to implement planned facilities based on opportunity, such as when streets are resurfaced, development occurs, or other street projects are taking place.

Lancaster should develop its own check-list, and weigh important factors more heavily when prioritizing capital improvement projects. Criteria include those listed above, and can be more general such as “promotes active transportation” or “addresses safety concern for pedestrians and bicyclists.”

The following tables identify all the projects grouped according to their project category. The projects are not ranked within each project category.

On-Street Bikeways

TABLE 11-1: SHORT-TERM ON-STREET BIKEWAYS PRIORITIES

Street	Section	Cost
30th St. W	South	\$225,000
Avenue J	Central	\$427,500
Avenue K	Central	\$400,000
Avenue J	East	\$1,767,500
Avenue J-4	East	\$10,000
30th St. W	North	\$155,000
Avenue J	West	\$518,750
Avenue M	West	\$631,250
Avenue N	West	\$75,000
Avenue M	Central	\$205,000
Sierra Highway	North	\$499,500
50th St. W	Central	\$375,000
60th St. W	South	\$137,500
Avenue K	West	\$775,000
Sierra Highway	Central	\$200,000
50th St. W	South	\$37,500
Avenue G	Central	\$630,000
30th St. W	Central	\$187,500
Lancaster Boulevard	West	\$170,000
Lancaster Boulevard	Central	\$425,000
Avenue L	Central	\$740,000
60th St. W	North	\$1,500,000
15th St. W	Central	\$234,000
10th St. W	Central	\$154,900
10th St. W	South	\$35,000
Avenue I	Central	\$452,500
Avenue G	West	\$670,000
Division Street	North	\$95,000
Avenue I	West	\$495,000
Avenue K-8	Central	\$476,250
Avenue K-8	West	\$259,750
Avenue L	West	\$368,750
Avenue L-8	Central	\$65,000



Street	Section	Cost
Avenue J-8	Central	\$251,150
15th St. W	North	\$87,500
15th St. W	South	\$146,500
60th St. W	Central	\$212,500
Avenue J-8	West	\$440,000
Avenue L-8	West	\$173,750
Avenue H	Central	\$2,145,000
Division Street	Central	\$232,500
25th St. W	Central	\$187,500
Valley Central Way	Central	\$125,000
Challenger Way	Central	\$200,000
15th St. E	Central	\$250,000
TOTAL		\$17,849,550

TABLE 11-2: MEDIUM-TERM ON-STREET BIKEWAYS PRIORITIES

Street	Section	Cost
Avenue H	West	\$2,145,000
Avenue H	Central	\$243,750
45th St. W	Central	\$75,000
Avenue H-8	Central	\$322,000
Avenue I	East	\$180,000
Lancaster Boulevard	East	\$1,045,000
Avenue J-8	East	\$145,250
35th St. W	Central	\$182,500
32nd St. W	Central	\$65,000
20th St. W	North	\$75,000
10th St. W	North	\$612,500
12th St. W	Central	\$17,500
Fern Avenue	Central	\$20,000
35th St. W	South	\$720,000
25th St. W	South	\$75,000
20th St. W	Central	\$168,500
20th St. W	South	\$612,500
Avenue H-8	West	\$2,000
40th St. W	Central	\$138,750
Fig Avenue	Central	\$15,000
5th St. E	Central	\$123,000
20th St. E	Central	\$181,250
25th St. E	Central	\$102,500
27th St. E	Central	\$131,500
30th St. E	Central	\$227,500
35th St. E	Central	\$31,250
Sierra Highway	South	\$125,000
Division Street	South	\$262,500
Challenger Way	South	\$137,500
15th St. E	South	\$47,750
20th St. E	South	\$300,000
25th St. E	South	\$12,500
30th St. E	South	\$75,000
TOTAL		\$8,617,500



TABLE 11-3: LONG-TERM ON-STREET BIKEWAYS PRIORITIES

Street	Section	Cost
65th St. W	Central	\$90,000
50th St. W	North	\$1,000,000
Avenue H	East	\$100,000
70th St. W	North	\$80,000
Avenue K	East	\$110,000
Avenue K-8	East	\$87,500
Avenue L	East	\$1,312,500
5th St. E	North	\$42,500
Challenger Way	North	\$50,000
15th St. E	North	\$5,000
20th St. E	North	\$168,750
25th St. E	North	\$5,000
30th St. E	North	\$10,000
70th St. W	Central	\$20,000
40th St. E	North	\$10,000
40th St. E	Central	\$20,000
90th St. W	North	\$40,000
55th St. W	South	\$75,000
45th St. W	South	\$225,000
40th St. W	South	\$189,500
15th St. W	South	\$146,000
12th St. W	South	\$28,200
5th St. E	South	\$28,500
35th St. E	South	\$50,000
40th St. E	South	\$10,000
90th St. W	Central	\$40,000
65th St. W	South	\$116,500
70th St. W	South	\$75,000
110th St. W	South	\$20,000
Newgrove St.	Central	\$18,000
TOTAL		\$4,172,950

Bicycle Off-Street Paths

TABLE 11-4: SHORT-TERM OFF-STREET BICYCLE PATH PRIORITIES

Path	Length	Cost
California Aqueduct Bike Path	2.6	\$2,630,000
Sierra Highway Bike Path	1	\$1,000,000
Amargosa Creek Bike Path	2.2	\$2,200,000
Avenue L Bike Path	3.4	\$3,400,000
Avenue K-8 Bike Path	0.2	\$200,000
35th Street Paved Multipurpose Path	2.6	\$2,600,000
TOTAL	12.0	\$12,030,000

TABLE 11-5: MEDIUM-TERM OFF-STREET BICYCLE PATH PRIORITIES

Path	Length	Cost
40th St. West Bike Path	1	\$1,000,000
Avenue G Bike Path	3.4	\$3,370,000
Utility Corridor Bike Path	4.6	\$4,620,000
Avenue H Bike Path	1.5	\$1,500,000
Lancaster Boulevard/Avenue I Loop Paved Multipurpose Path	3.5	\$3,500,000
TOTAL	14.0	\$13,990,000

TABLE 11-6: LONG-TERM OFF-STREET BICYCLE PATH PRIORITIES

Path	Length	Cost
Drainage Channel Bike Path	13.04	\$13,040,000
Avenue K-8 bridge	0.2	\$4,224,000
Avenue H-8 Connector Bike Path	0.25	\$250,000
Avenue L Connector Bike Path	0.5	\$500,000
TOTAL	14.0	\$18,014,000



Trails

TABLE 11-7: SHORT-TERM TRAILS PRIORITIES

Trail
Jogging Loop 1: 35th St. W, Avenue K-8, Sierra Highway, Avenue J
California Aqueduct Trail
Avenue I, Lancaster Blvd., 35th St. W, 50th St. W loop Multipurpose Path
35th St. W from Lancaster Boulevard to Avenue K-8 Multipurpose Path
Drainage Channel Trail

TABLE 11-8: MEDIUM-TERM TRAILS PRIORITIES

Trail
Jogging Loop 2: Lancaster Boulevard, 30th St. E, Soccer Center, Avenue J-8, 5th St. E
Amargosa Creek Trail
Avenue K-8 from 30th St. W to 15th St. W Trail
Utility Corridor Trail

TABLE 11-9: LONG-TERM TRAILS PRIORITIES

Trail
Avenue K-8 from 35th St. E to Littlerock Wash
Avenue H Trail
Littlerock Wash Trail
Avenue G / Division Street Trail
40th St. East Trail
33rd Street East Drainage Channel Trail
Avenue K-8 from 20th St. E to 30th St. E Trail
25th St. E from Avenue K-8 to Avenue L Trail

Pedestrian Improvements

TABLE 11-10: SHORT-TERM PEDESTRIAN IMPROVEMENT PRIORITIES

Location
Avenue K / 30th St. West
Avenue J-8 / 27th St. West
Lancaster Boulevard / 12th St. West
Avenue I / 10th St. West
Avenue I / 5th St. East
Avenue J-8 / 30th St. West
30th St. East between Lancaster Boulevard and Avenue I
Lancaster Boulevard / 30th St. West
Avenue K-8 / 10th St. West
Avenue L / 20th St. West
Avenue L (eastbound) / CA-14 Northbound on-ramp
Avenue L Eastbound / Sierra Highway on- and off-ramps
Avenue I / Division Street
Lancaster Boulevard / Sierra Highway
Avenue J-8 / 20th St. West
Avenue K / 10th St. West
Lancaster Boulevard / 15th St. West
Avenue I / Fern Avenue
Avenue J / Sierra Highway
Avenue K / Yew Street



TABLE 11-11: MEDIUM-TERM PEDESTRIAN IMPROVEMENT PRIORITIES

Location
Avenue L (eastbound) / CA-14 Northbound off-ramp
Avenue L (westbound) / CA-14 Northbound on-ramp
Avenue L (westbound) / CA-14 Southbound off-ramp
Avenue L (westbound) / CA-14 Southbound on-ramp
Avenue H-8 / 10th St. West
Lancaster Boulevard / 30th St. East
Avenue J / 10th St. West
Avenue J-8 / 10th St. West
Avenue K / 20th St. West
Avenue J / Challenger Way
Avenue I / Sierra Highway
Avenue J-8 / Sierra Highway
Avenue J / Fig Avenue
Avenue K / CA-14 northbound off-ramp (15th St. West) (Avenue K Crossing, east side)
Avenue I / 15th St. East
Jackman Avenue / Fern Avenue
Avenue J / Division Street
Avenue J / 20th St. East
Avenue J-8 / 30th St. East
Avenue K (north side) / CA-14 Southbound Exit
Avenue K (north side) / CA-14 Northbound Ramp
Avenue L Eastbound On-ramp (west of railroad) / Sierra Highway
Avenue J / 20th St. West

TABLE 11-12: LONG-TERM PEDESTRIAN IMPROVEMENT PRIORITIES

Location
Avenue I / 20th St. West
Avenue I between 10th St. West and Kingtree Avenue
Avenue I between 30th St. East and 20th St. East
Avenue L-8 / 35th St. West
Avenue J / 15th St. West
Avenue J / 5th St. East
Avenue L Westbound / Sierra Highway on- and off-ramps
Avenue J-8 / 15th St. East
Avenue K / CA-14 southbound on-ramp
Avenue K / CA-14 (15th St. West)
Avenue K (west of railroad) / Sierra Highway
Avenue K / 5th St. East
Avenue K / Challenger Way
Avenue K-4 / Prime Desert Woodland
Avenue L / 60th St. West
Avenue L (eastbound) / CA-14 Southbound on-ramp
Avenue L Westbound On-ramp (west of railroad) / Sierra Highway

ADA Improvements

The ADA Improvement priorities are available in Chapter 9, the ADA Transition Plan. Tables 9-9 and 9-10 illustrate short-term and medium-term priorities for missing sidewalks, and Tables 9-11 through 9-13 illustrate three tiers of priority for intersection improvements.



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CHAPTER 12

DESIGN GUIDELINES



Bicycle Guidelines

BIKEWAY DEFINITIONS

The following section summarizes key operating and design definitions.

Bicycle

The American Association of State Highway and Transportation Officials' (AASHTO) (1999) definition of a bicycle is "every vehicle propelled solely by human power which any person may ride, having two tandem wheels, except scooters and similar devices. The term 'bicycle' also includes three- and four-wheeled human-powered vehicles, but not tricycles for children."

Class I



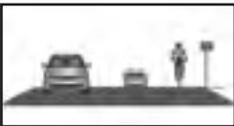
Referred to as a bike path, shared-use path, or multi-purpose trail. Provides for bicycle travel on a paved right-of-way completely separated from any street or highway. Other users may also be found on this type of facility.

Class II



Referred to as a bike lane. Provides a striped lane for one-way bicycle travel on a street or highway.

Class III



Referred to as a bike route. Provides for shared use with pedestrian or motor vehicle traffic.

BICYCLE DESIGN GUIDELINES

The following guidelines present the recommended minimum design standards and other recommended ancillary support items for shared use paths, bike lanes, and bike routes. Where possible, it may be desirable to exceed the minimum standards for shared use paths or bike lane widths, signage, lighting, and traffic signal detectors. These guidelines cover basic concepts. The Caltrans Highway Design Manual Chapter 1000 and the AASHTO Guide for the Development of Bicycle Facilities contain more detail standards and guidance and should be followed.

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 in locations with few driveways and intersections, be properly separated from the roadway, 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 tread way where feasible. Pavement width of 12 feet is preferred.
5. Multi-use trails and unpaved facilities that serve primarily a recreation rather than transportation function and will not be funded with federal transportation dollars may not need to be designed to Caltrans standards.
6. Class I bike path crossings of roadways 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 approximately 15,000 should be assessed for signalized crossing, flashing LED beacons, crossing islands, or other devices. Roundabouts can provide desirable treatment for a bike path intersecting with roadways where the bike path is not next to a parallel street.
7. Landscaping should generally consist of low water-consuming native vegetation and should have the least amount of debris.
8. Lighting should be provided where commuters will likely use the bike path in the late evening.
9. Barriers at pathway entrances should be clearly marked with reflectors and be ADA accessible (minimum five feet clearance), see Figure 12-1.

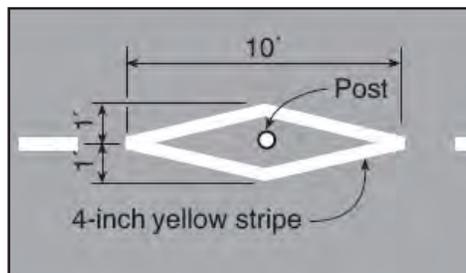


Figure 12-1: Bike Path Barrier Post Treatment

10. Bike path construction should take into account vertical requirements and the impacts of maintenance and emergency vehicles on shoulders.

Class II Bike Lane Facilities Design Recommendations

The following guidelines should be used when designing Class II bikeway facilities. These guidelines are provided by the Caltrans Highway Design Manual Chapter 1000, the American Association of State Highway and Transportation Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD), and the Caltrans Traffic Manual.

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 the following.

- Bike lanes located between through traffic lanes and right turn pockets at intersection approaches (see Figure 12-4).
 - 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.
 - Where there is no curb and the pavement is smooth to the curb.
3. "Bike Lane" signage, as shown in Figure 12-2, shall be posted after every significant intersection along the route of the bike lane facility. Directional signage may also accompany this sign to guide bicyclists along the route. If a bike lane exists where parking is prohibited, "no parking" signage may accompany bike lane signage.



Figure 12-2: Bike Lane Sign (Caltrans)

4. Bike lanes should be striped with a solid white stripe of width at least 4 inches and may be dashed up to 200 feet before the approach to an intersection. This design of a dashed bike lane allows for its dual use as a right-turn pocket for motor vehicles.
5. Stencils shall also be used within the lane on the pavement that read "bike lane" and include a stencil of a bicycle with an arrow showing the direction of travel (see Figure 12-3).



Figure 12-3: Bike Lane Striping and Stencil

6. Bike lanes with two stripes are more visible than those with one and are preferred. The second stripe 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 12-4.
8. Loop detectors that detect bicycles should be installed near the stop bar in the bike lane at all signalized intersections where bicycles are not reasonably accommodated. Signal timing and phasing should be set to accommodate bicycle acceleration speeds (see Figure 12-4.)

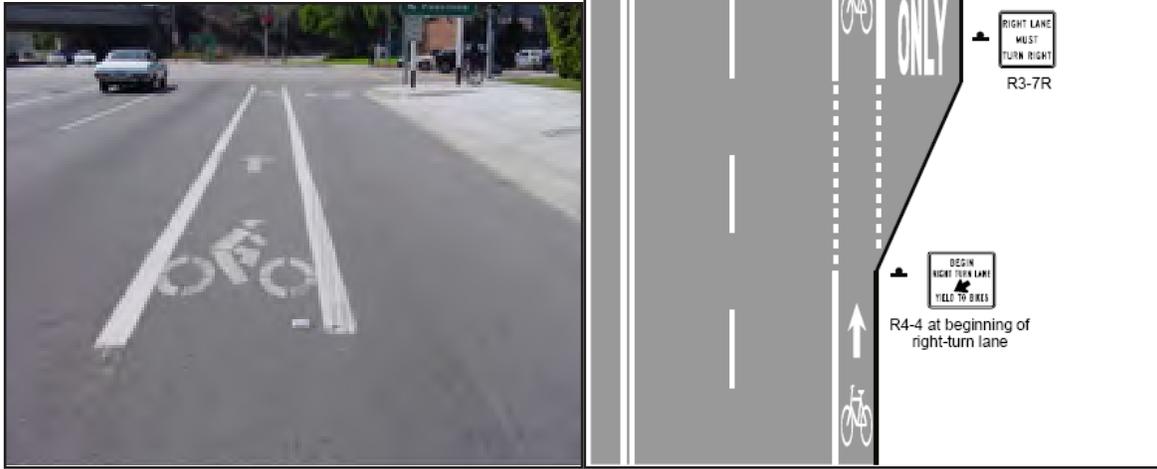


Figure 12-4: Bike Lane Treatment at Intersection (MUTCD, AASHTO)



Class III Bike Route Facilities Design Recommendations

Bike routes have been typically designated as simple signed routes along street corridors, usually local streets and collectors, and sometimes along arterials. With proper route signage, design, and maintenance, bike routes can be effective in guiding bicyclists along a route suited for bicycling without having enough roadway space to provide a dedicated Class II bike lane. Class III Bike Routes can be designed in a manner that encourages bicycle usage, convenience, and safety. There are a variety of other improvements that can enhance the safety and attraction of streets for bicyclists. Bike routes can become more useful when coupled with such techniques as the following:

- Route, directional, and distance signage
- Wide curb lanes
- Sharrow stencils painted in the traffic lane along the appropriate path of where a bicyclist would ride in the lane
- Accelerated pavement maintenance schedules
- Traffic signals timed and coordinated for cyclists (where appropriate)
- Traffic calming measures

The following design guidelines should be used with the implementation of new Class III Bike Route facilities:

Proper “Bike Route” signage, as shown in Figure 12-5, should be posted after every intersection along the route of the bikeway. This will inform bicyclists that the bikeway facility continues and will alert motorists to the presence of bicyclists along the route. Directional signage may accompany this sign as well to guide bicyclists along the route.



Figure 12-5: Class III Bike Route Sign

This Plan recommends using the sharrow stencil (Figure 12-6) as a way to enhance the visibility and safety of new Class III Bike Route facilities. The stencil should be placed outside of on-street vehicle parking to encourage cyclists to ride away from parked cars’ open doors. Stencils should also be placed at one or two locations on every block or more frequently on long blocks.

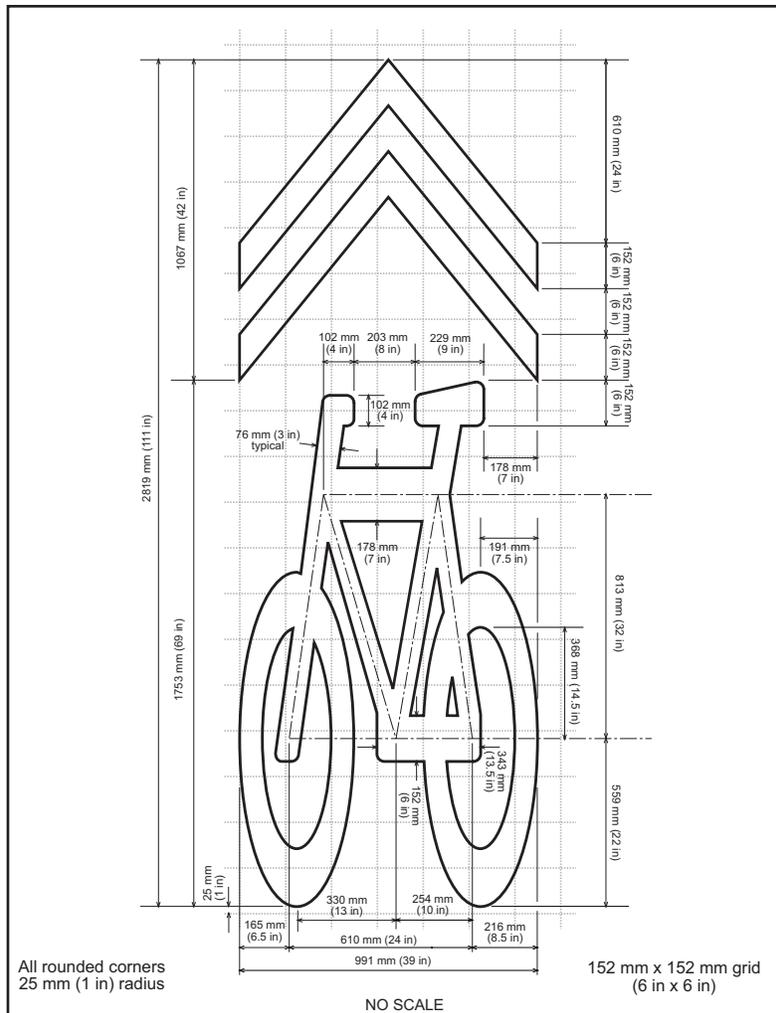


Figure 12-6: Sharrow Stencil

Sharrows installed next to parallel parking should be a minimum distance of 11 feet from the curb. Installing farther than 11 feet from the curb is usually desired to promote riding outside of the “door zone” and to promote cyclists taking the lane. Placing the sharrow between vehicle tire tracks increases the life of the markings and decreases long-term maintenance costs, as shown in Figure 12-7.



Figure 12-7: Sharrow placement

A numbered bike route network may be devised as a convenient way for bicyclists to navigate through the valley much the way the numbered highway system guides motorists efficiently through the roadway network. This could be used on all classes of bikeways. An example of a numbered bikeway sign is shown in Figure 12-8.



Figure 12-8: Numbered Bikeway Sign (MUTCD)

Green Sharrow Lanes (Type B or B-Type Sharrow)

The City of Long Beach is presently experimenting with green coloring of travel lanes (see Figure 12-9) with sharrows to strengthen the effect. The wide green stripe sends a strong signal to cyclists as to where they should ride, and 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 to apply this treatment. This treatment has not yet been approved as part of the California Manual of Uniform Traffic Control Devices (CA MUTCD). Until it is approved, the City would have to use them under a sanctioned experimental process.



Figure 12-9: Long Beach Green Sharrow Lane

Destination signs add value to bike routes and assist cyclists to develop a mental map of the route system. Arrows pointing to “Downtown,” “The BLVD,” “Antelope Valley College,” or “National Soccer Center,” should be a standard part of the bikeway network. Destination signs should be placed at the intersection of bikeways to notify cyclists where each bike route goes.

BIKEWAYS 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. The table below provides guidance on some of the most important signs.

TABLE 12-1: RECOMMENDED BIKEWAY SIGNAGE AND MARKINGS

Signage	Location	Color	CA MUTCD Designation	MUTCD Designation
Bike Lane Ahead: Right Lane Bikes Only	At beginning of bike lanes	B on W	N/A	R3-16 R3-17
Bicycle Crossing	For motorists at a bikeway crossing	B on Y	N/A	W11-15 with W11-15a
Bike Lane	At the far side of significant arterial intersections	B on W	R81	D11-1
STOP Ahead	Where a STOP sign is obscured	B,R on Y	W17	W3-1
Signal Ahead	Where signal is obscured	B,R,G	YW41	W3-3
Pedestrian Crossing	Where a pedestrian walkway crosses a bikeway	B on Y	W54	W11A-2
Directional Signs	At intersections where access to major destinations is available	W on G	G7 G8	D1-1b(r/l) D1-1c
Right Lane Must Turn Right; Begin Right Turn Here, Yield to Bikes	Where a bike lane ends before an intersection	B on W	R18	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	W16-1 with W11-1

Figure 12-10 below shows an example of a “Share the Road” sign.



Figure 12-10: Share the Road sign

Lancaster may want to add its own logo to give the bikeway signage a distinctive local flavor as in the picture of signs used in Berkeley (Figure 12-11).



Figure 12-11: Berkeley Sign

Vancouver, British Columbia, marks street signs with bicycles if they are a bicycle route as shown below in Figure 12-12.



Figure 12-12: Vancouver Street Signs

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 below.



Figure 12-13: Bicycle Signage and Pavement Markings

Colored Bicycle Lanes

Green bicycle lanes (Figure 12-14) are short lanes that are used where right-turn pockets direct motorists through a bicycle lane to turn right. The green lane makes it obvious to motorists that they are crossing the bicycle lane and makes them more likely to be cautious and to look for bicycles.



Figure 12-14: Green Bicycle Lanes

Green bicycle lanes can be used as continuous treatment as well, not only in conflict zones. The treatment has been approved on an interim basis by the Federal Highway Administration and the California Traffic Control Device Committee. Lancaster would need to notify the state if it chooses to use this treatment.

Buffered Bike Lanes

Buffered bike lanes provide a painted divider between the bike lane and the travel lanes. 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 slow traffic as they narrow the travel lanes. 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. 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.

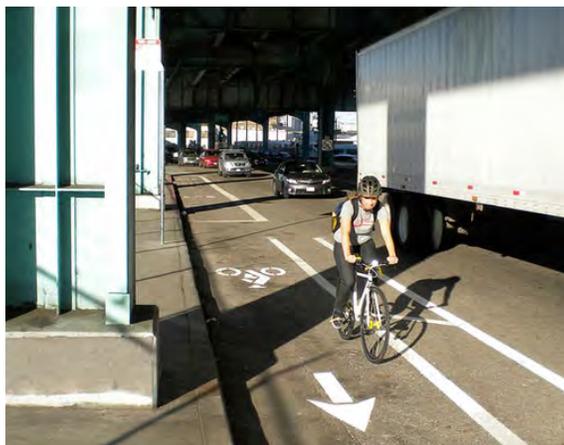


Figure 12-15: Buffered Bike Lanes

BICYCLE PARKING

Bicycle parking is not standardized in any state or municipal code. However, there are preferable types of secure bicycle accommodations available. Bicycle parking is a critical component of the network and facilitates bicycle travel, especially for commuting and utilitarian purposes. The provision of bicycle parking at every destination ensures that bicyclists have a place to safely secure their mode of travel. Elements of proper bicycle parking accommodation are outlined below.

1. Bike racks provide short-term parking. Bicycle racks should offer adequate support for the bicycles and should be easy to lock to. Figures 12-16 display a common inverted-U design that does this. Figure 12-17 depicts a multi-bicycle rack that works well. Figure 12-18 shows an innovative concept in which the bike rack itself looks like a bicycle.



Figure 12-16: "Inverted-U" Bicycle Rack



Figure 12-17: Multi-Bicycle Parking Rack



Figure 12-18: "Bike" Bike Rack

2. Long-term parking should be provided for those needing all day storage or enhanced safety. Bicycle lockers offer good long-term storage, as shown in Figure 12-19. Attendant and automated parking also serves long-term uses as shown in Figure 12-20.



Figure 12-19: Bicycle Lockers



Figure 12-20: Automated Bicycle Parking

3. Bicycle parking should be clearly identified by signage, such as in Figure 12-21. Signage shall also identify the location of racks and lockers at the entrance to shopping centers, buildings, and other establishments where parking may not be provided in an obvious location, such as near a front door.



Figure 12-21: Bicycle Parking Sign (Caltrans)

4. Bicycle parking should be located close to the front door of buildings and retail establishments in order to provide for the convenience, visibility, and safety of those who park their bicycles.
5. Bicycle lockers should have informational signage, placards, or stickers placed on or immediately adjacent to them identifying the procedure for how to use a locker. This information at a minimum should include the following:
 - Contact information to obtain a locker at City Hall or other administrating establishment
 - Cost (if any) for locker use
 - Terms of use
 - Emergency contact information
6. Bicycle lockers should be labeled explicitly as such and shall not be used for other types of storage.
7. Bicycle racks and storage lockers should be bolted tightly to the ground in a manner that prevents their tampering.
8. Bike corrals are created when a local jurisdiction replaces on-street auto-parking spaces with rows of bicycle racks. They should be used where bicycle parking is in high demand.

Pedestrian Guidelines

ESSENTIAL PRINCIPLES OF PEDESTRIAN CROSSINGS

The following principles should be incorporated into every pedestrian crossing improvement:

- Pedestrians must be able to cross roads safely. Cities have an obligation to provide safe and convenient crossing opportunities.
- The safety of all street users, particularly more vulnerable groups, such as children, the elderly, and those with disabilities, and more vulnerable modes, such as walking and bicycling, must be considered when designing streets.
- Pedestrian crossings must meet accessibility standards and guidelines.
- Real and perceived safety must be considered when designing crosswalks—crossing must be “comfortable.” A “safe” crossing that no one uses serves no purpose.
- Crossing treatments that have the highest crash reduction factors (CRFs) should be used when designing crossings.
- Safety should not be compromised to accommodate traffic flow.
- Good crossings begin with appropriate speed. In general, urban arterials should be designed to a maximum of 30 mph or 35 mph (note: 30 mph is the optimal speed for moving motor vehicle traffic efficiently).
- Every crossing is different and should be selected and designed to fit its unique environment.



The following issues should also be considered when planning and designing crossings:

- Ideally, uncontrolled crossing distances should be no more than 21 feet, which allows for one 11-foot lane and one 10-foot lane. Ideally, streets wider than 40 feet should be divided (effectively creating two streets) by installing a median or two crossing islands.
- The number of lanes should be limited to a maximum of three lanes per direction on all roads (plus a median or center turn lane).
- There must be a safe, convenient crossing near every transit stop.
- Double (or triple) left or right turns concurrent (permissive) with pedestrian crossings at signalized intersections must never be allowed.
- Avoid concurrent movements of motor vehicles and people at signalized intersections.
- People should never have to wait more than 90 seconds to cross at signalized intersections.
- Pedestrian signals should be provided at all signalized crossings where pedestrians are allowed.



PEDESTRIAN CROSSING DESIGN GUIDELINES

Safe pedestrian crossings are critical components of the pedestrian network. Although the California Vehicle Code states that a crosswalk implicitly exists on every leg at every intersection, it is important to recognize that visibility and safety are important factors that determine where people will attempt to cross a street. The following guidelines are recommended for pedestrian crossings, including both signalized and unsignalized crosswalks.

- Crosswalks should be a minimum of 6 feet in width, and at least 10 feet in commercial districts. Wider crosswalks should be considered in areas of high pedestrian volumes.
- Appropriate pedestrian crossing signage should be displayed in advance of and adjacent to all marked unsignalized crosswalks in order to enhance visibility of pedestrians by motorists.
- Uncontrolled pedestrian crosswalks should be adequately lighted, have clear sight distances, and be free from obstructions, such as foliage and poles.
- Uncontrolled crosswalks across streets should be evaluated for high visibility treatments.
- Mid-block crosswalks should be designated in areas with relatively high pedestrian activity and crossing patterns, and where the distance to the nearest marked crosswalk is greater than 200 feet.
- At signalized intersections, efforts should be made to install marked crosswalks at every leg of the intersection where feasible given traffic and other considerations.
- Pedestrian signals should be timed in order to accommodate slower pedestrians. This should take into consideration people with slower walking speeds, such as seniors and persons with disabilities, in areas where this is appropriate. This may be also achieved by using Pedestrian-Friendly-User-Intelligent (PUFFIN) signals that detect pedestrians in the crosswalk and extend the walk time to allow pedestrians to finish their crossing.
- In areas with significant pedestrian traffic, the “walk” signals should be automatically timed with the traffic signal and no push buttons should be needed.
- All crossings should meet all ADA standards and guidelines.
- ADA-compliant curb ramps should be provided at all corners. Where physically feasible, every corner should have two perpendicular ramps.
- Where feasible, pedestrian crossing islands should be considered where pedestrians are required to cross a multi-lane street, especially at uncontrolled locations.
- Consideration should be given to reducing the turning radius of corners at intersections in order to minimize the crossing distance of pedestrians and to slow traffic, especially across busy multi-lane arterials. The presence of buses, trucks and other large vehicles should be considered in designing the turning radii.
- Curb extensions should be considered at intersection corners as a way to minimize the crossing distance of pedestrians and to increase visibility.

