



ACTIVE TRANSPORTATION PROGRAM - CYCLE 2

Application Form for Part A

Parts B & C must be completed using a separate document

PROJECT unique APPLICATION NO.:

07-Lancaster-3

Auto populated

Total ATP Funds Requested:

\$ 785

(in 1000s)

Auto populated

Important: Applicants must follow the CTC Guidelines and Chapter 22 of the Local Assistance Program Guidelines, and include attachments and signatures as required in those documents. Ineligible project elements may result in a lower score/ranking or a lower level of ATP funding. Incomplete applications may be disqualified.

Applicants are expected to use the corresponding “step-by-step” Application Instructions and Guidance to complete the application (3 Parts):

Part A: General Project Information

Part B: Narrative Questions

Part C: Application Attachments

Application Part A: General Project Information

Implementing Agency: This agency must enter into a Master Agreement with Caltrans and will be financially and contractually responsible for the delivery of the project within all pertinent Federal and State funding requirements, including being responsible and accountable for the use and expenditure of program funds. This agency is responsible for the accuracy of the technical information provided in the application and is required to sign the application.

IMPLEMENTING AGENCY'S NAME:

Lancaster

IMPLEMENTING AGENCY'S ADDRESS

CITY

ZIP CODE

44933 N. Fern Avenue

Lancaster

CA

93434

IMPLEMENTING AGENCY'S CONTACT PERSON:

Stephen Carrillo

CONTACT PERSON'S TITLE:

Assistant Engineer

CONTACT PERSON'S PHONE NUMBER:

(661) 945-6861

CONTACT PERSON'S EMAIL ADDRESS :

scarrillo@cityoflancasterca.org



Project Partnering Agency: Entities that are unable to apply for Active Transportation Program funds or that are unable to enter into a Master Agreement with the State must partner with an eligible applicant that can implement the project. **In addition, entities that are unfamiliar with the requirements to administer a Federal-Aid Highway Program project may partner with an eligible applicant that can implement the project.**

If another entity (Partnering Agency) agrees to assume responsibility for the ongoing operations and maintenance of the facility, documentation of the agreement (e.g., letter of intent) must be submitted with the project application, and a copy of the Memorandum of Understanding or Interagency Agreement between the parties must be submitted with the first request for allocation. For these projects, the Project Partnering Agency's information shall be provided below.
(The Grant Writer's or Preparer's information should not be provided)

PROJECT PARTNERING AGENCY'S NAME:

PROJECT PARTNERING AGENCY'S ADDRESS

CITY

ZIP CODE

<input type="text"/>	<input type="text"/>	CA	<input type="text"/>
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PROJECT PARTNERING AGENCY'S CONTACT PERSON:

CONTACT PERSON'S TITLE:

CONTACT PERSON'S PHONE NUMBER:

CONTACT PERSON'S EMAIL ADDRESS :

MASTER AGREEMENTS (MAs):

Does the Implementing Agency currently have a MA with Caltrans?

Yes No

Implementing Agency's Federal Caltrans MA number

07-5419R

Implementing Agency's State Caltrans MA number

00265S

* Implementing Agencies that do not currently have a MA with Caltrans, must be able to meet the requirements and enter into an MA with Caltrans prior to funds allocation. The MA approval process can take 6 to 12 months to complete and there is no guarantee the agency will meet the requirements necessary for the State to enter into a MA with the agency. Delays could also result in a failure to meeting the CTC Allocation timeline requirements and the loss of ATP funding.

PROJECT NAME: (To be used in the CTC project list)

Application Number: out of **Applications**

PROJECT DESCRIPTION: (Max of 250 Characters)

PROJECT LOCATION: (Max of 250 Characters)



Will any infrastructure-improvements permanently or temporarily encroach on the State right-of-way? Yes No

If yes, see the application instructions for more details on the required coordination and documentation.

Project Coordinates: (latitude/longitude in decimal format) Lat. 34.708126 /long. -118.148200

Congressional District(s):

State Senate District(s): State Assembly District(s):

Caltrans District(s):

County:

MPO:

RTPA:

MPO UZA Population:

ADDITIONAL PROJECT GENERAL DETAILS: (Must be consistent with Part B of Application)

ESTIMATION OF ACTIVE TRANSPORTATION USERS

Existing Counts:	Pedestrians	<u>1,894</u>	Bicyclists	<u>190</u>
One Year Projection:	Pedestrians	<u>2,639</u>	Bicyclists	<u>286</u>
Five Year Projection:	Pedestrians	<u>2,772</u>	Bicyclists	<u>301</u>

BICYCLE AND/OR PEDESTRIAN INFRASTRUCTURE (Check all that apply)

Bicycle: Class I Class II Class III Other _____

Pedestrian: Sidewalk Crossing Other _____

Multiuse Trails/Paths: Meets "Class I" Design Standards Other _____

DISADVANTAGED COMMUNITIES

Project contributes toward the Disadvantaged Communities funding requirement: the project must clearly demonstrate a direct, meaningful, and assured benefit to a community that meets any of the following criteria: Yes No

If yes, which criterion does the project meet in regards to the Disadvantaged Community (mark all that apply):

Household Income Yes No **CalEnvioScreen** Yes No

Student Meals Yes No **Local Criteria** Yes No

Is the majority of the project physically located within the limits of a Disadvantaged Community: Yes No

CORPS

Does the agency intend to utilize the Corps: Yes No



PROJECT TYPE (Check only one: I, NI or I/NI)

Infrastructure (I) **OR Non-Infrastructure (NI)** **OR Combination (N/NI)**

“Plan” applications to show as NI only

Development of a Plan in a Disadvantaged Community: Yes No

If Yes, check all Plan types that apply:

- Bicycle Plan**
- Pedestrian Plan**
- Safe Routes to School Plan**
- Active Transportation Plan**

Indicate any of the following plans that your agency currently has: (Check all that apply)

Bicycle Plan Pedestrian Plan Safe Routes to School Plan Active Transportation Plan

PROJECT SUB-TYPE (check all Project Sub-Types that apply):

- Bicycle Transportation** % of Project 75.0 % (ped + bike must = 100%)
- Pedestrian Transportation** % of Project 25.0 %
- Safe Routes to School** *(Also fill out Bicycle and Pedestrian Sub-Type information above)*

How many schools does the project impact/serve: _____

If the project involves more than one school: 1) Insert “Multiple Schools” in the School Name, School Address, and distance from school; 2) Fill in the student information based on the total project; and 3) Include an attachment to the application which clearly summarizes the following school information and the school official signature and person to contact for each school.

School name: _____

School address: _____

District name: _____

District address: _____

Co.-Dist.-School Code: _____

School type (K-8 or 9-12 or Both) Project improvements maximum distance from school _____ mile

Total student enrollment: _____

% of students that currently walk or bike to school% _____ %

Approx. # of students living along route proposed for improvement: _____

Percentage of students eligible for free or reduced meal programs ** _____ %

**Refer to the California Department of Education website: <http://www.cde.ca.gov/ds/sh/cw/filesafdc.asp>

A map must be attached to the application which clearly shows the limits of: 1) the student enrollment area, 2) the students considered to be along the walking route being improved, 3) the project improvements.



Trails (Multi-use and Recreational): *(Also fill out Bicycle and Pedestrian Sub-Type information above)*

Trails Projects constructing multi-purpose trails and are generally eligible in the Active Transportation Program. If the applicant believes all or part of their project meets the federal requirements of the Recreational Trails Program they are encouraged to seek a determination from the California Department of Parks and Recreation on the eligibility of their project to complete for this funding. This is optional but recommended because some trails projects may compete well under this funding program.

For all trails projects:

Do you feel a portion of your project is eligible for federal Recreational Trail funding? Yes No

If yes, estimate the total projects costs that are eligible for the Recreational Trail funding: _____

If yes, estimate the % of the total project costs that serve “transportation” uses? _____ %

Applicants intending to pursue “Recreational Trails Program funding” **must submit** the required information to the California Department of Parks and Recreation prior to the ATP application submissions deadline. (See the Application Instructions for details)

PROJECT STATUS and EXPECTED DELIVERY SCHEDULE

Applicants need to enter **either** the date the milestone was completed (for all milestones already complete prior to submitting the application) **or** the date the applicant anticipates completing the milestone. Applicants should enter "N/A" for all CTC Allocations that will not be requested as part of the project. Per CTC Guidelines, all project applications must be submitted with the expectation of receiving partially federally funded and therefore the schedule below must account for the extra time needed for federal project delivery requirements and approvals. *See the application instructions for more details.*

The agency is responsible for meeting all CTC delivery requirements or their ATP funding will be forfeited. For projects consisting of entirely non-infrastructure elements are not required to complete all standard infrastructure project milestones listed below. Non-infrastructure projects only have to provide dates for the milestones identified with a “*” and can provide “N/A” for the rest.

MILESTONE:	DATE COMPLETED	OR	EXPECTED DATE
CTC - PA&ED Allocation:	_____		N/A
* CEQA Environmental Clearance:	_____		4/18/16
* NEPA Environmental Clearance:	_____		4/18/16
CTC - PS&E Allocation:	_____		7/22/16
CTC - Right of Way Allocation:	_____		N/A
* Right of Way Clearance & Permits:	_____		3/31/17
Final/Stamped PS&E package:	_____		5/5/17
* CTC - Construction Allocation:	_____		7/21/17
* Construction Complete:	_____		3/20/18
* Submittal of “Final Report”	_____		4/27/18



PROJECT FUNDING (in 1000s)

Per CTC Guidelines, Local Matching funds are not required for any ATP projects, but Local Leveraging funds are strongly encouraged. See the Application instructions for more details and requirements relating to ATP funding.

ATP funds being requested for this application/project by project delivery phase:

ATP funds for PA&D:	_____	
ATP funds for PS&E:	_____	\$70
ATP funds for Right of Way:	_____	
ATP funds for Construction:	_____	\$715
ATP funds for Non-Infrastructure:	_____	(All NI funding is allocated in a project's Construction Phase)
Total ATP funds being requested for this application/project:	_____	\$785

Local funds leveraging or matching the ATP funds: _____ **\$785**

For local funding to be considered Leveraging/Matching it must be for ATP eligible activities and costs. Per CTC Guidelines, Local Matching funds are not required for any ATP projects, but Local Leveraging funds are strongly encouraged. See the Application instructions for more details and requirements relating to ATP funding.

Additional Local funds that are 'non-participating' for ATP: _____

These are local funds required for the overall project, but not for ATP eligible activities and costs. They are not considered leverage/match.

TOTAL PROJECT FUNDS: _____ **\$1,570**

ATP - FUNDING TYPE REQUESTED:

Per the CTC Guidelines, All ATP projects must be eligible to receive federal funding. Most ATP projects will receive federal funding, however some projects may be granted State only funding (SOF) for all or part of the project.

Do you believe your project warrants receiving state-only funding? Yes No

If "Yes", provide a brief explanation. (Max of 250 characters) Applicants requesting SOF must also attach an "Exhibit 22-f"

ATP PROJECT PROGRAMMING REQUEST (PPR): In addition to the project funding information provided in Part A of the application, all applicants must complete the ATP Project Programming Request form and include it as Attachment B. More information and guidance on the completion and submittal of this form is located in the Application Instructions Document under Part C - Attachment B.

ACTIVE TRANSPORTATION PROGRAM - CYCLE 2

Part B: Narrative Questions

(Application Screening/Scoring)

Project unique application No.: 07-Lancaster-3

Implementing Agency's Name: City of Lancaster

Important:

- *Applicants must ensure all data in Part B of the application is fully consistent with Part A and C.*
- *Applicants must follow all instructions and guidance to have a chance at receiving full points for the narrative question and to avoid flaws in the application which could result in disqualification.*

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Part B: Narrative Questions

The following Screening Criteria are requirements for applications to be considered for ATP funding. Failure to demonstrate a project meets these criteria will result in the disqualification of the application.

1. Demonstrated fiscal needs of the applicant:

The Active Transportation Program is currently the one state competitive program providing funding for pedestrian and bicycle projects like this one. Regional and local funding sources for active projects have decreased dramatically as the Transportation Activities Enhancement Program, much of which had been programmed by the regions, was discontinued and replaced by the Transportation Alternatives Program distributed through ATP and the State Transportation Improvement Program. Also, local subvention dollars are projected to decline 65% from FY 2013-14 to 2015-16. Federal surface transportation dollars have not been growing at a rate sufficient to keep pace with increased in needs and costs.

The City of Lancaster receives Transportation Development Act Article 3 and Local Return funds; however, much of this has already been committed to implementing the City's Capital Improvement Program. In order for Lancaster to make meaningful progress toward implementing the Master Plan for Trails and Bikeways, our limited local funding must be used to leverage state and federal resources. The City has committed 784,000, or %50, in local match. The remaining \$784,1222 is needed from the ATP.

2. Consistency with Regional Plan.

This Project supports and is consistent with regional transportation goals of the Southern California Association of Governments (SCAG) and Metro. The 2012–2035 SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) has the following goals: 1) Decrease Bicyclist and Pedestrian Fatalities and Injuries, 2) Develop an Active Transportation-Friendly Environment throughout the SCAG Region, and 3) Increase Active Transportation Usage in the SCAG Region, among others related to developing complete streets and healthy, active communities. This Project will help meet all these goals through improved safety measures and increased opportunities for using active transportation modes.

The adopted 2009 Metro Long Range Transportation Plan states that bicycle and pedestrian programs are critical components of a successful transportation system. Also, this Project fully supports Metro's goal of implementing "a regional transportation system that increases mobility, fosters walkable and livable communities, and minimizes GHG emissions and environmental impacts," as discussed in Metro's Countywide Sustainability Planning Policy and Implementation Plan.

Part B: Narrative Questions

QUESTION #1 POTENTIAL FOR INCREASED WALKING AND BICYCLING, ESPECIALLY AMONG STUDENTS, INCLUDING THE IDENTIFICATION OF WALKING AND BICYCLING ROUTES TO AND FROM SCHOOLS, TRANSIT FACILITIES, COMMUNITY CENTERS, EMPLOYMENT CENTERS, AND OTHER DESTINATIONS; AND INCLUDING INCREASING AND IMPROVING CONNECTIVITY AND MOBILITY OF NON-MOTORIZED USERS. (0-30 POINTS)

A. Describe current and projected types and numbers/rates of users. (12 points max.)

The City of Lancaster proposes to develop a complete street on 10th Street West between Avenue H and Lancaster Blvd. through comprehensive bicycle and pedestrian improvements and removing vehicular traffic lanes, adding 3 miles (1.5 miles in each direction) of bicycle facilities and dramatically increasing safety. One year after completion (2019), projections estimate **50% increase in daily bicycle trips** and **841 new active transportation users**.

The proposed Project area is a 1.5-mile six-lane arterial (four to five travel lanes) with speed limits up to 50 mph. that connects residential, commercial zones and paths or travel for school children. This Project will encourage walking and bicycling among all users by increasing safety and perceptions of safety, as well as connecting to transit access points and local destinations. The total population for the Project's influence area is 71,382, according to the 2013 American Community Survey. Older adults make up 11% of the population (7,706 individuals). Additional groups of note are the **4,945 children (or 7% of the Project area's population) in grades 5 through 12** and the **9,019 persons with disabilities (12.7%)**. Also in this Project's sphere are **733 working individuals (1%) whose households do not own a vehicle**. Approximately **0.9% of workers within the 2-mile sphere of influence (ages 18 to 65) currently bike to work** and approximately **0.7% take transit to work**. This Project will enable the resident workforce to reach additional destinations, enjoy a safer, uninterrupted ride, and will encourage additional users to choose to bike to work.

The City used a demand model to estimate levels of current and projected use in the Project area. The demand model suggests that there are an estimated 190 daily bicycle trips and 1,894 pedestrian trips currently along the Project corridor. One year after completion (2019), the bicycle trip count is anticipated to increase to **286 daily bicycle trips, a 50% increase** from current levels and pedestrian daily trips are projected to increase to **2,639 trips, a 40% increase**. Importantly, a significant portion of new pedestrian trips will be made by 5th - 12th grade students walking to/from area schools. **Five-year projections estimate a 58% increase** from current levels to 301 daily bicycle trips and pedestrian trip count is anticipated to increase to 2,772 daily trips, a **46%**

increase. User demand was estimated using a 2.0 mile bikeshed and a 0.5 mile walkshed from which potential users in the surrounding community would likely be drawn. Following NCHRP Report 770 guidance, the demand model incorporates key demographic and economic data from the American Community Survey 2009-2013 5-Year Summary File and the 2009 California add-on to the National Household Travel Survey (CA-NHTS) to estimate the total number of walk and bike trips in a given project area based on household trip generation rates, median income, commute to work mode shares, and land use characteristics.

Figure 1: Existing Conditions on 10th Street West



B. Describe how the project links or connects, or encourages use of existing routes (for non-infrastructure applications) to transportation-related and community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations via: (12 points max.)

- a. creation of new routes**
- b. removal of barrier to mobility**
- c. closure of gaps**
- d. other improvements to routes**
- e. educates or encourages use of existing routes**

X
X
X
X
X

This Project will improve local and inter-jurisdictional bicycle and pedestrian trips by providing a direct 3-mile (1.5 miles in each direction) extension of Class IV (cycle track) and Class II bike lanes. Specific improvements to transportation-related destinations are described below:

Elementary Schools: This Project is adjacent to 2 schools: Mariposa Elementary School is 0.3 miles and Monte Vista Elementary School is 0.5 miles from the Project location. Based on Lancaster’s Safe

Routes to Schools Plan (SRTS), 22 students bike and 293 students walk to these schools, as demonstrated in the table below. The Project area is a “suggested routes to travel” for school children in Lancaster’s SRTS Plan. The safety of children who walk and bike to school will be improved by: road diets, bulbouts, medians, protective landscape planters, bicycle detection at crosswalks, LED lighting, ladder-style crosswalks. Coupling these significant safety improvements with the education and encouragement components of the SRTS Plan, the number of students biking and walking to school is anticipated to increase significantly.

Table 1: Students Walking/Biking to School in the Project Area

School	Total Enrolled Students	Bike to School		Walk to school	
Mariposa Elementary	733	2%	14	24%	175
Monte Vista Elementary	810	1%	8	14%	118
Total Students Biking and Walking:			22	293	

Existing Facilities: This Project will connect with the existing Class II bike lanes on Lancaster Blvd that provide access to the regional transit hub. This provides a first-mile, last-mile connection for commuters accessing the Metrolink Station or commercial and business destinations along 10th Street West. The south terminus of the Project on Lancaster Blvd is 0.8 miles from the Lancaster Metrolink Station. This station provides access to the Antelope Valley line, which terminates at Union Station in Los Angeles and serves 10 additional stations along the way. This station has approximately 360 boardings per Quarter, according to Metrolink. At the Lancaster Metrolink Station, riders can connect with Santa Clarita Transit, Antelope Valley Transit Authority, Amtrak ThruWay Bus, Eastern Sierra Transit Authority, and Kern Regional Transit.

Sierra Highway Bike Path is a 7.1 mile regional bike trail connecting the communities of Lancaster and Palmdale. The path provides bicyclists safe and direct access to the Metrolink stations and is a recreational route for residents. This Project expands this dedicated path for bicyclists nearly 2 miles to Avenue H.

Arbor Court Senior Village is located on 10th Street West near Lancaster Blvd. This housing community for seniors and disabled adults offers both independent living and low-income affordable housing. Seniors would benefit from the proposed safety improvements at intersections: bulbouts, ladder-style cross walks and LED lighting, as well as road diets and medians, and protective

landscape planters. Additionally, installing curb ramps at some corners will increase accessibility and safety for users with disabilities.

Antelope Valley Community Clinic (AVCC) at 45104 10th St West is located on the Project corridor between Avenue I and Jackman St. This location provides primary care and dental care and urgent care. AVCC is a Federally Qualified Health Center, providing health services to low-income individuals. Access to this facility will be improved by the road diet, center median, and Class II bike lanes, all which will calm speeds and protect non-motorized users.

The BLVD's (Downtown Lancaster) shops and activities are located on Lancaster Blvd between 10th Street West, the southern terminus of the Project area, and Sierra Highway. Destinations include restaurants, shopping, professional services and multiple entertainment venues. Access to the BLVD will be improved by restriping the roadway from six lanes to four lanes and the addition of a striped center median; Class II bikes lanes; installing bike racks adjacent to commercial centers and installing bicycle detection at signalized intersections. The BLVD hosts numerous events that attract high amounts of vehicle, bicycle, and pedestrian traffic. This Project will facilitate individuals using active transportation to get to the BLVD and provide opportunities for promoting bicycling and walking.

Attendance estimates for these events include:

- Farmers' market, winter (weekly): 2,500
- Farmers' market, summer (weekly): 4,000
- Celebrate America on The BLVD (annual): 20,000
- Streets of Lancaster Grand Prix (annual): 30,000 – 35,000
- BooLVD Halloween & Harvest Festival (annual): 35,000
- A Magical BLVD Christmas (annual): 25,000
- Santa's Village (annual): 2,500

Antelope Valley Transit Authority (AVTA) serves the City of Lancaster and provides service to the Project area. There are 150 bus stops within two miles of the Project area and 7 AVTA routes that run within the Project's influence area. Routes 7, 1, and 11 have multiple stops on 10th Street West. There are over 5,000 monthly boardings at the 7 stops directly on the Project corridor.

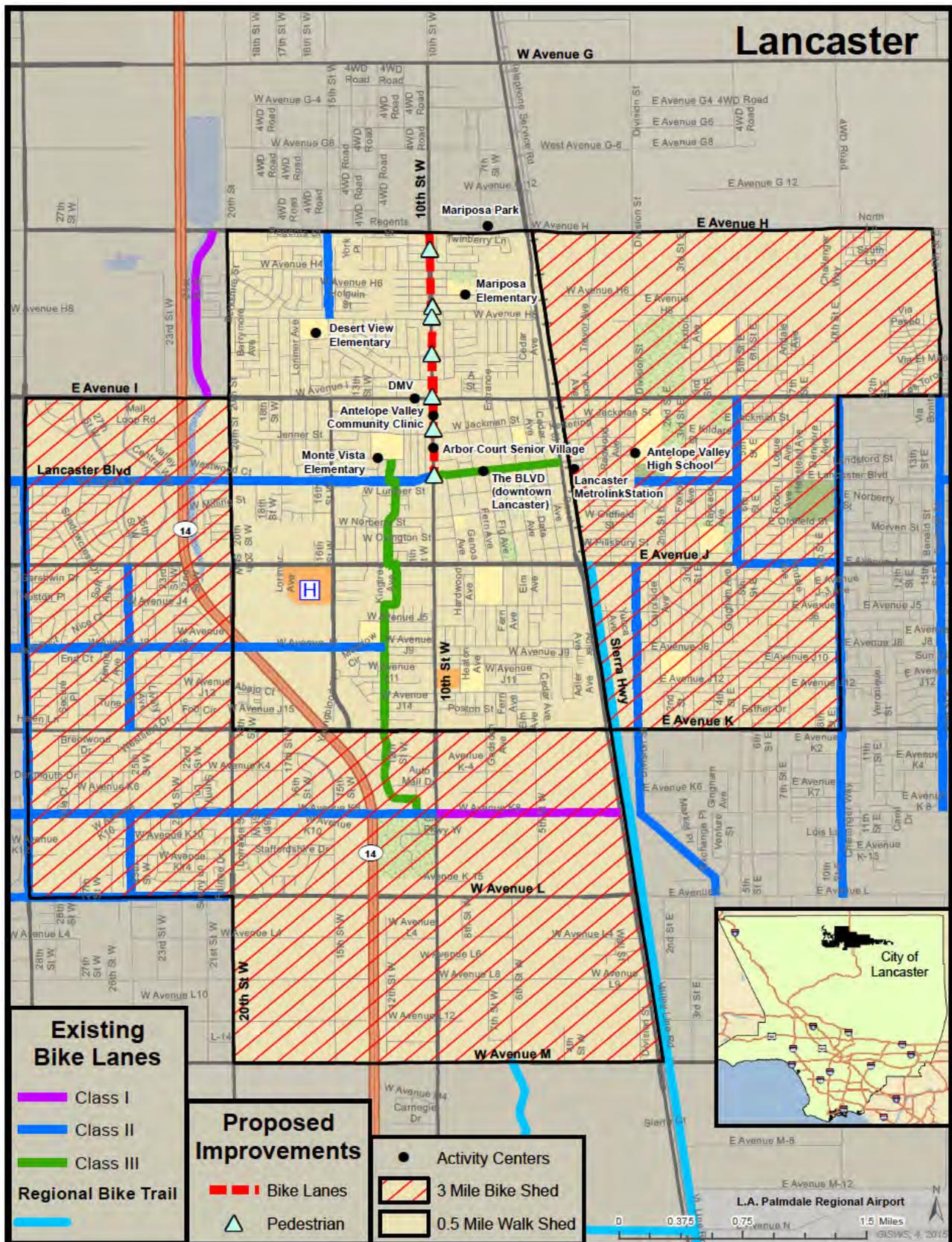
Additional activity centers in the Project area are:

- Lancaster City Hall: 0.3 miles from Project location

- Chase Bank: 0.2 miles from Project location
- Monte Vista Alta-Dental: on Project corridor

This Project will encourage more users of active transportation as it expands the existing network, increases safety for commuters and recreational users, provides an uninterrupted bicycle path, and completes a current gap in bicycle facilities. Figure 2 presents the proposed Project as well as major activity centers.

Figure 2: Project Location and Influence Area in Relation to Primary Activity Centers



-
- C. Referencing the answers to A and B above, describe how the proposed project represents one of the Implementing Agencies (and/or project Partnering Agency's) highest unfunded non-motorized active transportation priorities. (6 points max.)**

This Project is part of a comprehensive effort of the City to promote active transportation. Lancaster began this effort in 2009 by revitalizing the western edge of Downtown. Since then, it has developed all of Downtown Lancaster utilizing complete streets planning through its Master Plan of Trails and Bikeways. This Project is an important next step in implementing the Plan, as it will expand the active transportation network to another gateway area: Avenue H, the northern developed border of the city. This Project will also help the City meet the goals established by the Master Plan of Trails and Bikeways. The specific elements of this Project, the bike lanes and paths, road diets, connections to transit, and safety improvements, are consistent with recommendations of the Master Plan of Trails and Bikeways (Attachment I-1). Additionally, this Project complements current projects on Avenue I that are improving the area around this Project site. It is also consistent with the City's planning priorities to "reduce reliance of the use of automobiles and increase the average vehicle occupancy by promoting alternatives to single-occupancy auto use, including ridesharing, non-motorized transportation (bicycle, pedestrian), and the use of public transit." Throughout the city, opportunities for active transportation are being expanded in a thoughtful way, providing real connectivity for users.

Importantly, this Project is consistent with regional goals (Screening Criteria 2) and is supported by Metro, as demonstrated in Attachment I-8.

Part B: Narrative Questions

QUESTION #2 POTENTIAL FOR REDUCING THE NUMBER AND/OR RATE OF PEDESTRIAN AND BICYCLIST FATALITIES AND INJURIES, INCLUDING THE IDENTIFICATION OF SAFETY HAZARDS FOR PEDESTRIANS AND BICYCLISTS. (0-25 POINTS)

- A. Describe the plan/program influence area or project location's history of collisions resulting in fatalities and injuries to non-motorized users and the source(s) of data used (e.g. collision reports, community observation, surveys, audits). (10 points max.)**

The collision history for the Project area was compiled using data beginning 1/1/2009 and ending 12/31/2012 from the UC Berkeley Transportation Injury Mapping System (TIMS) database, as only partial information is available for 2013.

Between 2009 and 2012 there were a total of 137 collisions/incidents involving pedestrians and cyclists within two miles of the Project location. Of these collisions, 54 involved cyclists and 83 involved pedestrians, including four pedestrian fatalities. 10th Street West, the Project location, had a significant number of collisions/incidents. This roadway had 1 bicycle-involved collision and eight pedestrian-involved collisions, including one fatality, as demonstrated in Table 2 below. Table 3 demonstrates the injuries and fatalities that resulted from these collisions. Complete data is provided in Attachment I-2. Figure 3 following illustrates the collisions/incidents within the Project's 2.0-mile influence area.

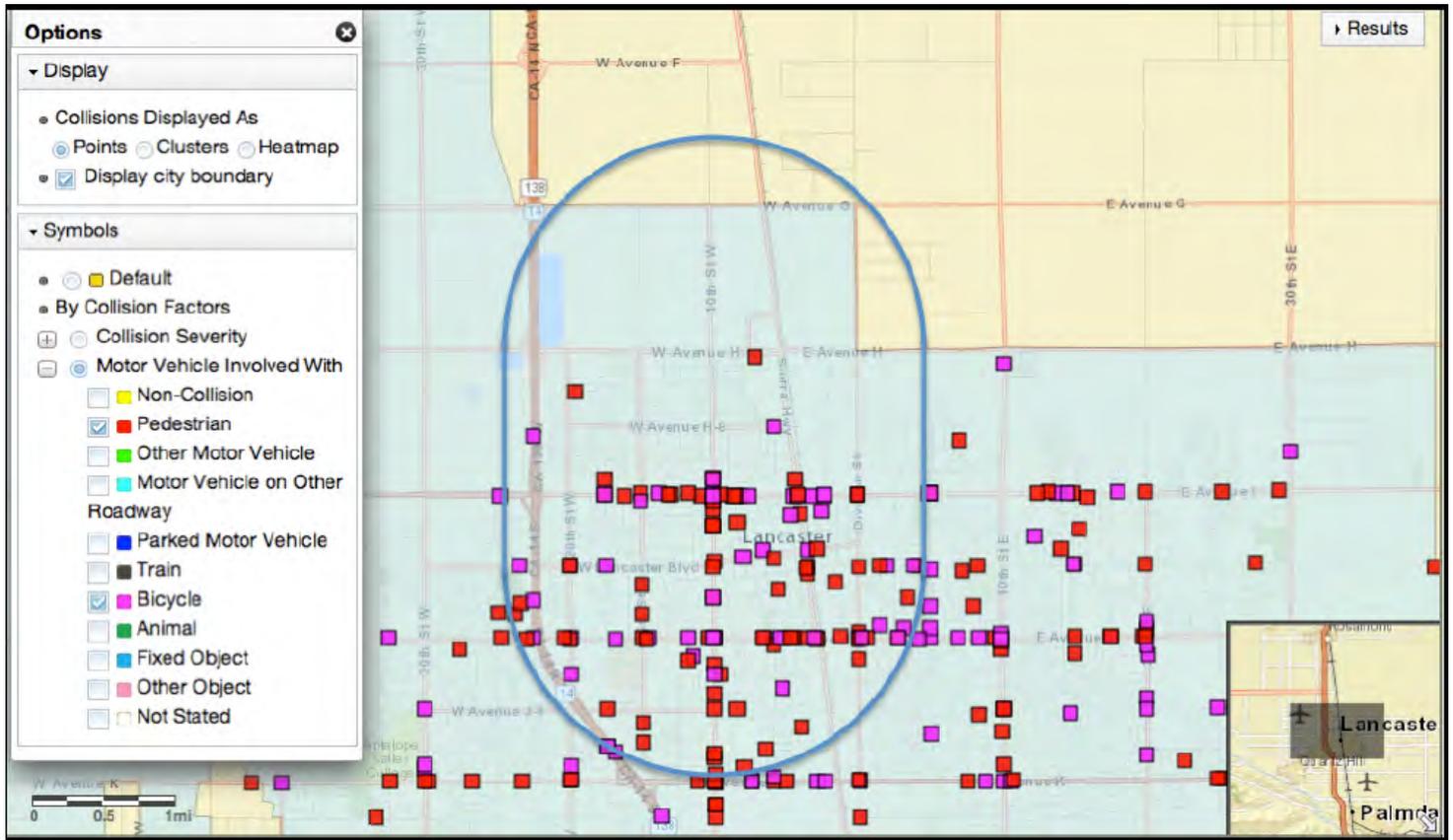
Table 2: Collision Types in The Project Limits and Influence Area

2009-2012 Motor Vehicle Collision With	Collisions/Incidents in Project Limits	Collisions/Incidents in Project Influence Area
Pedestrian	8	75
Bicyclist	1	53
Totals	9	128
Total Collisions	137	

Table 3: Summary of Injuries and Fatalities within the Project Limits and Influence Area

2009-2012 Motor Vehicle Collision With	Within Project Limits					Within 2-Mile Influence Area					
	Fatalities	Injuries				Total	Fatalities	Injuries			
AIS Severity Level	1	2	3	4		1	2	3	4		
Pedestrian	1	1	2	4	8	3	15	20	40	78	
Bicyclist	0	0	0	1	1	0	3	28	23	54	
Total	1	1	2	5	9	3	18	48	63	132	

Figure 3: Bike and pedestrian collisions involving personal injuries 2-miles of the Project between January 2009 and December 2012 (SWITRS via TIMS database)



B. Describe how the project/program/plan will remedy (one or more) potential safety hazards that contribute to pedestrian and/or bicyclist injuries or fatalities; including but not limited to the following possible areas: (15 points max.)

- Reduces speed or volume of motor vehicles in the proximity of non-motorized users.
- Improves sight distance and visibility between motorized and non-motorized users.
- Eliminates potential conflict points between motorized and non-motorized users, including creating physical separation between motorized and non-motorized users.
- Improves local traffic law compliance for both motorized and non-motorized users.
- Addresses inadequate traffic control devices.
- Eliminates or reduces behaviors that lead to collisions involving non-motorized users.
- Addresses inadequate or unsafe traffic control devices, bicycle facilities, trails, crosswalks and/or sidewalks.

X
X
X
X
X
X

With no bike lanes on 10th Street West and with vehicle speeds up to 50 miles per hour, there is a high safety risk for bicyclists and pedestrians that currently use or will use this roadway in the future. The proposed Project elements were developed to increase safety and provide separation between motorist, bicyclist, and pedestrians.

As shown in Figure 3 above, nine incidents—one involving a fatality—occurred in the Project limits between 2009 and 2012. By reducing travel lanes and vehicle speeds, visibility and safety of bicyclists will be improved. **Road diets** and the **addition of a striped center median** are proposed on 10th Street West between Avenue H and Avenue H-12. Between Avenue I and Lancaster Blvd, the road will be **restriped to four lanes with a striped center median** to reduce speeds. The Federal Highway Administration states that road diet benefits “include a crash reduction of 19 to 47 percent, reduced vehicle speed differential, improved mobility and access by all road users, and integration of the roadway into surrounding uses that results in an enhanced quality of life” (Attachment I-2).