INTERSECTION TOOLBOX

A growing number of communities are using a variety of techniques to improve pedestrian safety and access at intersections. Many of these are listed below. Local jurisdictions can select from this list and apply the appropriate tool at each given location.



Accessible pedestrian signal: A pedestrian signal that provides for accessible information to pedestrians who are visually impaired using audible or transmittable tones or speech messages. These signals may also include vibrating surfaces to provide accessibility to those who have visual or hearing impairments. These should be provided at all signalized intersections with those having significant pedestrian activity retrofitted first.

Advanced stop bar: A placing of the stop limit line for vehicle traffic at a traffic signal behind the crosswalk for the added safety of crossing pedestrians. Advanced limit lines should be placed in front of stop controlled intersections, usually about 4 to 6 feet in front of the crosswalk.



Advanced yield line: A placing of the yield line (shark's teeth) for vehicle traffic in advance of a crosswalk at uncontrolled locations. Advanced yield lines should be placed 20 to 50 feet in advance of crosswalks.

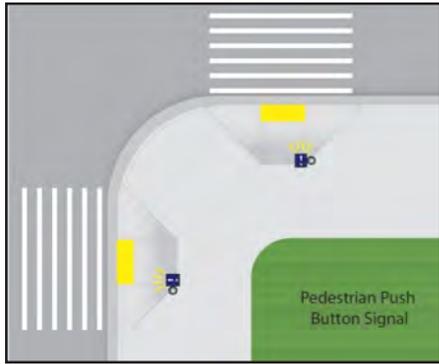
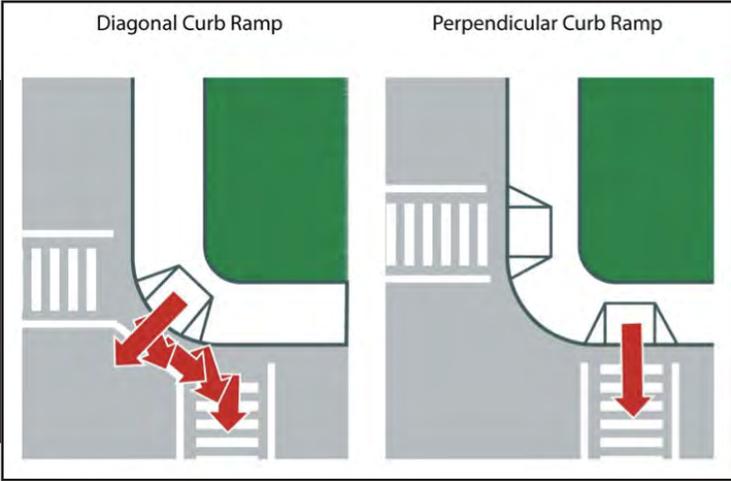
Bulbout/curb extension: A segment of sidewalk, landscaping, or curb that is extended into the street, usually associated with crosswalks, in order to shorten the crossing distance for pedestrians and improve visibility. It can also have the effect of slowing traffic, especially turning vehicles. Curb extensions should be provided at any intersection with significant pedestrian traffic that is along a street with parallel parking. If there is no parallel parking, the street can be narrowed at the pedestrian crossing with a curb extension that is tapered to prevent oncoming traffic from hitting it.



Countdown signal: A walk signal that provides a countdown to the next solid "don't walk" signal phase in order to provide pedestrians with information on how much time they have to cross. These should be placed at every signalized intersection with pedestrian heads.



Curb ramp: A ramp and landing that allows for a smooth transition between sidewalk and street via a moderate slope. This feature at intersections allows persons using wheelchairs to cross the street. They should have tactile devices that provide both texture and color cues for sight-impaired people to know where the street begins. The Americans with Disabilities Act requires wheelchair access at every street corner. Double, perpendicular curb ramps should be used in lieu of single, diagonal ramps except on streets with low traffic volumes. Double curb ramps make the trip across the street shorter and more direct than diagonal ramps.



Pedestrian-Activated Push Buttons: Pedestrian-activated traffic controls require pedestrians to push a button to activate a walk signal. Where significant pedestrian traffic is expected, pedestrian-activated signals are generally discouraged. The “WALK” signal should automatically come on. Where pedestrian-activated traffic controls exist, they should be located as close as possible to curb ramps without reducing the width of the path. The buttons should be at a level that is easily reached by people in wheelchairs near the top of the ramp. The U.S. Access Board guidelines recommend buttons raised above or flush with their housing and large enough (a minimum of 2 inches) for people with visual impairments to see them. The buttons should also be easy to push.

High-visibility crosswalk: Well-marked crosswalk, usually the “zebra” type. These should be provided at any intersection where a significant number of pedestrians cross. They are most important at uncontrolled crossings of multi-lane streets.





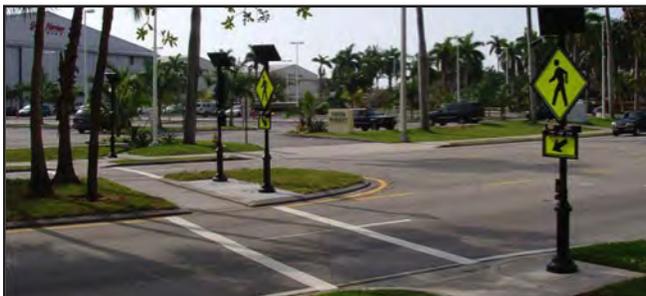
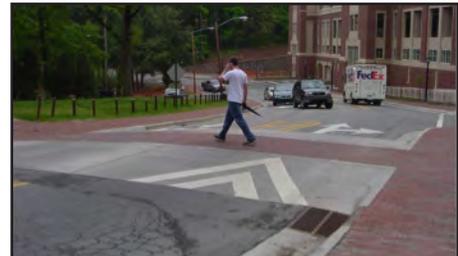
Mid-block crossing: A crosswalk designed at a mid-point between intersections. These are most suited where there is a long distance (greater than 400 feet) between crosswalks on retail streets and in front of schools.

Pedestrian crossing island: A defined area in the center of the street that is raised and provides a refuge area for pedestrians crossing a busy street. They can be used at any street crossing, but are most important at uncontrolled crossings of multi-lane streets.



PUFFIN crossing: Pedestrian user-friendly intelligent crossings detect pedestrians and hold the signal red for motor vehicles until the pedestrian has crossed. They are most appropriate at locations where a significant number of senior citizens or disabled people cross.

Raised crosswalk: A crosswalk that has been raised in order to slow motor vehicles and to enhance the visibility of crossing pedestrians. They are most appropriate in front of schools and in busy retail districts.



Rapid-Flash LED Beacons: High-visibility beacons that activate when pedestrians cross. They are most suitable at uncontrolled crossings that don't warrant signals, but need more than basic crossing devices. These are approved for experimental use by the national MUTCD.



Scramble intersection: Provides a separate all-direction red phase in the traffic signal to allow pedestrians to cross linearly and diagonally. They are most appropriate in retail districts with heavy volumes of both pedestrians and motor vehicles.



Signs: Alerts motorists to the presence of crosswalks and pedestrians. Center signs can help slow traffic. These are placed according to the CA MUTCD.



Speed feedback signs: Alerts motorists when they are going over the speed limit. They are most appropriate where motor vehicles commonly speed and there are pedestrians or bicyclists.



Where to Use these Devices

It is important to use the correct device in making pedestrian crossings safe. The following provides some general guidance. Engineering judgment is necessary at each location. Devices highlighted in red are the most important devices to use in those locations.

1. Common Treatments at Crossings of Two-Lane Streets
 - Marked crosswalks
 - Signs (at uncontrolled crossings)
 - Perpendicular curb ramps
 - Tactile warning devices
 - Advanced yield bars (at uncontrolled crossings)
 - Advanced stop bars (at stop-controlled crossings)
2. Common Treatments at Uncontrolled Crossings of Three-Lane Streets
 - High-visibility crosswalks
 - Signs
 - Perpendicular curb ramps
 - Tactile warning devices
 - Advanced yield bars
 - Crossing islands
 - Bulb-outs
3. Common Treatments at Uncontrolled Crossings of Four and Five-Lane Streets with ADTs < 25,000 to 30,000 and speed limits 35 mph or less
 - High-visibility crosswalks
 - Signs
 - Perpendicular curb ramps
 - Tactile warning devices
 - Advanced yield bars
 - **Crossing islands**
 - Bulb-outs
 - Rapid-flash LED beacons
 - Use more devices
4. Common Treatments at Crossings of Four-Lane +Streets with ADTs >25,000 to 30,000, or with lower ADTs and speed limits over 35 mph
 - **Signals**
 - Advanced stop bars
 - High-visibility crosswalks
 - Countdown and accessible pedestrian signals
 - Bulb-outs
 - Crossing islands



SIDEWALKS

Sidewalks should provide a comfortable space for pedestrians between the roadway and adjacent land uses. Sidewalks along city streets are the most important component of pedestrian mobility. General provisions for sidewalks include pathway width, slope, space for street furniture, utilities, trees and landscaping, and building ingress/egress.

Sidewalks include four distinct zones: the frontage zone, the pedestrian (aka walking) zone, the furniture zone, and the curb zone. The minimum widths of each of these zones vary based on street classifications as well as land uses.

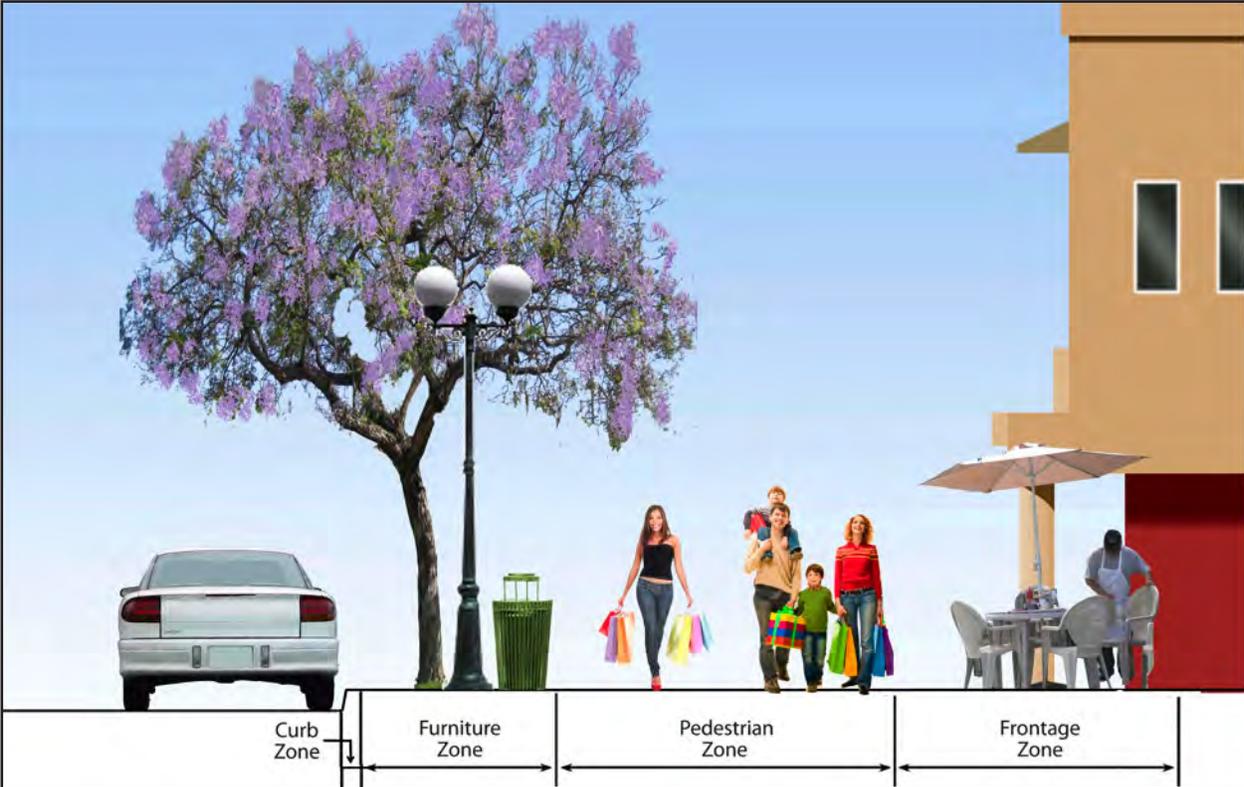


Figure 12-23: Sidewalk Zone System

Frontage Zone

The frontage zone is the portion of the sidewalk located immediately adjacent to buildings, and provides shy distance from buildings, walls, fences, or property lines. It includes space for building-related features such as entry ways and accessible ramps. It can include landscaping as well as awnings, signs, news racks, benches, and outdoor café seating. In single family residential neighborhoods, landscaping typically occupies the frontage zone.

Pedestrian Zone

The pedestrian zone, situated between the frontage zone and the furniture zone, is the area dedicated to walking and should be kept clear of all fixtures and obstructions. This route should be firm, stable, and slip-resistant, and should comply with maximum cross slope requirements.

Furniture Zone

The furniture zone is located between the curb line and the pedestrian zone. The furniture zone should contain all fixtures, such as street trees, bus stops and shelters, parking meters, utility poles and boxes, lamp posts, signs, bike racks, news racks, benches, waste receptacles, drinking fountains, and other street furniture to keep the pedestrian zone free of obstructions. In residential neighborhoods, the furniture zone is often landscaped.

Curb Zone

The curb zone serves primarily to prevent water and cars from encroaching on the sidewalk. It defines where the area for pedestrians begins, and the area for cars ends. It is the area people using assistive devices must traverse to get from the street to the sidewalk, so its design is critical to accessibility.

Other Sidewalk Guidelines

- Landscaped buffers or fences should separate sidewalks from off-street parking lots or off-street passenger loading areas.
- Pedestrian and driver sight distances should be maintained near driveways. Fencing and foliage near the intersection of sidewalks and driveways should ensure adequate sight distance as vehicles enter or exit.
- Where no frontage zone exists, driveway ramps usually violate cross slope requirements. In these situations, sidewalks should be built back from the curb at the driveway as shown in the adjacent photo.





Trails

Trails serve a variety of different users: equestrians, bicyclists, runners, joggers, and walkers. They should be designed with these different types of users in mind. Certain trails may have exclusive users and should have the appropriate amenities.

TRAIL CROSS-SECTIONS

Some of the rights-of-way in Lancaster lend themselves to three trail types. A paved path will serve bicyclists and other wheeled users best. A decomposed granite (DG) path is best for joggers and walkers. Hikers and equestrians can use a less-improved single-track path. The overall cross-section may look like the graphic below. The hiking/equestrian path may be further away from the others to provide adequate room for horses. The following guidelines illustrate the different types of trails Lancaster can use.

Multi-purpose Natural Trails

- Equestrian trails should have a minimum clear width of six (6) feet for passing and two-way use.
- A minimum width of four (4) feet should only be used when site-specific conditions do not allow the preferred width.
- Clearance for vegetation and obstructions should be a minimum of two (2) feet beyond each side of the trail.
- Vertical clearance should be ten (10) feet minimum.
- Trail should be free of any debris or obstructions that may injure the horse. This would include be is not limited to brush, stumps, logs, and large rocks.
- Equestrian trails are typically natural surface trails. They can be maintained in a grass or dirt condition.
- Equestrian trails should generally follow the alignment of the existing topography. Steep sections of trail should use switchbacks to alleviate the grade.
- The surface should be kept free of rocks and debris greater than one and one half (1-1/2) inches in diameter.
- Low edges should not be used on equestrian trails, since they create a tripping hazard for the horse. Protection from steep slopes or hazardous areas can be accommodated by dense landscaping or sturdy railing.

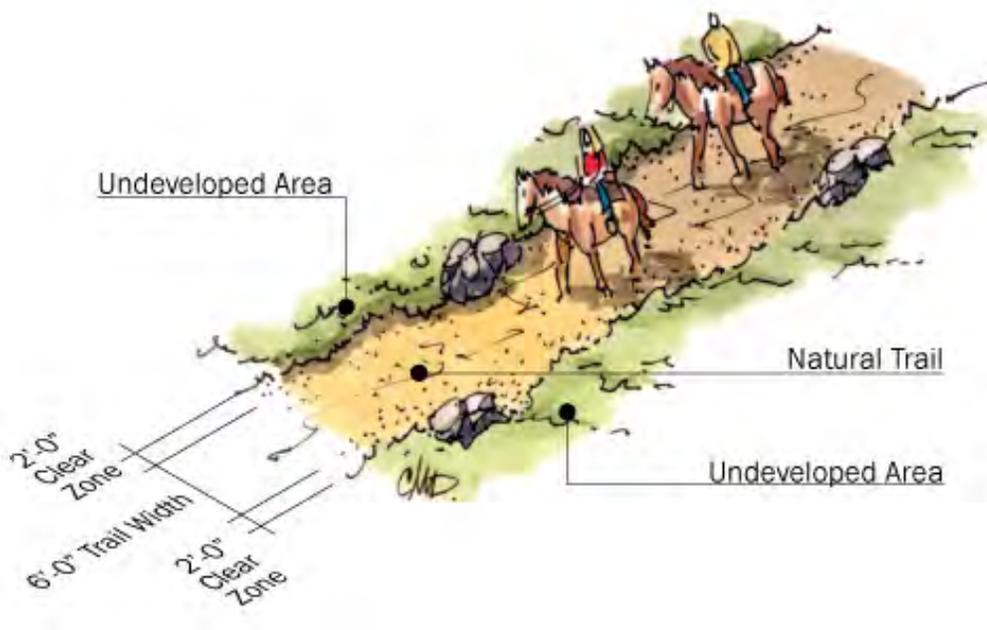


Figure 12-24: Natural Trail Cross-section

Developed Trails

- Equestrian trails should have a clear width of twelve (12) feet for passing and two-way use.
- A minimum width of eight (8) feet should only be used when site-specific conditions do not allow the preferred width.
- Clearance for vegetation and obstructions should be a minimum of two (2) feet beyond each side of the trail.
- Vertical clearance should be ten (10) feet minimum.
- Trail should be free of any debris or obstructions that may injure the horse. This would include but is not limited to brush, stumps, logs, and large rocks.
- Highly developed equestrian trails should have a surface of decomposed granite minimum four (4) inches deep
- A minimum fifty six (56) inch high PVC Fence (or comparable environmentally friendly material) should be used to separate equestrian trails from vehicular traffic; (The use of environmentally friendly material is preferred).
- A minimum fifty (50) inch high PVC Fence (or comparable environmentally friendly material) should be used to separate equestrian trails from adjacent trails (the use of environmentally friendly material is preferred).
- Equestrian trails are typically natural surface trails. They can be maintained in a grass or dirt condition.
- The surface should be kept free of rocks and debris greater than one and one half (1 ½) inches in diameter
- Low edges should not be used on equestrian trails, since they create a tripping hazard for the horse. Protection from steep slopes or hazardous areas can be accommodated by dense landscaping or sturdy railing.
- Wherever an equestrian trails runs parallel to a paved path, a fence should separate the two

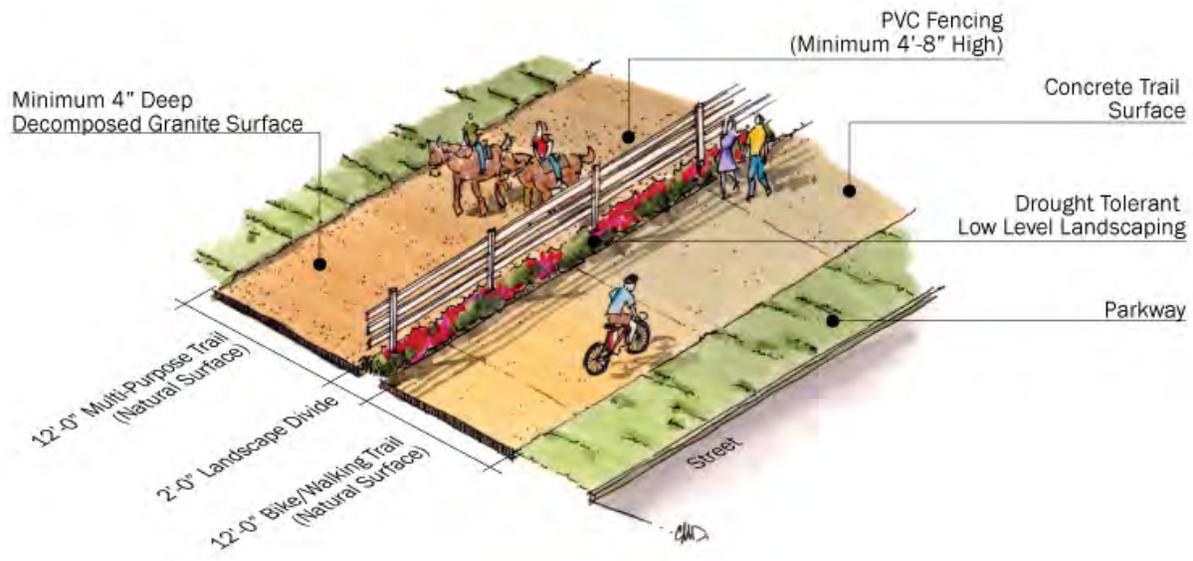


Figure 12-25: Developed Trail Cross-section

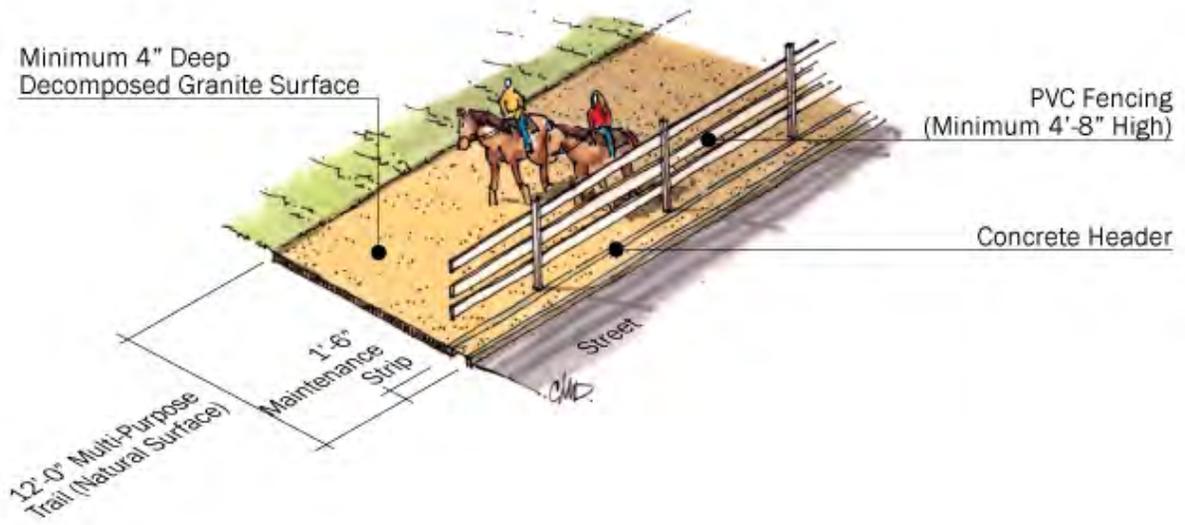


Figure 12-26: Alternative Developed Trail Cross-section

Drainage (developed trails)

It is very important that trails are well drained. Standing water on the trail will have an adverse effect on the trail surface and will result in higher maintenance and a decrease in the life and quality of the trail.

- Compacted stone dust may be used to assist areas with poor drainage, low areas that collect surface water should be drained by grading or culverts.
- The trail can deteriorate quickly if used in a wet condition. A minimum two (2) percent cross slope is recommended for drainage. Crowding of the trail at two (2) or (3) percent is acceptable, but may be more difficult and costly to construct.
- When a trail is constructed on the side of a hill, it may be necessary to build a swale on the uphill side of the trail. The swale will intercept the surface drainage of water from the hill and prevent erosion of the trail. When necessary, a catch basin and culvert would be required to direct the water under the trail.

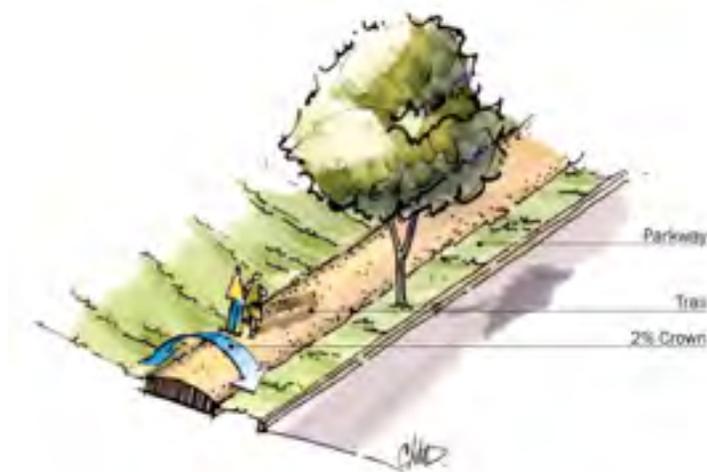


Figure 12-27: Trail with two-percent (2%) crown

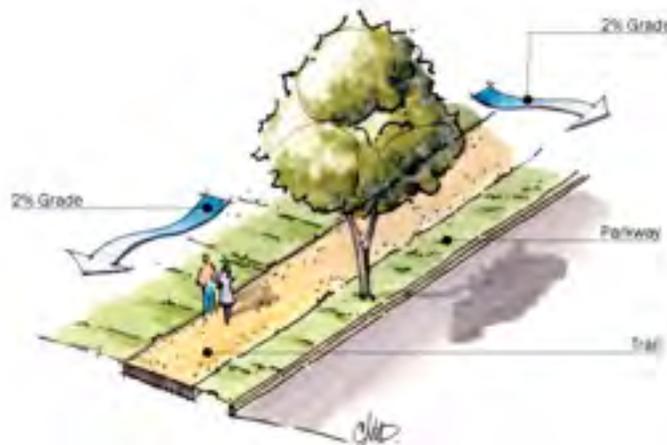


Figure 12-28: Trail with two-percent (2%) grade

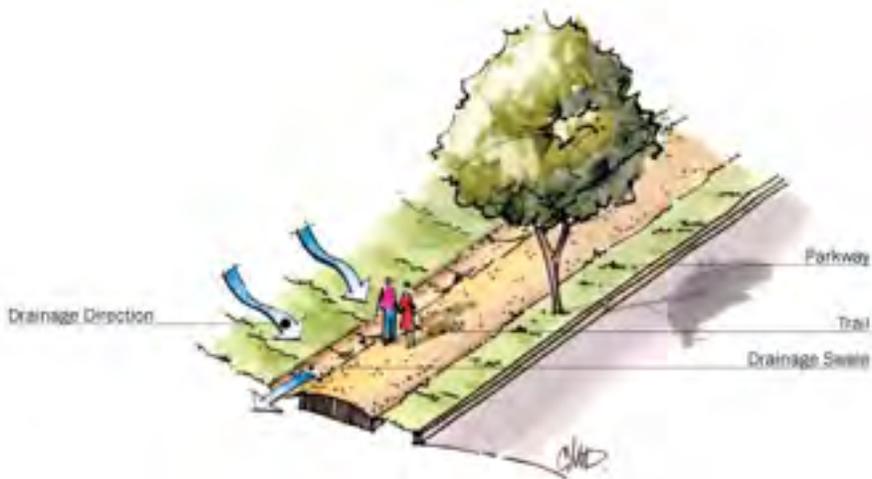


Figure 12-29: Trail with Drainage Swale

TRAIL CROSSINGS

Lancaster has immense opportunity to create a bikeway and trail network that will serve much of the community. The drainage channels, railroad and utility easements provide plenty of right-of-way for bike paths and trails. Designing good street crossings will be key to making these rights-of-way work. The following provides prototype guidance for these crossings over the various streets in Lancaster. All of these must follow all Caltrans standards and the California MUTCD. Each location will need to be designed in detail separately.