According to TIMS, 22% of the collisions within the Project’s influence area occurred because of bicyclists on the roadway riding against traffic. **Class II and Class IV bike lanes** will be striped along entire the Project area to create a safe path of travel that is visible to motorists and potential users. Between Avenue H and Holguin there will be **raised landscaped medians** on the east and west sides of the street to **create buffered bike lanes**. FHWA’s Pedestrian Safety Guide and Countermeasure Selection System reports that bicycle lanes “reduce conflicts between all modes of travel. Dedicated bicycle facilities...provide a buffer between pedestrians and motor vehicle traffic, encourage lower motor vehicle speeds, and reduce pedestrian exposure to motor vehicles at crossings,” (Attachment I-2). Clearly delineated bike lanes will help alleviate this danger and educate cyclists and motorists about safely sharing the road.

As 10th Street West is currently six lanes wide, crossing at intersections can be perceived as dangerous, particularly to students and seniors. According to TIMS data, 43% of the collisions that occurred on 10th Street West were caused by failing to yield to pedestrians in crosswalks. Another 43% of collisions were caused by pedestrians crossing outside of a crosswalk. The safety of pedestrians will be improved by **installing ladder-style crosswalks and bulbouts** from Avenue H to Avenue I. FHWA states that “marked crosswalks warn motorists to expect pedestrian crossings and indicate preferred crossing locations for pedestrians” (Attachment I-2). Bulbouts are included, consistent with FHWA guidance that crosswalks be used in conjunction with other safety measures.

10th Street West between Avenue H-14 and Lancaster Blvd, primarily serves commercial businesses and services. Lancaster Blvd is a major arterial and the heart of Downtown Lancaster. It is a roadway that has both high pedestrian activity and high vehicular movement. To increase safety for non-motorists users, the proposed Project includes **countdown signal heads and bicycle heads at 4 intersections**. **Raised right turn islands** are also proposed for the intersection with Avenue I to provide **refuge area for pedestrians**. According to the FHWA, the benefits of pedestrian refuge areas include reduction in pedestrian crashes by 46% and motor vehicle crashes by up to 39%; allowing pedestrians a safe place to stop at the mid-point of the roadway before crossing the remaining distance; enhancing the visibility of pedestrian crossings; and reducing the speed of vehicles approaching crossings (Attachment I-2).

Approximately 10% of collisions in the Project area were caused by drivers failing to yield to or stop for pedestrians. Adding **protective landscape planters** within the existing sidewalk will provide a sense of enclosure for pedestrians and will eliminate potential conflict points between motorized and non-motorized users. **Bicycle detection** will be also installed at signalized intersections between Avenue I and Lancaster Blvd. This countermeasure “can help deter red light running and unsafe behaviors by reducing delay at signalized intersections” (Attachment I-2). Improving pedestrian visibility and provide a protective barrier will reduce the opportunity for an incident.

Part B: Narrative Questions

QUESTION #3 PUBLIC PARTICIPATION and PLANNING (0-15 POINTS)

Describe the community based public participation process that culminated in the project/program proposal or will be utilized as part of the development of a plan.

A. Who: Describe who was engaged in the identification and development of this project/program/plan (for plans: who will be engaged). (5 points max)

This Project location was identified during the 2012 development of the Lancaster Master Plan of Trails and Bikeways, which included a comprehensive outreach program. A Technical Advisory Committee was assembled and included representatives from the City Planning Department, Manager's Office, Parks Department, Public Works Department, residents, Antelope Valley Transit Authority, local business owners, Los Angeles County DPH, Antelope Valley Union High School District, Eastside Union School District, School District, County Sheriff's Department, Equestrian and Trails advocates, High Desert Cyclists, and the consultant team. Additional public involvement included:

- Around 210 community members responded to a survey distributed in English and Spanish.
- Over 237 people attended seven public workshops. Participants included community members, residents with disabilities, seniors, and City representatives.



The Safe Routes to Schools (SRTS) Plan public involvement process also identified this Project location as an area of concern for many parents of students at Desert View, Mariposa, and Monte Vista. Workshops included school principals, duty aides, crossing guards, parents, students, and representatives from the Parent Teacher Organization, the School District, City Planning Department, City Manager's Office, City Parks, Recreation, and Arts Department, and Antelope Valley Partners for Health (AVPH), Kaiser Permanente, and County DPH.

B. How: Describe how stakeholders were engaged (or will be for a plan). (4 points max)

The Master Plan of Trails and Bikeways public involvement included:

- Outreach conducted by AVPH
- The Master Plan of Trails and Bikeways Technical Advisory Committee (TAC): The TAC advised the project team of current concerns and provided guidance and input on the Master Plan. TAC involvement included holding four meetings, identifying issues for cyclists, pedestrians, equestrians, and the disabled; helping develop the Goals, Policies and Actions of this Plan; reviewing preliminary plan results; commenting on the Draft Plan
- A community survey available in English and Spanish on the Plan website from September 2010 through December 2010. The City and other advocacy groups passed out hard copies of the survey at community meetings events.
- The City held three different types of public workshops, for a total of seven meetings with the public.
- Walk audits
- Public comments accepted via e-mail, mail, and fax

Development of the SRTS Plan included walk audit workshops at each of the three schools in the Project area.

Documentation for these activities is provided in Attachment I-3.



C. What: Describe the feedback received during the stakeholder engagement process and describe how the public participation and planning process has improved the project's overall effectiveness at meeting the purpose and goals of the ATP. (5 points max)

Master Plan of Bike and Trails workshops identified 10th Street West as having too high speeds and being too wide of a street; the need for mid-block crossings for schools; and the need for road diets. During the survey, 73% of respondents said they rode bicycles for health and 81% reported their bicycle riding was for enjoyment. These comments helped form the idea of a complete streets project, that would not only make the area safer and easier to use, but also a more inviting, beautiful environment to encourage use.

During SRTS workshops at the three schools, stakeholders expressed concerns about high speeds and the difficult pedestrian crossings on 10th Street West. Also mentioned was: the timing of "walk" signals as too short and 10th Street West being too wide. These comments all helped to shape the specific improvements and safety countermeasures that became this Project.

D. Describe how stakeholders will continue to be engaged in the implementation of the project/program/plan. (1 points max)

Public involvement will continue to be very important to this Project. Community forums or workshops will be held at appropriate intervals such as before breaking ground or after construction is complete. During on-going outreach, Lancaster will re-engage representatives from the various advisory committees and other stakeholders who have indicated their interest in the Project.

The public will also be involved through the City's SRTS Program and the School District's partnership with AVPH. For example, Mariposa Elementary has begun an Education and Encouragement Program. Mariposa Elementary kicked-off their Walking School Bus program in September of 2014. The schools in this Project area also part of a HEAL (Healthy Eating Active Living) Zone in partnership with AVPH and Kaiser Permanente. Both of these programs include significant public involvement and promotion of healthy and active living.

Part B: Narrative Questions

QUESTION #4 IMPROVED PUBLIC HEALTH (0-10 points)

- **NOTE: Applicants applying for the disadvantaged community set aside must respond to the below questions with health data specific to the disadvantaged communities. Failure to do so will result in lost points.**

A. Describe the health status of the targeted users of the project/program/plan. (3 points max)

The California Health Interview Survey (CHIS) provides important data on the current health status of the adults in this community. For the ZIP code in this Project area, 93534, CHIS reported that:

- 18.5% adults have fair or poor health.
- 32.5% of individuals 18 years and over are categorized as obese. This rate of adult obesity is higher than that of LA County (24.7%) and of California (24.8%).
- 13.6% of adults in this community have been diagnosed with asthma. This rate is very similar to that of LA County (12.2%) and of California (13.6%). The prevalence of adults diagnosed with diabetes (9.6%) is slightly higher than that of Los Angeles County (8.8%) and of California (8.4%).
- Only 28.7% of adults walked for transportation or leisure for at least 150 minutes a week—a rate that is lower than that of Los Angeles County (35%) and of California (33.3%).

According to Los Angeles County Department of Public Health's 2011 Mortality in Los Angeles County report Lancaster's ranks in the 4th quartile (worst ranking) for diabetes, stroke and coronary heart disease. These are all chronic diseases that can result from low physical activity.

Data for these health outcomes for children ages 0 to 17 is only available at the regional level, the Antelope Valley. According to LA County Department of Public Health's 2013 *Key Indicators of Health by Service Planning Area*:

- 20.3% of students in grade 5,7, and 9 in the Antelope Valley are obese.
- 12.2% of children ages 0 to 17 have been diagnosed with asthma.
- 8.7% of children 6 to 17 years old were found to be inactive.

Kidsdata.org offers additional data about child health for students enrolled in Lancaster School District's Elementary Schools: In 2014,

- Only 31.1% of 7th graders met all grade level fitness standards.
- Only 18.9 % of 5th graders met the fitness standards for their grade.

Data is provided in Attachment I-4.

Department of Public Health's PLACE Program assisted with this analysis and provided a Letter of Support (Attachment J) Additionally, the Master Plan of Trails & Bikeways and the SRTS plan were funded by DPH and health need was a factor in the grant making process.

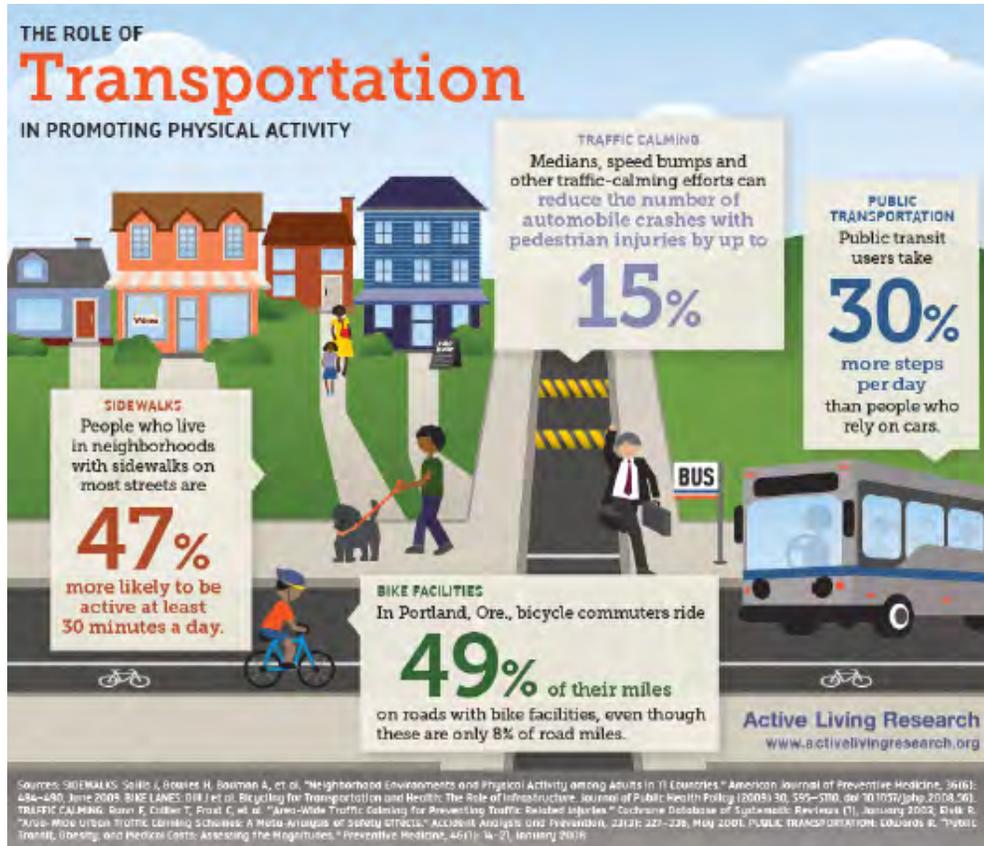
B. Describe how you expect your project/proposal/plan to enhance public health. (7 points max.)

This Project is part of the implementation of a larger network and citywide changes that are aimed at increasing opportunities for biking/walking, which will have a greater health impact beyond the Project. This Project will enhance Public health community-wide by providing access to a safe active transportation corridor. This Project will also improve infrastructure for pedestrians and cyclists using 10th Street West to access homes, schools, commercial and health centers, transit stops and hubs, and the BLVD. The 841 projected new user (Question #1) will have the opportunity to bike or walk to popular destinations. As the "lack of physical activity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke and other chronic health conditions in the United States," according to the CDC, this Project's focus on promoting active transportation will begin addressing Lancaster's concerning health indicators, such as obesity, asthma, and diabetes rates.

The many traffic calming measures included in the Project are: road-diets, raised medians, bulbouts at crossings, and raised-right turn islands, all intended to reduce the current excessively high speeds on 10th Street West. Between 2009 and 2012, there were 137 collisions involving pedestrians or cyclists. Active Living Research reports in their "The Role of Transportation in Promoting Physical Activity" Infographic that traffic-calming efforts can reduce the number of automobile crashes with pedestrian injuries by up to 15%. A 15% reduction means 20 fewer collisions each year.

The Active Living Research Infographic reports that public transit users take 30% more steps per day than people who drive. There are 10 Antelope Valley bus stops directly on 10th Street West and 250 bus stops within 2 miles of the Project. Additionally, this Project connects to the Lancaster Metrolink Station. One year after completion, a projected 1,583,573 steps, or 792 miles will be walked by active transportation users—individuals who will be working toward a healthier lifestyle.

Figure 5: Active Living Research Infographic



Part B: Narrative Questions

QUESTION #5 BENEFIT TO DISADVANTAGED COMMUNITIES (0-10 points)

A. Identification of disadvantaged communities: (0 points – SCREENING ONLY)

Provide a map showing the boundaries of the proposed project/program/plan and the geographic boundaries of the disadvantaged community that the project/program/plan is located within and/or benefiting.

Census Tract(s)	Median Income	Population	CES		Project Nexus to Disadvantaged Communities	
			Score	Percentile	Located Within	Directly Benefits
6037900501	\$45,461	6,704	25.09	51-55%		X
6037900607	\$35,114	4,077	23.69	46-50%		X
6037900606	\$32,823	4,010	24.48	51-55%		X
6037900602	\$28,495	5,396	30.34	61-65%		X
6037900705	\$39,237	4,785	28.75	61-65%		X
6037900704	\$36,990	3,007	22.53	46-50%		X
6037900804	\$36,928	3,525	28.46	61-65%	X	X
6037900806	\$15,474	3,488	30.27	61-65%	X	X
6037900701	\$30,292	4,785	28.63	61-65%	X	X
6037900703	\$31,657	3,758	27.26	56-60%	X	X

Figure 3 following maps these communities in relation to the Project’s location and influence area.

	Yes	No
Is the project located in a disadvantaged community?	X	
Does the project provide a direct, meaningful, and assured benefit to individuals from a disadvantaged community?	X	

Which criteria does this project meet?

- Option 1. Median household income by census tract for the community(ies) benefited by the project.
- Option 2. California Communities Environmental Health Screen Tool 2.0 (CalEnvironScreen) score for the community benefited by the project.
- Option 3. Percent of students eligible for the Free or Reduced Price Meals Programs
- Option 4. Alternative criteria for identifying disadvantaged communities.

X

B. For proposals located within disadvantage community: (5 points max)

What percent of the funds requested will be expended in the disadvantaged community? Explain how this percent was calculated.

35%

There are 15 census tracts within this Project's influence area and 10 of these are considered disadvantaged communities as their respective median household incomes are well below the 80% threshold of the State's average median household income, as demonstrated by the table above. For this exercise, the State median household income (\$61,0094) was identified through ACS 2013 5-year estimates, Table B19013. 80% of the State's average is \$48,875.

This Project will benefit all 10 disadvantaged communities within the 2-mile influence area; however, only four census tracts (out of 15 total) directly border the Project location, so a conservative estimate of 35% was used to describe the funds expended in the disadvantaged communities.