Prototype 1: Signalized Crossing

To be used on crossings of:

- Six-lane roads with medians or center turn lanes
- Four-lane roads with medians or center turn lanes and ADTs greater than 15,000

Guidelines:

- The unpaved trail segments will merge onto the paved trail a short distance before the crossing
- Align to cross at a right angle
- Add a user-activated signal (where there are equestrians, add a special push button at a height that is accessible to those on horses)
- Add a 12'-wide zebra-stripe crosswalk
- Add crossing islands
- Add W 11-1 bike signs
- Add “Bike Xing” pavement markings on approach
- Add loop detectors for trail users to trip the signals in advance



Figure 12-30: Signalized Trail Crossing



Prototype 2: Uncontrolled Crossing of Four-Lane Roads

- The unpaved trail segments will merge onto the paved trail a short distance before the crossing
- Align to cross at a right angle
- Taper the cross street to reduce the crossing distance for trail users
- Add user-activated LED rapid-flash beacons* (with ADTs > 10,000 and < 15,000)
- Add a 12'-wide zebra-stripe crosswalk
- Add crossing islands where medians or center turn lanes exist
- Add W 11-1 bike signs
- Add "Bike Xing" pavement markings on approach
- Leave adequate sight distance
- Add advanced yield bars and advanced yield signs
- Consider rumble bars on approach

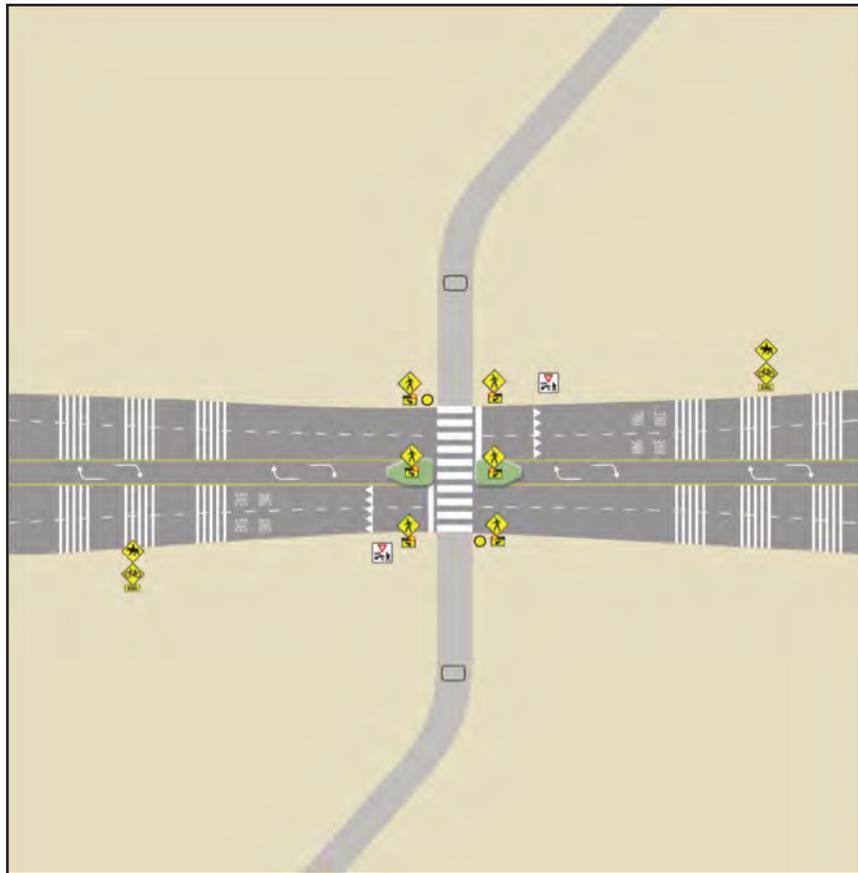


Figure 12-31: Uncontrolled Trail Crossing of Four-Lane Road

Prototype 3: Uncontrolled Crossing of Two-Lane Roads

Option 1 (preferred):

- The unpaved trail segments will merge onto the paved trail a short distance before the crossing
- Align to cross at a right angle
- Add a roundabout for trail users and users of the streets; this may be a mini-roundabout at crossings of narrow streets
- Add signs and bollards to prevent motorists from driving onto the trail
- Add W 11-1 bike signs on approach
- Add “Bike Xing” pavement markings on approach
- Leave adequate sight distance

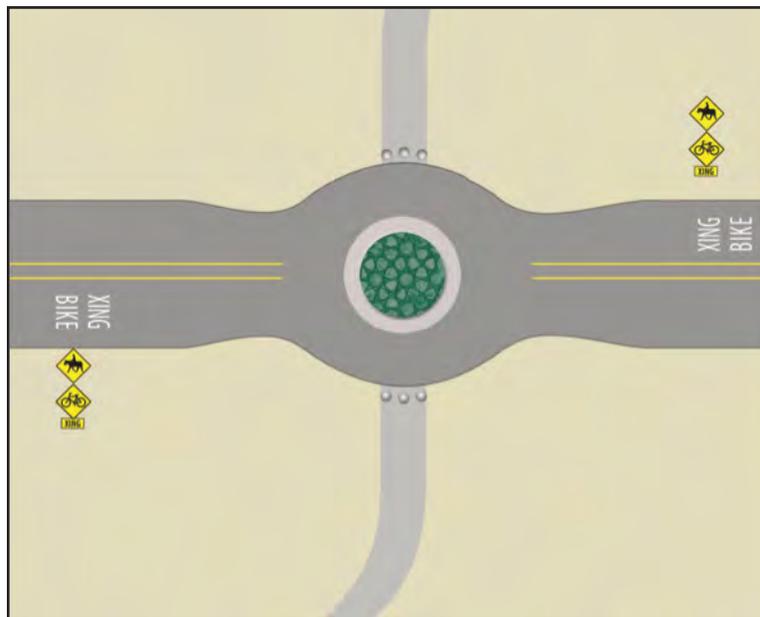


Figure 12-32: Preferred Option for Uncontrolled Trail Crossing of Two-Lane Road

Option 2:

- The unpaved trail segments will merge onto the paved trail a short distance before the crossing
- Align to cross at a right angle
- Taper the cross street to reduce the crossing distance for trail users; use bulbouts along streets where there is parallel parking
- Add user-activated LED rapid-flash beacons* (with ADTs > 12,000 and < 18,000)
- Add a 12'-wide zebra-stripe crosswalk
- Add crossing islands where medians or center turn lanes exist; or add by removing on-street parking
- Add W 11-1 bike signs
- Add "Bike Xing" pavement markings on approach
- Leave adequate sight distance
- Add advanced yield bars and advanced yield signs
- Consider rumble bars on approach

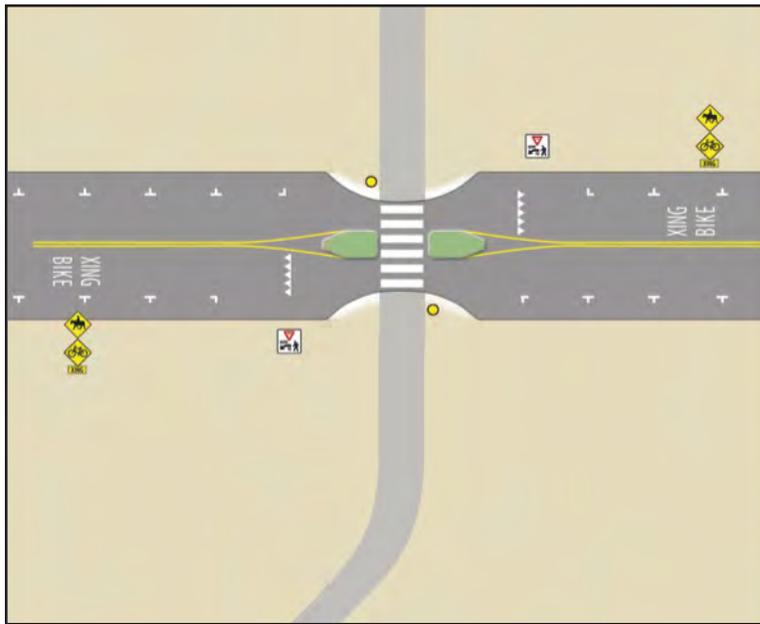


Figure 12-33: Option for Uncontrolled Trail Crossing of Two-Lane Road

Prototype 4: Cross at Nearby Intersection (to be used where trail crossing is within approximately 300' an intersection)

- The unpaved trail segments will merge onto the paved trail a short distance before the crossing
- Design the trail to follow along side of the street to the intersection
- Direct users to use existing crosswalks
- Add crosswalk improvements and other appropriate crossing improvements to enhance the crossing
- Design the trail to follow along the other side of the street to the intersection, and back to the right-of-way alignment

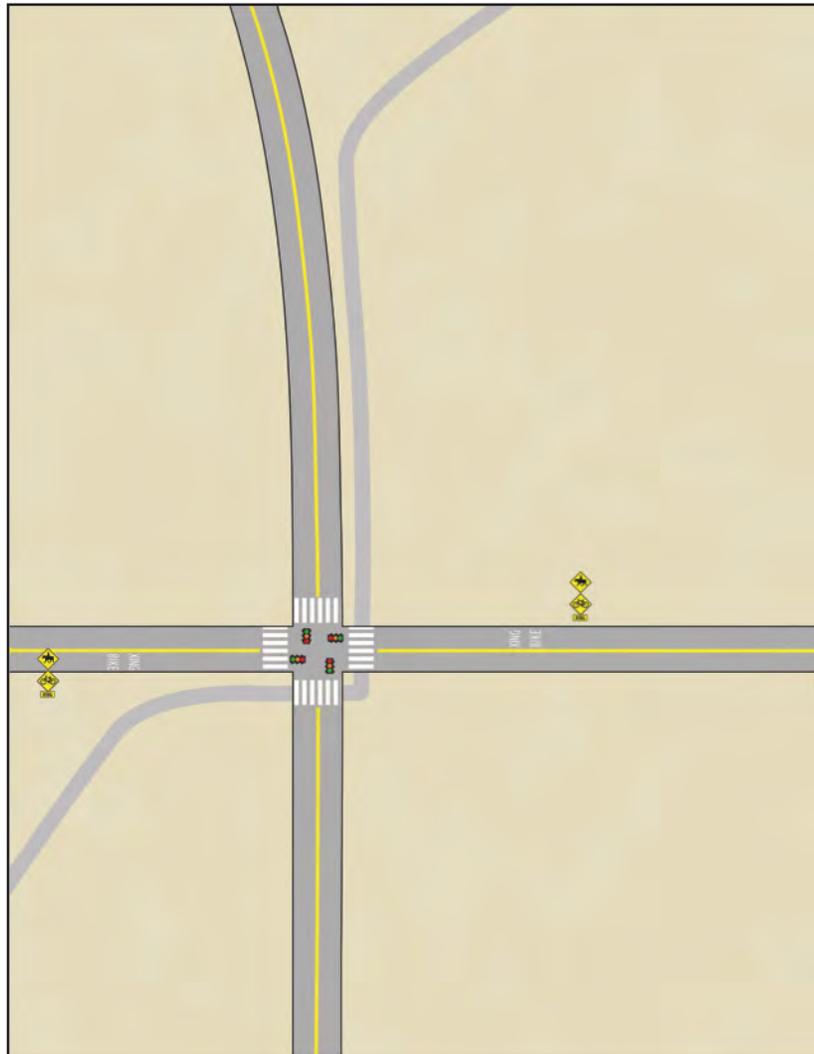


Figure 12-34: Trail Crossing at Nearby Intersection

Prototype 5: Underpasses

Underpasses would be ideal along the Amargosa Creek Pathway for the users. This would eliminate the need to cross streets. They would need appropriate clearance (10'). Most of the clearances are less than that today, so a retaining wall would likely be needed alongside a deeper trail alignment.

Prototype 6: Overpass

The Avenue K-8 bridge going over the railroad would provide a significant connection between the east side of Lancaster and the west side. It would have to be constructed to ADA standards.

*LED rapid-flash beacons have been shown to be very effective at getting motorists to yield - much more so than conventional beacons. They have been approved by the MUTCD for experimentation, but not yet by the California MUTCD.

TRAILHEADS AND STAGING AREAS

Trailheads

Trailheads provide a place for trail users to park a car, trailer or bicycle to begin a hike or ride on a horse. Typical features include:

- Auto parking
- Equestrian trailer parking
- Bicycle parking
- Signs to the trail
- Maps
- Interpretive signage
- Horse corral
- Drinking trough
- Restrooms
- Refuse receptacles
- Drinking fountains



Figure 12-35: Trailhead Features

Not all of these are needed at every trailhead. The features depend on the use of the trail, where it is, etc. Figure 12-36 following depicts a full-feature trailhead.



Figure 12-36: Graphic Depiction of Trailhead Layout

Staging Areas

Staging areas are an important amenity for equestrians, allowing riders the opportunity to tie up the horse to rest and perhaps grab a cup of coffee or do some light shopping.

- The staging areas should be placed adjacent to equestrian or multi-use trails at convenient locations around commercial and recreation areas.
- Pedestrian walkways or paths from the staging area to the commercial businesses are required.
- Staging areas should include corrals that would be a minimum twenty (20) feet long by twenty (20) feet wide or hitching posts six (6) to eight (8) feet long and forty (40) inches tall.
- Provide pull through parking areas with minimum 40-foot-long stalls.
- A fifty (50) inch tall PVC fence would surround the staging area with a manual unlocked gate (The use of environmentally friendly material is preferred).
- Street furniture is encouraged at staging areas
- Shade structures and or shade trees are encouraged for both the horses and riders at staged areas.
- Landscaping including shade trees should be installed at staging areas. Additional landscaping requirements are outlined in the landscape design guidelines section.

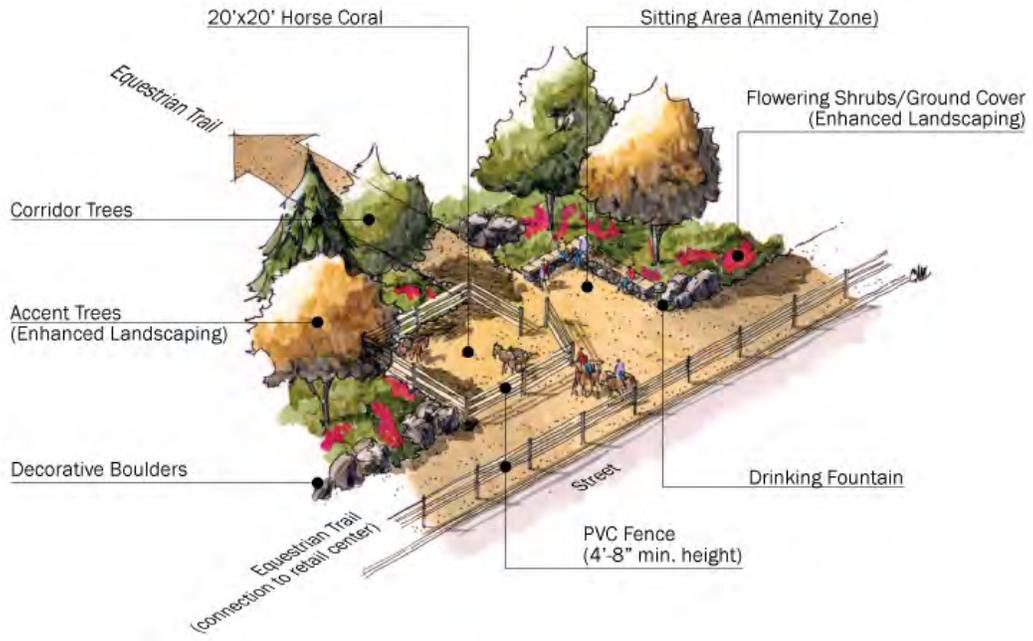


Figure 12-37: Amenity Zone with Horse Corral

TRAIL AMENITIES AND WEATHER REFUGES

Trail amenities enhance the user's experience. They provide conveniences that are sometimes necessary, and other times simply accommodating. Weather refuges are critical to enhance Lancaster's trail system due to the extreme heat and wind the City often experiences.



Figures 12-38 and 12-39: Trail Amenities

Generally, Trail Amenity Zones are small support facilities located along a trail system that can provide access to surrounding amenities.

- Amenity Zones should be located approximately every 1/2 mile along the trail system.
- Amenity Zones should be incorporated into landscape setbacks wherever possible.
- Amenity Zones should provide an area to stop and rest off the main trail traffic.
- Amenity Zones can act as pedestrian gateways and access points from the trail system to commercial areas.
- Amenity Zones should include a combination of the following amenities depending on the type of trail and physical constraints
 - Sitting areas with metal cleats or other anti skateboarding device*
 - Refuse Receptacles*
 - Drinking Fountains
 - Bike racks
 - Equestrian hitching post (only along equestrian trails)
 - Shade: provided either by a roof structure or shade trees*
 - Wayfinding/informational signage
 - Enhanced landscaping
 - Weather structures

(* required at all rest areas)

- Amenity Zones should use the same materials as surrounding development to better integrate them into the community.
- Use enhanced landscaping such as accent trees, flowering shrubs/ground cover, and decorative boulders in and around Amenity Zones to provide relief to the physical environment and add visual cues to trail users.
- Restrooms facilities should be located every 5 miles along the trail system.



Major Amenity Zone specifications:

- Seat wall
 - Along 2 sides eighteen (18) inches tall
 - 10' long in each direction
 - Stone veneer (to match surrounding development) and concrete cap for sitting area
 - Metal cleats or other anti skateboarding devices should be used to discourage skateboard use.
- Shade structures
 - Alumina-wood trellis structure painted to match surround development
- Windscreens
 - Plexi-glass windscreens should be installed to provide shelter from severe wind conditions.
- Enhanced landscaping
 - Flowering shrubs/ ground cover
 - decorative boulders
 - approved accent trees.
- Refuse receptacles and water fountains should be placed on either side of the rest stop

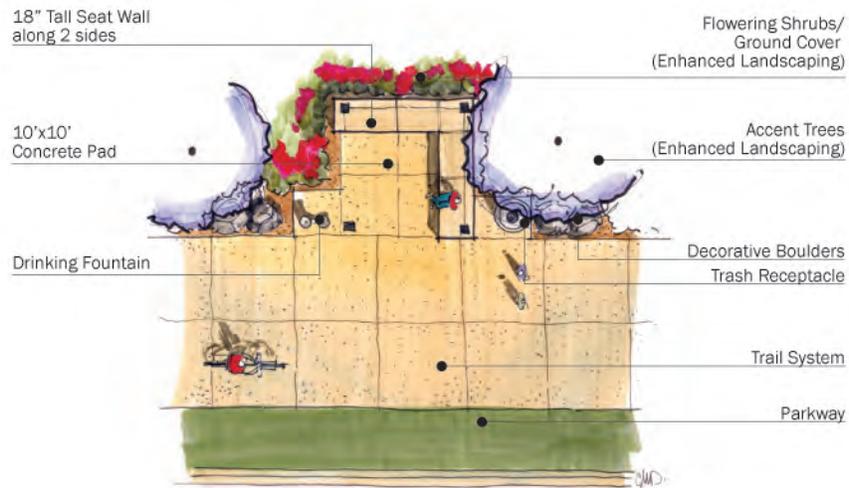


Figure 12-40: Plan View of Major Amenity Zone

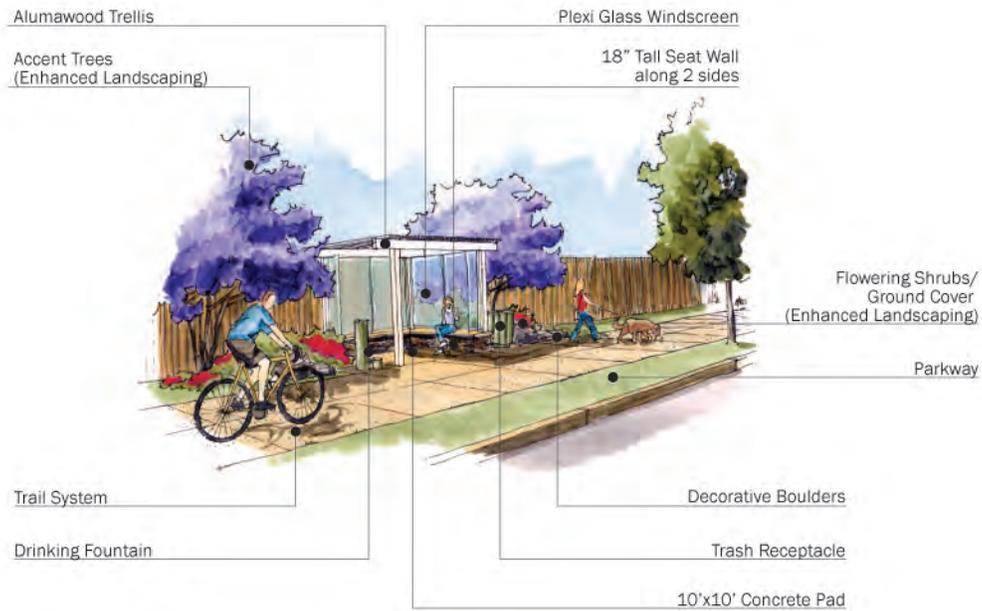


Figure 12-41: Perspective of Major Amenity Zone

Minor Amenity Zone Specifications

- Seat wall
 - Eighteen (18) inches tall
 - Six (6) to eight (8) feet long.
 - Stone veneer (to match surrounding development) and concrete cap for sitting area
 - Metal cleats or other anti skateboarding devices should be used to discourage skateboard use.
- Shade structures
 - Alumawood trellis structure painted to match surrounding development.
- Windscreens
 - Plexi-glass windscreens should be installed to provide shelter from severe wind conditions.
- Refuse receptacle and water fountain should be placed on either side of rest stop.

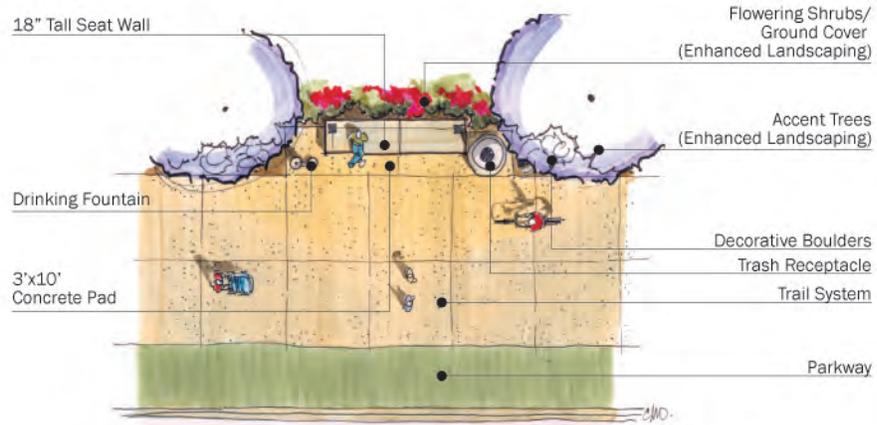


Figure 12-42: Plan View of Minor Amenity Zone

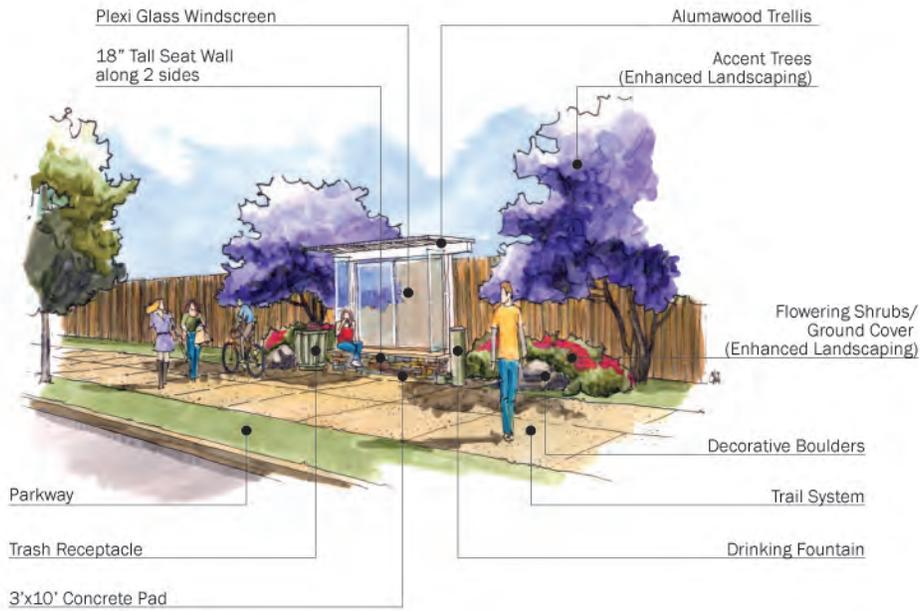


Figure 12-43: Perspective of Minor Amenity Zone

Signage

Trail signage provides critical information for users. Good signage is important to safe trail use, informed trail use and convenience. Signage performs the following tasks:

- Directs users to the trail
- Directs users to crossing trails
- Instructs users as to where trails go
- Provides distances of destinations along the trails
- Instructs users as to the type of use that is legal and what is not (hiking, horseback riding, mountain bicycling, walking dogs, etc.)
- Instructs users as to who has the right-of-way and who yields to whom
- Provides information about maintaining the environment, rules on protecting habitat, areas that are off limits, etc.
- Provides interpretive information about the geology, cultural history, etc.



Figure 12-44: Trail Etiquette Sign



New Development

New development presents significant opportunities to incorporate walkability, bikeways and trails into new communities. Challenges abound trying to retrofit existing streets that have poor network connectivity, or trying to add bike paths and trails without through rights-of-way. New development can be built with walkways, bikeways and trails as part of the circulation system and community form. Today's real estate market has dramatically slowed development, but it will likely rebound in coming years. This section will present means to integrate bicycles, pedestrians and trails with new development.

LAND USE PLANNING

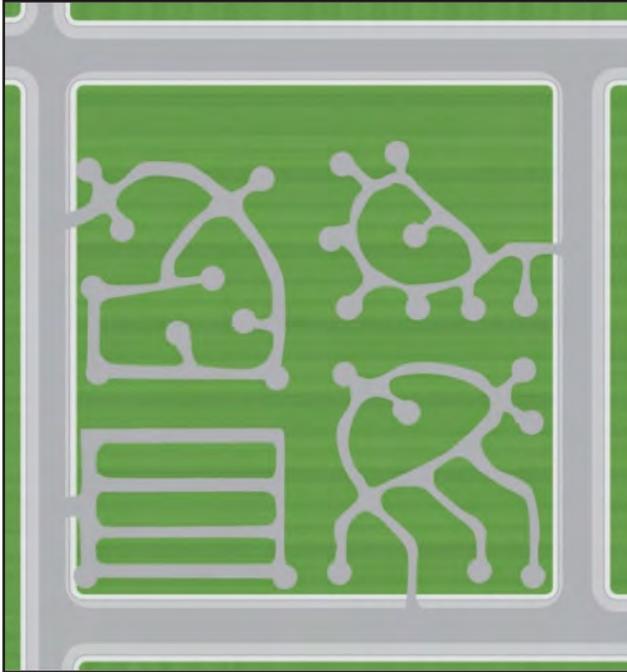
Land use planning that adheres to smart growth principles provides opportunities for people to travel on bicycle, on foot or on trails. Mixing land uses brings origins and destinations closer to one another so that people can travel between them by non-motorized means. Compact land use that builds up more than out does the same. Comprehensive land use planning integrates parks and greenways so that bikeways and trails can be built in.

STREET NETWORKS

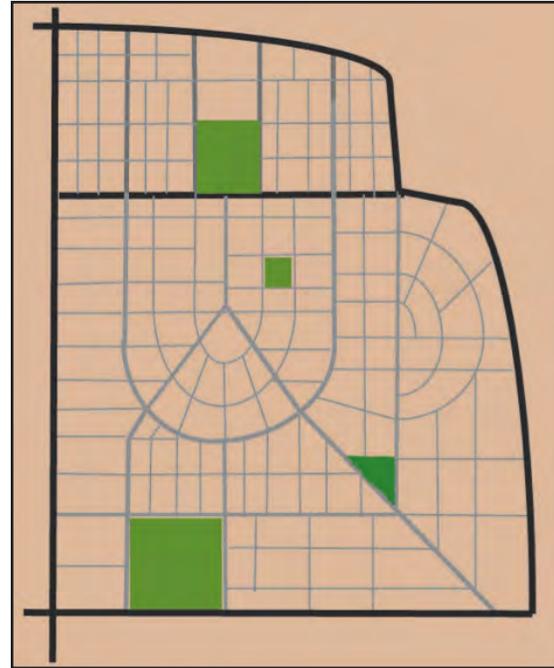
Street Networks Conducive to Non-Motorized Travel

Street networks play a key role in bikeable and walkable neighborhoods. Typical suburban developments with 45 and 50 mph arterials isolate neighborhoods. In such developments, people have to travel long distances to enter or exit a neighborhood and must find their way to the few streets that lead in and out. Individual neighborhoods, although adjacent, may be isolated from each other. Schools, stores and workplaces are too far to walk to and the wide, busy streets are inhospitable to walk along, bicycle along, or to cross. Neighborhoods that have disconnected streets, significant numbers of culs-de-sac, and walls force people to take longer, indirect routes that involve travel along high-speed arterial roads that are inhospitable to non-motorized users.

Bikeable and walkable neighborhoods need both the streets that lend themselves, and street networks that lend to cycling and walking. Bicyclists and pedestrians fare best in neighborhoods with well-connected streets that have small blocks. Such street networks bring many origins and destinations within walking and bicycling distance. They also spread traffic among more streets so that fewer wide, high-speed streets that discourage bicycling and walking are needed. Many destinations can be accessed along quiet, direct streets. The graphics below contrast these two neighborhood types.



Not this ...



This

Figures 12-45 and 12-46: Disconnected and Connected Street Networks

- Streets should consist of interconnected grid patterns. Culs-de-sac without pedestrian and bicycle connectivity should be avoided.
- Blocks should be short. Short blocks allow for more route options that keep a greater number of destinations closer than long blocks. Ideally 200-foot long blocks are best. Blocks that are longer than 400 to 500 feet discourage walking.
- In the City's core, the streets should not be designed for travel at over 35 miles per hour. Local streets and pedestrian-oriented streets should be designed for speeds of 20 to 25 miles per hour. Design speed determines how fast cars will travel. Therefore, **design speed** should not be engineered in excess of **desired speed**.
- Freeway on and off-ramps should be designed as close to 90 degrees with the access street as possible.
- The number of lanes, and lane widths should be kept to the minimum necessary. Table 12-2 presents sample road standards for consideration. The traffic engineer in each community will need to investigate the particulars of each situation.

Designing with Cul-de-Sac

As described above, connected street networks are preferred. However, where cul-de-sac are used they can be made to work with bikeways and trails. In order for this to function, the ends of the cul-de-sac need to be connected to the bike paths and trails that run in between. This can actually give bicyclists and trail users an advantage over motorists for short trips. Figure 12-47 illustrates this design.



Figure 12-47: Connecting Cul-de-Sac

Integrating Trails into the Street Network

The best way to integrate trails into new neighborhoods is to integrate them into the street network. This way the trail right-of-way receives the same treatment as another street with appropriate street crossings. Every section of street blocks would have one of its streets in the north-south, and one in the east-west direction designed as a bikeway and trail. The ideal cross-section would include a bike path and a parallel hiking/equestrian trail. The ideal crossing of two-lane streets would be an appropriately sized roundabout. This would allow users to yield and continue on without stopping. Crossings of multi-lane streets should include the suitable treatments with crossing islands, flashing LED beacons, zebra-stripe crosswalks and/or signals where warranted. The graphics below illustrate how this concept would work. The minimum width for a paved trail is 12', and 6' to 8' for the earthen portion as shown in Figure 12-49.



Figures 12-48 and 12-49: Integrated Trail and Street Networks

Road Standards

The “DNA” of community form rests in both land use planning and street network planning. The mold for street networks in local jurisdictions is found in their road standards. The road standards spell out how many lanes will be built on each street type, how wide the lanes will be, whether bike lanes will be striped, etc. Given this, it is important that local road standards create a mold that will yield walkable, bikeable communities. They should embody the concepts previously described. Some guidance is provided here.



New collector streets and streets higher on the hierarchy should include bicycle lanes. This means that the curb-to-curb cross section of these types of streets should have bike lanes included. Ideally 6' wide lanes should be used as a minimum with 7' or 8' bike lanes on wide, high-speed arterials or rural highways. By including bike lanes in such road standards they will be built along with the new roads. Table 12-2 below shows guidelines for ideal road standards.

TABLE 12-2: EXAMPLE ROAD STANDARDS

STREET TYPE	LAND USE	# OF TRAVEL LANES	STREET OR LANE WIDTH	BIKE LANES
Street (Local)	Single-family residential, home-office and/or small retail	2	26 to 28 feet total including on-street parking	Not needed
Avenue (Collector and Secondary Arterial)	Single-family residential, multifamily residential, small retail, or industrial	2 to 4	10 feet per lane plus on street parking	Yes, minimum 5 feet wide; 6 feet is preferred
Boulevard (Arterial)	Multi-family residential, mixed-use commercial or industrial	4	10 to 11 feet per lane plus on-street parking	Yes, preferably 6 feet wide
Main Street	Retail or mixed use with retail and/or office	2 lanes are preferred; 4 lanes with slowing features	10 feet per lane plus on street parking; may have angled parking	In some cases
Rural	Agricultural or open space	2	11 feet, 12 feet on State Highways with exceptions	Yes where terrain permits, preferably 7 to 8 feet wide

LAND USE PLANNING AND ZONING

As new development occurs it presents opportunities to remold our communities into ones that facilitate and encourage walking. The following should be adopted to ensure this.