C. Describe how the project/program/plan provides (for plans: will provide) a direct, meaningful, and assured benefit to members of the disadvantaged community. (5 points max)

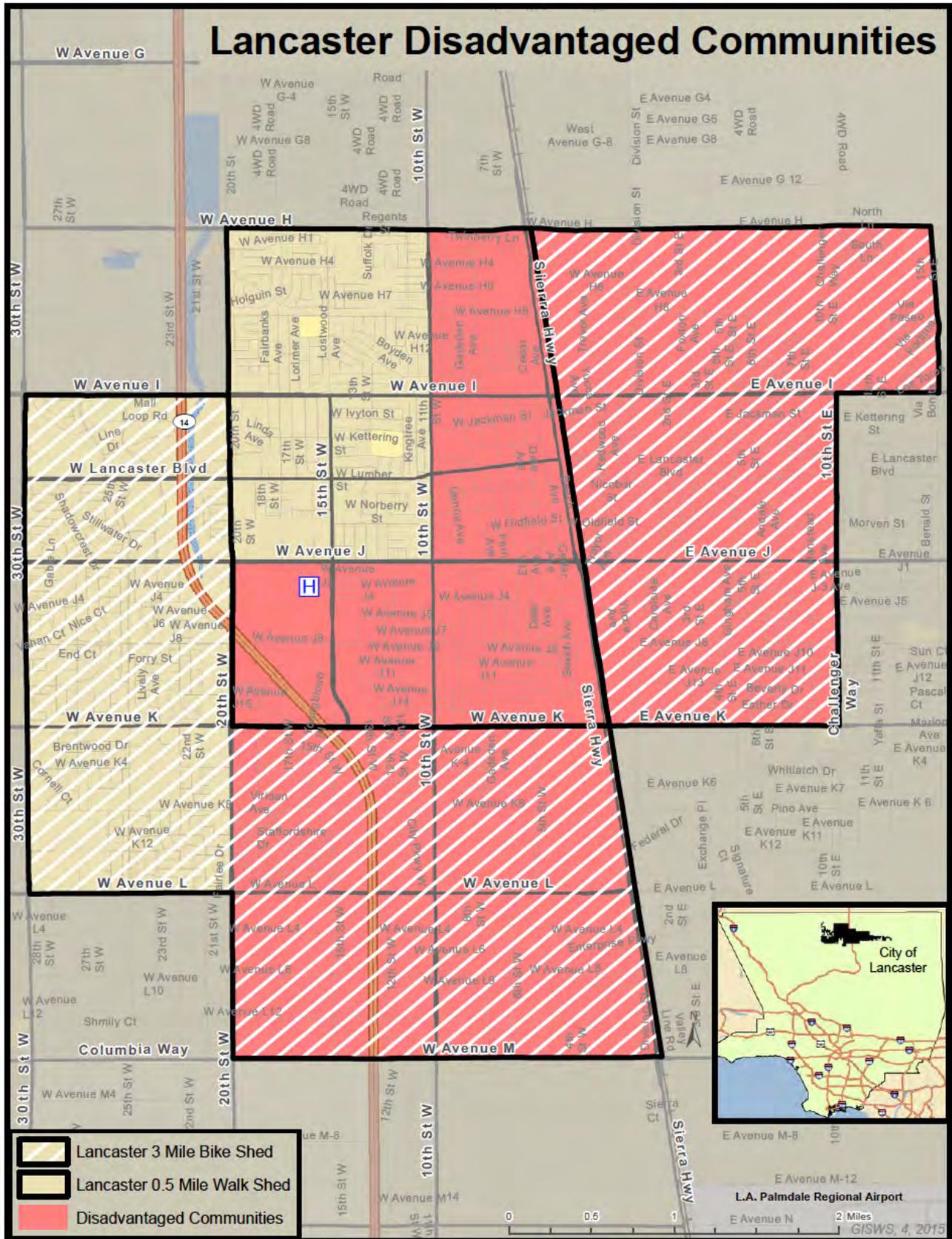
Define what direct, meaningful, and assured benefit means for your proposed project/program/plan, how this benefit will be achieved, and who will receive this benefit

While FHWA guidance suggests a 3-mile shed for bicycle facilities, the City identified a constrained 2-mile bike shed to develop realistic measures of potential users, projected demand and benefit to users. As demonstrated in the table above and in Figure 3 following, 10 of the 15 census tracts making up this shed, or influence area, are disadvantaged communities. This Project is expected to provide a direct, meaningful, and assured benefit to users in these communities through increased safety near schools, commercial centers and residences; increased mobility including opportunities to enjoy active transportation; increased access to public transit, to local commercial and health center destination; and increased recreational opportunities.

A total of 43,535 disadvantaged individuals live within 2 miles of this Project. Pedestrians, cyclists, and transit users among this group are currently facing a dangerous path because of the six lane arterial, high travel speeds, and lack of pedestrian safety countermeasures. The Project elements described throughout this application, will enable 5,872 disadvantaged individuals, 3,180 disadvantaged elementary and secondary students, and 7,783 individuals living below the poverty line to walk and bike safely to school, to multiple bus stops, to a health center, to downtown Lancaster, and to numerous other destinations.

Increased opportunities to use active transportation will radically improve the health of this community. The majority of 5th and 7th graders aren't at recommended fitness levels and the majority of adults aren't active enough (see question #4). This complete Project will provide safer access for those who may have to walk, bike, or ride transit out of necessity and improve their health in the process.

Figure 3: Disadvantaged Communities in Relation to the Project



Part B: Narrative Questions

QUESTION #6 COST EFFECTIVENESS (0-5 POINTS)

- A. Describe the alternatives that were considered and how the ATP-related benefits vs. project-costs varied between them. Explain why the final proposed alternative is considered to have the highest Benefit to Cost Ratio (B/C) with respect to the ATP purpose of “increased use of active modes of transportation”. (3 points max.)**

The City considered two alternatives. Alternative 1 is the proposed Project described in this application. Through increased safety and improved access for cyclists and pedestrians, this Project will achieve all of the published ATP program goals. Benefits of this Project include: at least 20 fewer collisions with non-motorized users each year, and a 50% increase in cyclists and a 40% increase in pedestrian users after one year. The Project cost (\$1,568,244) is reasonable when compared to the numerous safety countermeasures that will be implemented, the number of active transportation trips that will be generated and the health improvements residents will receive—all detailed in earlier portions of the application.

Alternative 2 would only include restriping along 10th Street West to create bikeways and create a road diet. The following improvements were considered: 1) 10th Street West from Avenue H to Holguin - Restripe the roadway to reduce it to two lanes and striped center median. 2) 10th Street West from Holguin to Avenue H-12 - Restripe the roadway to two lanes, striped center median, Class II bike lanes, striped buffer lanes and on-street parking. 3) 10th Street West from Avenue H-12 to Avenue I - Restripe the roadway to two lanes, striped center median, Class II bike lanes and on-street parking. 4) 10th Street West from Avenue I to Lancaster Blvd - Restripe the roadway to four lanes, striped center median and Class II bike lanes.

This alternative was less expensive, with the cost estimated to be \$250,000. However, it did not provide any pedestrian improvements, meaning fewer transit, activity center and overall connections would be possible. The increase in students walking to school wouldn't be realized by this alternative. This alternative wouldn't fully meet ATP goals as these limited improvements wouldn't address all safety hazards. For example, the safety of cyclists is less ensured by a bike path than a separated path. Additionally, with less improvements, it would be difficult to achieve the resultant benefits, including the multiple health improvements the community may realize.

- B. Use the ATP Benefit/Cost Tool, provided by Caltrans Planning Division, to calculate the ratio of the benefits of the project relative to both the total project cost and ATP funds requested. The Tool is located on the CTC's website at: <http://www.dot.ca.gov/hq/tpp/offices/eab/atp.html>. After calculating the B/C ratios for the project, provide constructive feedback on the tool (2 points max.)**

$$\left(\frac{\textit{Benefit}}{\textit{Total Project Cost}} \textit{ and } \frac{\textit{Benefit}}{\textit{Funds Requested}} \right).$$

The Project benefit to cost (B/C) ratio is 13.14 and the benefits to funds requested ratio is 26.27. This means that for every dollar invested, the Project will generate \$13.14 in benefits. With such a large, positive B/C ratio, the Project is clearly a good investment with benefits that will outweigh the costs.

Regarding feedback for the ATP Benefit/Cost Tool, one comment is on the population growth rate. The Tool assumes population grows at 2.0 percent, based on historic growth rates in California from 1955 to 2011. However, the Southern California Association of Governments (SCAG) estimates that many areas in the SCAG region will grow at a much lower rate between now and 2040 (approximately 0.5 percent). Therefore, a future iteration of the ATP Benefit/Cost Tool may wish to provide more localized assumptions for population growth. This will help take into account the difference between benefits in higher versus lower-growth areas of the State. Additional feedback on potential model enhancements for the next cycle of the ATP Benefit/Cost Tool is documented in Attachment I-6.

Part B: Narrative Questions

QUESTION #7 LEVERAGING OF NON-ATP FUNDS (0-5 points)

A. The application funding plan will show all federal, state and local funding for the project: (5 points max.)

The total cost of this Project is 1,568,244. The City of Lancaster is committing a total \$784,000 as local match—50% of the total. The matching fund sources will be a combination of TDA Article 8 and Proposition C funds. As 10th Street West is a major arterial and public bus transportation route for AVTA, the Project is eligible to use both of these types of funds.

\$70,000 will be expended for PS&E to be allocated in FY16/17.

\$714,122 will be expended for Construction to allocated in FY 17/18.

This is detailed in Attachment B, ATP-PPR.

Part B: Narrative Questions

QUESTION #8 USE OF CALIFORNIA CONSERVATION CORPS (CCC) OR A CERTIFIED COMMUNITY CONSERVATION CORPS (0 or -5 points)

Step 1: Is this an application requesting funds for a Plan (Bike, Pedestrian, SRTS, or ATP Plan)?

- Yes (If this application is for a Plan, there is no need to submit information to the corps and there will be no penalty to applicant: 0 points)
- No (If this application is NOT for a Plan, proceed to Step #2)

Step 2: The applicant must submit the following information via email concurrently to both the CCC AND certified community conservation corps prior to application submittal to Caltrans. The CCC and certified community conservation corps will respond within five (5) business days from receipt of the information.

- Project Title
- Project Description
- Detailed Estimate
- Project Schedule
- Project Map
- Preliminary Plan

California Conservation Corps representative:

Name: Wei Hsieh

Email: atp@ccc.ca.gov

Phone: (916) 341-3154

Community Conservation Corps representative:

Name: Danielle Lynch

Email: inquiry@atpcommunitycorps.org

Phone: (916) 426-9170

Step 3: The applicant has coordinated with Wei Hsieh with the CCC AND Danielle Lynch with the certified community conservation corps and determined the following (check appropriate box):

- Neither corps can participate in the project (0 points)
- Applicant intends to utilize the CCC or a certified community conservation corps on the following items listed below

California Conservation Corps will participate on

- small construction work
 - installing of signs
- Applicant has contacted the corps but intends not to use the corps on a project in which either corps has indicated it can participate (-5 points)
- Applicant has not coordinated with both corps (-5 points)

The CCC and certified community conservation corps will provide a list to Caltrans of all projects submitted to them and indicating which projects they are available to participate on. The applicant must also attach any email correspondence from the CCC and certified community conservation corps to the application verifying communication/participation.

Part B: Narrative Questions

QUESTION #9 APPLICANT'S PERFORMANCE ON PAST GRANTS AND DELIVERABILITY OF PROJECTS (0 to-10 points OR disqualification)

- A. Applicant:** Provide short explanation of the Implementing Agency's project delivery history for all projects that include project funding through Caltrans Local Assistance administered programs (ATP, Safe Routes to School, BTA, HSIP, etc.) for the last five (5) years.

The City of Lancaster has not experienced any grant failures to date. The City has a history of successful grant management and the development, implementation, and maintenance of both large and small capital improvement projects. The City currently has three Safe Route to School projects totaling \$1,350,000 in SRTS funds. Together, the City currently has over \$10 million in State and Federal grants funds programmed in its Capital projects. Table 4 below provides a detailed grant history.

Table 4: Lancaster Past Grant History

Grant Name	Grant Type	Grant ID Number		Amount
5th Street East Corridor Improvements	ATP	ATPLNI-	Cycle 1	\$85,000
Safe Route to School Master Plan	ATP	ATPLNI-5419 (045)	Cycle 1	\$322,000
Bike Lanes 20th Street West / Avenue J-8 to Avenue L	BTA	BTA 1112-07-LA-04	FY11/12	\$202,810
Lancaster Blvd/ Valley Central to 10th Street West	BTA	BTA 1112-07-LA-03	FY11/12	\$243,000
Avenue K-8 Bike Facilities Improvements	BTA	BTA 1213-07-LA-06	FY12/13	\$858,237
Avenue J Median Improvements	HSIP	HSIPL-5419 (032)	Cycle 3	\$373,030
Rural Intersection Enhancements	HSIP	HSIPL-5419 (035)	Cycle 2	\$510,030
Avenue I/40th Street West Turn Pocket	HSIP	HSIPL-5419 (025)	Cycle 2	\$239,760
Neighborhood Traffic Calming	HSIP	HSIPL-5419 (029)	Cycle 3	\$410,000
Avenue L/Challenger Way Roundabout	HSIP	HSIPL-5419 (033)	Cycle 4	\$690,300
15th Street West /Lancaster Blvd Roundabout	HSIP	HSIPL-5419 (043)	Cycle 5	\$897,800
15th Street East /Lancaster Blvd Roundabout	HSIP	HSIPL-5419 (046)	Cycle 5	\$882,900
10th Street West / 30th Street West at Avenue I	HSIP	HSIPL-5419 (041)	Cycle 4	\$210,000
Install Solar-Powered LED Stop Signs	HSIP	HSIPL-5419 (040)	Cycle 4	\$393,200
East Avenue I between Challenger Way/Price Lane	HSIP	HSIPL 5419 (xxx)	Cycle 6	\$1,231,400
Avenue I between Price Lane / 35th Street East	HSIP	HSIPL 5419 (xxx)	Cycle 6	\$1,482,600
Avenue I Resurfacing	STPL	STPL-5419 (019)	-	\$1,252,719
Traffic Signal Equipment	STPL	STPL-5419 (031)	-	\$1,055,000
Avenue H Rehab 20th Street West to Sierra Hwy	STPL	STPL-5419 (044)	-	\$1,500,000
Miller Elementary School, Street/Sidewalk Improvements	SR2S	SR2SL-5419 (038)	Cycle 10	\$450,000
Cole Middle School/Bonita Elementary	SR2S	SR2SL-5419 (037)	Cycle 10	\$450,000
Valley View Elementary Pedestrian Improvements	SR2S	SR2SL-5419 (030)	Cycle 9	\$450,000
Total Awards				\$14,189,786

B. Caltrans response only:

Caltrans to recommend score for deliverability of scope, cost, and schedule based on the overall application.



Part C: Application Attachments

Applicants must ensure all data in this part of the application is fully consistent with the other parts of the application. See the Application Instructions and Guidance document for more information and requirements related to Part C.

List of Application Attachments

The following attachment names and order must be maintained for all applications. Depending on the Project Type (I, NI or Plans) some attachments will be intentionally left blank. All non-blank attachments must be identified in hard-copy applications using “tabs” with appropriate letter designations

Application Signature Page Required for all applications	Attachment A
ATP - PROJECT PROGRAMMING REQUEST (ATP-PPR) Required for all applications	Attachment B
Engineer’s Checklist Required for Infrastructure Projects	Attachment C
Project Location Map Required for all applications	Attachment D
Project Map/Plans showing existing and proposed conditions Required for Infrastructure Projects (optional for ‘Non-Infrastructure’ and ‘Plan’ Projects)	Attachment E
Photos of Existing Conditions Required for all applications	Attachment F
Project Estimate Required for Infrastructure Projects	Attachment G
Non-Infrastructure Work Plan (Form 22-R) Required for all projects with Non-Infrastructure Elements	Attachment H
Narrative Questions backup information Required for all applications Label attachments separately with “H-#” based on the # of the Narrative Question	Attachment I
Letters of Support Required or Recommended for all projects (as designated in the instructions)	Attachment J
Additional Attachments Additional attachments may be included. They should be organized in a way that allows application reviews easy identification and review of the information.	Attachment K

Application Signature

Attachment A



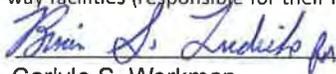
Part C: Attachments

Attachment A: Signature Page

IMPORTANT: Applications will not be accepted without all required signatures.

Implementing Agency: Chief Executive Officer, Public Works Director, or other officer authorized by the governing board

The undersigned affirms that their agency will be the "Implementing Agency" for the project if funded with ATP funds and they are the Chief Executive Officer, Public Works Director or other officer **authorized by their governing board with the authority to commit the agency's resources and funds**. They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge. For infrastructure projects, the undersigned affirms that they are the manager of the public right-of-way facilities (responsible for their maintenance and operation) or they have authority over this position.

Signature:  Date: 5/27/2015
 Name: Carlyle S. Workman Phone: (661) 723-6079
 Title: Public Works Manager e-mail: cworkman@cityoflancafterca.org

For projects with a Partnering Agency: Chief Executive Officer or other officer authorized by the governing board

(For use only when appropriate)

The undersigned affirms that their agency is committed to partner with the "Implementing Agency" and agrees to assume the responsibility for the ongoing operations and maintenance of the facility upon completion by the implementing agency and they intend to document such agreement per the CTC guidelines. The undersigned also affirms that they are the Chief Executive Officer or other officer authorized by their governing board with the authority to commit the agency's resources and funds. They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge.

Signature: _____ Date: _____
 Name: _____ Phone: _____
 Title: _____ e-mail: _____

For Safe Routes to School projects and/or projects presented as benefiting a school: School or School District Official

(For use only when appropriate)

The undersigned affirms that the school(s) benefited by this application is not on a school closure list.

Signature:  Date: May 27, 2015
 Name: Dr. Michele Bowers Phone: (661) 948-4661
 Title: Superintendent of Lancaster e-mail: bowersm@lancafterca.org
School District

For projects with encroachments on the State right-of-way: Caltrans District Traffic Operations Office Approval*

(For use only when appropriate)

If the application's project proposes improvements within a freeway or state highway right-of-way, whether it affects the safety or operations of the facility or not, it is required that the proposed improvements be reviewed by the district traffic operations office and either a letter of support/acknowledgement from the traffic operations office be attached or the signature of the traffic manager be secured in the application. The Caltrans letter and/or signature does not imply approval of the project, but instead is only an acknowledgement that Caltrans District staff is aware of the proposed project; and upon initial review, the project appears to be reasonable and acceptable.

Is a letter of support/acknowledgement attached? If yes, no signature is required. If no, the following signature is required.

Signature: _____ Date: _____
 Name: _____ Phone: _____
 Title: _____ e-mail: _____

* Contact the District Local Assistance Engineer (DLAE) for the project to get Caltrans Traffic Ops contact information. DLAE contact information can be found at <http://www.dot.ca.gov/hq/LocalPrograms/dlae.htm>

Project Programming Request

Attachment B

Date: 20-Apr

Project Information:					
Project Title:	10th Street West Road Diet and Bikeway Improvements				
District	County	Route	EA	Project ID	PPNO
07	LA	10th Street West			

Funding Information:
DO NOT FILL IN ANY SHADED AREAS

Proposed Total Project Cost (\$1,000s)									Notes:
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E				140				140	
R/W									
CON					1,428			1,428	
TOTAL				140	1,428			1,568	

ATP Funds	Infrastructure Cycle 2								Program Code
Proposed Funding Allocation (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									Caltrans
PS&E				70				70	Notes:
R/W									
CON					714			714	
TOTAL				70	714			784	

ATP Funds	Non-infrastructure Cycle 2								Program Code
Proposed Funding Allocation (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									Notes:
R/W									
CON									
TOTAL									

ATP Funds	Plan Cycle 2								Program Code
Proposed Funding Allocation (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									Notes:
R/W									
CON									
TOTAL									

ATP Funds	Previous Cycle								Program Code
Proposed Funding Allocation (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									Notes:
R/W									
CON									
TOTAL									

ATP Funds	Future Cycles								Program Code
Proposed Funding Allocation (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									Notes:
R/W									
CON									
TOTAL									

Date: 20-Apr

Project Information:					
Project Title: 10th Street West Road Diet and Bikeway Improvements					
District	County	Route	EA	Project ID	PPNO
07	LA	10th Street West			

Funding Information:
DO NOT FILL IN ANY SHADED AREAS

Fund No. 2:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									City of Lancaster
PS&E				70				70	
R/W									
CON					714			714	
TOTAL				70	714			784	

Fund No. 3:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									
PS&E									
R/W									
CON									
TOTAL									

Fund No. 4:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									
PS&E									
R/W									
CON									
TOTAL									

Fund No. 5:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									
PS&E									
R/W									
CON									
TOTAL									

Fund No. 6:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									
PS&E									
R/W									
CON									
TOTAL									

Fund No. 7:	Future Source for Matching								Program Code
Proposed Funding Allocation (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Notes:
E&P (PA&ED)									
PS&E									
R/W									
CON									
TOTAL									

Engineer's Checklist

Attachment C

ATP Engineer’s Checklist for Infrastructure Projects

Required for “Infrastructure” applications ONLY

This application checklist is to be used by the engineer in “responsible charge” of the preparation of this ATP application to ensure all of the primary elements of the application are included as necessary to meet the CTC’s requirements for a PSR-Equivalent document (per CTC’s ATP Guidelines and CTC’s Adoption of PSR Guidelines - Resolution G-99-33) and to ensure the application is free of critical errors and omissions; allowing the application to be accurately ranked in the statewide ATP selection process.

Special Considerations for Engineers before they Sign and Stamp this document attesting to the accuracy of the application:

Chapter 7; Article 3; Section 6735 of the Professional Engineer's Act of the State of California requires engineering calculation(s) or report(s) be either prepared by or under the responsible charge of a licensed civil engineer. Since the corresponding ATP Infrastructure-application defines the scope of work of a future civil construction project and requires complex engineering principles and calculations which are based on the best data available at the time of the application, the application must be signed and stamped by a licensed civil engineer.

By signing and stamping this document, the engineer is attesting to this application's technical information and engineering data upon which local agency's recommendations, conclusions, and decisions are made. This action is governed by the Professional Engineer's Act and the corresponding Code of Professional Conduct, under Sections 6775 and 6735.

The following checklist is to be completed by the engineer in “responsible charge” of defining the projects Scope, Cost and Schedule per the expectations of the CTC’s PSR Equivalent. The checklist is expected to be used during the preparation of the documents, but not initialed and stamped until the final application and application attachments are complete and ready for submission to Caltrans.

1. Vicinity map /Location map

Engineer’s Initials: RMH

- a. The project limits must be clearly depicted in relationship to the overall agency boundary

2. Project layout-plan/map showing existing and proposed conditions must:

Engineer’s Initials: RMH

- a. Be to a scale which allows the visual verification of the overall project “construction” limits and limits of each primary element of the project
- b. Show the full scope of the proposed project, including any non-participating construction items
- c. Show all changes to existing motorized/non-motorized lane and shoulder widths. Label the proposed widths
- d. Show agency’s right of way (ROW) lines when permanent or temporary ROW impacts are possible. (As appropriate, also show Caltrans’, Railroad, and all other government agencies ROW lines)

3. Typical cross-section(s) showing existing and proposed conditions.

Engineer’s Initials: RMH

(Include cross-section for each controlling configuration that varies significantly from the typical)

- a. Show and dimension: changes in lane widths, ROW lines, side slopes, etc.

4. Detailed Engineer's Estimate

Engineer’s Initials: RMH

- a. Estimate is reasonable and complete.
- b. Each of the main project elements are broken out into separate construction items. The costs for each item are based on calculated quantities and appropriate corresponding unit costs
- c. All non-participating costs in relation to the ATP funding are clearly identified and accounted for separately from the eligible costs.
- d. All project elements the applicant intends to utilize the CCC (or a certified community conservation corps) on need to be clearly identified and accounted for
- e. All project development costs to be funded by the ATP need to be accounted for in the total project cost

5. **Crash/Safety Data, Collision maps and Countermeasures:**

Engineer's Initials: RMH

- a. Confirmation that crash data shown occurred within influence area of proposed improvements.

6. **Project Schedule and Requested programming of ATP funding**

Engineer's Initials: RMT

- a. All applicants must anticipate receiving federal ATP funding for the project and therefore the project schedules and programming included in the application must account for all applicable requirements and timeframes.
- b. "Completed Dates" for project Milestone Dates shown in the application have been reviewed and verified
- c. "Expected Dates" for project Milestone Dates shown in the application account for all reasonable project timetables, including: Interagency MOUs, Caltrans agreements, CTC allocations, FHWA authorizations, federal environmental studies and approvals, federal right-of-way acquisitions, federal consultant selections, project permits, etc.
- d. The fiscal year and funding amounts shown in the PPR must be consistent with the values shown in the project cost estimate(s), expected project milestone dates and expected matching funds.

7. **Warrant studies/guidance (Check if not applicable)**

Engineer's Initials: RMT



N/A

- a. For new Signals – Warrant 4, 5 or 7 must be met (CA MUTCD): Signal warrants must be documented as having been met based on the CA MUTCD

8. **Additional narration and documentation:**

Engineer's Initials: RMT

- a. The text in the "Narrative Questions" in the application is consistent with and supports the engineering logic and calculations used in the development of the plans/maps and estimate
- b. When needed to clarify non-standard ATP project elements (i.e. vehicular roadway widening necessary for the construction of the primary ATP elements); appropriate documentation is attached to the application to document the engineering decisions and calculations requiring the inclusion of these non-standard elements.

Licensed Engineer:

Name (Last, First):

Title:

Engineer License Number

Signature: _____

Date:

Email:

Phone:

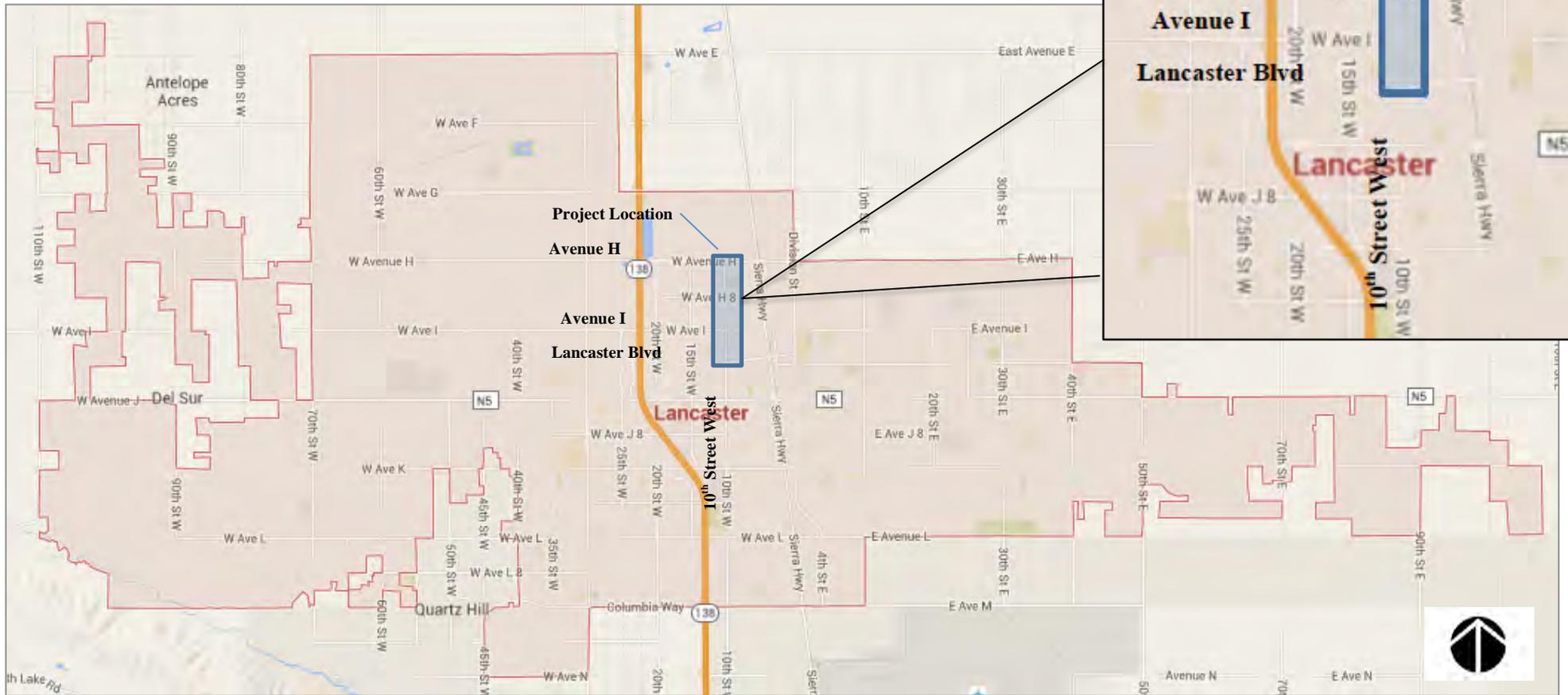
Engineer's Stamp:



Project Location Map

Attachment D

ATTACHMENT D: PROJECT LOCATION MAP



Project Map/Plans
Existing and Proposed
Conditions
Attachment E

CITY OF LANCASTER

10TH STREET WEST ROAD DIET AND BIKEWAY IMPROVEMENTS

ATP CYCLE 2 GRANT

SUBMITTED BY:	DATE
REVIEWED BY:	DATE
SENIOR CIVIL ENGINEER	DATE
APPROVED BY:	DATE
DIRECTOR OF PUBLIC WORKS	DATE

GENERAL NOTES

1. THE EXISTENCE AND LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR SHALL CALL AND OBTAIN UNDERGROUND SERVICE ALERT ID NUMBER BY CALLING 811.
2. THESE PLANS ARE HEREBY MADE A PART OF THE SPECIFICATION.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2012 EDITION, INCLUDING ALL AMENDMENTS THERETO.
4. REQUEST FOR INSPECTION SERVICE BY THE CITY OF LANCASTER DEPARTMENT OF PUBLIC WORKS SHALL BE MADE BY THE CONTRACTOR AT LEAST TWENTY FOUR (24) HOURS BEFORE THE SERVICES ARE REQUIRED. TO REQUEST INSPECTION SERVICES CALL 661-945-6879.
5. NO WORK IN CONNECTION HERewith SHALL BE CONDUCTED ON SATURDAYS, SUNDAYS OR HOLIDAYS WITHOUT PRIOR WRITTEN APPROVAL OF THE LANCASTER CITY ENGINEER, OR OTHERWISE DIRECTED BY THE PLANS AND SPECIFICATIONS. ENTIRE INTERSECTION MAY BE SHUT DOWN FOR NIGHT WORK BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM AFTER WRITTEN APPROVAL HAS BEEN OBTAINED FROM THE CITY MANAGER.
6. THE CONTRACTOR SHALL FURNISH SURVEYING REQUIRED FOR THE PRESERVATION OF EXISTING SURVEY MONUMENTATION: THE CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING SURVEY DOCUMENTS WHICH CONTROL SUBDIVISIONS, TRACTS, BOUNDARIES, STREETS, HIGHWAY, RIGHTS OF WAY, EASEMENTS OR PROVIDE SURVEY CONTROL WHICH WILL BE DISTURBED OR REMOVED DUE TO THE WORK PERFORMED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TEN WORKING DAYS NOTICE TO THE CITY SURVEYOR PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING MONUMENTS. THE CITY SURVEYOR WILL COORDINATE WITH THE CONTRACTOR TO PROVIDE WITNESS MONUMENTS. RESET MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH COUNTY SURVEYOR IN ACCORDANCE WITH BUSINESS AND PROFESSIONS CODE SECTION 8771.

CONTRACTOR'S RESPONSIBILITY STATEMENT

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITIES PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT ON THESE DRAWINGS. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DISCREPANCY BETWEEN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY OF LANCASTER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



VICINITY MAP

N.T.S.

LEGEND (EXISTING FEATURES SHOWN DASHED AND/OR SCREENED)

APPROXIMATE STREET CENTERLINE	---
EXISTING CURB	=====
EXISTING EDGE OF PAVEMENT	-----
EXISTING OVERHEAD WIRES	--- OHW --- OHW ---
EXISTING ELECTRICAL	--- E --- E ---
EXISTING GAS	--- G --- G ---
EXISTING STORM DRAIN	--- SD --- SD ---
EXISTING WATER	--- W --- W ---
EXISTING COMMUNICATION LINE	--- COMM --- COMM ---
EXISTING SANITARY SEWER LINE	--- S --- S ---
PROPOSED CURB & GUTTER	=====
PROPOSED EDGE OF PAVEMENT	-----
PROPOSED SAWCUT LINE	-----
RIGHT-OF-WAY	-----

ABBREVIATIONS

AB	AGGREGATE BASE	FS	FINISHED SURFACE
AC	ASPHALT CONCRETE	GB	GRADE BREAK
ANG	ANGLE POINT	HP	HIGH POINT
BC	BEGIN CURVE	LP	LOW POINT
BCR	BEGIN CURB RETURN	MAX	MAXIMUM
BLDG	BUILDING	MIN	MINIMUM
BVC	BEGIN VERTICAL CURVE	POC	POINT OF CONCENTRIC CURVATURE
BOW	BACK OF WALK	PI	POINT OF INTERSECTION
CL	CENTERLINE	PRC	POINT OF REVERSE CURVATURE
DET	DETAIL	R/W	RIGHT OF WAY
EC	END CURVE	SHT	SHEET
ECR	END CURB RETURN	TC	TOP OF CURB
ELEV	ELEVATION	TOP	TOP OF PIPE
EVC	END VERTICAL CURVE	TYP	TYPICAL
EG	EXISTING GROUND	UNO	UNLESS NOTED OTHERWISE
EX	EXISTING	VC	VERTICAL CURVE
FG	FINISHED GROUND	WM	WATER METER
FH	FIRE HYDRANT		
FL	FLOWLINE		



SYMBOL LEGEND

▲ CP1 CONTROL POINT

SHEET INDEX

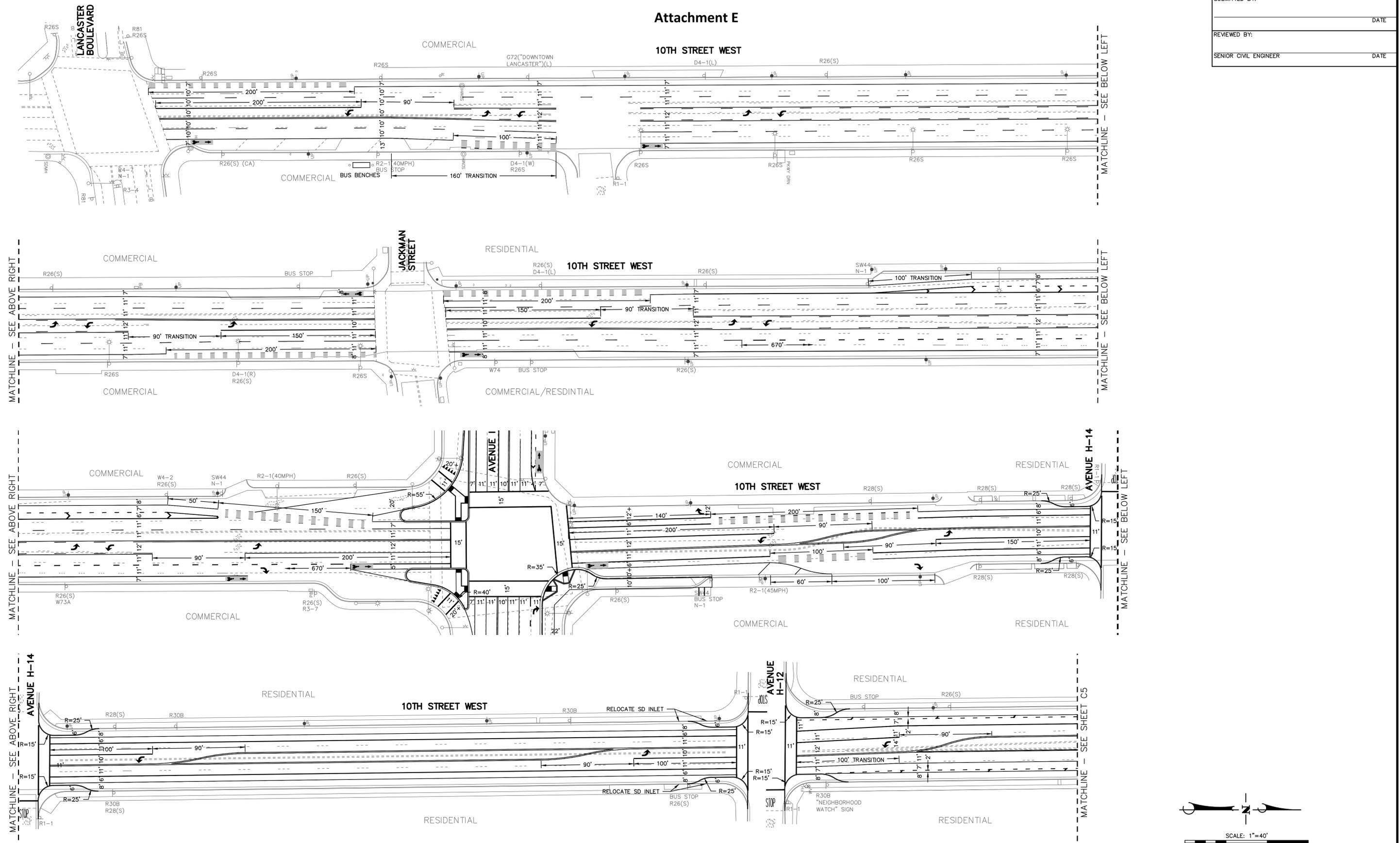
SHEET	DESCRIPTION
C1	TITLE SHEET
C2	PRELIMINARY LAYOUT PLAN - 10TH STREET WEST - LANCASTER BLVD TO 270' NORTH OF AVE H-12
C3	PRELIMINARY LAYOUT PLAN - 10TH STREET WEST - 270' NORTH OF AVE H-12 TO AVE H