- Setbacks shall be required where adequate width does not presently exist to meet the minimum widths for sidewalks. The minimum width for sidewalks is 5'. Setbacks and ideal sidewalk zone widths depend upon surrounding land uses and street typology. These widths will be further defined in the City's street design guidelines.
- The ground floor of new buildings shall contain active uses or windows.
- In main street environments a building entrance from the sidewalk shall be provided at least every 75 feet where there are retail and office establishments. This will ensure a pedestrian-oriented compactness.
- In commercial or civic areas, vehicular parking shall be located in the back of the building or in a subterranean garage. This is to prevent parking lots in front of buildings that spread walking distances between buildings, visually impact the pedestrian environment, and conflict with pedestrian movement in driveways.
- In commercial or civic areas the number of driveways should be limited.
- Drive-through commercial establishments should be prohibited.
- Mixed-use development should be encouraged through planning and zoning codes.
- Along multi-family residential streets, vehicular parking shall be located in the back of the building or in a subterranean garage. A maximum of one level of parking garage shall be permitted above natural grade up to a maximum of 7 feet in height. Any portion of the parking garage above grade shall be mechanically ventilated and enclosed, except for the driveway.
- Commercial properties that have vehicle parking in front should also have a physical separation between the parking and sidewalk to prevent intrusion into the sidewalk.
- Driveways and driveway landscaping shall be designed to minimize interference with pedestrians. Motorists' view shall not be obstructed from 8 feet inside the property line to a distance of 10 feet from the side of the driveway on the driver's right side and 10 feet from the centerline of the driveway to the driver's left side. It will minimize conflicts between pedestrians and vehicles backing out of driveways on private lots.
- Driveway aprons shall not extend beyond the sidewalk furniture zone into the pedestrian zone. This will maintain an even walking surface for persons in wheelchairs and others.
- Parking structure entrances shall be designed in a way that minimizes the occurrence of vehicles waiting for gates to open. Entry controllers shall be set back a minimum of 20 feet from the property line.
- For multi-family residential developments, the intersection of the sidewalk and the pathway leading to the building's entry shall be wide enough to allow for enhanced mobility for pedestrians and persons in wheelchairs.
- Walled or gated developments should be prohibited.
- New development should undergo walkability audits to ensure that they meet the needs of pedestrians.
- Parking lots in new commercial development should be pedestrian friendly in keeping with the goals of the City. Walkways should be in place to gain entry to the parking lot and pedestrian friendly arteries should be in place to allow for easy and safe walking between buildings.





A B

Landscape Design and Public Realm Enhancements

The purpose of landscape enhancements along the developed trail (street, sidewalk, natural trails, developed trails, etc.) sections are for both functional and aesthetic purposes. These treatments can also serve as enhancements to the public realm, and can ultimately provide economic and cultural benefits, including identity creation. The following are primary issues that landscaping should mitigate throughout out the trail systems

Note: all landscaping must be consistent with the “Landscape and Irrigation Design Standards,” Ordinance 907, adopted by the Public Works Department in October 2008.

- Visual and psychological cooling
- Wind break
- Reduction of glare and dust
- Keeping safe, secure and clear view of trails
- Create nodes and focal points along trail
- Promote historical and cultural information
- Conserve water and energy

STREETSCAPE

Landscaping along the trail system is vital to its usage. Landscaping should be used to promote a pedestrian-friendly environment that is both safe and attractive.

- Landscaped parkways setting the trails back from the street six (6) feet to eight (8) feet help to protect the trail users from vehicular traffic.
- Approved street trees should be planted every thirty (30) feet to provide adequate shade and a protective buffer for the trail users.
- Cluster trees at focal points to provide visual cues of activity.
- Where trees are planted in close proximity to streets and sidewalks; select trees that will minimize root problems to help reduce maintenance issues.
- Streetscapes shall be supplemented by appropriate shrubs and ground cover.



FOCAL POINTS

Focal points are important along any trail system to encourage trail usage and provide visual cues to trail users this includes; starting and stopping points, areas of caution, distances covered, crossings of other trails and or streets, and rest stops.

The following elements should be defined as focal point for the trials system throughout the City of Lancaster.

- Street/trail crossings
- Staging areas
- Rest stops (amenity zones)
- Trailheads
- Connection points to residential development

Focal points should incorporate amenities such as shaded sitting areas, drinking fountains, trash receptacles, and shade trees or shade structures. These focal points should be highlighted with enhanced landscaping including but not limited to accent trees, decorative boulders, and flowering plant material.



Figure 12-50: Example of Enhanced Landscaping at Trails Crossing and Access Points



Figure 12-51: Example of Enhanced Landscaping at Trails Crossing and Access Points

IRRIGATION

In order to conserve both water and energy resources the following guidelines should be used to aid in conserving water resources.

- Irrigation designed for reclaimed water use as soil conditions allow and as reclaimed water is available.
- Low volume, water efficient irrigation system.
- Solar irrigation controllers should be utilized throughout the trail.
- Automatic irrigation system to be adjusted seasonally and with watering hours between ten pm and six am.



LANDSCAPE SCREENING

To provide visual screening between the trail and adjacent property.

- Consider the dimensions of a mature plant when determining appropriate plant species and locations. A common mistake is to install plant material too close together and not allow adequate room for the plants to grow resulting in unhealthy plants that may need replacing.
- Determine the level of screening, i.e., total visual screen or merely filtering views.
- Try to utilize native, low maintenance plant material wherever possible.
- Consider temporary irrigation (drip irrigation or Treegator bags) to establish plants versus a traditional irrigation system.

PLANTING CRITERIA

- Native low maintenance and drought tolerant plant materials should be used whenever possible.
- Poisonous plant materials shall not be used.
- Trees that are less than five (5) feet from equestrian trails must keep a minimum vertical clearance of ten (10) feet high.
- Trees that are less than five (5) feet from walking/bicycle/multi-purpose trails must have a minimum vertical clearance of eight (8) feet.
- Tree canopies are to be kept above ten (10) feet high on equestrian trails.
- Accent trees will act as visual cues and alerting trail users that there is a change in the trail environment. Smaller colorful trees should be used to call attention to any focal points along the trail this includes but is not limited to street/trail crossings, staging areas, rest stops, and trailheads.
- Corridor trees planted between focal points are primarily used to provide relief from the sun, flare and wind.
- Shrub planting will be kept below three (3) feet high (except where graffiti control or screening is required).

SUGGESTED PLANT PALLET

The following are all plants selected from the City of Lancaster Plant List October 2008.

TABLE 12-3: ACCENT TREES

Scientific Name	Common Name
<i>Cercidium Microphyllum</i>	Foothills Palo Verde
<i>Cercis Occidentalis</i>	Western Redbud
<i>Geijera Parviflora</i>	Austrilian Willow

TABLE 12-4: CORRIDOR/STREET TREES

Scientific Name	Common Name
<i>Fraxinis Oxycarpa</i> 'Raywood'	Raywood Ash
<i>Gleditsia Tricanthos</i> 'Shademaster'	Shademaster Locust
<i>Juniperus Virginiana</i>	Red Cedar Juniper
<i>Koelreuteria Bipinnata</i>	Chinese Flame Tree
<i>Pistacia Chinensis</i>	Chinese Pistache
<i>Pyrus Calleryana</i> 'Bradford'	Bradford Pear
<i>Robinia Ambigua</i> 'Idahoensis'	Idoho Locust
<i>Zelkova Serrata</i>	Japanese Zelkova

TABLE 12-5: TALL SHRUBS/FOUNDATION (ISOLATED USE ONLY)

Scientific Name	Common Name
<i>Chilopsis Linearis</i> 'Burgundy'	Desert Willow
<i>Larrea Tridentata</i>	Creosote Bush
<i>Simmondsia Chinensis</i>	Jojoba
<i>Salvia Greggii</i>	Autumn Sage



TABLE 12-6: LOW SHRUBS

Scientific Name	Common Name
Baccharis Pilularis 'Twin Peaks'	Coyote Bush Prostrate
Chrysothamnus Nauseosus Alvicaulis	Rabbit Brush
Dalea Pulchra	Indigo Bush
Eriogonum Fasciculatum	California Buckwheat
Rosmarinus Officinalis	Rosemary
Salvia Clevelandii	Cleveland Sage

TABLE 12-7: GROUND COVER

Scientific Name	Common Name
Arctostaphylos Uva-Ursi	Manzanita 'point Reyes'
Baccharis Pilularis	Coyote Brush
Convolvulus Cneorum	Morning Glory Bush, Silverbush
Encelia Farinosa	Encelia
Eschscholzia Californica	California Poppy
Mahonia Repens	Creeping Mahonia

Maintenance and Operation

For the long-term operations and maintenance of the trail system to succeed, the City must identify what is to be maintained, and who is responsible for the trail maintenance; including both the physical trails and landscaping. There are a variety of organizations and parties that may become responsible for the trail maintenance, such as, homeowners associations, private landowners, utility operators or the City of Lancaster.

The initial research and documentation of the trail responsibility is the up-front task from which all other subsequent work follows. This information (ownership, maintenance responsibility, trail category, and location) can be added to the existing trails GIS database. Once the areas of responsibility are determined and recorded, an operations and maintenance program can be established, budgeted, and scheduled.

PROGRAM STEPS

- Evaluation (what is the existing condition of the trail and who is responsible for its maintenance)
- Maintenance schedule (Identify how frequent specific trails should be inspected and when routine maintenance should be conducted)
- Response to situations (fix trail components which are damaged through natural disasters, accidents or vandalism)

The already established trail classifications and their related components form the basis of the maintenance program. An Evaluation Checklist should be created to aid in the evaluation phase of the program. This checklist should identify the trail standard, locations, trail name (if designated) and notations of deficiencies. Depending on the trail classification, trail evaluations may vary from quarterly to annually. For instance, trails with higher traffic volumes should be evaluated more frequently than a neighborhood trail with a lower traffic volume, evaluations should be done for all public trails within the City, including those maintained by other organizations. From these checklists work orders or repairs could then be written. In addition, the information could be input into a performance database and utilized for baseline information for future maintenance programs.

Developing a Maintenance program database will help identify which type of trails, or areas need more or less maintenance allowing the City of Lancaster to allocate the appropriate funds in a efficient and effective manner ensuring the operational safety and quality of the entire trail system. Many cities have maintenance schedules for resurfacing and rehabilitating road surfaces. When possible and appropriate, prioritize these maintenance activities on the bicycle boulevards.

The following list represents a typical maintenance schedules associated with trail systems and should be used as a resource by local agencies.



TABLE 12-8: MAINTENANCE FREQUENCY SCHEDULE

Item	Frequency
Sign replacement/repair	1-3 years or as needed
Pavement sealing/potholes	5-15 years
Resurface, re-grade and re-stripe trail	10 years
Clean drainage system	1 year
Trash disposal	Bimonthly or as needed
Lighting replacement/repair	1 year
Graffiti removal	Weekly or as needed
Maintain furniture	1 year
Restroom cleaning/repair	Weekly or as needed
Replace or reconstruct trail	20 years
Map or signage updates	As needed
Sweeping and brush removal	Monthly or as needed
Repair flood damage, such as silt clean-up, culvert clean out, etc.	As needed
Clearing of vegetation for adequate sight distances	4 months or as needed

Under unique conditions or based upon the performance database, these frequencies could be increased or decreased for specific trail segments. Ideally, the City would be responsible for maintaining all of the public trails not within an organized homeowner’s association, thereby ensuring a consistent level of maintenance and care.

TRAIL MAINTENANCE GUIDELINES

Pavement

Many cities have maintenance schedules for re-surfacing and rehabilitating road surfaces. When possible and appropriate, prioritize these maintenance activities on the bicycle boulevards. Repave rough sections, repair broken or damaged pavement, and patch holes or cracks greater than one (1) inch deep.

Maintain regular sweeping program to keep the trail surface free of loose sand gravel, broken glass and litter.

Inspect trails, bridges, fencing, gates, vehicle barriers, lighting, and signs at regular intervals for safety hazards, damage, or other needed maintenance or repairs.

Decomposed Granite

Continuously maintain proper grade and surfacing of all trails, including but not limited to, removal of loose rock in excess of one and a half (1.5) inches in diameter, filling pot holes, and refilling with new surfacing material to required depth, as needed.

Caution must be used to compacted granite areas, with emphasis on sustaining the integrity of the sub-grade and granite pathway. This would include repairs to ruts, washouts, and erosion areas. Trails must remain clear of physical obstructions at all times.

Maintain regular weed abatement program to keep trail surface free of weeds.

LANDSCAPE MAINTENANCE AND OPERATION

The City of Lancaster will need to adopt a maintenance and operation schedule for the landscaping that will be integrated into the trail system, the following are guidelines and standards to help the City identify what needs to be maintained. Below is a schedule and basic guidelines for the routine maintenance of landscaped areas in and around the trail system.

Tree Maintenance

Tree pruning shall be performed with the intent of developing structurally sound trees with appearance typical of the species and proper safety clearance and access. All trees below fourteen (14) feet shall be inspected annually and pruned on a schedule.

Maintain trees to achieve an eight (8) foot clearance for all branches over trails and sidewalks to maintain safe pedestrian and bicycle visibility, clearance and access to prevent or eliminate hazardous situations. All trees shall be trimmed to prevent encroachment into private property.

The City's landscape maintenance program will continue into the trail system.

Shrubs

Prune hedges and shrubs from top to bottom. They shall not exceed ten (10) feet in height. Prune one year's growth back from curb, or sidewalk.

Remove all dead, diseased and unsightly branches from shrubs. Remove all vines or other growth as it develops within the shrubs/hedge. Vines that cover sound walls are not to be removed unless directed to do so by inspector. All dead shrubs shall be removed. Notify inspector prior to removal.



Restrict growth of hedges and shrubs to areas behind curbs and walkways and within planter beds by trimming. All pruning cuts shall be smooth, leaving no stubs exposed. Ragged or chewed appearance is not acceptable.

Ground Cover

Ground cover shall be kept free of weeds, litter, debris and leaves. Ground cover shall not exceed three (3) inches beyond the inside edge of the curb or border.

Fertilizer shall be a complete pellet type, with appropriate amount of nitrogen, phosphorus, potassium and trace elements and approved by the inspector.

Prune ground cover to maintain at an even level and consistent height. Cut long branches to the main growing height of the plant.

Irrigation

Routine inspections of landscaped areas for water leaks, blowouts, or stressed plant material indicating a lack of water delivery. Staff shall inspect the irrigation controller for power and program monitoring on a weekly basis repairs to system performed by assigned staff may include but are not limited to; line repair, emitter replacement, valve repair and electrical troubleshooting.

Schedule

TABLE 12-9: ANNUAL MAINTENANCE SCHEDULE

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
TREES/SHRUBS/GROUND COVER													
Trim Ground Cover	0	0	1	0	0	1	0	0	1	0	0	0	3
Shear Hedges	0	0	1	0	0	1	0	0	1	0	0	1	4
Tree Pruning	1	0	0	1	0	0	1	0	0	1	0	0	4
Fertilizing Shrubs	0	0	0	0	0	1	0	0	0	0	0	0	1
Fertilizing Trees	0	0	0	0	0	0	0	0	0	0	0	0	0
Fertilizing Ground covers	0	0	0	0	0	0	0	0	0	0	0	0	0
Weeding - mechanical	1	1	2	3	3	4	3	4	3	2	0	0	26
Weeding - Spraying	0	0	2	2	2	3	2	2	1	0	0	0	14
HARD SURFACES													
Spray Crack Weeds	0	0	0	2	2	3	2	3	2	1	0	0	15
Blow Walks	0	0	0	0	0	0	0	0	0	0	0	0	0
IRRIGATION													
Inspection for leaks/blowouts	1	1	1	1	1	1	1	1	1	1	1	1	12
Monitor/Adjust Heads	as needed												
OTHER													
Litter Debris removal on site	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX A



The following tables show the recommended roadway configuration to include bikeways. Details for the type and style of facility, such as widths of recommended bicycle lanes, are included. However, the City will practice context sensitivity and use its judgment when facilities are engineered. The widths and ultimate type of facility may vary from what these tables present.

Bikeways (Class II, III and other improvements) Detailed Tables

WEST-EAST ROUTES

(1) AVENUE E			
STREET:	30th St. W		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> Los Angeles County jurisdiction on north side 2 lanes 26' wide No development 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes

(2) AVENUE F			
STREET:	70th St. W		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide No development 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes

(3) AVENUE G			
STREET:	100th St. W		
LIMITS:	50th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add bike lanes

(3) AVENUE G

STREET:	50th St. W		
LIMITS:	30th St. W		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center median • 36' wide to median, both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes on each side of the median • Add 6'-wide bike lanes with painted buffer
STREET:	30th St. W		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center median • 36' wide both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes westbound • Add 6'-wide bike lanes with painted buffer
STREET:	25th St. W		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • Los Angeles County jurisdiction on north side • 2 lanes • 24' wide • 30' wide bridge over SR 14 (Caltrans jurisdiction) 	PROPOSED	<ul style="list-style-type: none"> • No designated bikeway • Extend pavement to create 8' wide shoulder on each side • Should development occur, add wide bike lanes
STREET:	Sierra Highway		
LIMITS:	Division Street		
EXISTING	<ul style="list-style-type: none"> • Los Angeles County jurisdiction on north side • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes



(4) AVENUE H		
STREET:	Mid-block 93rd St. W / 90th St. W	
LIMITS:	90th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes, no center marking 21' wide 90 degree parking in front of Del Sur Elementary 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	90th St. W	
LIMITS:	70th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	70th St. W	
LIMITS:	50th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	50th St. W	
LIMITS:	~1,330' west of 35th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	~1,330' west of 35th St. W	
LIMITS:	35th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with painted median 73' wide 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Should development occur, add wide bike lanes

(4) AVENUE H

STREET:	35th St. W		
LIMITS:	30th St. W		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 54' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to add 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	30th St. W		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> 3 lanes westbound, 2 lanes eastbound with painted buffer, center-turn lane 88' wide including 8'-wide painted buffer 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer Remove existing painted buffer
STREET:	25th St. W		
LIMITS:	CA-14 SB Ramps		
EXISTING	<ul style="list-style-type: none"> 6 lanes with striped median and 8'-wide shoulders Varies 94' to 102' wide 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lanes with painted buffer Some improvements will require Caltrans approval
STREET:	CA-14 SB Ramps		
LIMITS:	CA-14 NB Ramps		
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound with striped median and striped shoulders 94' wide Caltrans right-of-way 	PROPOSED	<ul style="list-style-type: none"> Restripe shoulders for 6'-wide bike lanes with painted buffer Some improvements will require Caltrans approval
STREET:	CA-14 NB Ramps		
LIMITS:	20th St. W		
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, striped median, striped shoulder 94' to 110' wide Caltrans right-of-way 	PROPOSED	<ul style="list-style-type: none"> Restripe shoulders for 6'-wide bike lanes with painted buffer Some improvements will require Caltrans approval



(4) AVENUE H		
STREET:	20th St. W	
LIMITS:	10th St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane westbound, 3 lanes eastbound, center-turn lane 66' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lanes Restripe to 2 lanes eastbound and 2 lanes westbound
STREET:	10th St. W	
LIMITS:	7th St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane westbound, 4 lanes eastbound 70' wide 	PROPOSED
		<ul style="list-style-type: none"> Widen pavement on northside from 10th St. W to approximately 620' east Add 7'-wide bike lanes with painted buffer
STREET:	7th St. W	
LIMITS:	Trevor Avenue	
EXISTING	<ul style="list-style-type: none"> 4 lanes eastbound, 3 lanes westbound with center median, intermittent right-hand turn pockets both directions 47' wide to median both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 3 lanes in eastbound direction Add 7'-wide bike lanes with painted buffer
STREET:	Trevor Avenue	
LIMITS:	Division Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes with striped center median 36' wide 	PROPOSED
		<ul style="list-style-type: none"> Should development occur, add wide bike lanes
STREET:	Division Street	
LIMITS:	40th St. E (City limit)	
EXISTING	<ul style="list-style-type: none"> 2 lanes 22' wide Los Angeles County jurisdiction on north side 	PROPOSED
		<ul style="list-style-type: none"> Should development occur, add wide bike lanes

(5) AVENUE H-8 (21ST STREET WEST TO SIERRA HIGHWAY)

STREET:	21st St. W		
LIMITS:	20th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide • Entrance to a Amargosa Creek at Avenue H-8 and Keaton Way 	PROPOSED	<ul style="list-style-type: none"> • Add bicycle route with sharrows
STREET:	20th St. W		
LIMITS:	Pickford Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bicycle route with sharrows
STREET:	Pickford Avenue		
LIMITS:	13th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 37' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bicycle route with sharrows
STREET:	13th St. W		
LIMITS:	10th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bicycle route with sharrows
STREET:	10th St. W		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide • Dead ends at Sierra Highway 	PROPOSED	<ul style="list-style-type: none"> • Add bicycle route with sharrows



AVENUE H-8 (DIVISION STREET TO CHALLENGER WAY)		
STREET:	Division Street	
LIMITS:	Carrousel Drive	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 62' wide 	PROPOSED <ul style="list-style-type: none"> • Add 7'-wide bike lanes
STREET:	Carrousel Drive	
LIMITS:	3rd St. E	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 52' wide 	PROPOSED <ul style="list-style-type: none"> • Add 7'-wide bike lanes
STREET:	3rd St. E	
LIMITS:	Foxtan Avenue	
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 31' wide 	PROPOSED <ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	Foxtan Avenue	
LIMITS:	5th St. E	
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 31' wide 	PROPOSED <ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	5th St. E	
LIMITS:	7th St. E	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 68' wide 	PROPOSED <ul style="list-style-type: none"> • Add 7'-wide bike lanes

AVENUE H-8 (DIVISION STREET TO CHALLENGER WAY)

STREET:	7th St. E		
LIMITS:	Challenger Way		
EXISTING	<ul style="list-style-type: none"> Dirt road 	PROPOSED	<ul style="list-style-type: none"> Add bike path through undeveloped area to Challenger Way



(6) AVENUE I		
STREET:	90th St. W	
LIMITS:	87th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 35' wide to median 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	87th St. W	
LIMITS:	80th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 35' to 37' wide Los Angeles County jurisdiction on north side from 87th St. W to 85th St. W and on both sides from 85th St. W to 82nd St. W 	PROPOSED
		<ul style="list-style-type: none"> Add 5' to 7'-wide bike lanes
STREET:	80th St. W	
LIMITS:	75th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement in each direction to add 8'-wide bike lanes
STREET:	75th St. W	
LIMITS:	70th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 29' wide Segment is within Los Angeles County jurisdiction 	PROPOSED
		<ul style="list-style-type: none"> Work with Los Angeles County to extend pavement in each direction to add 8'-wide bike lanes
STREET:	70th St. W	
LIMITS:	45th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' to 29' wide 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement in each direction to add 8'-wide bike lanes

(6) AVENUE I

STREET:	45th St. W		
LIMITS:	Mid-block 45th St. W / 40th St. W		
EXISTING	<ul style="list-style-type: none"> 1 lane westbound, 1 lane with painted hatched buffer eastbound, center median 13' wide westbound lane; 45' wide eastbound lane including 33' wide painted buffer 	PROPOSED	<ul style="list-style-type: none"> Extend pavement westbound to add 8'-wide bike lane Add 7'-wide bike lane with painted buffer eastbound
STREET:	Mid-block 45th St. W / 40th St. W		
LIMITS:	35th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement in each direction to add 8'-wide bike lanes
STREET:	35th St. W		
LIMITS:	32nd St. W		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 49' to 62' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide bike lanes with painted buffer Option: Maintain number of lanes and add 5'-wide bike lanes
STREET:	32nd St. W		
LIMITS:	30th St. W		
EXISTING	<ul style="list-style-type: none"> 4 lanes to 7 lanes with center-turn lane/raised median 83' to 128' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	30th St. W		
LIMITS:	CA-14 on-ramp		
EXISTING	<ul style="list-style-type: none"> 8 lanes with center median 45' wide on either side of median 	PROPOSED	<ul style="list-style-type: none"> Reduce to 3 lanes in each direction Add 7'-wide colored bike lanes with painted buffer starting at Valley Central Way



(6) AVENUE I		
STREET:	CA-14 on-ramp	
LIMITS:	20th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 85' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer Reduce to 2 lanes in each direction after freeway on-ramp
STREET:	20th St. W	
LIMITS:	17th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with striped/raised median 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	17th St. W	
LIMITS:	13th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with striped median/center-turn lane 76' to 78' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide bike lanes with painted buffer from 17th St. W to 15th St. W Add 7'-wide bike lanes with painted buffer westbound from 15th St. W to 13th St. W Add 7'-wide bike lanes eastbound 15th St. W and 13th St. W Color bike lanes
STREET:	13th St. W	
LIMITS:	11th St. W	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes, with center-turn lane On-street parking westbound from 13th St. W to Kingtree Ave. 76' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes eastbound Consolidate access points to reduce number of driveways Add 7'-wide bike lanes eastbound from 13th St. W to 11th St. W Add 5'-wide bike lanes and 7'-wide parking lane westbound from 13th St. W to Kingtree Ave. Add 7'-wide bike lane westbound from Kingtree Ave. to 11th St. W Color bike lanes

(6) AVENUE I

STREET:	11th St. W		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane • 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 7'-wide colored bike lanes with painted buffer
STREET:	Sierra Highway		
LIMITS:	Trevor Avenue		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound with center-turn lane from Sierra Avenue to Yucca Avenue • 4 lanes with center-turn lane from Yucca Avenue to Trevor Avenue • 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes westbound • Add 7'-wide colored bike lanes
STREET:	Trevor Avenue		
LIMITS:	Division Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with on-street parking and center-turn lane • 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Division Street		
LIMITS:	5th St. E		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane • 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 7'-wide colored bike lanes with painted buffer
STREET:	5th St. E		
LIMITS:	7th St. E		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane • 84' wide • Sidewalk both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce 2 lanes in each direction • Add 7'-wide colored bike lanes with painted buffer



(6) AVENUE I

STREET:	7th St. E		
LIMITS:	Challenger Way (10th St. E)		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane • 85' wide • 7th St. E to 33' east and from 600' west of Challenger to 330' west of Challenger 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes westbound • Add 7'-wide colored bike lanes with painted buffer
STREET:	Challenger Way (10th St. E)		
LIMITS:	12th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 24' wide eastbound; 35' wide westbound 	PROPOSED	<ul style="list-style-type: none"> • Add 4'-wide bike lane eastbound and 6'-wide bike lane westbound • Color bike lanes
STREET:	12th St. E		
LIMITS:	15th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 68' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	15th St. E		
LIMITS:	18th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	18th St. E		
LIMITS:	20th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • Varies 42' to 52' wide eastbound; 30' wide westbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer

(6) AVENUE I

STREET:	20th St. E		
LIMITS:	23rd St. E		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 67' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement southbound Add 7'-wide colored bike lanes with painted buffer
STREET:	23rd St. E		
LIMITS:	26th St. E		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane Varies 82' to 84' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	26th St. E		
LIMITS:	27th St. E		
EXISTING	<ul style="list-style-type: none"> 4 lanes 75' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	27th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> 4 lanes Varies 48' to 77' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement in both directions Add 7'-wide colored bike lanes
STREET:	30th St. E		
LIMITS:	Gifford Middle School		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 67' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide colored bike lanes



(6) AVENUE I		
STREET:	Gifford Middle School	
LIMITS:	35th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes 48' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction with center-turn lane Add 8'-wide bike lanes
STREET:	35th St. E	
LIMITS:	37th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median Varies 24' to 34' wide eastbound; 36' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide bike lanes with painted buffers
STREET:	37th St. E	
LIMITS:	40th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 66' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide bike lanes with painted buffers

(7) LANCASTER BOULEVARD

STREET:	35th St. W		
LIMITS:	Mid-block 35th St. W / 32nd St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 66' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 6' or 7' • Color bike lanes
STREET:	Mid-block 35th St. W / 32nd St. W		
LIMITS:	30th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 68' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 6' or 7' • Color bike lanes
STREET:	30th St. W		
LIMITS:	27th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median and bike lanes in both directions • 35' to the median including 13'-wide bike lane 	PROPOSED	<ul style="list-style-type: none"> • Add painted buffer within the existing bike lane • Color bike lanes
STREET:	27th St. W		
LIMITS:	Valley Central Way		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median and bike lanes both directions • 35' to the median both directions, including 13'-wide bike lane westbound and 5'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lane eastbound to 6' or 7' • Add painted buffer within the existing bike lane • Color bike lanes
STREET:	Valley Central Way		
LIMITS:	CA-14 on-ramp		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 60' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 7' with painted buffer • Color bike lanes



(7) LANCASTER BOULEVARD			
STREET: CA-14 on-ramp			
LIMITS: 20th St. W			
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lane westbound only 61' wide including 5'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lane with painted buffer eastbound Widen to 7' and color bike lane westbound, and add on-street parking
STREET: 20th St. W			
LIMITS: 11th St. W			
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 60' wide including 5'-wide bike lanes both directions 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 7' and add on-street parking Color bike lanes Option: Color existing bike lanes
STREET: 11th St. W			
LIMITS: 10th St. W			
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 70' wide with 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 7' Color bike lanes
STREET: 10th St. W			
LIMITS: Sierra Highway			
EXISTING	<ul style="list-style-type: none"> 2 lanes with intermittent on-street parking and center diagonal head-in parking 19' wide in each direction; 30' wide area for diagonal parking Bike route with sharrows 	PROPOSED	<ul style="list-style-type: none"> Keep as is
STREET: Sierra Highway			
LIMITS: Yucca Avenue			
EXISTING	<ul style="list-style-type: none"> 4 lanes with on-street parking on eastbound side and center median 35' wide to the median 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide colored bike lanes Add 8'-wide parking lane eastbound Reduce to 1 lane in each direction

(7) LANCASTER BOULEVARD

STREET:	Yucca Avenue		
LIMITS:	Division Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with on-street parking eastbound • 60' wide • Break in Lancaster here; Lancaster Blvd. continues south 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes and 8'-wide parking lane

(8) LANCASTER BOULEVARD

STREET:	Division Street		
LIMITS:	Foxton Avenue		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 58' wide with 4'-wide bike lanes in each direction 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen to 6' and color bike lanes • Add 8'-wide parking lane
STREET:	Foxton Avenue		
LIMITS:	5th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with on-street parking eastbound side and bike lanes both directions • 62' wide with 4'-wide bike lane westbound and 11'-wide parking / bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction and add center-turn lane • Widen to 6' and color bike lanes • Add 8'-wide parking lane eastbound
STREET:	5th St. E		
LIMITS:	Challenger Way (10th St. E)		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • Varies between 62' and 70' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'- or 7'-wide colored bike lanes with painted buffer • Reduce to 1 lane in each direction with center-turn lane
STREET:	Challenger Way (10th St. E)		
LIMITS:	12th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes westbound, 1 lane with on-street parking eastbound, center-turn lane, and bike lanes in both directions • 62' to 64' wide including 4'-wide bike lane westbound and 13' to 16'-wide parking and bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane westbound • Add 7'-wide parking lane eastbound • Widen westbound bike lane to 7' and add painted buffer • Color bike lanes



(8) LANCASTER BOULEVARD			
STREET:	12th St. E		
LIMITS:	17th St. E		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes in both directions 64' wide including 5'-wide bike lane westbound and 5'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 7' and add painted buffer Color bike lanes
STREET:	17th St. E		
LIMITS:	18th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes westbound, 1 lane eastbound, center-turn lane and bike lanes in both directions 56' wide including 5'-wide bike lane westbound and 5'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane westbound Widen bike lanes to 7' and add painted buffer Color bike lanes
STREET:	18th St. E		
LIMITS:	20th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes both directions 57' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 7' Color bike lanes Reduce number of lanes
STREET:	20th St. E		
LIMITS:	340' east of 21st St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes 44' to 57' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 6' Color bike lanes Reduce number of lanes
STREET:	340' east of 21st St. E		
LIMITS:	23rd St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes with bike lanes 34' to 57' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 6' Color bike lanes Should development occur, extend pavement Reduce number of lanes

(8) LANCASTER BOULEVARD

STREET:	23rd St. E		
LIMITS:	25th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide including 5'-wide bike lanes 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 7' and add painted buffer • Color bike lanes
STREET:	25th St. E		
LIMITS:	27th St. E		
EXISTING	<ul style="list-style-type: none"> • 1 lane westbound, 2 lanes eastbound, center-turn lane and bike lanes in both directions • 57' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane eastbound • Widen bike lanes to 7' and add painted buffers • Color bike lanes
STREET:	27th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide with 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 7' and add painted buffer • Color bike lanes • Add 7'-wide parking lane westbound
STREET:	30th St. E		
LIMITS:	300' east of Cajun Street		
EXISTING	<ul style="list-style-type: none"> • 1 lane and bike lane westbound, 2 lanes eastbound (includes right-hand turn lane), center-turn lane • 57' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane eastbound • Add 6' or 7'-wide bike lanes • Add painted buffer to bike lane eastbound
STREET:	300' east of Cajun Street		
LIMITS:	Christian Life Assembly		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bike lanes



(8) LANCASTER BOULEVARD			
STREET:	Christian Life Assembly		
LIMITS:	33rd St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound (includes right-turn lane), 1 lane westbound 45' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide bike lanes
STREET:	33rd. St. E		
LIMITS:	40th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide bike lanes
STREET:	40th St. E		
LIMITS:	Lancaster Baptist Church		
EXISTING	<ul style="list-style-type: none"> Los Angeles County jurisdiction westbound 2 lanes eastbound, 1 lane westbound, center-turn lane 53' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	Lancaster Baptist Church		
LIMITS:	50th St. E		
EXISTING	<ul style="list-style-type: none"> Los Angeles County jurisdiction westbound 2 lanes 25' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes

(9) NEWGROVE STREET

STREET:	12th St. West		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • 2 lanes 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

(10) AVENUE J

STREET:	110th St. W		
LIMITS:	65th St. W		
EXISTING	<ul style="list-style-type: none"> • Pockets of Los Angeles County jurisdiction throughout • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	65th St. W		
LIMITS:	60th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center-turn lane • 64' wide including paved shoulder 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	60th St. W		
LIMITS:	57th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with raised center median and painted hatched buffer eastbound • 35' wide westbound; 39' wide eastbound including 17' wide painted buffer 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(10) AVENUE J		
STREET:	57th St. W	
LIMITS:	53rd St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes westbound, center-turn lane 59' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	53rd St. W	
LIMITS:	52nd St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median and painted buffer eastbound 35' westbound; 35' wide eastbound including 23' wide painted buffer 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	52nd St. W	
LIMITS:	50th St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes westbound, center-turn lane 60' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	50th St. W	
LIMITS:	47th St. W	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 1 lane westbound, center median 35' wide eastbound; 14' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement westbound to add 8'-wide bike lane Reduce to 2 lanes eastbound Add 7'-wide bike lane eastbound with painted buffer
STREET:	47th St. W	
LIMITS:	45th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center median 36' wide eastbound; 14' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement westbound to add 8'-wide bike lane Add 7'-wide bike lane eastbound with painted buffer

(10) AVENUE J

STREET:	45th St. W		
LIMITS:	42nd St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 31' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bike lanes in both directions
STREET:	42nd St. W		
LIMITS:	40th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center-turn lane • 54' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	40th St. W		
LIMITS:	38th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, striped center median • 56' wide 	PROPOSED	<ul style="list-style-type: none"> • Should development occur on north side, extend pavement and add westbound bike lane with painted buffer • Add 7'-wide bike lane with painted buffer eastbound
STREET:	38th St. W		
LIMITS:	36th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes eastbound, 2 lanes westbound, raised center median • 35' wide both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes eastbound • Add 6'-wide bike lanes with painted buffer
STREET:	36th St. W		
LIMITS:	32nd St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes eastbound, 2 lanes westbound, center-turn lane • 71' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes eastbound • Add 6'-wide bike lanes with painted buffer • Color bike lanes starting at 35th St. W



(10) AVENUE J		
STREET:	32nd St. W	
LIMITS:	31st St. W	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes eastbound Add 7'-wide colored bike lanes with painted buffer
STREET:	31st St. W	
LIMITS:	30th St. W	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center-turn lane 76' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes eastbound Add 7'-wide colored bike lanes with painted buffer
STREET:	30th St. W	
LIMITS:	25th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	25th St. W	
LIMITS:	CA-14 on-ramp	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 36' wide both directions Sidewalk both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'- or 7'-wide colored bike lanes with painted buffer
STREET:	CA-14 on-ramp	
LIMITS:	20th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with striped and raised center medians 35' wide eastbound, 33' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'- or 7'-wide colored bike lanes with painted buffer

(10) AVENUE J			
STREET:	20th St. W		
LIMITS:	16th St. W		
EXISTING	<ul style="list-style-type: none"> 6 lanes with raised center median 35' wide eastbound, 33' wide westbound 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	16th St. W		
LIMITS:	15th St. W		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	15th St. W		
LIMITS:	Leatherwood Avenue		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 60' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway
STREET:	Leatherwood Avenue		
LIMITS:	12th St. W		
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, raised center-turn lane, 22' wide westbound, 35' eastbound 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Reduce number of lanes
STREET:	12th St. W		
LIMITS:	11th St. W		
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center-turn lane 72' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Reduce number of lanes



(10) AVENUE J		
STREET:	11th St. W	
LIMITS:	10th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 83' wide 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway Reduce number of lanes
STREET:	10th St. W	
LIMITS:	Beech Avenue	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 83' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in both directions Add 6'-wide colored bike lanes with painted buffer
STREET:	Beech Avenue	
LIMITS:	Trevor Avenue	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide eastbound; 37' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Trevor Avenue	
LIMITS:	Mid-block Trevor Avenue / Division Street	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 87' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Mid-block Trevor Avenue / Division Street	
LIMITS:	Division Street	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center-turn lane 72' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes eastbound Add 6'-wide colored bike lanes with painted buffer

(10) AVENUE J

STREET:	Division Street		
LIMITS:	Glenraven Road		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 3 lanes westbound, with center-turn lane • 72' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:	Glenraven Road		
LIMITS:	5th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 56' to 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lane westbound from 3rd St. E to 5th St. E • From Glenraven to 3rd St. E add bike route on frontage road for westbound travel • From 3rd St. E to Raysack Avenue, add bike route on frontage road eastbound
STREET:	5th St. E		
LIMITS:	Andale Avenue		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 70' wide to Watford Avenue • 60' wide to Andale Avenue 	PROPOSED	<ul style="list-style-type: none"> • Maintain number of lanes and add 5'-wide colored bike lanes
STREET:	Andale Avenue		
LIMITS:	Challenger Way (10th St. E)		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane, bike lane westbound, right-hand turn lane eastbound at 8th St. E • 68' to 83' wide including 4'-wide bike lane 	PROPOSED	<ul style="list-style-type: none"> • Where 83' wide, add 7'-wide colored bike lanes with painted buffer eastbound • Where 68' wide, add 5'-wide colored bike lane eastbound • Widen and color westbound bike lane to 7' and add painted buffer
STREET:	Challenger Way (10th St. E)		
LIMITS:	11th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes and right-hand turn lane eastbound, 3 lanes westbound, center median • 37' wide eastbound, 33' wide westbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes westbound • Add 6'-wide colored bike lanes with painted buffer



(10) AVENUE J			
STREET:	11th St. E		
LIMITS:	640' east of 15th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 3 lanes westbound, center-turn lane Raised median from 11th St. E to Palm Vista, 24' wide eastbound, 32' wide eastbound 72' wide from Palm Vista to 13th St. E 84' wide from 13th St. E to 640' east of 15th St. E 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes westbound Add 7'-wide colored bike lanes with painted buffer Reconstruct 300' of raised median between 11th St. E and Palm Vista to move/narrow
STREET:	640' east of 15th St. E		
LIMITS:	17th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 3 lanes westbound, raised center median 35' wide eastbound, 33' westbound 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes westbound Add 6'-wide colored bike lanes with painted buffer
STREET:	17th St. E		
LIMITS:	20th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 3 lanes westbound, center median 35' wide both directions 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes westbound Add 7'-wide colored bike lanes with painted buffer
STREET:	20th St. E		
LIMITS:	21st St. E		
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes westbound, center-turn lane 48' wide 	PROPOSED	<ul style="list-style-type: none"> Add wide bike lanes
STREET:	21st St. E		
LIMITS:	25th St. E		
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes westbound, center median 13' eastbound, 35' wide westbound 	PROPOSED	<ul style="list-style-type: none"> Extend pavement eastbound to add 8'-wide bike lane Add 7'-wide bike lane with painted buffer westbound

(10) AVENUE J

STREET:	25th St. E		
LIMITS:	26th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer eastbound • Extend pavement 8' westbound and add bike lane
STREET:	26th St. E		
LIMITS:	27th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 63' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer westbound • Extend pavement 8' eastbound to add bike lane
STREET:	27th St. E		
LIMITS:	32nd St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center median • 35' wide eastbound, 21' wide westbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer eastbound • Extend pavement 8' westbound and add bike lane
STREET:	32nd St. E		
LIMITS:	35th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bike lanes in both directions
STREET:	35th St. E		
LIMITS:	37th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with raised center median, painted hatched buffer eastbound • 15' wide westbound; 35' wide eastbound including 23' wide painted hatched buffer 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to accommodate 8'-wide bike lane westbound • Modify existing painted buffer and add 7'-wide bike lane with painted buffer eastbound



(10) AVENUE J			
STREET:	37th St. E		
LIMITS:	40th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike lanes
STREET:	40th St. E		
LIMITS:	70th St. E		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes

(11) AVENUE J-4

STREET:	25th St. E		
LIMITS:	26th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking westbound • 29' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	26th St. E		
LIMITS:	27th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking eastbound • 33' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	27th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows



(12) AVENUE J-8			
STREET: 65th St. W			
LIMITS: 60th St. W			
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane with on-street parking westbound, center-turn lane and bike lanes in both directions 66' wide including 5'-wide bike lane eastbound and 16'-wide parking / bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 6' and add painted buffer Add 7'-wide parking lane westbound
STREET: 60th St. W			
LIMITS: 56th St. W			
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center-turn lane, bike lane eastbound 54' wide including 5'-wide bike lane eastbound Developed road ends here 	PROPOSED	<ul style="list-style-type: none"> Widen bike lane to 6' eastbound Add 6'-wide bike lane westbound <li style="color: #e91e63;">Reduce number of lanes
STREET: 56th St. W			
LIMITS: 55th St. W			
EXISTING	<ul style="list-style-type: none"> Undeveloped land 	PROPOSED	<ul style="list-style-type: none"> Add bike lanes
STREET: 55th St. W			
LIMITS: 50th St. W			
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 53' wide 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lanes with painted buffer
STREET: 50th St. W			
LIMITS: Appaloosa Drive			

(12) AVENUE J-8

EXISTING	<ul style="list-style-type: none"> • 1 lane eastbound, 1 lane with right-hand turn lane westbound, center-turn lane • 62' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 6'-wide colored bike lanes with painted buffer
STREET:	Appaloosa Drive		
LIMITS:	Mid-block Appaloosa Drive / 47th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 62' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 6'-wide bike colored lanes with painted buffer
STREET:	Mid-block Appaloosa Drive / 47th St. W		
LIMITS:	47th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lane eastbound • 66' wide including 5'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 6'-wide colored bike lane with painted buffer westbound • Widen bike lane eastbound to 6' and add colored pavement and painted buffer
STREET:	47th St. W		
LIMITS:	40th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 6'-wide colored bike lanes with painted buffer
STREET:	40th St. W		
LIMITS:	Mid-block 37th St. W / 35th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with bike lanes in both directions • 35' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, widen and add colored bike lanes



(12) AVENUE J-8

STREET:	Mid-block 37th St. W / 35th St. W		
LIMITS:	35th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and bike lanes in both directions • 47' wide including 7'-wide bike lane eastbound and 5'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, widen and add colored bike lanes
STREET:	35th St. W		
LIMITS:	Bobby Jones Drive		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center-turn lane and bike lanes in both directions • 57' wide including 5'-wide bike lane eastbound and 4'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 6' • Color bike lanes
STREET:	Bobby Jones Drive		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 6' and add painted buffers • Color bike lanes
STREET:	25th St. W		
LIMITS:	15th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Color bike lanes
STREET:	15th St. W		
LIMITS:	13th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane, on-street parking eastbound, 1 lane westbound, and bike lanes in both directions • Merges from 2 lanes to 1 lane eastbound in this block • 59' wide including 15' wide park / bike lane eastbound and 8'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Color bike lanes • Add 8'-wide parking lane eastbound

(12) AVENUE J-8

STREET:	13th St. W		
LIMITS:	12th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane, on-street parking and bike lanes in both directions • 59' wide including 16' wide park / bike lane eastbound and 10' wide park / bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Color bike lanes • Add 7'-wide parking stripe
STREET:	12th St. W		
LIMITS:	10th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking both directions • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows
STREET:	10th St. W		
LIMITS:	Cedar Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking both directions • 37' wide • Avenue J-8 jogs north on to Cedar to continue 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows

CEDAR AVENUE

STREET:	Avenue J-8		
LIMITS:	Avenue J-7		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 30' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows



AVENUE J-7			
STREET:	Cedar Avenue		
LIMITS:	Adler Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking both directions • 30' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows
ADLER AVENUE			
STREET:	Avenue J-7		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 30' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows
AVENUE J-8			
STREET:	Adler Avenue		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking both directions • 36' wide • Avenue J-8 ends here. Continues after railroad at Division Street 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with b-type sharrows • Add signalized crossing of Sierra Highway to connect to the Sierra Highway Bike Path • Construct a bridge connecting the Sierra Highway Bike Path at Avenue J-8 over the railroad to a bike path that connects with East Avenue J-8 at Division Street

(13) AVENUE J-8

STREET:	Division Street		
LIMITS:	Glenraven Road		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • Few observed parking • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

AVENUE J-9

STREET:	Glenraven Road		
LIMITS:	Rodin Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • Few observed parking • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

RODIN AVENUE

STREET:	Avenue J-9		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking both directions • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

AVENUE J-8

STREET:	Rodin Avenue		
LIMITS:	7th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 63' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffers
STREET:	7th St. E		
LIMITS:	8th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 31' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide colored bike lanes • Should development occur, maintain wide color bike lanes, and add painted buffers



AVENUE J-8		
STREET:	8th St. E	
LIMITS:	10th St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes 36' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes Should development occur, maintain color and painted buffers to bike lanes
STREET:	10th St. E	
LIMITS:	Palm Vista Avenue	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 64' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	Palm Vista Avenue	
LIMITS:	15th St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center-turn lane 64' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	15th St. E	
LIMITS:	20th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes 64' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	20th St. E	
LIMITS:	Mid-block 20th St. E / 22nd St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 47' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes with painted buffer

AVENUE J-8

STREET:	Mid-block 20th St. E / 22nd St. E		
LIMITS:	22nd St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking westbound • 64' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer
STREET:	22nd St. E		
LIMITS:	25th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 32' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide colored bike lanes • Should development occur, widen bike lanes and add color
STREET:	25th St. E		
LIMITS:	27th St. E		
EXISTING	<ul style="list-style-type: none"> • Undeveloped land gap • No road between these streets 	PROPOSED	<ul style="list-style-type: none"> • Add colored bike lanes
STREET:	27th St. E		
LIMITS:	Mid-block 27th St. E / 30th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 64' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Mid-block 27th St. E / 30th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> • 1 lane eastbound, 1 lane westbound, center-turn lane • 50' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes



AVENUE J-8			
STREET:		30th St. E	
LIMITS:		35th St. E	
EXISTING		PROPOSED	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center-turn lane • 55' wide
			<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:		35th St. E	
LIMITS:		40th St. E	
EXISTING		PROPOSED	<ul style="list-style-type: none"> • 2 lanes • 30' wide • No center marking
			<ul style="list-style-type: none"> • Extend pavement to create 8'-wide bike lanes • Should development occur, accommodate wide bike lanes with color

(14) AVENUE K

STREET:	90th St. W		
LIMITS:	65th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route
STREET:	65th St. W		
LIMITS:	Mid-block 65th St. W / 62nd St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes westbound, 1 lane eastbound, center median • 35' wide to median 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Mid-block 65th St. W / 62nd St. W		
LIMITS:	Mid-block 62nd St. W / 60th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 35' wide to median 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Mid-block 62nd St. W / 60th St. W		
LIMITS:	60th St. W		
EXISTING	<ul style="list-style-type: none"> • 1 lane westbound, 2 lanes eastbound, center median • 16' wide westbound; 37' wide eastbound 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lane westbound • Add 7'-wide bike lane with painted buffer eastbound
STREET:	60th St. W		
LIMITS:	57th St. W		
EXISTING	<ul style="list-style-type: none"> • 1 lane eastbound, 2 lanes westbound, center median • 14' wide eastbound; 35' wide westbound 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bike lane eastbound • Add 7'-wide bike lane with painted buffer westbound



(14) AVENUE K			
STREET:	57th St. W		
LIMITS:	50th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide bike lanes
STREET:	50th St. W		
LIMITS:	Blossom Drive		
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes westbound, center median 15' wide eastbound, 35' wide westbound 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide bike lane eastbound Add 7'-wide bike lane with painted buffer westbound
STREET:	Blossom Drive		
LIMITS:	45th St. W		
EXISTING	<ul style="list-style-type: none"> 1 lane with painted buffer eastbound, 1 lane westbound, center median 35' wide including 23' wide buffer eastbound; 15' wide westbound 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide bike lane westbound Add 7'-wide bike lane with painted buffer eastbound
STREET:	45th St. W		
LIMITS:	42nd St. W		
EXISTING	<ul style="list-style-type: none"> 1 lane eastbound, 2 lanes with painted buffer westbound, center-turn lane 63' wide including 9'-wide buffer westbound 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	42nd St. W		
LIMITS:	40th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes 26' wide 	PROPOSED	<ul style="list-style-type: none"> Extend pavement to add 8'-wide colored bike lanes

(14) AVENUE K

STREET:	40th St. W		
LIMITS:	Mid-block 37th St. W / Buena Vista Way		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer
STREET:	Mid-block 37th St. W / Buena Vista Way		
LIMITS:	Buena Vista Way		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 73' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer
STREET:	Buena Vista Way		
LIMITS:	36th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 62' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer
STREET:	36th St. W		
LIMITS:	Yew Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 86' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer
STREET:	Yew Street		
LIMITS:	32nd St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 34' wide westbound, 36' wide eastbound 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes with painted buffer



(14) AVENUE K		
STREET:	32nd St. W	
LIMITS:	Bethel Church	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide eastbound; 36' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Bethel Church	
LIMITS:	27th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center turn pockets 82' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	27th St. W	
LIMITS:	25th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 61' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5' to 6'-wide colored bike lanes with painted buffer
STREET:	25th St. W	
LIMITS:	20th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes with painted buffer
STREET:	20th St. W	
LIMITS:	18th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lanes with painted buffer

(14) AVENUE K

STREET:	18th St. W		
LIMITS:	15th St. W		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide westbound, 36' wide eastbound 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lanes with painted buffer
STREET:	15th St. W		
LIMITS:	12th St. W		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide westbound, 36' wide eastbound 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway
STREET:	12th St. W		
LIMITS:	10th St. W		
EXISTING	<ul style="list-style-type: none"> 2 lanes westbound, 3 lanes eastbound, center-turn lane 72' wide 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway
STREET:	10th St. W		
LIMITS:	Gadsden Avenue		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 82' wide 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide colored bike lanes
STREET:	Gadsden Avenue		
LIMITS:	Division Street		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 82' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes in each direction beginning at Sierra Highway Add 6'-wide colored bike lanes with painted buffer



(14) AVENUE K		
STREET:	Division Street	
LIMITS:	Kirkland Avenue	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 82' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Kirkland Avenue	
LIMITS:	5th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 82' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	5th St. E	
LIMITS:	Mid-block 6th St. E / 7th St. E	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Mid-block 6th St. E / 7th St. E	
LIMITS:	7th St. E	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	7th St. E	
LIMITS:	8th St. E	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 74' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 6'-wide colored bike lanes with painted buffer

(14) AVENUE K

STREET:	8th St. E		
LIMITS:	15th St. E		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 6'-wide colored bike lanes with painted buffer
STREET:	15th St. E		
LIMITS:	20th St. E		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center median • 35' wide both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 5'-wide colored bike lanes
STREET:	20th St. E		
LIMITS:	Mid-block 20th St. E / 22nd St. E		
EXISTING	<ul style="list-style-type: none"> • 3 lanes eastbound, 2 lanes westbound, center-turn lane • 90' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 5'-wide bike lanes
STREET:	Mid-block 20th St. E / 22nd St. E		
LIMITS:	22nd St. E		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 2 lanes in each direction • Add 5'-wide bike lanes
STREET:	22nd St. E		
LIMITS:	25th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 69' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes



(14) AVENUE K		
STREET:	25th St. E	
LIMITS:	Tranquility Court (If extended)	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 36' wide eastbound, 35' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	Tranquility Court (If extended)	
LIMITS:	30th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 75' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	30th St. E	
LIMITS:	32nd St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 35' wide to median 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	32nd St. E	
LIMITS:	35th St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center-turn lane 61' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	35th St. E	
LIMITS:	Devyn Lane	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 46' wide 	PROPOSED
		<ul style="list-style-type: none"> Should development occur, add wide bike lanes

(14) AVENUE K

STREET:	Devyn Lane		
LIMITS:	40th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 27' wide • No sidewalk, soft shoulder both directions 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes

(15) AVENUE K-8

STREET:	62nd St. W		
LIMITS:	57th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and bike lanes • 68' wide including 5'-wide bike lanes 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer
STREET:	57th St. W		
LIMITS:	50th St. W		
EXISTING	<ul style="list-style-type: none"> • Becomes Avenue K-9 east of 60th St. W and dead ends at 57th St. W; starts again at 50th St. W 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	50th St. W		
LIMITS:	Mid-block 50th St. W / 47th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking westbound • No center marking • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes



(15) AVENUE K-8			
STREET: Mid-block 50th St. W / 47th St. W			
LIMITS: 47th St. W (If extended)			
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking westbound No center marking 32' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route with sharrows
STREET: 47th St. W (If extended)			
LIMITS: 45th St. W			
EXISTING	<ul style="list-style-type: none"> Unincorporated 2 lanes with no center marking 33' wide Gravel road 	PROPOSED	<ul style="list-style-type: none"> Smooth surface or add pavement to accommodate bicycles
STREET: 45th St. W			
LIMITS: 40th St. W			
EXISTING	<ul style="list-style-type: none"> Unincorporated 2 lanes No center marking Gravel Road 32' wide to 36' wide 	PROPOSED	<ul style="list-style-type: none"> Smooth surface or add pavement to accommodate bicycles
STREET: 40th St. W			
LIMITS: 35th St. W			
EXISTING	<ul style="list-style-type: none"> Prime Desert Woodlands Road does not continue through 	PROPOSED	<ul style="list-style-type: none"> Eventual connection through park
STREET: 35th St. W			
LIMITS: 33rd St. W			
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes in both directions 41' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> Keep as is Color bike lanes

(15) AVENUE K-8

STREET:	33rd St. W		
LIMITS:	32nd St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes westbound, 1 lane eastbound, center-turn lane, bike lanes both directions • 64' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' • Color bike lanes
STREET:	32nd St. W		
LIMITS:	28th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 65' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Widen bike lanes to 7' • Color bike lanes
STREET:	28th St. W		
LIMITS:	Mid-block 27th St. W / Fanchon Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes westbound, 1 lane eastbound, center-turn lane, bike lanes in both directions • 57' wide including 5'-wide bike lane westbound and 6'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane westbound • Widen bike lanes to 7' • Color bike lanes
STREET:	Mid-block 27th St. W / Fanchon Avenue		
LIMITS:	Fanchon Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with bike lanes in both directions • 53' wide including 5'-wide bike lane westbound and 6'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' • Color bike lanes
STREET:	Fanchon Avenue		
LIMITS:	25th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and bike lanes in both directions • 66' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer • Color bike lanes



(15) AVENUE K-8		
STREET:	25th St. W	
LIMITS:	Sunny Lane	
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center-turn lane, bike lanes in both directions 56' wide including 6'-wide bike lane westbound and 5'-wide eastbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane eastbound Widen bike lanes to 7' Color bike lanes
STREET:	Sunny Lane	
LIMITS:	21st St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane westbound, 2 lanes eastbound, center-turn lane, bike lanes both directions, on-street parking westbound 67' wide including 16'-wide park / bike lane westbound and 5'-wide bike lane eastbound 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane eastbound Widen bike lanes to 7' Color bike lanes Add 7'-wide parking stripe
STREET:	21st St. W	
LIMITS:	20th St. W	
EXISTING	<ul style="list-style-type: none"> 1 lane and right-hand turn lane westbound, 2 lanes eastbound, center-turn lane, bike lanes in both directions 67' wide including 5'-wide bike lanes both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane eastbound Widen bike lanes to 7' Color bike lanes
STREET:	20th St. W	
LIMITS:	15th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 64' wide including 5'-wide bike lanes both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 6' Color bike lanes
STREET:	15th St. W	
LIMITS:	Driver's Way	
EXISTING	<ul style="list-style-type: none"> 2 lanes with bike lanes in both directions 36' wide including 5'-wide bike lanes eastbound and 4'-wide bike lane westbound 9'-wide eastbound bike lane on top of bridge 	PROPOSED
		<ul style="list-style-type: none"> Widen bike lanes to 7' Color bike lanes

(15) AVENUE K-8

STREET:	Driver's Way		
LIMITS:	10th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and 5'-wide bike lanes • 64' wide including 5'-wide bike lanes • Road ends at 10th St. W, but bike path continues through 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' or 7' • Color bike lanes
STREET:	10th St. W		
LIMITS:	West of Gadsden Avenue		
EXISTING	<ul style="list-style-type: none"> • 10'-wide bike path continues through 	PROPOSED	<ul style="list-style-type: none"> • Add bike-activated signal to cross 10th St. W • Increase signage and remove barriers in front of entrance to path • Widen bollards for easier bicycle through zone • Should development occur, add wide bike lanes
STREET:	West of Gadsden Avenue		
LIMITS:	East of Gadsden Avenue		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • No center stripe • 36' wide • Road dead ends at Gadsden Avenue 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	East of Gadsden Avenue		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • Bike path (10' wide) • Ends at Sierra Highway and restarts at Division Street 	PROPOSED	<ul style="list-style-type: none"> • Add bike-activated signal to cross Sierra Highway • Increase signage and remove barriers in front of entrance to path • Widen bollards for easier bicycle through zone • Should development occur, add wide bike lanes



(15) AVENUE K-8		
STREET:	Division Street	
LIMITS:	5th St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes 65' wide with 5'-wide bike lanes Bike lanes are unmarked with no signage or pavement stencils 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	5th St. E	
LIMITS:	First View Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes 21' wide 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement to add 8'-wide colored bike lanes
STREET:	First View Street	
LIMITS:	8th St. E	
EXISTING	<ul style="list-style-type: none"> 2 lanes 64' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	8th St. E	
LIMITS:	Challenger Way	
EXISTING	<ul style="list-style-type: none"> 2 lanes 39' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes with painted buffer
STREET:	Challenger Way	
LIMITS:	Carol Drive	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 66' wide including 5'-wide bike lanes in both directions 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 7' Color bike lanes

(15) AVENUE K-8

STREET:	Carol Drive		
LIMITS:	20th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes westbound, 1 lane eastbound, center-turn lane, bike lane westbound • 56' wide including 5'-wide bike lane westbound • Trail next to sidewalk in westbound direction from 15th St. E to 20th St. E • Trail next to sidewalk northbound from Avenue K-4 to Avenue K-8 on 15th St. E 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane westbound • Widen bike lane westbound to 7' • Add 7'-wide bike lane eastbound • Color bike lanes
STREET:	20th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> • Undeveloped area • Road ends at 20th St. E; opportunity to create path through undeveloped area to 30th St. E 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	30th St. E		
LIMITS:	35th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 73' wide • Road dead ends at 35th St. E 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(16) AVENUE L		
STREET:	110th St. W	
LIMITS:	90th St. W	
EXISTING	<ul style="list-style-type: none"> No road 	PROPOSED
		<ul style="list-style-type: none"> Add bicycle path
STREET:	90th St. W	
LIMITS:	72nd St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide Road ends at 90th St. W 	PROPOSED
		<ul style="list-style-type: none"> Add bicycle path
STREET:	72nd St. W	
LIMITS:	70th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes eastbound, 1 lane westbound, center median 35' wide eastbound; 13' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Add bicycle path
STREET:	70th St. W	
LIMITS:	65th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED
		<ul style="list-style-type: none"> Should development occur, add wide bike lanes
STREET:	65th St. W	
LIMITS:	60th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and on-street parking / bike lane eastbound direction 53' wide including 13'-wide park / bike lane eastbound 	PROPOSED
		<ul style="list-style-type: none"> Widen bike lanes to 6' and add painted buffer

(16) AVENUE L

STREET:	60th St. W		
LIMITS:	57th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and bike lanes, and painted buffer westbound • 75' wide including 5'-wide bike lanes in both directions and 30'-wide painted buffer westbound 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' and add painted buffer
STREET:	57th St. W		
LIMITS:	55th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, bike lanes both directions • 61' wide including 5'-wide bike lane eastbound and 4'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer
STREET:	55th St. W		
LIMITS:	52nd St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes including bike lanes • 35' wide including 5'-wide bike lane eastbound; 2' wide (signed) bike lane westbound • Road dead ends here 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer
STREET:	52nd St. W		
LIMITS:	45th St. W		
EXISTING	<ul style="list-style-type: none"> • Unincorporated • Quartz Hill • Road does not go through 	PROPOSED	<ul style="list-style-type: none"> • Coordinate with County
STREET:	45th St. W		
LIMITS:	32nd St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 80' wide including 7'-wide bike lane eastbound and 10'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7' wide with painted buffer • Color bike lanes starting at 40th St. W



(16) AVENUE L			
STREET:	32nd St. W		
LIMITS:	30th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 89' wide including 10'-wide bike lane westbound and 7'-wide bike lane eastbound 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7' wide with painted buffer • Color bike lanes
STREET:	30th St. W		
LIMITS:	27th St. W		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane and bike lanes in both directions • 107' wide including 10'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7' wide and add painted buffer • Color bike lanes
STREET:	27th St. W		
LIMITS:	Ana Madre Lane		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 71' wide including 6'-wide bike lanes 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer • Color bike lanes
STREET:	Ana Madre Lane		
LIMITS:	Mid-block 22nd St. W / 23rd St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 71' wide including 6'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer • Color bike lanes
STREET:	Mid-block 22nd St. W / 23rd St. W		
LIMITS:	22nd St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 84' wide including 13'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7' wide with painted buffer • Color bike lanes

(16) AVENUE L

STREET:	22nd St. W		
LIMITS:	21st St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lane westbound only • 86' wide including 10'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer eastbound • Change bike lane to 7'-wide with painted buffer westbound • Color bike lanes
STREET:	21st St. W		
LIMITS:	20th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane, bike lane westbound • 88' wide including 10'-wide bike lane westbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer eastbound • Change bike lane to 7'-wide with painted buffer westbound • Color bike lanes
STREET:	20th St. W		
LIMITS:	19th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	19th St. W		
LIMITS:	15th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes westbound, 2 lanes eastbound, center-turn lane • 71' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	15th St. W		
LIMITS:	10th St. W		
EXISTING	<ul style="list-style-type: none"> • 3 lanes eastbound, 4 lanes westbound, center median • 48' wide both directions 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer



(16) AVENUE L		
STREET:	10th St. W	
LIMITS:	8th St. W	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 94' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	8th St. W	
LIMITS:	Mid-block 8th St. W / 6th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes westbound; 3 lanes eastbound, center-turn lane 78' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes with painted buffer
STREET:	Mid-block 8th St. W / 6th St. W	
LIMITS:	6th St. W	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center-turn lane 111' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	6th St. W	
LIMITS:	Sierra Highway	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 104' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	Sierra Highway	
LIMITS:	Business Center Parkway / 4th St. E	
EXISTING	<ul style="list-style-type: none"> 3 lanes eastbound, 2 lanes westbound, center median and bike lanes both directions 50' wide both directions including 7'-wide bike lanes in both directions 	PROPOSED
		<ul style="list-style-type: none"> Add 2'-wide painted buffer