OWNER CITY OF LANCASTER PROJECT MANAGER: MARISSA DIAZ 615 W AVENUE H LANCASTER, CA 93534-2461 PHONE: (661) 945-6864	RECORD DRAWING THESE "RECORD" DRAWINGS WERE PREPARED FROM INFORMATION FURNISHED ENTIRELY OR IN PART BY OTHERS. NO WARRANTY, EXPRESSED OR IMPLIED IS MADE OR INTENDED BY THE ENGINEER OF RECORD AS TO COMPLETENESS OR ACCURACY OF DATA INCORPORATED INTO THESE DRAWINGS AS A RESULT OF WORK BY OTHERS.	 Engineering • Surveying • Planning • Construction Management 42225 10th Street West, Suite 119, Lancaster, CA 93534 Phone: (661) 949-6676 Fax: (661) 945-7592 THESE PLAN HAVE BEEN PREPARED UNDER THE SUPERVISION OF FOR CITY OF LANCASTER HGC PREPARER DBR CHECKER RCE#	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>RECORD RCE</th> <th>REVISION BLOCK</th> <th>DEV ENG DIV MGR</th> </tr> <tr> <td>REV #</td> <td>APPR DATE</td> <td>APPR DATE</td> </tr> <tr> <td>△</td> <td></td> <td></td> </tr> </table>	RECORD RCE	REVISION BLOCK	DEV ENG DIV MGR	REV #	APPR DATE	APPR DATE	△			CITY OF LANCASTER 10TH STREET WEST ROAD DIET AND BIKEWAY TITLE SHEET SCALE: AS SHOWN PWCP ##-### PLAN DATE: 01/16/2014 WO: 21478
RECORD RCE	REVISION BLOCK	DEV ENG DIV MGR											
REV #	APPR DATE	APPR DATE											
△													

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 PLOT BY: Corrallo, Stephen
 PLOT DATE: 4/17/2015 1:18:13 PM
 SAVE DATE: 4/17/2015 1:14:36 PM
 36-LAN

Attachment E

SUBMITTED BY:	DATE
REVIEWED BY:	DATE
SENIOR CIVIL ENGINEER	DATE



811
 Know what's below.
 Call before you dig.
 DIAL TOLL FREE
8 1 1
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

OWNER	
CITY OF LANCASTER	
PROJECT MANAGER:	MARISSA DIAZ
615 W AVENUE H LANCASTER, CA 93534-2461 PHONE: (661) 945-6864	

RECORD DRAWING	
RECORD ENGINEER	DATE
CITY STAFF	DATE
CITY ENGINEER	DATE

Penfield & Smith
 Engineering • Surveying • Planning
 • Construction Management •
 42225 10th Street West, Suite 119, Lancaster, CA 93534
 Phone: (661) 949-6676
 Fax: (661) 945-7592

THESE PLAN HAVE BEEN PREPARED UNDER THE SUPERVISION OF FOR CITY OF LANCASTER

HGC - DBR
 PREPARER - CHECKER
 RCE#

REVISION BLOCK			
REVISION #	APPR	DATE	REVISION DESCRIPTION
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RECORD RCE	DEV ENG DIV MGR	
REVISION #	APPR	DATE
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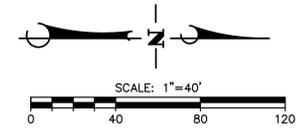
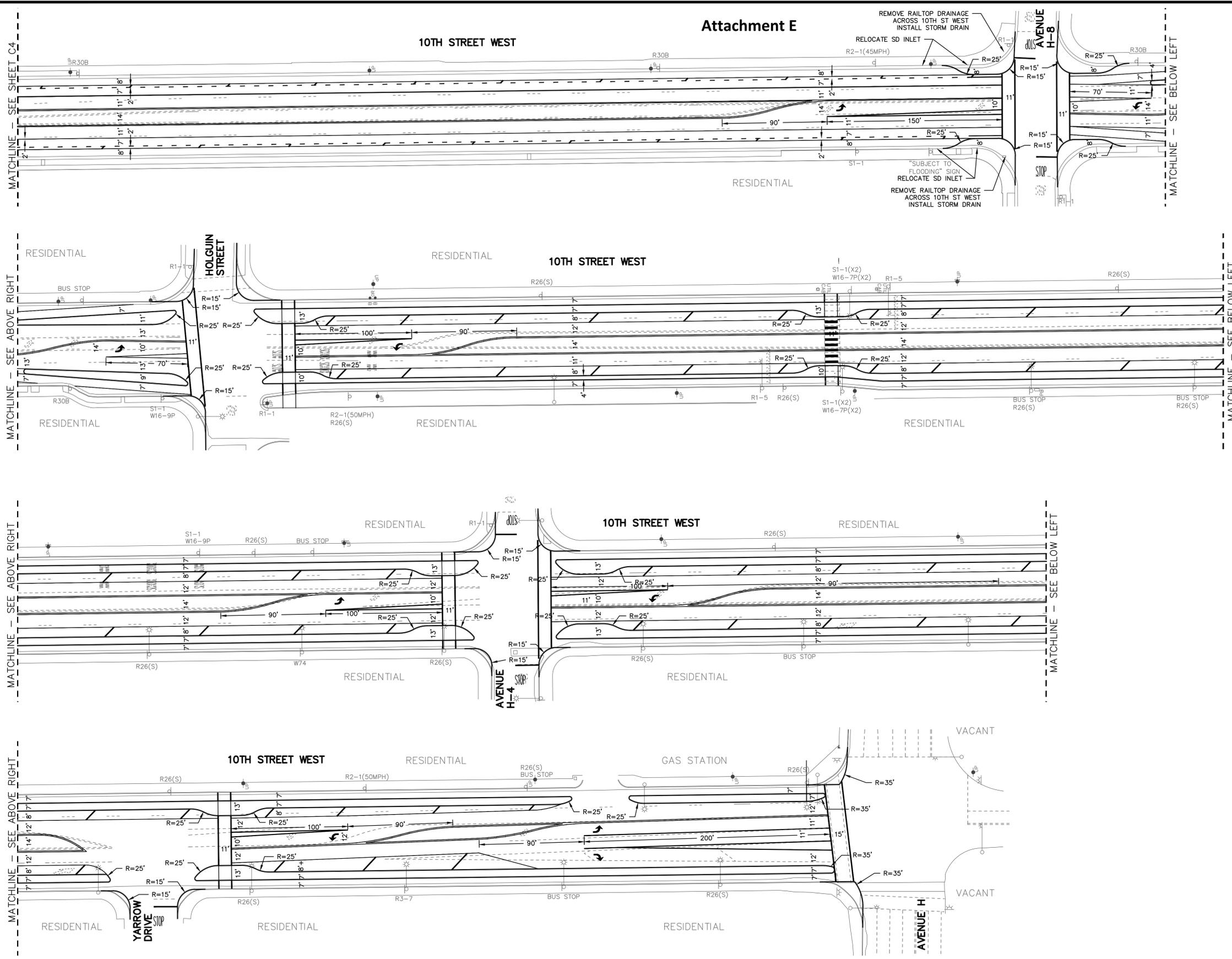
CITY OF LANCASTER
 10TH STREET WEST ROAD DIET AND BIKEWAY
 PRELIMINARY LAYOUT PLAN - 10TH ST W
 LANCASTER BLVD TO 270' NORTH OF AVE H-12

SHEET C2

SCALE: AS SHOWN PWPC # - # - # PLAN DATE: 01/16/2014 WO: 21478

Attachment E

SUBMITTED BY:	DATE
REVIEWED BY:	DATE
SENIOR CIVIL ENGINEER	DATE



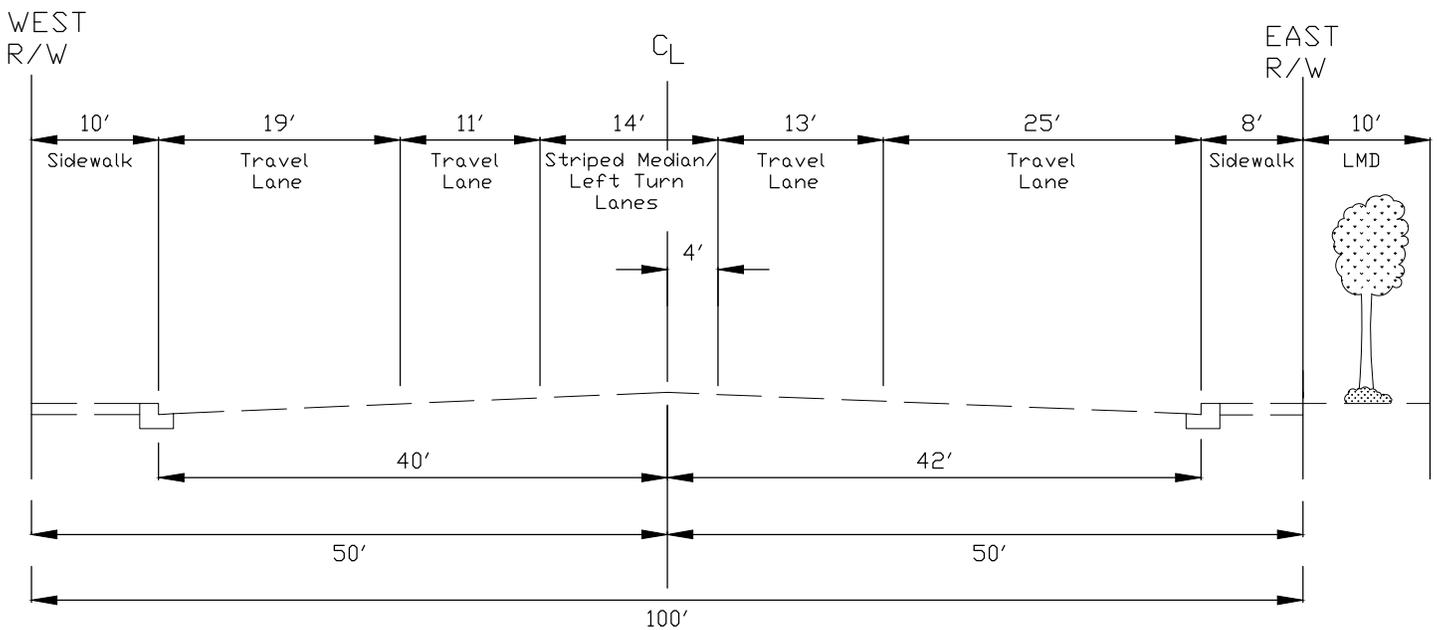
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PLOT BY: Corrallo, Stephen
PLOT DATE: 4/17/2015 1:18:23 PM
SAVE DATE: 4/17/2015 1:14:36 PM

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DIAL TOLL FREE
8 1 1
Know what's below.
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AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

OWNER CITY OF LANCASTER PROJECT MANAGER: MARISSA DIAZ 615 W AVENUE H LANCASTER, CA 93534-2461 PHONE: (661) 945-6864		RECORD DRAWING THESE "RECORD" DRAWINGS WERE PREPARED FROM INFORMATION FURNISHED ENTIRELY OR IN PART BY OTHERS. NO WARRANTY, EXPRESSED OR IMPLIED IS MADE OR INTENDED BY THE ENGINEER OF RECORD AS TO COMPLETENESS OR ACCURACY OF DATA INCORPORATED INTO THESE DRAWINGS AS A RESULT OF WORK BY OTHERS.		Penfield & Smith Engineering • Surveying • Planning • Construction Management 42225 10th Street West, Suite 119, Lancaster, CA 93534 Phone: (661) 949-6676 Fax: (661) 945-7592 HGC PREPARER DBR CHECKER RCE#		REVISION BLOCK REVISION #, DATE, DESCRIPTION		CITY OF LANCASTER 10TH STREET WEST ROAD DIET AND BIKEWAY PRELIMINARY LAYOUT PLAN - 10TH ST W 270' NORTH OF AVE H-12 TO AVE H SCALE: AS SHOWN PWPC ##-### PLAN DATE: 01/16/2014 WO: 21478		SHEET C5
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Attachment E

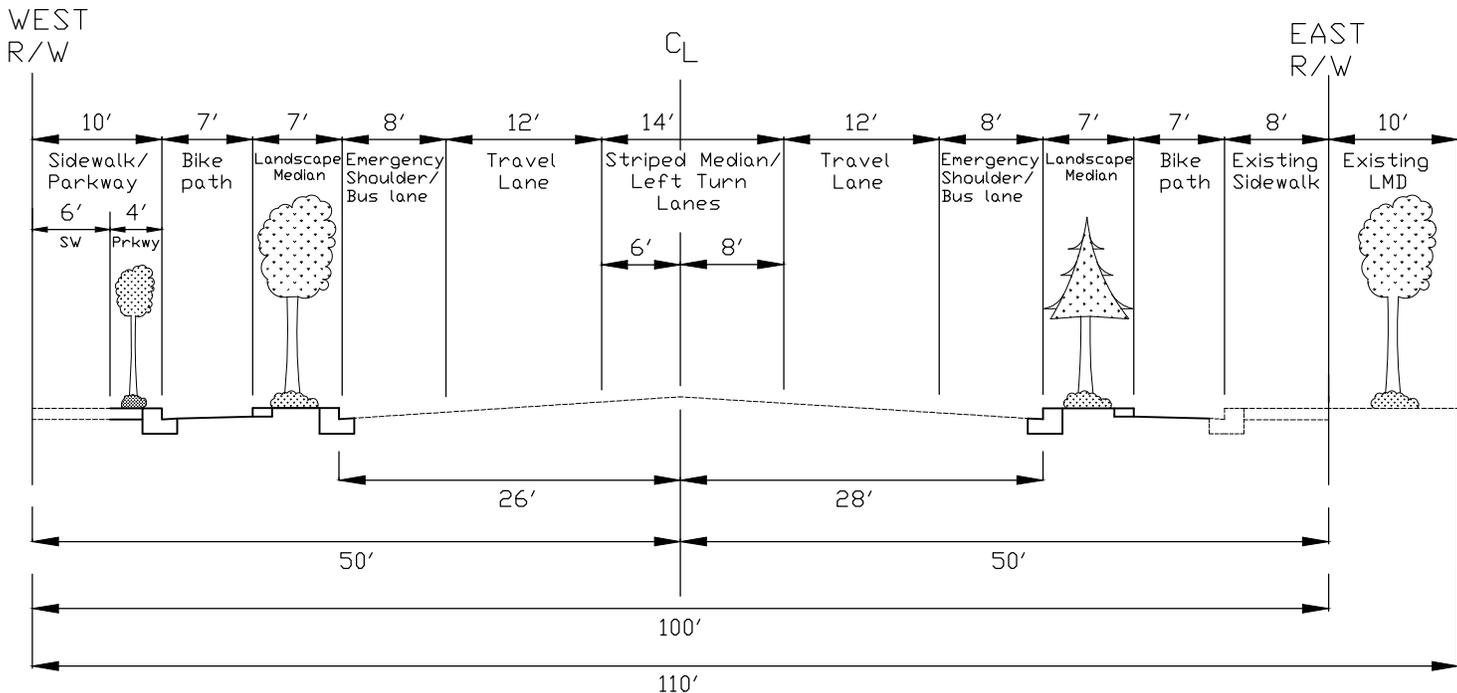
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**EXISTING TYPICAL CROSS SECTION = N.T.S.
AVENUE H - AVENUE H6**