(16) AVENUE L

STREET:	Business Center Parkway / 4th St. E		
LIMITS:	10th St. E		
EXISTING	<ul style="list-style-type: none"> • 4 lanes • 47' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction and add a center-turn lane • Add 6'-wide bike lanes
STREET:	10th St. E		
LIMITS:	25th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 26' wide • South side is City of Palmdale 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bike lanes on north side
STREET:	25th St. E		
LIMITS:	30th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 44' wide • South side is City of Palmdale 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	30th St. E		
LIMITS:	35th St. E		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 30' wide • South side is City of Palmdale 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	35th St. E		
LIMITS:	40th St. E		
EXISTING	<ul style="list-style-type: none"> • Undeveloped land • Road ends • South side is City of Palmdale 	PROPOSED	<ul style="list-style-type: none"> • Add bike path • Should development occur, add wide bike lanes



(17) AVENUE L-8		
STREET:	76th St. W	
LIMITS:	75th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking both directions 53' wide Road dead ends at 76th St. W 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	75th St. W	
LIMITS:	Sunny Slope Drive	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking both directions 33' wide 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	Sunny Slope Drive	
LIMITS:	72nd St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 28' wide 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	72nd St. W	
LIMITS:	70th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 64' wide Very wide westbound lane Road dead ends at 70th St. W 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	70th St. W	
LIMITS:	67th St. W	
EXISTING	<ul style="list-style-type: none"> No development; open field 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes

(17) AVENUE L-8

STREET:	67th St. W		
LIMITS:	60th St. W		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 64' wide • Sidewalk both directions • Trees in parkway from 63rd St. W to 60th St. W 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	60th St. W		
LIMITS:	57th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center turn pockets • 50' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane eastbound • Add 6'-wide bike lanes with painted buffer
STREET:	57th St. W		
LIMITS:	55th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 62' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes with painted buffer
STREET:	55th St. W		
LIMITS:	40th St. W		
EXISTING	<ul style="list-style-type: none"> • Unincorporated county area 	PROPOSED	<ul style="list-style-type: none"> • Work with County to ensure connections
STREET:	40th St. W		
LIMITS:	37th St. W (If extended)		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 45' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes



(17) AVENUE L-8		
STREET:	37th St. W (If extended)	
LIMITS:	35th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	35th St. W	
LIMITS:	Mid-block 35th St. W / 32nd St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking eastbound direction 44' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	Mid-block 35th St. W / 32nd St. W	
LIMITS:	30th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	12th St. W	
LIMITS:	10th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes 31' wide No center marking 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	10th St. W	
LIMITS:	Mid-block 10th St. W / 7th St. W	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 50' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes

(17) AVENUE L-8

STREET:	Mid-block 10th St. W / 7th St. W		
LIMITS:	7th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 41' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes
STREET:	7th St. W		
LIMITS:	Sierra Highway		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 32' wide • Ends at Sierra Highway 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes



(18) COLUMBIA WAY (AVENUE M)		
STREET:	Quartz Hill Road	
LIMITS:	35th St. W	
EXISTING	<ul style="list-style-type: none"> • 2 lanes, high speed road 	PROPOSED
		<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bicycle lanes • Should development occur, accommodate wide bike lanes
STREET:	35th St. W	
LIMITS:	32nd St. W	
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 31' wide between lines; pavement varies 	PROPOSED
		<ul style="list-style-type: none"> • Extend pavement to add 8'-wide bicycle lanes • Should development occur, accommodate wide bike lanes
STREET:	32nd St. W	
LIMITS:	30th St. W	
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center median • 14' wide westbound, 35' wide eastbound • City of Palmdale on eastbound side 	PROPOSED
		<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer eastbound
STREET:	30th St. W	
LIMITS:	25th St. W	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with intermittent center-turn lane • 61' wide • City of Palmdale on eastbound side 	PROPOSED
		<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer westbound
STREET:	25th St. W	
LIMITS:	23rd St. W	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 36' wide 	PROPOSED
		<ul style="list-style-type: none"> • Should development occur, accommodate wide bike lanes

(18) COLUMBIA WAY (AVENUE M)

STREET:	23rd St. W		
LIMITS:	22nd St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 61' wide 	PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes
STREET:	22nd St. W		
LIMITS:	20th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 32' wide between white lines • Shoulder pavement varies in width 	PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes
STREET:	20th St. W		
LIMITS:	CA-14 on-ramp		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes
STREET:	CA-14 on-ramp		
LIMITS:	CA-14 off-ramp		
EXISTING	<ul style="list-style-type: none"> • Width varies 	PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes
STREET:	CA-14 off-ramp		
LIMITS:	Mid-block CA-14 off-ramp / 10th St. W		
EXISTING	<ul style="list-style-type: none"> • 2 lanes eastbound, 1 lane westbound, center-turn lane • 83' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(18) COLUMBIA WAY (AVENUE M)		
STREET:	Mid-block CA-14 off-ramp / 10th St. W	
LIMITS:	10th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 47' wide eastbound; 33' wide westbound 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	10th St. W	
LIMITS:	4th St. W	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 67' wide City of Palmdale is on eastbound side 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lane with painted buffer westbound
STREET:	4th St. W	
LIMITS:	4th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes 50' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes with painted buffer westbound
STREET:	4th St. E	
LIMITS:	5th St. E	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 63' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes with painted buffer westbound
STREET:	5th St. E	
LIMITS:	Challenger Way (10th St. E)	
EXISTING	<ul style="list-style-type: none"> 4 lanes 50' wide City limit at 10th St. E 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes with painted buffer westbound

(19) AVENUE N			
STREET:	45th St. W		
LIMITS:	30th St. W		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes to connect to Los Angeles County



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NORTH-SOUTH ROUTES

(1) 110TH ST. WEST			
STREET:	Avenue G		
LIMITS:	Avenue L		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add bike route
(2) 90TH ST. WEST			
STREET:	Avenue G		
LIMITS:	North end of Del Sur Elementary		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 23' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Should more development occur, and wide bike lanes
STREET:	North end of Del Sur Elementary		
LIMITS:	Avenue H		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with perpendicular on-street parking southbound • 64' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Should more development occur, add wide colored bike lanes
STREET:	Avenue H		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 23' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Should development occur, add wide bike lanes



(2) 90TH ST. WEST			
STREET:	Avenue I		
LIMITS:	Jackman Street		
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, center-turn lane 62' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route Should more development occur, add wide bike lanes
STREET:	Jackman Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> 2 lanes 23' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route Should development occur, add wide bike lanes
STREET:	Avenue J		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide Dead ends at Avenue L 	PROPOSED	<ul style="list-style-type: none"> Add bike route Should development occur, add wide bike lanes

(3) 70TH ST. WEST

STREET:	Avenue F		
LIMITS:	Midblock Avenue H / Avenue H-12		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Extend pavement to add 8'-wide shoulder • Should development occur, add wide bike lanes
STREET:	Midblock Avenue H / Avenue H-12		
LIMITS:	Avenue H-12		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 50' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Should more development occur, add wide bike lanes
STREET:	Avenue H-12		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Extend pavement to create 8' wide shoulder on each side • Should development occur, add wide bike lanes
STREET:	Avenue J		
LIMITS:	North end of Good Shepherd Cemetery		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike path • Extend pavement to create 8' wide shoulder on each side • Should development occur, add wide bike lanes
STREET:	North end of Good Shepherd Cemetery		
LIMITS:	South end of Good Shepherd Cemetery		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 61' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike path • Should development occur, add wide bike lanes



(3) 70TH ST. WEST		
STREET:	South end of Good Shepherd Cemetery	
LIMITS:	Avenue L	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED
		<ul style="list-style-type: none"> Add bike path Extend pavement to create 8' wide shoulder on each side Should development occur, add wide bike lanes
STREET:	Avenue L	
LIMITS:	Avenue L-8	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 3 lanes southbound (third lane is lane and also right hand turn pocket), center median 14' wide northbound; 36' wide southbound 	PROPOSED
		<ul style="list-style-type: none"> <li style="color: #e91e63;">Reduce to 2 lanes southbound Add 6'-wide bike lanes with painted buffer southbound Extend pavement northbound to include 8'-wide bike lanes
STREET:	Avenue L-8	
LIMITS:	Avenue L-12	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	Avenue L-12	
LIMITS:	Mojave Rose Drive	
EXISTING	<ul style="list-style-type: none"> 2 lanes 30' wide Southbound shoulder is partially paved and lifted up 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	Mojave Rose Drive	
LIMITS:	Columbia Way	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center median 85' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes

(4) 65TH ST. WEST

STREET:	Avenue J		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, bike lane northbound, center-turn lane • 51' wide including 5'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane northbound • Widen bike lane northbound to 6' and add painted buffer • Add 6'-wide bike lane with painted buffer southbound
STREET:	Avenue J-8		
LIMITS:	Avenue J-12 (If extended)		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, bike lane northbound, center-turn lane, 1 lane southbound • 55' wide including 5'-wide bike lane • Dead ends at Avenue J-12 at creek or water basin • Trail or path opportunities 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane northbound • Widen northbound bike lane to 6' • Add 6'-wide bike lane southbound
STREET:	Avenue J-12		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • Undeveloped land 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	Avenue L		
LIMITS:	Midblock Avenue L / Avenue L-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 33' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	Midblock Avenue L / Avenue L-4		
LIMITS:	Avenue L-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes southbound, 1 lane northbound, center-turn lane • 50' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane southbound • Add 6'-wide bike lanes



(4) 65TH ST. WEST			
STREET:	Avenue L-4		
LIMITS:	Avenue L-8		
EXISTING	<ul style="list-style-type: none"> 2 lanes southbound, 1 lane northbound, center-turn lane, on-street parking northbound 50' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane southbound Add 6'-wide bike lanes
STREET:	Avenue L-8		
LIMITS:	Avenue L-12		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 65' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	Avenue L-12		
LIMITS:	Avenue M		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking southbound 37' wide Southbound side is Los Angeles County 	PROPOSED	<ul style="list-style-type: none"> Should development occur, add wide bike lanes

(5) 60TH ST. WEST

STREET:	Avenue F		
LIMITS:	S. of Avenue I (Mira Loma Detention Center entrance)		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide • Soft shoulders 	PROPOSED	<ul style="list-style-type: none"> • No designated bikeway • Extend pavement to create 8' wide shoulder on each side • Should development occur, add wide bike lanes
STREET:	S. of Avenue I (Mira Loma Detention Center entrance)		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J		
LIMITS:	Mid-block Avenue J-4 and J-8		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with median and 17'-wide painted buffers • Each side is 45' wide to median, including buffer 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Mid-block Avenue J-4 and J-8		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and painted buffer • 80' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J-8		
LIMITS:	Avenue K-4		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 3 lanes northbound, center median • 14' wide southbound; 46' wide northbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer northbound • Extend pavement to add 7'-wide bike lane with painted buffer southbound



(5) 60TH ST. WEST		
STREET:	Avenue K-4	
LIMITS:	Avenue K-8	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lanes southbound, center median 45' wide southbound; 14'-wide northbound 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement and add 8'-wide bike lane northbound Add 7'-wide bike lane with painted buffer southbound
STREET:	Avenue K-8	
LIMITS:	Avenue L	
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, center median 45' wide northbound; 15' wide southbound 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lane southbound Add 7'-wide bike lane with painted buffer northbound
STREET:	Avenue L	
LIMITS:	Avenue L-8	
EXISTING	<ul style="list-style-type: none"> 2 lanes southbound with bike lane, 1 lane northbound, center-turn lane 57' wide including 10'-wide bike lane southbound Bikeway sign at Avenue L No bikeway pavement stencil 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lane northbound Change to 7'-wide bike lane southbound
STREET:	Avenue L-8	
LIMITS:	Columbia Way (City Limit)	
EXISTING	<ul style="list-style-type: none"> 4 lanes, center-turn lane, bike lanes both directions 86' wide including 13'-wide bike lanes in both directions Bikeway sign at Avenue L-8 No bikeway pavement stencil 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7'-wide with painted buffer Add more frequent bikeway pavement stencil markings Add more frequent bikeway signage

(6) 55TH ST. WEST

STREET:	Avenue L		
LIMITS:	Avenue M-8		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add bike lanes

(7) 50TH ST. WEST

STREET:	Apollo County Park		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide • No sidewalks, soft shoulder 	PROPOSED	<ul style="list-style-type: none"> • No designated bikeway • Extend pavement to create 8'-wide shoulder on each side • Should more development occur, add wide bike lanes
STREET:	Avenue I		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes southbound, 1 lane northbound, center-turn lane • 75' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J		
LIMITS:	Avenue J-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center median • 35'-wide to median northbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(7) 50TH ST. WEST		
STREET:	Avenue J-4	
LIMITS:	Avenue J-8	
EXISTING	<ul style="list-style-type: none"> 4 lanes, center median 35'-wide to median, both sides 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J-8	
LIMITS:	Avenue K	
EXISTING	<ul style="list-style-type: none"> 2 lanes 24' wide 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement to create 8'-wide colored bike lanes
STREET:	Avenue K	
LIMITS:	Avenue K-4	
EXISTING	<ul style="list-style-type: none"> 2 lanes with 13' painted shoulder southbound 38' wide including shoulder Southbound side is Los Angeles County 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Avenue K-4	
LIMITS:	Avenue K-8	
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, center-turn lane 80' wide City limit Southbound side is Los Angeles County 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer

(8) 45TH ST. WEST

STREET:	Avenue G		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> Undeveloped road 	PROPOSED	<ul style="list-style-type: none"> No designated bikeway Should development occur, add wide bike lanes
STREET:	Avenue J		
LIMITS:	Avenue J-6		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 55' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J-6		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 64' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J-8		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 2 lanes southbound, one lane northbound, intermittent center-turn lane, bike lane southbound only 64' wide including 5'-wide bike lane southbound 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer northbound Widen bike lane southbound to 7' and add painted buffer
STREET:	Avenue K		
LIMITS:	Avenue N		
EXISTING		PROPOSED	<ul style="list-style-type: none"> Connect to Los Angeles County Add wide buffered bike lanes



(9) 40TH ST. WEST			
STREET:	Avenue I		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> 2 lanes 26' wide No road north of Avenue I 	PROPOSED	<ul style="list-style-type: none"> Should development occur, add wide bike lanes
STREET:	Avenue J		
LIMITS:	Avenue J-6		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane, parking on northbound side only 84' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer <li style="color: #e91e63;">Reduce number of lanes
STREET:	Avenue J-6		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> 4 lanes with parking on both sides, center median 35' wide to center median 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lanes with painted buffer <li style="color: #e91e63;">Reduce number of lanes
STREET:	Avenue J-8		
LIMITS:	Avenue J-12		
EXISTING	<ul style="list-style-type: none"> 1 lane southbound, 2 lanes northbound, center median, buffered bike lane northbound 35' wide to median including 6'-wide buffer and 6'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lane with painted buffer southbound Maintain northbound direction Widen shoulder southbound
STREET:	Avenue J-12		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 1 lane southbound and 2 lanes northbound with intermittent center-turn lane 60' wide 	PROPOSED	<ul style="list-style-type: none"> <li style="color: #e91e63;">Reduce to 1 lane in each direction Add 6'-wide bike lanes with painted buffer Widen shoulder southbound

(9) 40TH ST. WEST

STREET:	Avenue K		
LIMITS:	Avenue K-12		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 2 lanes northbound, intermittent center-turn lane and right turn pockets • 60' wide • Los Angeles County jurisdiction southbound from Ave. K-4 to Ave. K-7 and Ave. K-9 to Ave. K-11 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 6'-wide bike lanes with painted buffer
STREET:	Avenue K-12		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane • 72' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes with painted buffer
STREET:	Avenue L		
LIMITS:	Avenue L-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 31' wide • Los Angeles County jurisdiction southbound 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	Avenue L-8		
LIMITS:	Vancouver Lane		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 43' wide • Street ends just south of Vancouver Lane, picks up further south at Avenue M-8 • Los Angeles County jurisdiction southbound 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes • Difficulty connecting because of Quartz Hill
STREET:	Avenue M-8		
LIMITS:	Derby Circle		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 66' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes



(9) 40TH ST. WEST			
STREET:	Derby Circle		
LIMITS:	Avenue N		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking southbound side only 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes

(10) 35TH ST. WEST

STREET:	Kildare Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane, bike lane northbound direction only • 54' wide including 5'-wide bike lane northbound • Potential trail / bike path opportunities north of Kildare Street 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lane southbound • Widen northbound bike lane to 7' and add color
STREET:	Lancaster Boulevard		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with bike lanes both directions, on-street parking northbound side only • 45' wide including 12'-wide bike / park lane northbound, 5'-wide bike lane southbound • Bike lane narrows and disappears at intersection in southbound direction 	PROPOSED	<ul style="list-style-type: none"> • Widen southbound bike lane to 7' • Add 7'-wide parking stripe northbound • Widen northbound bike lane to 7' • Color bike lanes
STREET:	Avenue J		
LIMITS:	Marilynn Place		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 49' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Marilynn Place		
LIMITS:	Avenue J-6		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and intermittent right-hand turn pockets • 64' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue J-6		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(10) 35TH ST. WEST		
STREET:	Avenue J-8	
LIMITS:	Avenue J-9	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lane northbound only 55' wide including 5'-wide bike lane Street dead ends just past J-9, picks up at K-8 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer southbound Widen northbound bike lane to 7' and add painted buffer
STREET:	Avenue J-9	
LIMITS:	Avenue K-4	
EXISTING	<ul style="list-style-type: none"> Undeveloped land north of K Prime Desert Woodlands between Avenues K and K-8 	PROPOSED
		<ul style="list-style-type: none"> Add bicycle path
STREET:	Avenue K-4	
LIMITS:	Avenue K-8	
EXISTING	<ul style="list-style-type: none"> Undeveloped land north of K Prime Desert Woodlands between Avenues K and K-8 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway
STREET:	Avenue K-8	
LIMITS:	Mid-block Avenue K-8 / K-12	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes both directions 42' wide including 5'-wide bike lanes Prime Desert Woodland access to north 	PROPOSED
		<ul style="list-style-type: none"> Widen bike lanes to 6' Color bike lanes
STREET:	Mid-block Avenue K-8 / K-12	
LIMITS:	Avenue L	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes both directions 64' wide including 5'-wide bike lanes 	PROPOSED
		<ul style="list-style-type: none"> Widen bike lanes to 7' Color bike lanes

(10) 35TH ST. WEST

STREET:	Avenue L		
LIMITS:	Avenue L-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue L-4		
LIMITS:	Avenue L-6		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 53' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue L-6		
LIMITS:	Avenue L-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 37' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue L-8		
LIMITS:	Avenue L-10		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 45' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue L-10		
LIMITS:	Columbia Way		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement and add 8'-wide colored bike lanes



(11) 32ND ST. WEST			
STREET:	Jackman Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	Lancaster Boulevard		
LIMITS:	Lancaster High School		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and bike lanes in both directions • 52' wide including 11'-wide bike lane southbound, 6'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> • Widen northbound bike lane to 7' and add painted buffer • Change southbound bike lane to 7' wide and add painted buffer • Color bike lanes
STREET:	Lancaster High School		
LIMITS:	First entrance (in southbound direction) to Central Christian Church		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with bike lanes • 40' wide including 12'-wide bike lane southbound, 6'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> • Widen northbound bike lane to 7' with painted buffer • Change southbound bike lane to 7' wide with painted buffer • Color bike lanes
STREET:	First entrance (in southbound direction) to Central Christian Church		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with bike lanes • 40' wide includes 6'-wide bike lanes in each direction 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' and add painted buffer • Color bike lanes
STREET:	Avenue J		
LIMITS:	Avenue J-2		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking southbound side only • 28' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Add sharrows southbound

(11) 32ND ST. WEST

STREET:	Avenue J-2		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide • Road ends at J-8 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

(12) 30TH ST. WEST

STREET:	Avenue G		
LIMITS:	Avenue G-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	Avenue G-8		
LIMITS:	Avenue H		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 74' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue H		
LIMITS:	Mid-block Avenue H / Avenue I		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 54' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Mid-block Avenue H / Avenue I		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane • 90' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 4 lanes with center-turn lane • Add 7'-wide bike lanes with painted buffer



(12) 30TH ST. WEST		
STREET:	Avenue I	
LIMITS:	Jackman Street	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes 84' wide including 13'-wide bike lanes in both directions 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide with painted buffer
STREET:	Jackman Street	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median and bike lanes 35' wide to the median including 13'-wide bike lanes in each direction 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide and add painted buffer
STREET:	Lancaster Boulevard	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median and bike lanes 35' wide to the median including 13'-wide bike lanes in each direction 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide and add painted buffer Color bike lanes
STREET:	Avenue J	
LIMITS:	Avenue J-6	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes in both directions 84' wide including 13'-wide bike lanes in both directions 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide with painted buffer Color bike lanes
STREET:	Avenue J-6	
LIMITS:	Avenue J-8	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane, on-street parking and bike lanes in both directions 84' wide including 13'-wide bike lanes in both direction Bike lanes accommodate parking 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide Color bike lanes Stripe 7'-wide parking lane

(12) 30TH ST. WEST

STREET:	Avenue J-8		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane, and bike lanes in both directions • 84' wide including 13'-wide bike lanes in both direction 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7' wide and add painted buffer • Color bike lanes
STREET:	Avenue K		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane, intermittent on-street parking, and bike lanes in both directions • 84' wide including 13'-wide bike lanes in both direction 	PROPOSED	<ul style="list-style-type: none"> • Replace and add pavement stencil markings indicating bike lane • Where there is parking, include 7' parking stripe • Change bike lanes to 7' wide and add painted buffer • Color bike lanes
STREET:	Avenue L		
LIMITS:	Avenue L-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane • 54' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	Avenue L-8		
LIMITS:	Mid-block Avenue L-8 / Columbia Way		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	Mid-block Avenue L-8 / Columbia Way		
LIMITS:	Columbia Way		
EXISTING	<ul style="list-style-type: none"> • 2 lanes southbound with on-street parking, center-turn lane, 1 lane northbound • 70' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(12) 30TH ST. WEST

STREET:	Columbia Way		
LIMITS:	Avenue N		
EXISTING	<ul style="list-style-type: none"> • 1 lane northbound, 2 lanes southbound • 73' wide • Northbound is City of Palmdale jurisdiction 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer southbound

(13) 25TH ST. WEST

STREET:	Lancaster Boulevard		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 25' wide to center median 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue J		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes • 64' wide including 5'-wide bike lanes in each directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Reduce to 1 lane in each direction • Color bike lanes
STREET:	Avenue K		
LIMITS:	Avenue K-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound direction only • 44' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue K-4		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound direction only • 44' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue K-8		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 64' wide including 5'-wide bike lanes in both directions • Dirt road south of Avenue L 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Color bike lanes



(14) VALLEY CENTRAL WAY		
STREET: Avenue I		
LIMITS: Double Play Way		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide to center median 	PROPOSED
<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer 		
STREET: Double Play Way		
LIMITS: Mall Loop Drive		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 23' wide to center median 	PROPOSED
<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer 		
STREET: Mall Loop Drive		
LIMITS: Mall Entrance (South of Mall Loop Drive)		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 60' wide 	PROPOSED
<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer 		
STREET: Mall Entrance (South of Mall Loop Drive)		
LIMITS: Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median and right turn only lanes No measurement, very brief period 	PROPOSED
<ul style="list-style-type: none"> Reduce to 2 lanes in each direction Add 7'-wide colored bike lanes with painted buffer 		
STREET: Lancaster Boulevard		
LIMITS: Avenue J		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 25' wide to median Sidewalk with parkways, both directions 	PROPOSED
<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer 		

(15) 20TH ST. WEST

STREET:	Avenue H		
LIMITS:	Avenue H-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane • 60' wide • Dirt road north of Avenue H 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue H-4		
LIMITS:	Avenue H-8		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue H-8		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 35' wide to median 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue I		
LIMITS:	Linda Avenue		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	Linda Avenue		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer



(15) 20TH ST. WEST		
STREET:	Lancaster Boulevard	
LIMITS:	Newgrove Street	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	Newgrove Street	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 59' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue J	
LIMITS:	Avenue J-8	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center median 35' wide to median 	PROPOSED
		<ul style="list-style-type: none"> No designated bikeway
STREET:	Avenue J-8	
LIMITS:	Avenue J-12	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes Reduce to 2 lanes in each direction
STREET:	Avenue J-12	
LIMITS:	Avenue K-8	
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes Reduce to 2 lanes in each direction

(15) 20TH ST. WEST

STREET:	Avenue K-8		
LIMITS:	Avenue K-10		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 71' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue K-10		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue L		
LIMITS:	Columbia Way		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes



(16) 15TH ST. WEST		
STREET:	Avenue H	
LIMITS:	Avenue H-8	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes 64' wide including 16'-wide bike lanes in both directions 	PROPOSED
		<ul style="list-style-type: none"> Change bike lanes to 7' wide and add painted buffer Add stencils and signage Color bike lanes
STREET:	Avenue H-8	
LIMITS:	Avenue H-10	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and on-street parking 60' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes
STREET:	Avenue H-10	
LIMITS:	Avenue I	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and on-street parking in northbound direction only 60' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes
STREET:	Avenue I	
LIMITS:	Jenner Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 38' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes
STREET:	Jenner Street	
LIMITS:	Kettering Street	
EXISTING	<ul style="list-style-type: none"> 4 lanes 60' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer

(16) 15TH ST. WEST

STREET:	Kettering Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes with painted buffer • Option: Maintain number of lanes and add 5'-wide colored bike lanes
STREET:	Lancaster Boulevard		
LIMITS:	Norberry Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes with painted buffer • Option: Maintain number of lanes and add 5'-wide colored bike lanes
STREET:	Norberry Street		
LIMITS:	Pillsbury Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes with painted buffer • Option: Maintain number of lanes and add 5'-wide colored bike lanes
STREET:	Pillsbury Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction to Avenue J • Add 7'-wide colored bike lanes with painted buffer • Option: Maintain number of lanes and add 5'-wide colored bike lanes
STREET:	Avenue J		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and on-street parking southbound direction only • 66' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer • Option: Maintain number of lanes and add 5'-wide colored bike lanes, reduce center-turn lane width to 9' wide



(16) 15TH ST. WEST		
STREET:	Avenue J-8	
LIMITS:	Avenue K	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center median 25' wide to median 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer Option: Maintain number of lanes and add 5'-wide colored bike lanes

(17) 17TH ST. W / AVENUE J-12

STREET:	20th St. W		
LIMITS:	15th St. W		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes

15TH ST. WEST

STREET:	17th St. W		
LIMITS:	Avenue K-8		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes
STREET:	Avenue K-8		
LIMITS:	Avenue M		
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add wide bike lanes • Color bike lanes



(18) 12TH ST. WEST		
STREET:	Kettering Street	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 36' wide Existing signed bicycle route Begins at Monte Vista Elementary School 	PROPOSED
		<ul style="list-style-type: none"> Add bike route Add bicycle boulevard treatment
LANCASTER BOULEVARD		
STREET:	Kettering Street (east-west)	
LIMITS:	12th St. West (north-south)	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 61' wide including 5'-wide bike lanes both directions Break at Lancaster Blvd. with no signal to cross back to 12th St. W. 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Widen bike lanes to 7' and add painted buffer Color bike lanes Option: Color existing bike lanes Add directional signage and pavement markings to direct people on route
12TH ST. WEST		
STREET:	Lancaster Boulevard	
LIMITS:	Pillsbury Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 36' wide Existing signed bicycle route Stop sign at Norberry Street 	PROPOSED
		<ul style="list-style-type: none"> Add bike route Add bicycle boulevard treatment
PILLSBURY STREET		
STREET:	12th St. West	
LIMITS:	Kingtree Avenue	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 	PROPOSED
		<ul style="list-style-type: none"> Add bike route Add bicycle boulevard treatment

KINGTREE AVENUE			
STREET:	Pillsbury Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • Narrow 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Add bicycle boulevard treatment • Create bike and pedestrian-only gap at cul-de-sac to cross Avenue J at existing signal
STREET:	Avenue J		
LIMITS:	Avenue J-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide • Existing signed bicycle route 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Add bicycle boulevard treatment
AVENUE J-4			
STREET:	Kingtree Avenue		
LIMITS:	12th St. West		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide • Existing signed bicycle route 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Add bicycle boulevard treatment



12TH ST. WEST		
STREET:	Avenue J-4	
LIMITS:	Avenue J-5	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound only • Existing signed bicycle route 	PROPOSED
		<ul style="list-style-type: none"> • Add bike route • Add bicycle boulevard treatment
STREET:	Avenue J-5	
LIMITS:	Avenue K	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide • Existing signed bicycle route • Stop signs at Avenues J-8, J-11, J-12, J-14 	PROPOSED
		<ul style="list-style-type: none"> • Add bike route • Add bicycle boulevard treatment
STREET:	Avenue K	
LIMITS:	Commerce Center Drive	
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide • Existing signed bicycle route 	PROPOSED
		<ul style="list-style-type: none"> • Add bike route • Reduce number of lanes
STREET:	Commerce Center Drive	
LIMITS:	Motor Lane	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and on-street parking • 64' wide • Existing signed bicycle route 	PROPOSED
		<ul style="list-style-type: none"> • Add bike route with sharrows
MOTOR LANE		
STREET:	12th St. West	
LIMITS:	Driver's Way	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and on-street parking • 64' wide • Existing signed bicycle route 	PROPOSED
		<ul style="list-style-type: none"> • Add bike route with sharrows

DRIVERS WAY

STREET:	Motor Lane		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none">• 2 lanes with center-turn lane and on-street parking• 64' wide• Existing signed bicycle route	PROPOSED	<ul style="list-style-type: none">• Add bike route with sharrows



(19) 10TH ST. WEST

STREET:	Avenue G		
LIMITS:	Avenue H		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 24' wide 	PROPOSED	<ul style="list-style-type: none"> • No designated bikeway • Extend pavement to add 8'-wide shoulder • Should development occur, add wide bike lanes
STREET:	Avenue H		
LIMITS:	Avenue H-6		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 82' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer • Reduce to 1 lane in each direction
STREET:	Avenue H-6		
LIMITS:	Holguin Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 82' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer • Reduce to 1 lane in each direction
STREET:	Holguin Street		
LIMITS:	Avenue H-8		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 82' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer • Reduce to 1 lane in each direction
STREET:	Avenue H-8		
LIMITS:	Mid-block Avenue H-8 / Avenue H-12		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and on-street parking • 70' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes with painted buffer

(19) 10TH ST. WEST

STREET:	Mid-block Avenue H-8 / Avenue H-12		
LIMITS:	Avenue H-12		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and on-street parking 70' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue H-12		
LIMITS:	Avenue H-14		
EXISTING	<ul style="list-style-type: none"> 4 lanes with on-street parking 61' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue H-14		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> 4 lanes with on-street parking 61' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 6'-wide colored bike lanes with painted buffer
STREET:	Avenue I		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> 3 lanes northbound, 2 lanes southbound, center-turn lane 70' wide 	PROPOSED	<ul style="list-style-type: none"> Reduce to 2 lanes northbound Add 7'-wide colored bike lanes with painted buffer
STREET:	Lancaster Boulevard		
LIMITS:	Avenue J-4		
EXISTING	<ul style="list-style-type: none"> 6 lanes with center-turn lane 84' wide 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide colored bike lanes Reduce to 2 lanes in each direction until Newgrove Street



AVENUE J-4			
STREET:		10th St. W	
LIMITS:		Heaton Ave.	
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
HEATON AVENUE			
STREET:		Avenue J-4	
LIMITS:		Avenue J-12	
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
AVENUE J-12			
STREET:		Heaton Ave.	
LIMITS:		Gadsden Ave.	
EXISTING		PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows

GADSDEN AVENUE		
STREET:	Avenue J-12	
LIMITS:	Avenue K-8	
EXISTING		PROPOSED <ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	Avenue K-8	
LIMITS:	Avenue L	
EXISTING		PROPOSED <ul style="list-style-type: none"> • Add bike lanes

(20) FERN AVENUE		
STREET:	Avenue I	
LIMITS:	Jackman Street	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with intermittent on-street parking • 40' wide 	PROPOSED <ul style="list-style-type: none"> • Add bike route with b-type sharrows
STREET:	Jackman Street	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with intermittent on-street parking • 38' wide 	PROPOSED <ul style="list-style-type: none"> • Add bike route with b-type sharrows
STREET:	Lancaster Boulevard	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 36' wide • Stop signs at Newgrove Avenue, Oldfield Street • Dead ends at Avenue J in front of Parkview Middle School 	PROPOSED <ul style="list-style-type: none"> • Add bike route and b-type sharrows • Add cyclist activated signal to cross Avenue J



(21) FIG AVENUE			
STREET:	Lancaster Boulevard		
LIMITS:	Milling Street		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 36' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route with b-type sharrows
STREET:	Milling Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 36' wide Stop signs at Newgrove Avenue, Oldfield Street Existing traffic signal to cross Avenue J 	PROPOSED	<ul style="list-style-type: none"> Add bike route with b-type sharrows
STREET:	Avenue J		
LIMITS:	Avenue J-4		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking northbound side only 40' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route
STREET:	Avenue J-4		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 36' wide Jog in street at J-4 to continue on Fig Avenue Ends at J-8 	PROPOSED	<ul style="list-style-type: none"> Add bike route

(22) SIERRA HIGHWAY

STREET:	Avenue G		
LIMITS:	Avenue G-12		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 35' wide, including paved portion of shoulder; varies 	PROPOSED	<ul style="list-style-type: none"> • No designated bikeway • Ensure 8'-wide paved shoulder • Should development occur, add wide bike lanes
STREET:	Avenue G-12		
LIMITS:	Avenue H		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes
STREET:	Avenue H		
LIMITS:	Avenue H-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 38' wide including paved portion of shoulder 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue H-8		
LIMITS:	Avenue H-13		
EXISTING	<ul style="list-style-type: none"> • 2 lanes southbound, 1 lane northbound, center-turn lane • 46' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane southbound • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue H-13		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 72' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide bike lanes with painted buffer



(22) SIERRA HIGHWAY		
STREET:	Avenue I	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer Reduce number of lanes
STREET:	Lancaster Boulevard	
LIMITS:	Oldfield Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes southbound, 3 lanes northbound, center-turn lane, on-street parking southbound only 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes Reduce to 2 lanes northbound
STREET:	Oldfield Street	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and on-street parking 84' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes Stripe 7'-wide parking lanes Reduce number of lanes
STREET:	Avenue J	
LIMITS:	Avenue J-2	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and on-street parking 84' wide Intermittent right turn only lane Bike path along Sierra Highway, west of railroad 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lane southbound Stripe 7'-wide parking lanes
STREET:	Avenue J-2	
LIMITS:	Avenue J-8	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 57' wide Bike path along Sierra Highway, west of railroad 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lane southbound

(22) SIERRA HIGHWAY

STREET:	Avenue J-8		
LIMITS:	Mid-block Avenue J-8 / Avenue K		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 57' wide • Bike path along Sierra Highway, west of railroad 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lane southbound
STREET:	Mid-block Avenue J-8 / Avenue K		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 3 lanes southbound, 2 lanes northbound, center-turn lane • 89' wide • Bike path along Sierra Highway, west of railroad 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lane southbound
STREET:	Avenue K		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 57' wide • Bike path along Sierra Highway, west of railroad 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lane southbound to Avenue K-8 • Add 6'-wide bike lane southbound from Avenue K-8 to Avenue L
STREET:	Avenue L		
LIMITS:	Enterprise Parkway		
EXISTING	<ul style="list-style-type: none"> • 3 lanes southbound, 2 lanes northbound, center-turn lane • 95' wide • Bike path along Sierra Highway, west of railroad 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lane southbound
STREET:	Enterprise Parkway		
LIMITS:	Columbia Way		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 58' wide • Bike path along Sierra Highway, west of railroad 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lane southbound



(23) DIVISION STREET		
STREET:	Avenue G	
LIMITS:	Avenue H-8	
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide No sidewalk, soft shoulders 	PROPOSED
		<ul style="list-style-type: none"> Should development occur, add wide bike lanes Add colored bike lanes beginning at Avenue H
STREET:	Avenue H-8	
LIMITS:	Mid-block Avenue H-8 / Avenue I	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 55' wide Street widens and narrows; minimum width is 55' 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 7'-wide colored bike lanes with painted buffer
STREET:	Mid-block Avenue H-8 / Avenue I	
LIMITS:	Avenue I	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 72' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue I	
LIMITS:	W. Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, center-turn lane 56' wide Antelope Valley High School at W. Lancaster Blvd. 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide colored bike lanes Reduce to 1 lane northbound
STREET:	W. Lancaster Blvd.	
LIMITS:	Milling Street	
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane 60' wide 	PROPOSED
		<ul style="list-style-type: none"> Reduce to 1 lane in each direction Add 6'-wide colored bike lanes with painted buffer Option: Maintain number of lanes and add 5'-wide colored bike lanes

(23) DIVISION STREET

STREET:	Milling Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue J		
LIMITS:	Avenue J-7		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes • 72' wide including 5'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' with painted buffer • Color bike lanes
STREET:	Avenue J-7		
LIMITS:	Business Center Parkway		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes • 84' wide including 13'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Change bike lanes to 7'-wide with painted buffer • Color bike lanes

BUSINESS CENTER PARKWAY

STREET:	Division Street		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median and bike lanes • 35' wide to median including 6'-wide bike lanes 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 7' with painted buffer • Color bike lanes



4TH ST. EAST		
STREET:	Avenue L	
LIMITS:	Avenue L-4	
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide 	PROPOSED
		<ul style="list-style-type: none"> Add wide bike lanes
STREET:	Avenue L-4	
LIMITS:	Avenue L-12	
EXISTING	<ul style="list-style-type: none"> 2 lanes with right hand turn pockets northbound 85' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Avenue L-12	
LIMITS:	Avenue M	
EXISTING	<ul style="list-style-type: none"> 2 lanes 26' wide No sidewalk, soft shoulder 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement to include 8'-wide bike lanes Should development occur, add wide bike lanes

(24) 5TH ST. EAST

STREET:	Avenue H-8		
LIMITS:	Avenue H-11		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane and on-street parking northbound • 60' wide • School southbound side 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:	Avenue H-11		
LIMITS:	Avenue H-14		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:	Avenue H-14		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane • 60' wide 	PROPOSED	<ul style="list-style-type: none"> • Reduce to 1 lane in each direction • Add 7'-wide colored bike lanes
STREET:	Avenue I		
LIMITS:	Jackman Avenue		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes • 64' wide including 5'-wide bike lane northbound, 6'-wide bike lane southbound • Eastside Park at Avenue I 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Color bike lanes
STREET:	Jackman Avenue		
LIMITS:	Kettering Street		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 2 lanes northbound, center-turn lane, bike lanes • 64' wide including 13'-wide bike lane southbound, 5'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> • Widen northbound bike lane to 7' • Change southbound bike lane to 7' wide • Color bike lanes



(24) 5TH ST. EAST			
STREET:	Kettering Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking and bike lanes both directions 52' wide including 13'-wide bike / parking lanes 	PROPOSED	<ul style="list-style-type: none"> Change bike lanes to 6' wide Stripe 7'-wide parking lane Add bike pavement stencils and signage Color bike lanes
STREET:	Lancaster Boulevard		
LIMITS:	Mid-block Nugent Street / Pondera Street		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane, on-street parking and bike lanes both directions 58' wide including 12'-wide bike / parking lanes 	PROPOSED	<ul style="list-style-type: none"> Change bike lanes to 6' wide Stripe 7'-wide parking lanes Add bike pavement stencils and signage Color bike lanes
STREET:	Mid-block Nugent Street / Pondera Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane, on-street parking southbound only, bike lanes both directions 58' wide including 12'-wide bike lane northbound, 12'-wide bike / parking lane southbound 	PROPOSED	<ul style="list-style-type: none"> Change bike lanes to 6'-wide Stripe 7'-wide parking lanes Add bike pavement stencils and signage Color bike lanes
STREET:	Avenue J		
LIMITS:	City Vacant Lot		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane and bike lanes both directions 64' wide including 12'-wide bike lanes both directions 	PROPOSED	<ul style="list-style-type: none"> Change bike lanes to 7' wide Color bike lanes

CITY VACANT LOT

STREET:	Avenue J-5		
LIMITS:	Avenue J-9		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 40' wide 	PROPOSED	<ul style="list-style-type: none"> Add colored bike lanes through lot

5TH ST. EAST

STREET:	Avenue J-9		
LIMITS:	Mid-block Avenue J-10 / Avenue J-11		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 40' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route
STREET:	Mid-block Avenue J-10 / Avenue J-11		
LIMITS:	Avenue J-11		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 40' wide Soft shoulder southbound 	PROPOSED	<ul style="list-style-type: none"> Add bike route
STREET:	Avenue J-11		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking 40' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route
STREET:	Avenue K		
LIMITS:	Avenue K-4		
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking northbound only 40' wide 	PROPOSED	<ul style="list-style-type: none"> Add bike route



5TH ST. EAST

STREET:	Avenue K-4		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 30' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route
STREET:	Avenue K-8		
LIMITS:	Avenue K-12		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide • Road ends at Avenue K-12 	PROPOSED	<ul style="list-style-type: none"> • Add bike route

AVENUE K-12

STREET:	5th St. E		
LIMITS:	Capital Drive		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 54' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer

CAPITAL DRIVE

STREET:	Avenue K-12		
LIMITS:	Bus Center Parkway		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 55' wide • Office center complex 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer

(25) CHALLENGER WAY (10TH ST. EAST)

STREET:	Avenue H		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 25' wide 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, add wide bike lanes
STREET:	Avenue I		
LIMITS:	Kettering Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lane southbound only • 76' wide including 5'-wide bike lane southbound 	PROPOSED	<ul style="list-style-type: none"> • Widen southbound bike lane to 7' and add painted buffer • Add 7'-wide bike lane northbound and add painted buffer • Color bike lanes
STREET:	Kettering Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes • 84' wide including 6'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen southbound bike lane to 7' and add painted buffer • Add 7'-wide bike lane northbound and add painted buffer • Color bike lanes
STREET:	Lancaster Boulevard		
LIMITS:	Nugent Street		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes in both directions • 84' wide including 7'-wide bike lane northbound, 12'-wide bike lane southbound 	PROPOSED	<ul style="list-style-type: none"> • Add painted buffer northbound • Change southbound bike lane to 7' wide and add painted buffer • Color bike lanes
STREET:	Nugent Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 82' wide including 7'-wide bike lanes in both directions 	PROPOSED	<ul style="list-style-type: none"> • Add painted buffers • Color bike lanes



(25) CHALLENGER WAY (10TH ST. EAST)			
STREET:	Avenue J		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 84' wide including 12'-wide bike lane southbound, 13'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> Change bike lanes to 7'-wide and add painted buffers Color bike lanes
STREET:	Avenue K		
LIMITS:	Avenue K-12		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 84' wide including 6'-wide bike lanes both directions 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 7' and add painted buffer Color bike lanes until Avenue K-8
STREET:	Avenue K-12		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> 4 lanes with center-turn lane and bike lanes both directions 70' wide including 6'-wide bike lanes both directions 	PROPOSED	<ul style="list-style-type: none"> Widen bike lanes to 7' and add painted buffer
STREET:	Avenue L		
LIMITS:	Columbia Way		
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide Intermittently widens, but narrowest point is 25' wide 	PROPOSED	<ul style="list-style-type: none"> Should development occur, add wide bike lanes

(26) 15TH ST. EAST

STREET:	Avenue H-12		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound • 32' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	Avenue I		
LIMITS:	Kettering Street		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane, bike lanes both directions • 54' including 6'-bike lane northbound, 5'-bike lane southbound 	PROPOSED	<ul style="list-style-type: none"> • Widen southbound bike lane to 6' • Color bike lanes • Reduce to 1 lane northbound
STREET:	Kettering Street		
LIMITS:	Marion Avenue		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center-turn lane and bike lanes both directions • 64' wide including 5'-wide bike lanes both directions 	PROPOSED	<ul style="list-style-type: none"> • Widen bike lanes to 6' • Color bike lanes • Reduce to 1 lane in each direction
STREET:	Marion Avenue		
LIMITS:	Avenue K-4		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 2 lanes northbound • 64' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Avenue K-4		
LIMITS:	Avenue K-6		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 2 lanes northbound, center-turn lane, bike lane northbound only • 54' wide including 5'-wide bike lane northbound 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lane southbound • Widen northbound bike lane to 6' • Color bike lanes • Reduce to 1 lane northbound



(26) 15TH ST. EAST			
STREET:	Avenue K-6		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none"> 1 lane southbound, 2 lanes northbound, center-turn lane, bike lane northbound 68' wide including 5'-wide bike lane northbound Forced right onto Avenue K-8 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lane southbound Widen northbound bike lane to 7' Color bike lanes

(27) 20TH ST. EAST

STREET:	Avenue H		
LIMITS:	Avenue H-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 27' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to include 8'-wide shoulder • Should more development occur, add wide bike lanes
STREET:	Avenue H-4		
LIMITS:	Avenue H-8		
EXISTING	<ul style="list-style-type: none"> • 1 lane northbound, 2 lanes southbound, center median • 13' to median northbound, 45' to median southbound 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement northbound to include 8'-wide bike lane • Add 7'-wide bike lane southbound with painted buffer
STREET:	Avenue H-8		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 27' wide • Appears to be a path along road on northbound side 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to include 8'-wide bike lanes in both directions
STREET:	Avenue I		
LIMITS:	Kettering Street		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with intermittent right hand turn pockets, center median • 45' wide to center median 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Kettering Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 27' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to include 8'-wide colored bike lanes in both directions



(27) 20TH ST. EAST		
STREET:	Lancaster Boulevard	
LIMITS:	Nugent Street	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 3 lanes southbound, center-turn lane 73' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	Nugent Street	
LIMITS:	Avenue J-2	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 3 lanes southbound, center median 14' wide northbound, 45' southbound to median 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement to include 8'-wide bike lane northbound Add 7'-wide bike lane with painted buffer southbound Color bike lanes
STREET:	Avenue J-2	
LIMITS:	Avenue J-4	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 3 lanes southbound, center-turn lane 104' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes with painted buffer
STREET:	Avenue J-4	
LIMITS:	Avenue J-8	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 3 lanes southbound, center-turn lane 67' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes
STREET:	Avenue J-8	
LIMITS:	Villa Way	
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 3 lanes southbound, bike lane southbound 94' wide including 6'-bike lane southbound Painted buffer northbound from Villa Way to mid-block Avenue J-10 / Villa Way 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lane with painted buffer northbound Widen southbound bike lane to 7' with painted buffer Color bike lanes

(27) 20TH ST. EAST

STREET:	Villa Way		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 6 lanes with center-turn lane and bike lane southbound only • 104' wide including 6'-wide bike lane southbound 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lane with painted buffer northbound • Widen southbound bike lane to 7' and add painted buffer • Color bike lanes
STREET:	Avenue K		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none"> • 1 lane northbound, 2 lanes southbound, center median • 14' wide northbound, 45' wide southbound to median 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement northbound to include 8'-wide bike lane • Add 7'-wide bike lane with painted buffer southbound • Color bike lanes
STREET:	Avenue K-8		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 23' wide 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement to include 8'-wide bike lanes • Should more development occur, maintain wide bike lanes



(28) 25TH ST. EAST		
STREET:	Avenue H-8	
LIMITS:	Mobile Court	
EXISTING	<ul style="list-style-type: none"> 2 lanes 30' wide 	PROPOSED
		<ul style="list-style-type: none"> Should more development occur, add bike route
STREET:	Mobile Court	
LIMITS:	Avenue I	
EXISTING	<ul style="list-style-type: none"> 2 lanes 32' wide 	PROPOSED
		<ul style="list-style-type: none"> Should more development occur, add bike route
STREET:	Avenue I	
LIMITS:	Kettering Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes 33' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	Kettering Street	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 2 lanes 52' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lanes
STREET:	Lancaster Boulevard	
LIMITS:	Mid-block Newgrove Street / Nugent Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes 34' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lanes

(28) 25TH ST. EAST

STREET:	Mid-block Newgrove Street / Nugent Street		
LIMITS:	Nugent Street		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 44' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	Nugent Street		
LIMITS:	Avenue J		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 50' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	Avenue J		
LIMITS:	Avenue J-4		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 33' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes
STREET:	Avenue J-4		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • Gap in road between Avenues J-4 and J-8 • Large field, undeveloped area • Potential for trail / bike path opportunities to connect 	PROPOSED	<ul style="list-style-type: none"> • Should development occur, accommodate wide bike lanes
STREET:	Avenue J-8		
LIMITS:	Avenue J-10		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 32' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes



(28) 25TH ST. EAST			
STREET:	Avenue J-10		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 64' wide 	PROPOSED	<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	Avenue K		
LIMITS:	Avenue K-4		
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, center-turn lane 53' wide 	PROPOSED	<ul style="list-style-type: none"> Add 6'-wide bike lanes

(29) 27TH ST. EAST

STREET:	Avenue I		
LIMITS:	Regal Court		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 33' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:	Regal Court		
LIMITS:	Kettering Street		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide colored bike lanes
STREET:	Kettering Street		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 34' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide colored bike lanes
STREET:	Lancaster Boulevard		
LIMITS:	Nugent Street		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows
STREET:	Nugent Street		
LIMITS:	Via Genova		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route with sharrows



(29) 27TH ST. EAST		
STREET:	Via Genova	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> 2 lanes 29' wide 	PROPOSED
		<ul style="list-style-type: none"> Add bike route
STREET:	Avenue J	
LIMITS:	Avenue J-2	
EXISTING	<ul style="list-style-type: none"> 2 lanes 38' wide 	PROPOSED
		<ul style="list-style-type: none"> Add bike route
STREET:	Avenue J-2	
LIMITS:	Garnet Lane	
EXISTING	<ul style="list-style-type: none"> 2 lanes 30' wide 	PROPOSED
		<ul style="list-style-type: none"> Add bike route
STREET:	Garnet Lane	
LIMITS:	Avenue J-4	
EXISTING	<ul style="list-style-type: none"> Street ends at Garnet Lane, but there is pathway in vacant land to connect to Avenue J-4 People walk through this currently 	PROPOSED
		<ul style="list-style-type: none"> Add bike path Should development occur, accommodate bike lanes
STREET:	Avenue J-4	
LIMITS:	Avenue J-6	
EXISTING	<ul style="list-style-type: none"> 2 lanes with on-street parking northbound only 48' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide colored bike lanes

(29) 27TH ST. EAST

STREET:	Avenue J-6		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound only • 37' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide colored bike lanes
STREET:	Avenue J-8		
LIMITS:	Avenue J-10		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking northbound only • 28' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route
STREET:	Avenue J-10		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with on-street parking • 40' wide • Ends at Avenue K 	PROPOSED	<ul style="list-style-type: none"> • Add bike route



(30) 30TH ST. EAST		
STREET:	Avenue H	
LIMITS:	Kettering Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes 25' wide 	PROPOSED
		<ul style="list-style-type: none"> Add bike route Extend pavement to include 8' wide paved shoulder Should development occur, add wide bike lanes
STREET:	Kettering Street	
LIMITS:	Lancaster Boulevard	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lanes southbound, center-turn lane 63' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Lancaster Boulevard	
LIMITS:	Nugent Street	
EXISTING	<ul style="list-style-type: none"> 2 lanes northbound, 1 lane southbound, painted buffer southbound, center median 35' wide to median both directions 21' wide painted buffer, 14' wide lane southbound 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Nugent Street	
LIMITS:	Avenue J	
EXISTING	<ul style="list-style-type: none"> 2 lanes 28' wide 	PROPOSED
		<ul style="list-style-type: none"> Extend pavement northbound to include 6'-wide bike lanes in both directions
STREET:	Avenue J	
LIMITS:	Avenue J-4	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lanes southbound, center median 15' wide southbound, 35' wide northbound Soft shoulder southbound 	PROPOSED
		<ul style="list-style-type: none"> Add 5'-wide bike lane southbound Add 7'-wide bike lane northbound

(30) 30TH ST. EAST

STREET:	Avenue J-4		
LIMITS:	Avenue J-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes with center-turn lane • 36' wide 	PROPOSED	<ul style="list-style-type: none"> • Remove center-turn lane • Add 7'-wide bike lanes
STREET:	Avenue J-8		
LIMITS:	Avenue K		
EXISTING	<ul style="list-style-type: none"> • 4 lanes with center median • 35' wide to center median 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue K		
LIMITS:	Avenue K-8		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center-turn lane • 62' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer
STREET:	Avenue K-8		
LIMITS:	Avenue K-12		
EXISTING	<ul style="list-style-type: none"> • 2 lanes northbound, 1 lane southbound, center median • 14' wide southbound, 35' wide to northbound 	PROPOSED	<ul style="list-style-type: none"> • Extend pavement southbound to include 8'-wide bike lane • Add 7'-wide bike lane with painted buffer northbound
STREET:	Avenue K-12		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 1 lane southbound, 2 lanes northbound, center-turn lane • 84' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 7'-wide bike lanes with painted buffer



(31) 35TH ST. EAST		
STREET:	Avenue J-8	
LIMITS:	Mid-block	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lane southbound, center-turn lane 66' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Mid-block	
LIMITS:	Eastside High School	
EXISTING	<ul style="list-style-type: none"> 2 lanes with center-turn lane 52' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes with painted buffer
STREET:	Eastside High School	
LIMITS:	Avenue K	
EXISTING	<ul style="list-style-type: none"> 2 lanes 37' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 7'-wide bike lanes
STREET:	Avenue K	
LIMITS:	Avenue K-4	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lanes southbound, center-turn lane 53' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lanes
STREET:	Avenue K-4	
LIMITS:	Avenue K-8	
EXISTING	<ul style="list-style-type: none"> 1 lane northbound, 2 lanes southbound, center-turn lane 53' wide 	PROPOSED
		<ul style="list-style-type: none"> Add 6'-wide bike lanes

(31) 35TH ST. EAST

STREET:	Avenue K-8		
LIMITS:	James Court		
EXISTING	<ul style="list-style-type: none"> • 2 lane with center-turn lane • 54' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 6'-wide bike lanes
STREET:	James Court		
LIMITS:	Avenue L		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 30' wide 	PROPOSED	<ul style="list-style-type: none"> • Add 5'-wide bike lanes

(32) 40TH ST. EAST

STREET:	Avenue H		
LIMITS:	Avenue I		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 23' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Extend pavement to include 8'-wide shoulder • Should more development occur, add wide bike lanes
STREET:	Avenue I		
LIMITS:	Lancaster Boulevard		
EXISTING	<ul style="list-style-type: none"> • 2 lanes • 27' wide 	PROPOSED	<ul style="list-style-type: none"> • Add bike route • Extend pavement to include 8'-wide shoulder • Should more development occur, add wide bike lanes



A

B

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APPENDIX B

COST ESTIMATES FOR PROPOSED BIKEWAYS

This appendix details the unit improvement costs for each on-street bikeway project by section. Several of the improvements will not be designated bikeways, but rather improvements to the street in order to accommodate bicycles.

The “orientation” lists whether the street is east / west or north / south.

The “project #” refers to the list in Appendix A.

The “section” refers to the geographic part of that street; this also corresponds to the priority tables. Classification categories are as follows:

- WS - Widen Shoulder
- BL - Bike Lanes
- BBL - Buffered Bike Lanes
- WSBL - Widen shoulder and add bike lanes
- BR - Bike Route
- BRS - Bike Route with Sharrows
- P - Path
- WE - Widen existing bike lanes

TABLE B-1: DETAILED COST ESTIMATES FOR ON-STREET BIKEWAYS BY SECTION

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	1	West	Avenue E	30 W	25 W	0.50	WS			\$500,000	\$0	\$250,000
EAST - WEST ROUTES	2	West	Avenue F	70 W	25 W	4.50	WS			\$500,000	\$0	\$2,250,000
EAST - WEST ROUTES	3	West	Avenue G	100 W	50 W	3.00	BL			\$50,000	\$0	\$150,000
EAST - WEST ROUTES	3	West	Avenue G	50 W	25 W	2.70	BBL		X	\$100,000	\$0	\$270,000



Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	3	West	Avenue G	25 W	20 W	0.50	WS			\$500,000	\$0	\$250,000
EAST - WEST ROUTES	3	Central	Avenue G	20 W	Sierra Hwy..	1.20	WS			\$500,000	\$0	\$600,000
EAST - WEST ROUTES	3	Central	Avenue G	Sierra Hwy.	Division St	0.60	BL			\$50,000	\$0	\$30,000
EAST - WEST ROUTES	4	West	Avenue H	Mid-block 93 W / 90 W	90 W	0.10	WS			\$500,000	\$0	\$50,000
EAST - WEST ROUTES	4	West	Avenue H	90 W	70 W	2.00	BR			\$10,000	\$0	\$20,000
EAST - WEST ROUTES	4	West	Avenue H	70 W	30 W	4.00	WS			\$500,000	\$0	\$2,000,000
EAST - WEST ROUTES	4	West	Avenue H	30 W	20 W	1.00	BBL			\$75,000	\$0	\$75,000
EAST - WEST ROUTES	4	Central	Avenue H	20 W	10 W	1.00	BL			\$50,000	\$0	\$50,000
EAST - WEST ROUTES	4	Central	Avenue H	10 W	7 W	0.25	BBL			\$75,000	\$0	\$18,750
EAST - WEST ROUTES	4	Central	Avenue H	7 W	Trevor Ave	0.60	BBL		X	\$100,000	\$0	\$60,000
EAST - WEST ROUTES	4	Central	Avenue H	Trevor Ave	20 E	2.30	BL			\$50,000	\$0	\$115,000
EAST - WEST ROUTES	4	East	Avenue H	20 E	40 E (City Limit)	2.00	BL			\$50,000	\$0	\$100,000
EAST - WEST ROUTES	5	West	Avenue H-8	21 W	20 W	0.10	BRS			\$20,000	\$0	\$2,000
EAST - WEST ROUTES	5	Central	Avenue H-8	20 W	Sierra Highway	1.60	BRS			\$20,000	\$0	\$32,000
EAST - WEST ROUTES	5	Central	Avenue H-8	Division St	7 E	0.80	BL			\$50,000	\$0	\$40,000



B

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	5	Central	Avenue H-8	7 E	Challenger Way	0.25	P			\$1,000,000	\$0	\$250,000
EAST - WEST ROUTES	6	West	Avenue I	90 W	35 W	6.50	BL			\$50,000	\$0	\$325,000
EAST - WEST ROUTES	6	West	Avenue I	35 W	32 W	0.30	BBL		X	\$100,000	\$0	\$30,000
EAST - WEST ROUTES	6	West	Avenue I	32 W	30 W	0.20	BBL			\$75,000	\$0	\$15,000
EAST - WEST ROUTES	6	West	Avenue I	30 W	20 W	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	6	Central	Avenue I	20 W	13 W	0.70	BBL	X	X	\$100,000	\$17,500	\$87,500
EAST - WEST ROUTES	6	Central	Avenue I	13 W	11 W	0.20	BL	X	X	\$100,000	\$5,000	\$25,000
EAST - WEST ROUTES	6	Central	Avenue I	11 W	Sierra Highway	0.70	BBL	X	X	\$100,000	\$17,500	\$87,500
EAST - WEST ROUTES	6	Central	Avenue I	Sierra Highway	Trevor Ave	0.20	BL	X	X	\$100,000	\$5,000	\$25,000
EAST - WEST ROUTES	6	Central	Avenue I	Trevor Ave	Division St	0.20	BL	X		\$50,000	\$5,000	\$15,000
EAST - WEST ROUTES	6	Central	Avenue I	Division Street	Challenger Way	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	6	Central	Avenue I	Challenger Way	15 E	0.50	BL	X		\$50,000	\$12,500	\$37,500
EAST - WEST ROUTES	6	Central	Avenue I	15 E	20 E	0.50	BBL	X		\$75,000	\$12,500	\$50,000
EAST - WEST ROUTES	6	East	Avenue I	20 E	27 E	0.60	BBL	X		\$75,000	\$15,000	\$60,000
EAST - WEST ROUTES	6	East	Avenue I	27 E	Gifford Middle School	0.40	BL	X		\$50,000	\$10,000	\$30,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	6	East	Avenue I	Gifford Middle School	35 E	0.40	BL		X	\$100,000	\$0	\$40,000
EAST - WEST ROUTES	6	East	Avenue I	35 E	40 E	0.50	BBL		X	\$100,000	\$0	\$50,000
EAST - WEST ROUTES	7	West	Lancaster Blvd.	35 W	30 W	0.50	WE	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	7	West	Lancaster Blvd.	30 W	Valley Central Way	0.70	BBL	X		\$75,000	\$17,500	\$70,000
EAST - WEST ROUTES	7	West	Lancaster Blvd.	Valley Central Way	20 W	0.30	BBL	X	X	\$100,000	\$7,500	\$37,500
EAST - WEST ROUTES	7	Central	Lancaster Blvd.	20 W	10 W	1.00	WE	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	7	Central	Lancaster Blvd.	Sierra Highway	Division St	0.40	BL	X	X	\$100,000	\$10,000	\$50,000
EAST - WEST ROUTES	8	Central	Lancaster Blvd.	Division Street	5 E	0.50	WE	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	8	Central	Lancaster Blvd.	5 E	Challenger Way	0.50	BL	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	8	Central	Lancaster Blvd.	Challenger Way	20 E	1.00	WE	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	8	East	Lancaster Blvd.	20 E	23 E	0.30	WE	X	X	\$100,000	\$7,500	\$37,500
EAST - WEST ROUTES	8	East	Lancaster Blvd.	23 E	30 E	0.70	BBL	X	X	\$100,000	\$17,500	\$87,500
EAST - WEST ROUTES	8	East	Lancaster Blvd.	30 E	300' east of Cajun St	0.20	BBL		X	\$100,000	\$0	\$20,000
EAST - WEST ROUTES	8	East	Lancaster Blvd.	300' east of Cajun St	40 E	0.80	WSBL			\$500,000	\$0	\$400,000
EAST - WEST ROUTES	8	East	Lancaster Blvd.	40 E	50 E	1.00	WS			\$500,000	\$0	\$500,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	10	East	Avenue J	20 E	21 E	0.10	BL			\$50,000	\$0	\$5,000
EAST - WEST ROUTES	10	East	Avenue J	21 E	32 E	1.10	BBL			\$75,000	\$0	\$82,500
EAST - WEST ROUTES	10	East	Avenue J	32 E	35 E	0.30	WSBL			\$500,000	\$0	\$150,000
EAST - WEST ROUTES	10	East	Avenue J	35 E	37 E	0.20	BBL			\$75,000	\$0	\$15,000
EAST - WEST ROUTES	10	East	Avenue J	37 E	40 E	0.30	BL			\$50,000	\$0	\$15,000
EAST - WEST ROUTES	10	East	Avenue J	40 E	70 E	3.00	WS			\$500,000	\$0	\$1,500,000
EAST - WEST ROUTES	11	East	Avenue J-4	25 E	30 E	0.50	BRS			\$20,000	\$0	\$10,000
EAST - WEST ROUTES	12	West	Avenue J-8	65 W	60 W	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	12	West	Avenue J-8	60 W	56 W	0.30	WE		X	\$100,000	\$0	\$30,000
EAST - WEST ROUTES	12	West	Avenue J-8	56 W	55 W	0.20	BL			\$50,000	\$0	\$10,000
EAST - WEST ROUTES	12	West	Avenue J-8	55 W	50 W	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	12	West	Avenue J-8	50 W	40 W	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	12	West	Avenue J-8	40 W	35 W	0.50	BL	X		\$50,000	\$12,500	\$37,500
EAST - WEST ROUTES	12	West	Avenue J-8	35 W	25 W	1.00	WE	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	12	West	Avenue J-8	25 W	20 W	0.50	WE	X		\$50,000	\$12,500	\$37,500