Attachment E

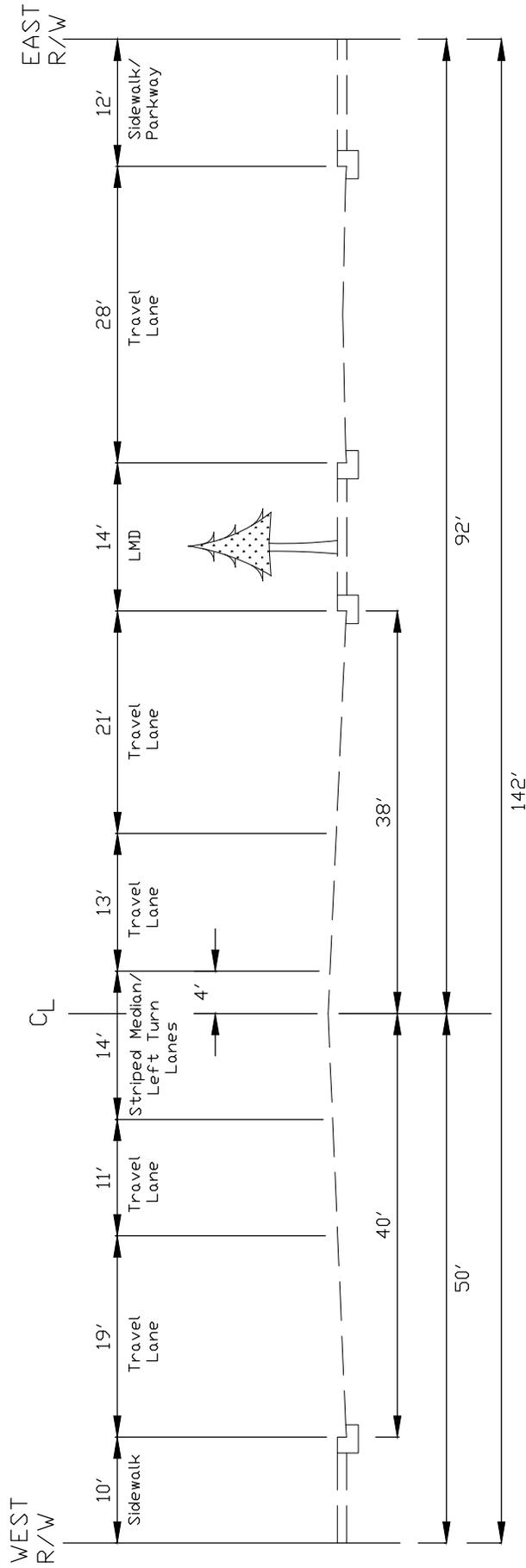
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**PROPOSED TYPICAL CROSS SECTION - N.T.S.
AVENUE H - AVENUE H6**

Attachment E

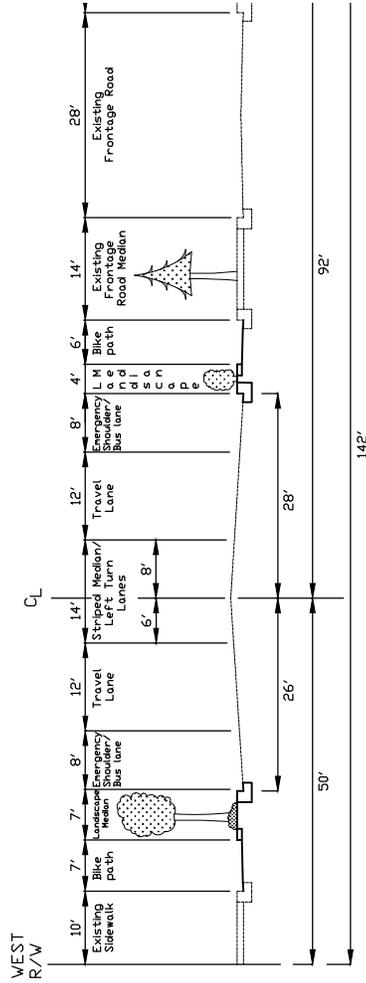
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**EXISTING TYPICAL CROSS SECTION - N.T.S.
AVENUE H6 - HOLGUIN ST.**

Attachment E

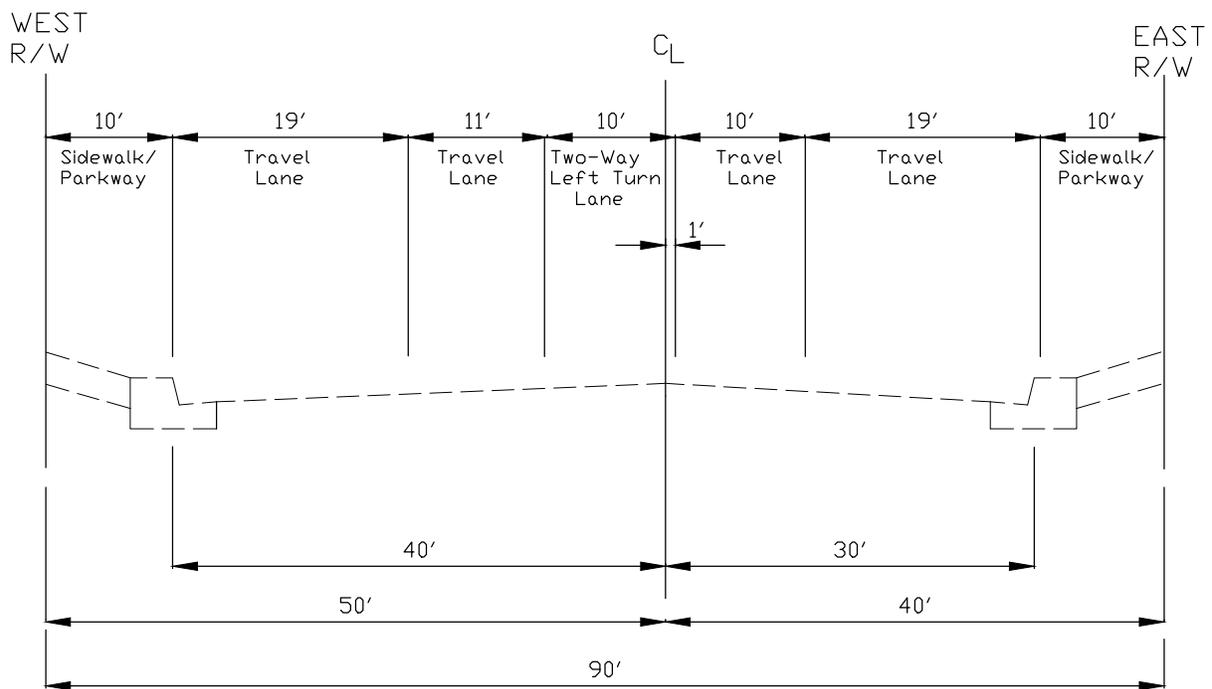
**10TH STREET WEST
BIKEWAY IMPROVEMENT PROJECT**



**PROPOSED TYPICAL CROSS SECTION - N.T.S.
AVENUE H6 - HOLGUIN ST.**

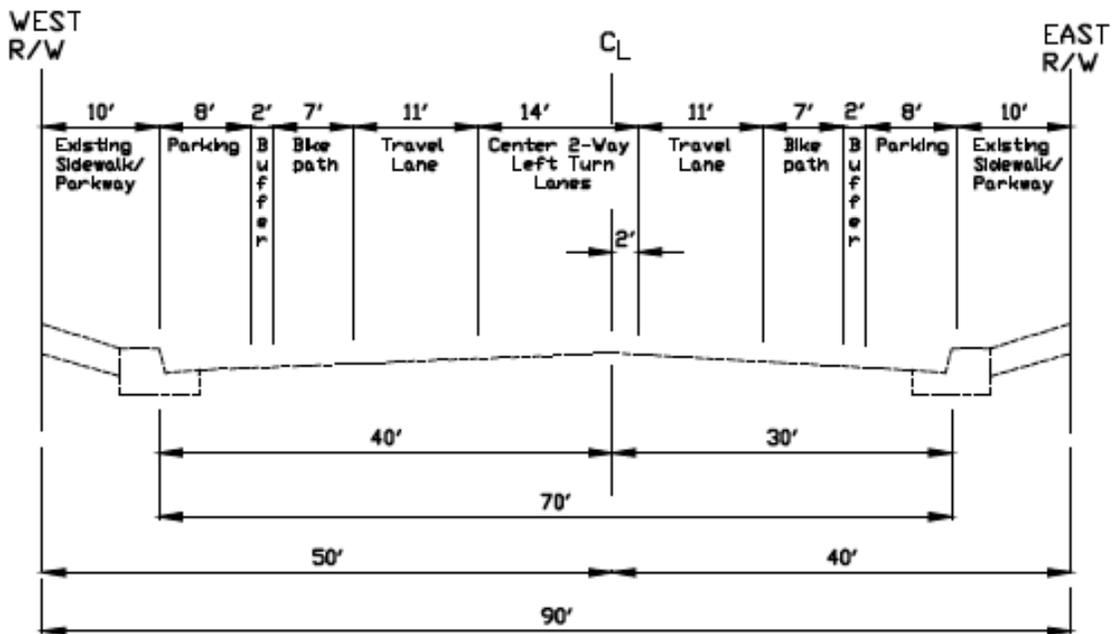
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10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**EXISTING TYPICAL CROSS SECTION = N.T.S.
HOLGUIN ST - AVENUE H-12**

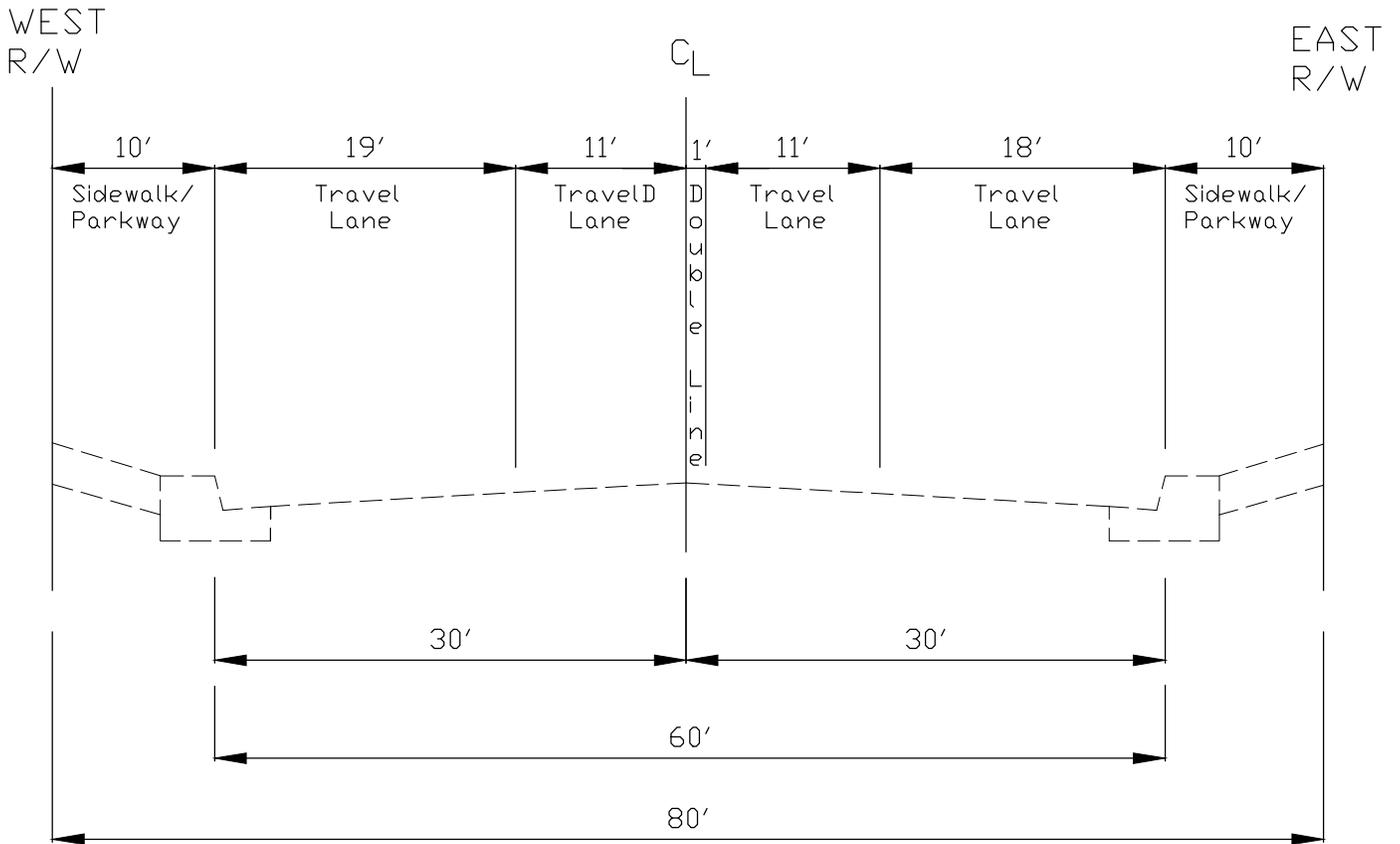
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



PROPOSED TYPICAL CROSS SECTION - N.T.S. HOLGUN ST. - AVENUE H-12

Attachment E

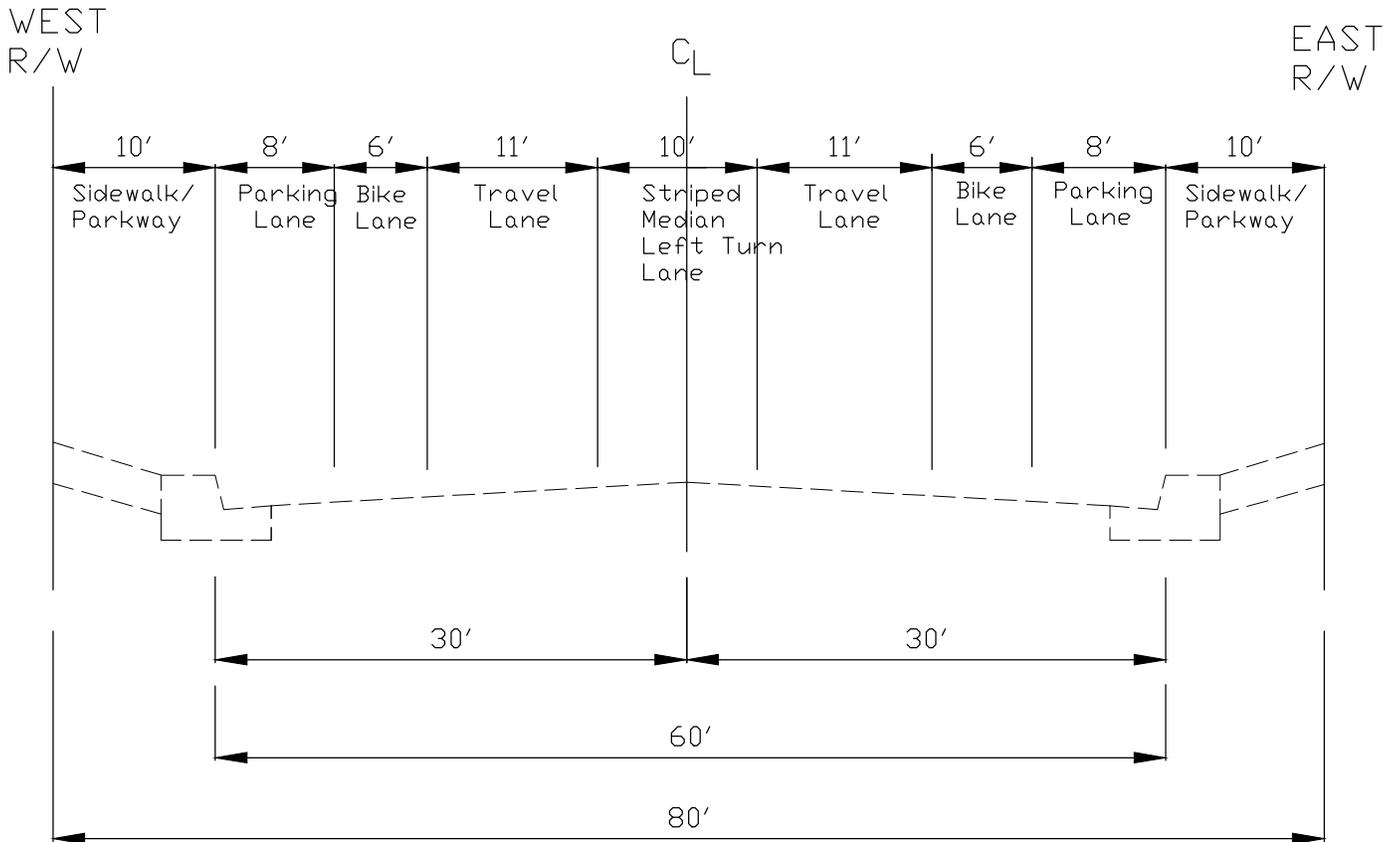
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**EXISTING TYPICAL CROSS SECTION - N.T.S.
AVENUE H-12 - AVENUE I**