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Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	12	Central	Avenue J-8	20 W	12 W	0.80	WE	X		\$50,000	\$20,000	\$60,000
EAST - WEST ROUTES	12	Central	Avenue J-8	12 W	Cedar Avenue	0.80	BRS			\$20,000	\$0	\$16,000
EAST - WEST ROUTES	12	Central	Cedar Avenue	Avenue J-8	Avenue J-7	0.03	BRS			\$20,000	\$0	\$600
EAST - WEST ROUTES	12	Central	Avenue J-7	Cedar Avenue	Adler Avenue	0.16	BRS			\$20,000	\$0	\$3,200
EAST - WEST ROUTES	12	Central	Adler Avenue	Avenue J-7	Avenue J-8	0.05	BRS			\$20,000	\$0	\$1,000
EAST - WEST ROUTES	12	Central	Avenue J-8	Adler Avenue	Sierra Highway	0.10	BRS			\$20,000	\$0	\$2,000
EAST - WEST ROUTES	13	Central	Avenue J-8	Division Street	Glenraven Road	0.40	BRS			\$20,000	\$0	\$8,000
EAST - WEST ROUTES	13	Central	Avenue J-9	Glenraven Road	Rodin Avenue	0.30	BRS			\$20,000	\$0	\$6,000
EAST - WEST ROUTES	13	Central	Rodin Avenue	Avenue J-9	Avenue J-8	0.03	BRS			\$20,000	\$0	\$600
EAST - WEST ROUTES	13	Central	Avenue J-8	Rodin Avenue	7 E	0.10	BBL	X		\$75,000	\$2,500	\$10,000
EAST - WEST ROUTES	13	Central	Avenue J-8	7 E	10 E	0.25	BL	X		\$50,000	\$6,250	\$18,750
EAST - WEST ROUTES	13	Central	Avenue J-8	10 E	20 E	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	13	East	Avenue J-8	20 E	22 E	0.25	BBL	X		\$75,000	\$6,250	\$25,000
EAST - WEST ROUTES	13	East	Avenue J-8	22 E	35 E	1.27	BL	X		\$50,000	\$31,750	\$95,250
EAST - WEST ROUTES	13	East	Avenue J-8	35 E	40 E	0.50	BL			\$50,000	\$0	\$25,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	14	West	Avenue K	90 W	65 W	2.50	BRS			\$20,000	\$0	\$50,000
EAST - WEST ROUTES	14	West	Avenue K	65 W	57 W	0.75	BBL			\$75,000	\$0	\$56,250
EAST - WEST ROUTES	14	West	Avenue K	57 W	50 W	0.75	WSBL			\$500,000	\$0	\$375,000
EAST - WEST ROUTES	14	West	Avenue K	50 W	45 W	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	14	West	Avenue K	45 W	42 W	0.25	BBL	X		\$75,000	\$6,250	\$25,000
EAST - WEST ROUTES	14	West	Avenue K	42 W	40 W	0.25	BL	X		\$50,000	\$6,250	\$18,750
EAST - WEST ROUTES	14	West	Avenue K	40 W	32 W	0.75	BBL	X		\$75,000	\$18,750	\$75,000
EAST - WEST ROUTES	14	West	Avenue K	32 W	27 W	0.50	BBL	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	14	West	Avenue K	27 W	20 W	0.75	BBL	X		\$75,000	\$18,750	\$75,000
EAST - WEST ROUTES	14	Central	Avenue K	20 W	15 W	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	14	Central	Avenue K	10 W	Gadsden Avenue	0.25	BL	X		\$50,000	\$6,250	\$18,750
EAST - WEST ROUTES	14	Central	Avenue K	Gadsden Avenue	15 E	2.25	BBL	X	X	\$100,000	\$56,250	\$281,250
EAST - WEST ROUTES	14	Central	Avenue K	15 E	20 E	0.50	BL	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	14	East	Avenue K	20 E	22 E	0.25	BL		X	\$100,000	\$0	\$25,000
EAST - WEST ROUTES	14	East	Avenue K	22 E	40 E	1.70	BL			\$50,000	\$0	\$85,000



B

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	15	West	Avenue K-8	62 W	57 W	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	15	West	Avenue K-8	57 W	50 W	0.75	BL			\$50,000	\$0	\$37,500
EAST - WEST ROUTES	15	West	Avenue K-8	50 W	Midblock 50 W / 47 W	0.15	BL			\$50,000	\$0	\$7,500
EAST - WEST ROUTES	15	West	Avenue K-8	Midblock 50 W / 47 W	47 W	0.10	BRS			\$20,000	\$0	\$2,000
EAST - WEST ROUTES	15	West	Avenue K-8	35 W	33 W	0.15	BL	X		\$50,000	\$3,750	\$11,250
EAST - WEST ROUTES	15	West	Avenue K-8	33 W	32 W	0.10	WE	X		\$50,000	\$2,500	\$7,500
EAST - WEST ROUTES	15	West	Avenue K-8	32 W	Midblock 27 W / Fanchon Avenue	0.60	WE	X	X	\$100,000	\$15,000	\$75,000
EAST - WEST ROUTES	15	West	Avenue K-8	Midblock 27 W / Fanchon Avenue	Fanchon Ave	0.07	WE	X		\$50,000	\$1,750	\$5,250
EAST - WEST ROUTES	15	West	Avenue K-8	Fanchon Ave	25 W	0.10	BBL	X		\$75,000	\$2,500	\$10,000
EAST - WEST ROUTES	15	West	Avenue K-8	25 W	Sunny Lane	0.40	WE	X	X	\$100,000	\$10,000	\$50,000
EAST - WEST ROUTES	15	West	Avenue K-8	Sunny Lane	21 W	0.07	WE	X	X	\$100,000	\$1,750	\$8,750
EAST - WEST ROUTES	15	West	Avenue K-8	21 W	20 W	0.06	WE	X	X	\$100,000	\$1,500	\$7,500
EAST - WEST ROUTES	15	Central	Avenue K-8	20 W	15 W	0.50	WE	X	X	\$100,000	\$12,500	\$62,500
EAST - WEST ROUTES	15	Central	Avenue K-8	15 W	10 W	0.50	WE	X		\$50,000	\$12,500	\$37,500
EAST - WEST ROUTES	15	Central	Avenue K-8	10 W	Sierra Highway	0.90	BL			\$50,000	\$0	\$45,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	15	Central	Avenue K-8	Division Street	5 E	0.50	BBL	X		\$75,000	\$12,500	\$50,000
EAST - WEST ROUTES	15	Central	Avenue K-8	5 E	First View Street	0.25	WSBL	X		\$500,000	\$6,250	\$131,250
EAST - WEST ROUTES	15	Central	Avenue K-8	First View Street	Challenger Way	0.25	BBL	X		\$75,000	\$6,250	\$25,000
EAST - WEST ROUTES	15	Central	Avenue K-8	Challenger Way	20 E	1.00	WE	X	X	\$100,000	\$25,000	\$125,000
EAST - WEST ROUTES	15	East	Avenue K-8	20 E	30 E	1.00	BL			\$50,000	\$0	\$50,000
EAST - WEST ROUTES	15	East	Avenue K-8	30 E	35 E	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	16	West	Avenue L	70 W	65 W	0.50	BL			\$50,000	\$0	\$25,000
EAST - WEST ROUTES	16	West	Avenue L	65 W	52 W	1.25	BBL			\$75,000	\$0	\$93,750
EAST - WEST ROUTES	16	West	Avenue L	45 W	40 W	0.50	BBL	X		\$75,000	\$12,500	\$50,000
EAST - WEST ROUTES	16	West	Avenue L	40 W	20 W	2.00	BBL	X		\$75,000	\$50,000	\$200,000
EAST - WEST ROUTES	16	Central	Avenue L	20 W	15 W	0.50	BBL	X		\$75,000	\$12,500	\$50,000
EAST - WEST ROUTES	16	Central	Avenue L	15 W	10 W	0.50	BBL	X		\$75,000	\$12,500	\$50,000
EAST - WEST ROUTES	16	Central	Avenue L	10 W	Sierra Highway	1.00	BBL	X		\$75,000	\$25,000	\$100,000
EAST - WEST ROUTES	16	Central	Avenue L	Sierra Highway	Business Center Parkway	0.40	BBL			\$75,000	\$0	\$30,000
EAST - WEST ROUTES	16	Central	Avenue L	Business Center Parkway	10 E	0.60	BL		X	\$100,000	\$0	\$60,000



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B

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	16	Central	Avenue L	10 E	20 E	1.00	WSBL			\$500,000	\$0	\$500,000
EAST - WEST ROUTES	16	East	Avenue L	20 E	25 E	0.50	WSBL			\$500,000	\$0	\$250,000
EAST - WEST ROUTES	16	East	Avenue L	25 E	30 E	0.50	BBL			\$75,000	\$0	\$37,500
EAST - WEST ROUTES	16	East	Avenue L	30 E	35 E	0.50	BL			\$50,000	\$0	\$25,000
EAST - WEST ROUTES	16	East	Avenue L	35 E	40 E	0.50	P			\$1,000,000	\$0	\$500,000
EAST - WEST ROUTES	16	East	Avenue L	40 E	50 E	1.00	WS			\$500,000	\$0	\$500,000
EAST - WEST ROUTES	17	West	Avenue L-8	76 W	60 W	1.60	BL			\$50,000	\$0	\$80,000
EAST - WEST ROUTES	17	West	Avenue L-8	60 W	57 W	0.25	BBL		X	\$100,000	\$0	\$25,000
EAST - WEST ROUTES	17	West	Avenue L-8	57 W	55 W	0.25	BBL			\$75,000	\$0	\$18,750
EAST - WEST ROUTES	17	West	Avenue L-8	40 W	30 W	1.00	BL			\$50,000	\$0	\$50,000
EAST - WEST ROUTES	17	Central	Avenue L-8	12 W	Sierra Highway	1.30	BL			\$50,000	\$0	\$65,000
EAST - WEST ROUTES	18	West	Avenue M	Quartz Hill Rd.	32 W	1.10	WSBL			\$500,000	\$0	\$550,000
EAST - WEST ROUTES	18	West	Avenue M	32 W	25 W	0.75	BBL			\$75,000	\$0	\$56,250
EAST - WEST ROUTES	18	West	Avenue M	25 W	20 W	0.50	BL			\$50,000	\$0	\$25,000
EAST - WEST ROUTES	18	Central	Avenue M	20 W	CA-14 off-ramp	0.80	BL			\$50,000	\$0	\$40,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
EAST - WEST ROUTES	18	Central	Avenue M	CA-14	Challenger Way	2.20	BBL			\$75,000	\$0	\$165,000
EAST - WEST ROUTES	19	West	Avenue N	45 W	30 W	1.50	BL			\$50,000	\$0	\$75,000
NORTH - SOUTH ROUTES	1	North	110 W	Avenue G	Avenue I	2.00	BRS			\$20,000	\$0	\$40,000
NORTH - SOUTH ROUTES	1	Central	110 W	Avenue I	Avenue K	2.00	BRS			\$20,000	\$0	\$40,000
NORTH - SOUTH ROUTES	1	South	110 W	Avenue K	Avenue L	1.00	BRS			\$20,000	\$0	\$20,000
NORTH - SOUTH ROUTES	2	North	90 W	Avenue G	Avenue I	2.00	BRS			\$20,000	\$0	\$40,000
NORTH - SOUTH ROUTES	2	Central	90 W	Avenue I	Avenue K	2.00	BRS			\$20,000	\$0	\$40,000
NORTH - SOUTH ROUTES	3	North	70 W	Avenue F	Avenue I	4.00	BRS			\$20,000	\$0	\$80,000
NORTH - SOUTH ROUTES	3	Central	70 W	Avenue I	Avenue J	1.00	BRS			\$20,000	\$0	\$20,000
NORTH - SOUTH ROUTES	3	South	70 W	Avenue L	Avenue L-8	0.50	BBL		X	\$100,000	\$0	\$50,000
NORTH - SOUTH ROUTES	3	South	70 W	Avenue L-8	Avenue M	0.50	BL			\$50,000	\$0	\$25,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	5	South	60 W	Avenue K	Avenue L	1.00	BBL			\$75,000	\$0	\$75,000
NORTH - SOUTH ROUTES	5	South	60 W	Avenue L	Avenue L-8	0.50	BL			\$50,000	\$0	\$25,000
NORTH - SOUTH ROUTES	5	South	60 W	Avenue L-8	Avenue M	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	6	South	55 W	Avenue L	Avenue M-8	1.50	BL			\$50,000	\$0	\$75,000
NORTH - SOUTH ROUTES	7	North	50 W	Apollo County Park	Avenue I	2.00	WS			\$500,000	\$0	\$1,000,000
NORTH - SOUTH ROUTES	7	Central	50 W	Avenue I	Avenue J-8	1.50	BBL			\$75,000	\$0	\$112,500
NORTH - SOUTH ROUTES	7	Central	50 W	Avenue J-8	Avenue K	0.50	WSBL	X		\$500,000	\$12,500	\$262,500
NORTH - SOUTH ROUTES	7	South	50 W	Avenue K	Avenue K-8	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	8	Central	45 W	Avenue J	Avenue K	1.00	BBL			\$75,000	\$0	\$75,000
NORTH - SOUTH ROUTES	8	South	45 W	Avenue K	Avenue N	3.00	BBL			\$75,000	\$0	\$225,000
NORTH - SOUTH ROUTES	9	Central	40 W	Avenue I	Avenue J	1.00	BL			\$50,000	\$0	\$50,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	10	Central	35 W	Avenue J	Avenue J-9	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	10	Central	35 W	Avenue J-9	Avenue K	0.10	P			\$1,000,000	\$0	\$100,000
NORTH - SOUTH ROUTES	10	South	35 W	Avenue K	Avenue K-4	0.50	P			\$1,000,000	\$0	\$500,000
NORTH - SOUTH ROUTES	10	South	35 W	Avenue K-8	Avenue L	0.50	WE	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	10	South	35 W	Avenue L	Avenue L-10	0.76	BL	X		\$50,000	\$19,000	\$57,000
NORTH - SOUTH ROUTES	10	South	35 W	Avenue L-10	Avenue M	0.24	WSBL	X		\$500,000	\$6,000	\$126,000
NORTH - SOUTH ROUTES	11	Central	32 W	Jackman Street	Lancaster Blvd..	0.25	BRS			\$20,000	\$0	\$5,000
NORTH - SOUTH ROUTES	11	Central	32 W	Lancaster Blvd..	Avenue J	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	11	Central	32 W	Avenue J	Avenue J-8	0.50	BRS			\$20,000	\$0	\$10,000
NORTH - SOUTH ROUTES	12	North	30 W	Avenue G	Avenue G-8	0.50	BL			\$50,000	\$0	\$25,000
NORTH - SOUTH ROUTES	12	North	30 W	Avenue G-8	Midblock Avenue H / I	0.80	BBL			\$75,000	\$0	\$60,000



B

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	12	North	30 W	Midblock Avenue H / I	Avenue I	0.70	BBL		X	\$100,000	\$0	\$70,000
NORTH - SOUTH ROUTES	12	Central	30 W	Avenue I	Lancaster Blvd.	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	12	Central	30 W	Lancaster Blvd.	Avenue K	1.50	BBL	X		\$75,000	\$37,500	\$150,000
NORTH - SOUTH ROUTES	12	South	30 W	Avenue K	Avenue L	1.00	BBL	X		\$75,000	\$25,000	\$100,000
NORTH - SOUTH ROUTES	12	South	30 W	Avenue L	Columbia Way	1.00	BL			\$50,000	\$0	\$50,000
NORTH - SOUTH ROUTES	12	South	30 W	Columbia Way	Avenue N	1.00	BBL			\$75,000	\$0	\$75,000
NORTH - SOUTH ROUTES	13	Central	25 W	Lancaster Blvd..	Avenue J	0.50	BBL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	13	Central	25 W	Avenue J	Avenue K	1.00	WE	X	X	\$100,000	\$25,000	\$125,000
NORTH - SOUTH ROUTES	13	South	25 W	Avenue K	Avenue K-8	0.50	BL	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	13	South	25 W	Avenue K-8	Avenue L	0.50	WE	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	14	Central	Valley Central Way	Avenue I	Avenue J	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	15	North	20 W	Avenue H	Avenue I	1.00	BBL			\$75,000	\$0	\$75,000
NORTH - SOUTH ROUTES	15	Central	20 W	Avenue I	Newgrove St	0.76	BBL	X		\$75,000	\$19,000	\$76,000
NORTH - SOUTH ROUTES	15	Central	20 W	Newgrove Street	Avenue J	0.24	BBL	X	X	\$100,000	\$6,000	\$30,000
NORTH - SOUTH ROUTES	15	Central	20 W	Avenue J-8	Avenue K	0.50	BL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	15	South	20 W	Avenue K	Avenue K-8	0.50	BL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	15	South	20 W	Avenue K-8	Avenue L	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	15	South	20 W	Avenue L	Columbia Way	1.00	WSBL			\$500,000	\$0	\$500,000
NORTH - SOUTH ROUTES	16	North	15 W	Avenue H	Avenue H-8	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	16	North	15 W	Avenue H-8	Avenue I	0.50	BL	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	16	Central	15 W	Avenue I	Kettering St	0.40	BL	X		\$50,000	\$10,000	\$30,000
NORTH - SOUTH ROUTES	16	Central	15 W	Kettering Street	Avenue J-4	0.80	BBL	X	X	\$100,000	\$20,000	\$100,000



B

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	16	Central	15 W	Avenue J-4	Avenue K	0.80	BBL	X		\$75,000	\$20,000	\$80,000
NORTH - SOUTH ROUTES	17	Central	17 W / Avenue J-12	20 W	Avenue K	0.48	BL			\$50,000	\$0	\$24,000
NORTH - SOUTH ROUTES	17	South	17 W / Avenue J-12	Avenue K	15 W	0.14	BL			\$50,000	\$0	\$7,000
NORTH - SOUTH ROUTES	17	South	15 W	17 W	Avenue K-8	0.53	BL			\$50,000	\$0	\$26,500
NORTH - SOUTH ROUTES	17	South	15 W	Avenue K-8	Avenue M	1.50	BL	X		\$50,000	\$37,500	\$112,500
NORTH - SOUTH ROUTES	18	Central	12 W	Kettering Street	Pillsbury St	0.60	BR			\$10,000	\$0	\$6,000
NORTH - SOUTH ROUTES	18	Central	Pillsbury Street	12 W	Kingtree Avenue	0.05	BR			\$10,000	\$0	\$500
NORTH - SOUTH ROUTES	18	Central	Kingtree Avenue	Pillsbury Street	Avenue J-4	0.30	BR			\$10,000	\$0	\$3,000
NORTH - SOUTH ROUTES	18	Central	Avenue J-4	Kingtree Avenue	12 W	0.05	BR			\$10,000	\$0	\$500
NORTH - SOUTH ROUTES	18	Central	12 W	Avenue J-4	Avenue K	0.75	BR			\$10,000	\$0	\$7,500
NORTH - SOUTH ROUTES	18	South	12 W	Avenue K	Commerce Center Drive	0.20	BR		X	\$100,000	\$0	\$20,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	18	South	12 W	Commerce Center Drive	Motor Lane	0.23	BRS			\$20,000	\$0	\$4,600
NORTH - SOUTH ROUTES	18	South	Motor Lane	12 W	Driver's Way	0.10	BRS			\$20,000	\$0	\$2,000
NORTH - SOUTH ROUTES	18	South	Driver's Way	Motor Lane	Avenue K-8	0.08	BRS			\$20,000	\$0	\$1,600
NORTH - SOUTH ROUTES	19	North	10 W	Avenue G	Avenue H	1.00	WS			\$500,000	\$0	\$500,000
NORTH - SOUTH ROUTES	19	North	10 W	Avenue H	Avenue H-8	0.50	BBL		X	\$100,000	\$0	\$50,000
NORTH - SOUTH ROUTES	19	North	10 W	Avenue H-8	Avenue I	0.50	BBL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	19	Central	10 W	Avenue I	Lancaster Blvd.	0.50	BBL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	19	Central	10 W	Lancaster Blvd.	Newgrove St	0.25	BL	X	X	\$100,000	\$6,250	\$31,250
NORTH - SOUTH ROUTES	19	Central	10 W	Newgrove St	Avenue J-4	0.53	BL	X		\$50,000	\$13,250	\$39,750
NORTH - SOUTH ROUTES	19	Central	Avenue J-4	10 W	Heaton Ave	0.15	BRS			\$20,000	\$0	\$3,000
NORTH - SOUTH ROUTES	19	Central	Heaton Ave	Avenue J-4	Avenue J-12	0.60	BRS			\$20,000	\$0	\$12,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	22	Central	Sierra Highway	Avenue I	Avenue J	1.00	BBL	X	X	\$100,000	\$25,000	\$125,000
NORTH - SOUTH ROUTES	22	Central	Sierra Highway	Avenue J	Avenue K	1.00	BL	X		\$50,000	\$25,000	\$75,000
NORTH - SOUTH ROUTES	22	South	Sierra Highway	Avenue K	Avenue L	1.00	BL	X		\$50,000	\$25,000	\$75,000
NORTH - SOUTH ROUTES	22	South	Sierra Highway	Ave L	Columbia Way	1.00	BL			\$50,000	\$0	\$50,000
NORTH - SOUTH ROUTES	23	North	Division Street	Avenue H	Avenue H-8	0.50	BL	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	23	North	Division Street	Avenue H-8	Midblock Avenue H-8 / I	0.30	BBL	X	X	\$100,000	\$7,500	\$37,500
NORTH - SOUTH ROUTES	23	North	Division Street	Midblock Avenue H-8 / I	Avenue I	0.20	BBL	X		\$75,000	\$5,000	\$20,000
NORTH - SOUTH ROUTES	23	Central	Division Street	Avenue I	Lancaster Blvd..	0.50	BL	X	X	\$100,000	\$12,500	\$62,500
NORTH - SOUTH ROUTES	23	Central	Division Street	Lancaster Blvd..	Milling Street	0.16	BBL	X	X	\$100,000	\$4,000	\$20,000
NORTH - SOUTH ROUTES	23	Central	Division Street	Milling Street	Avenue K	1.50	BBL	X		\$75,000	\$37,500	\$150,000
NORTH - SOUTH ROUTES	23	South	Division Street	Avenue K	Business Center Parkway	0.70	BBL	X		\$75,000	\$17,500	\$70,000



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Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	23	South	Business Center Parkway	Division Street	Avenue L	0.40	BBL	X		\$75,000	\$10,000	\$40,000
NORTH - SOUTH ROUTES	23	South	4 E	Avenue L	Avenue L-4	0.30	BL			\$50,000	\$0	\$15,000
NORTH - SOUTH ROUTES	23	South	4 E	Avenue L-4	Avenue L-12	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	23	South	4 E	Avenue L-12	Avenue M	0.20	WSBL			\$500,000	\$0	\$100,000
NORTH - SOUTH ROUTES	24	North	5 E	Avenue H-8	Avenue H-14	0.30	BL	X		\$50,000	\$7,500	\$22,500
NORTH - SOUTH ROUTES	24	North	5 E	Avenue H-14	Avenue I	0.16	BL	X	X	\$100,000	\$4,000	\$20,000
NORTH - SOUTH ROUTES	24	Central	5 E	Avenue I	City Vacant Lot	1.40	WE	X		\$50,000	\$35,000	\$105,000
NORTH - SOUTH ROUTES	24	Central	City Vacant Lot	Avenue J-5	Avenue J-9	0.20	BL	X		\$50,000	\$5,000	\$15,000
NORTH - SOUTH ROUTES	24	Central	5 E	Avenue J-9	Avenue K	0.30	BR			\$10,000	\$0	\$3,000
NORTH - SOUTH ROUTES	24	South	5 E	Avenue K	Avenue K-12	0.90	BR			\$10,000	\$0	\$9,000
NORTH - SOUTH ROUTES	24	South	Avenue K-12	5 E	Capital Drive	0.06	BBL			\$75,000	\$0	\$4,500

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	24	South	Capital Drive	Avenue K-12	Business Center Parkway	0.20	BBL			\$75,000	\$0	\$15,000
NORTH - SOUTH ROUTES	25	North	Challenger Way	Avenue H	Avenue I	1.00	BL			\$50,000	\$0	\$50,000
NORTH - SOUTH ROUTES	25	Central	Challenger Way	Avenue I	Avenue K	2.00	BBL	X		\$75,000	\$50,000	\$200,000
NORTH - SOUTH ROUTES	25	South	Challenger Way	Avenue K	Avenue K-8	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	25	South	Challenger Way	Avenue K-8	Avenue L	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	25	South	Challenger Way	Avenue L	Avenue M	1.00	BL			\$50,000	\$0	\$50,000
NORTH - SOUTH ROUTES	26	North	15 E	Avenue H-12	Avenue I	0.25	BRS			\$20,000	\$0	\$5,000
NORTH - SOUTH ROUTES	26	Central	15 E	Avenue I	Avenue K	2.00	WE	X	X	\$100,000	\$50,000	\$250,000
NORTH - SOUTH ROUTES	26	South	15 E	Avenue K	Marion Avenue	0.10	WE	X	X	\$100,000	\$2,500	\$12,500
NORTH - SOUTH ROUTES	26	South	15 E	Marion Avenue	Avenue K-4	0.15	BL	X		\$50,000	\$3,750	\$11,250
NORTH - SOUTH ROUTES	26	South	15 E	Avenue K-4	Avenue K-6	0.12	WE	X	X	\$100,000	\$3,000	\$15,000



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Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	26	South	15 E	Avenue K-6	Avenue K-8	0.12	WE	X		\$50,000	\$3,000	\$9,000
NORTH - SOUTH ROUTES	27	North	20 E	Avenue H	Avenue H-4	0.25	WS			\$500,000	\$0	\$125,000
NORTH - SOUTH ROUTES	27	North	20 E	Avenue H-4	Avenue H-8	0.25	BBL			\$75,000	\$0	\$18,750
NORTH - SOUTH ROUTES	27	North	20 E	Avenue H-8	Avenue I	0.50	BL			\$50,000	\$0	\$25,000
NORTH - SOUTH ROUTES	27	Central	20 E	Avenue I	Lancaster Blvd..	0.50	BL	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	27	Central	20 E	Lancaster Blvd..	Avenue J-4	0.75	BBL	X		\$75,000	\$18,750	\$75,000
NORTH - SOUTH ROUTES	27	Central	20 E	Avenue J-4	Avenue J-8	0.25	BL	X		\$50,000	\$6,250	\$18,750
NORTH - SOUTH ROUTES	27	Central	20 E	Avenue J-8	Avenue K	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	27	South	20 E	Avenue K	Avenue K-8	0.50	BBL	X		\$75,000	\$12,500	\$50,000
NORTH - SOUTH ROUTES	27	South	20 E	Avenue K-8	Avenue L	0.50	WSBL			\$500,000	\$0	\$250,000
NORTH - SOUTH ROUTES	28	North	25 E	Avenue H-8	Avenue I	0.50	BR			\$10,000	\$0	\$5,000

Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	28	Central	25 E	Avenue I	Avenue J-4	1.25	BL			\$50,000	\$0	\$62,500
NORTH - SOUTH ROUTES	28	Central	25 E	Avenue J-4	Avenue J-8	0.30	BL			\$50,000	\$0	\$15,000
NORTH - SOUTH ROUTES	28	Central	25 E	Avenue J-8	Avenue K	0.50	BL			\$50,000	\$0	\$25,000
NORTH - SOUTH ROUTES	28	South	25 E	Avenue K	Avenue K-4	0.25	BL			\$50,000	\$0	\$12,500
NORTH - SOUTH ROUTES	29	Central	27 E	Avenue I	Lancaster Blvd..	0.50	BL	X		\$50,000	\$12,500	\$37,500
NORTH - SOUTH ROUTES	29	Central	27 E	Lancaster Blvd..	Via Genova	0.30	BRS			\$20,000	\$0	\$6,000
NORTH - SOUTH ROUTES	29	Central	27 E	Via Genova	Garnet Lane	0.40	BR			\$10,000	\$0	\$4,000
NORTH - SOUTH ROUTES	29	Central	27 E	Garnet Lane	Avenue J-4	0.06	P			\$1,000,000	\$0	\$60,000
NORTH - SOUTH ROUTES	29	Central	27 E	Avenue J-4	Avenue J-8	0.25	BL	X		\$50,000	\$6,250	\$18,750
NORTH - SOUTH ROUTES	29	Central	27 E	Avenue J-8	Avenue K	0.50	BR			\$10,000	\$0	\$5,000
NORTH - SOUTH ROUTES	30	North	30 E	Avenue H	Avenue I	1.00	BR			\$10,000	\$0	\$10,000



Orientation	Project #	Section	Street	From	To	Mileage	Class	Colored	Road Diet	Unit Improvement Cost	Color Cost	Total Cost
NORTH - SOUTH ROUTES	30	Central	30 E	Avenue I	Kettering Street	0.25	BR			\$10,000	\$0	\$2,500
NORTH - SOUTH ROUTES	30	Central	30 E	Kettering Street	Nugent Street	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	30	Central	30 E	Nugent Street	Avenue J	0.25	WSBL			\$500,000	\$0	\$125,000
NORTH - SOUTH ROUTES	30	Central	30 E	Avenue J	Avenue J-8	0.50	BL			\$50,000	\$0	\$25,000
NORTH - SOUTH ROUTES	30	Central	30 E	Avenue J-8	Avenue K	0.50	BBL			\$75,000	\$0	\$37,500
NORTH - SOUTH ROUTES	30	South	30 E	Avenue K	Avenue L	1.00	BBL			\$75,000	\$0	\$75,000
NORTH - SOUTH ROUTES	31	Central	35 E	Avenue J-8	Eastside High School	0.25	BBL			\$75,000	\$0	\$18,750
NORTH - SOUTH ROUTES	31	Central	35 E	Eastside High School	Avenue K	0.25	BL			\$50,000	\$0	\$12,500
NORTH - SOUTH ROUTES	31	South	35 E	Avenue K	Avenue L	1.00	BL			\$50,000	\$0	\$50,000
NORTH - SOUTH ROUTES	32	North	40 E	Avenue H	Avenue I	1.00	BR			\$10,000	\$0	\$10,000
NORTH - SOUTH ROUTES	32	Central	40 E	Avenue I	Avenue K	2.00	BR			\$10,000	\$0	\$20,000
NORTH - SOUTH ROUTES	32	South	40 E	Avenue K	Avenue L	1.00	BR			\$10,000	\$0	\$10,000
TOTAL COST												\$30,978,750