Attachment E

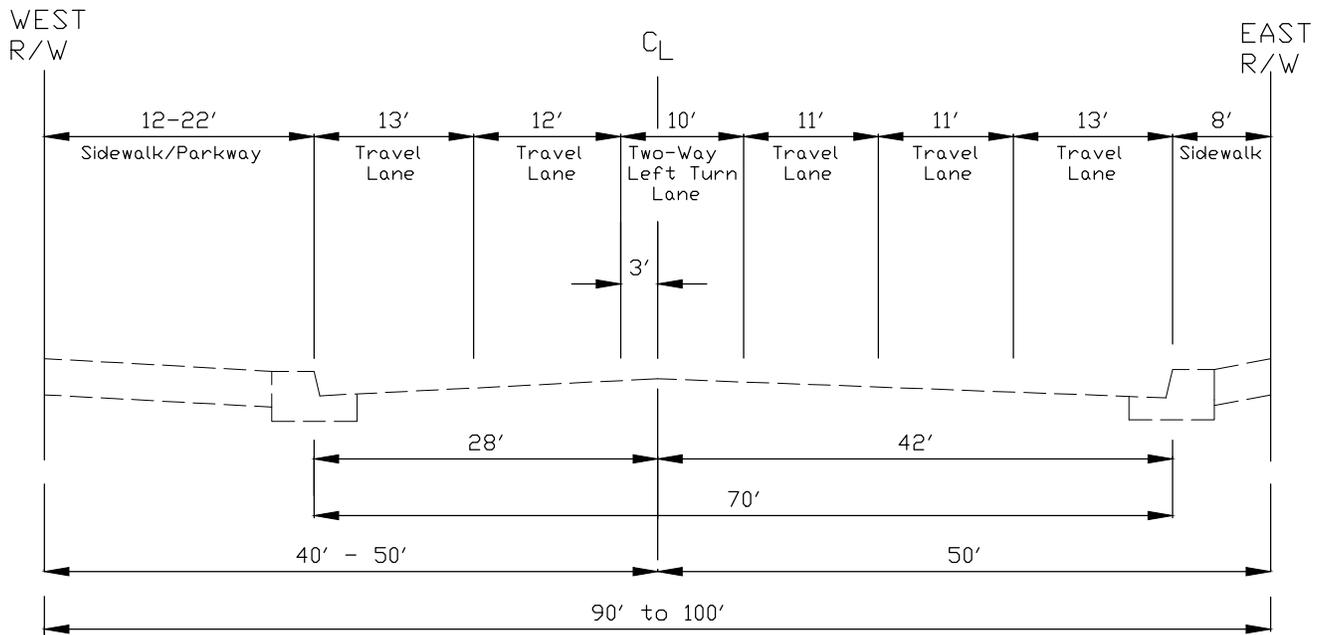
10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**PROPOSED TYPICAL CROSS SECTION - N.T.S.
AVENUE H-12 - AVENUE I**

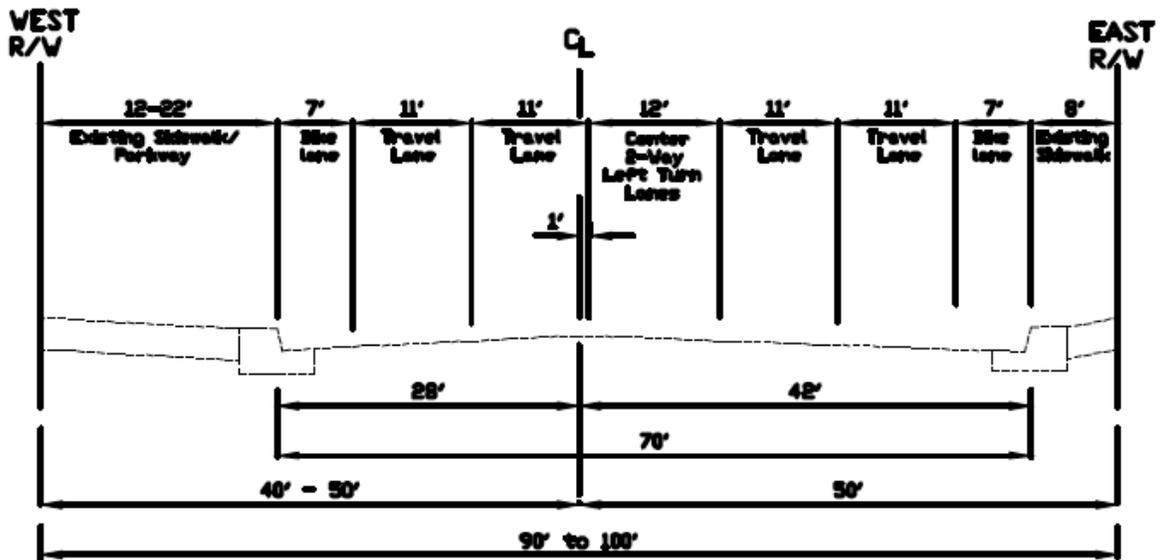
Attachment E

10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



**EXISTING TYPICAL CROSS SECTION = N.T.S.
AVENUE I - LANCASTER BLVD.**

10TH STREET WEST BIKEWAY IMPROVEMENT PROJECT



PROPOSED TYPICAL CROSS SECTION - NTR AVENUE I - LANCASTER BLVD.

Photos of Existing Conditions

Attachment F

Attachment F



Picture 1 – 10th Street West and Avenue H, looking north



Picture 2 – 10th Street West and Avenue H, looking south

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians

Attachment F



Picture 3 – 10th Street West and Avenue H-4, looking south



Picture 4 – Proposed location to open fence, existing Avenue H-6 crosswalk

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians; limited visibility for pedestrians in crosswalk

Attachment F



Picture 5 – Existing Avenue H-6 crosswalk and frontage road



Picture 6 – Existing Avenue H-6 crosswalk

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians; limited visibility for pedestrians in crosswalk

Attachment F



Picture 7 – 10th Street West and Avenue H-8, looking north



Picture 8 – 10th Street West and Avenue H-8, looking south

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians Attachment F

Attachment F



Picture 9 – 10th Street West and Avenue H-12, looking north



Picture 10 – 10th Street West and Avenue H-12, looking south

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians

Attachment F



Picture 11 – 10th Street West and Avenue I, looking north



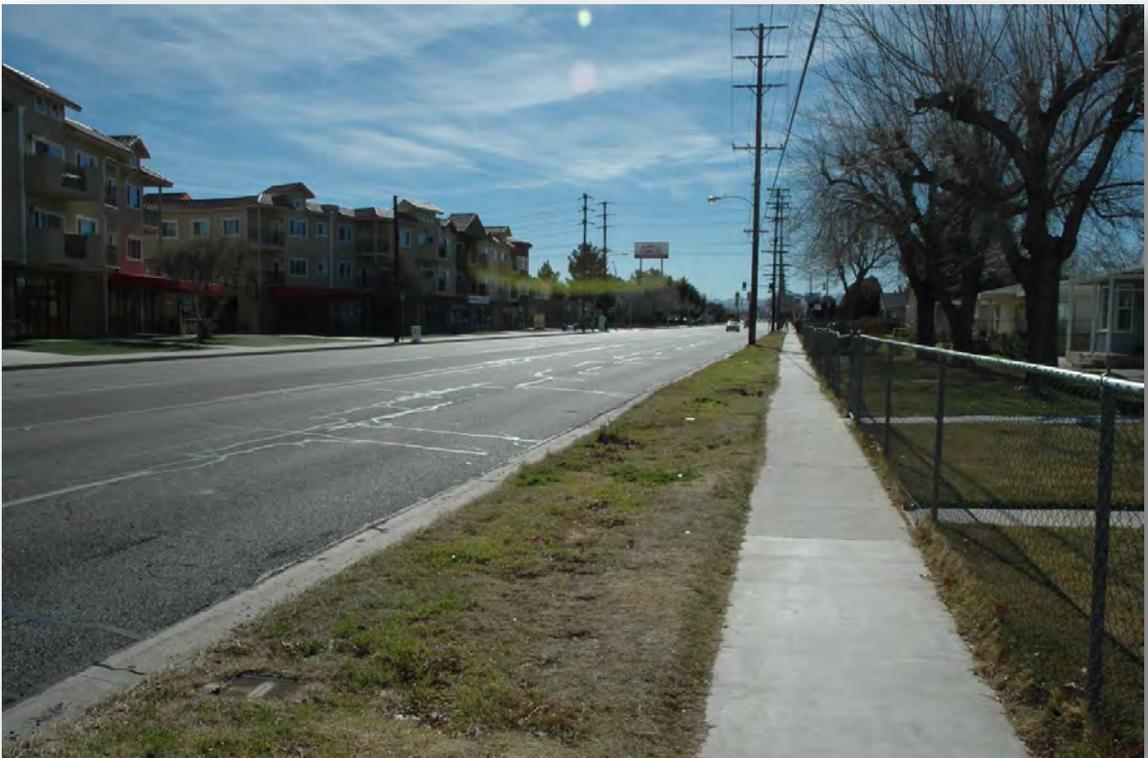
Picture 12 – 10th Street West and Avenue I, looking south

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians; limited visibility for pedestrians in crosswalk

Attachment F



Picture 13 – 10th Street West and Avenue I, looking south



Picture 14 – 10th Street West and south of Avenue I, looking south

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians Attachment F

Attachment F



Picture 15 – 10th Street West and Jackman St, looking south



Picture 16 – 10th Street West and Lancaster Blvd, looking north

Super wide crossings; high speeds; no bicycle facilities; lack of shade for pedestrians

Attachment F



Picture 17 – Lancaster Blvd bike paving

Connectivity to existing bicycle facilities on Lancaster Blvd needed.

Project Estimate

Attachment G

Detailed Engineer's Estimate and Total Project Cost

10th Street West Road Diet and Bikeway Improvements

Important: Read the Instructions in the other sheet (tab) before entering data. Do not enter in shaded fields (with formulas).

Project Information:

Agency:	City of Lancaster				
Application ID:	07-Lancaster-3	Prepared by:	Stephen Carrillo	Date:	4/20/15
Project Description:	Convert 10th Street West to a complete street by removing vehicular traffic lanes, adding bikeways and improving pedestrian facilities				
Project Location:	10th Street West, from Avenue H to Lancaster Blvd				

Engineer's Estimate and Cost Breakdown:

Engineer's Estimate (for Construction Items Only)						Cost Breakdown							
						Note: Cost can apply to more than one category. Therefore may be over 100%.							
						ATP Eligible Items		Landscaping		Non-Participating Items		To be Constructed by Corps/CCC	
Item No.	Item	Quantity	Units	Unit Cost	Total Item Cost	%	\$	%	\$	%	\$	%	\$
General													
1	Mobilization/Demobilization	1	LS	\$50,000.00	\$50,000	100%	\$50,000						
2	Pedestrian and Worker Safety	1	LS	\$30,000.00	\$30,000	100%	\$30,000						
AVENUE H TO HOLGUIN													
3	Traffic Control	1	LS	\$18,500.00	\$18,500	100%	\$18,500						
Demolition													
4	Demolition/Removals Work												
	a. Full Depth Pavement	40,000	SF	\$1.50	\$60,000	100%	\$60,000						
	b. Sidewalk/Driveway	3,250	SF	\$2.10	\$6,825	100%	\$6,825						
	c. Stamped Concrete	4,750	SF	\$1.25	\$5,938	100%	\$5,938						
	d. Block Wall	60	SF	\$15.00	\$900	100%	\$900						
	e. Street Signs	1	LS	\$1,200.00	\$1,200	100%	\$1,200						
	f. Striping	10,000	LF	\$1.00	\$10,000	100%	\$10,000						
Street Improvements													
5	6" Asphalt Concrete	10,000	SF	\$2.65	\$26,500	100%	\$26,500						
6	2" Overlay	20,800	SF	\$1.00	\$20,800	100%	\$20,800						
7	Cold Planing	20,800	SF	\$0.40	\$8,320	100%	\$8,320						
8	16" Aggregate Base	10,400	SF	\$2.75	\$28,600	100%	\$28,600						
9	Stamped Concrete	12,250	SF	\$2.50	\$30,625	100%	\$30,625						
10	6" PCC Curb	4,500	LF	\$15.00	\$67,500	100%	\$67,500						
11	6" PCC Curb and Gutter	4,800	LF	\$18.00	\$86,400	100%	\$86,400						
12	8" PCC Curb and Gutter	720	LF	\$22.00	\$15,840	100%	\$15,840						
13	PCC Curb Ramp	20	EA	\$2,750.00	\$55,000	100%	\$55,000						
14	Detectable Warning Panels	25	EA	\$350.00	\$8,750	100%	\$8,750						
15	Traffic Striping and Markings	1	LS	\$15,000.00	\$15,000	100%	\$15,000						
16	Traffic Signs	1	LS	\$3,200.00	\$3,200	100%	\$3,200						
17	Wayfinding Street Name Signs	2	EA	\$2,250.00	\$4,500	100%	\$4,500						
18	Countdown Pedestrian Signal Heads	4	EA	\$400.00	\$1,600	100%	\$1,600						
19	Bicycle Racks	1	EA	\$1,500.00	\$1,500	100%	\$1,500						
20	Street Lights @ Ped Xings	10	EA	\$4,000.00	\$40,000	100%	\$40,000						
21	4' Wide Parkway Drain	42	LF	\$75.00	\$3,150	100%	\$3,150						
Irrigation and Landscaping													
22	Point of Connection Assemblies	1	EA	\$400.00	\$400	100%	\$400	100%	\$400				
23	1" Water Meter	1	EA	\$3,000.00	\$3,000	100%	\$3,000	100%	\$3,000				
24	Backflow Preventer	1	EA	\$2,500.00	\$2,500	100%	\$2,500	100%	\$2,500				
25	Controller	1	EA	\$5,000.00	\$5,000	100%	\$5,000	100%	\$5,000				
26	Ball Valve	1	EA	\$300.00	\$300	100%	\$300	100%	\$300				
27	3/4" Control Valve	2	EA	\$250.00	\$500	100%	\$500	100%	\$500				
28	1" Control Valve	2	EA	\$300.00	\$600	100%	\$600	100%	\$600				
29	Sidewalk Drip System	130	EA	\$125.00	\$16,250	100%	\$16,250	100%	\$16,250				
30	Median Drip System	5,000	LF	\$6.50	\$32,500	100%	\$32,500	100%	\$32,500				
31	Mainline	2,500	LF	\$15.00	\$37,500	100%	\$37,500	100%	\$37,500				
32	24" Box Trees	80	EA	\$480.00	\$38,400	100%	\$38,400	100%	\$38,400				
33	5 Gallon Shrubs	650	EA	\$15.00	\$9,750	100%	\$9,750	100%	\$9,750				
34	1 Gallon Shrubs	2,000	EA	\$6.00	\$12,000	100%	\$12,000	100%	\$12,000				
35	Decorative Rock w/ Weed Barrier	18,525	SF	\$1.25	\$23,156	100%	\$23,156	100%	\$23,156				
36	Linear Root Barriers	2,400	LF	\$8.00	\$19,200	100%	\$19,200	100%	\$19,200				
37	Soil Preparation/Fine Grading	1	LS	\$10,500.00	\$10,500	100%	\$10,500	100%	\$10,500				
38	Maintenance Period	90	DAYS	\$180.00	\$16,200	100%	\$16,200	100%	\$16,200				
HOLGUIN TO AVENUE I													
39	Traffic Control	1	LS	\$8,000.00	\$8,000	100%	\$8,000						
Demolition													
40	Demolition/Removals Work												
	a. Striping	10,100	LF	\$1.00	\$10,100	100%	\$10,100						
	b. Parkway	2,400	SF	\$2.50	\$6,000	100%	\$6,000						

Engineer's Estimate (for Construction Items Only)						Note: Cost can apply to more than one category. Therefore may be over 100%.								
						ATP Eligible Items		Landscaping		Non-Participating Items		To be Constructed by Corps/CCC		
Item No.	Item	Quantity	Units	Unit Cost	Total Item Cost	%	\$	%	\$	%	\$	%	\$	
Street Improvements														
41	Concrete Sidewalk	2,700	SF	\$5.00	\$13,500	100%	\$13,500							
42	6" PCC Curb	700	LF	\$15.00	\$10,500	100%	\$10,500							
43	8" Curb and Gutter	560	LF	\$22.00	\$12,320	100%	\$12,320							
44	PCC Curb Ramp w/ Detectable Warning Panel	26	EA	\$2,750.00	\$71,500	100%	\$71,500							
45	Detectable Warning Panel	6	EA	\$350.00	\$2,100	100%	\$2,100							
46	Traffic Striping and Markings	1	LS	\$25,000.00	\$25,000	100%	\$25,000							
47	Traffic Signs	1	LS	\$1,800.00	\$1,800	100%	\$1,800							
48	Wayfinding Street Name Signs	2	EA	\$2,250.00	\$4,500	100%	\$4,500							
49	Countdown Pedestrian Timers	8	EA	\$400.00	\$3,200	100%	\$3,200							
50	Bicycle Racks	1	EA	\$1,500.00	\$1,500	100%	\$1,500							
51	Street Lights @ Ped Xings	8	EA	\$4,000.00	\$32,000	100%	\$32,000							
52	Relocate Catch Basin, Complete	4	EA	\$4,000.00	\$16,000	100%	\$16,000							
Irrigation and Landscaping														
53	Sidewalk Drip System	60	EA	\$200.00	\$12,000	100%	\$12,000	100%	\$12,000					
54	24" Box Trees	25	EA	\$480.00	\$12,000	100%	\$12,000	100%	\$12,000					
55	5 Gallon Shrubs	200	EA	\$15.00	\$3,000	100%	\$3,000	100%	\$3,000					
56	1 Gallon Shrubs	400	EA	\$6.00	\$2,400	100%	\$2,400	100%	\$2,400					
57	Linear Root Barriers	750	LF	\$8.00	\$6,000	100%	\$6,000	100%	\$6,000					
58	Soil Preparation/Fine Grading	1	LS	\$6,500.00	\$6,500	100%	\$6,500	100%	\$6,500					
59	Maintenance Period	90	DAYS	\$150.00	\$13,500	100%	\$13,500	100%	\$13,500					
AVENUE I TO LANCASTER BLVD														
60	Traffic Control	1	LS	\$8,000.00	\$8,000	100%	\$8,000							
Demolition														
61	Demolition/Removals Work													
	a. Striping	13,000	LF	\$1.25	\$16,250	100%	\$16,250							
	b. Parkway	2,400	SF	\$2.50	\$6,000	100%	\$6,000							
Street Improvements														
62	Traffic Striping and Markings	1	LS	\$25,000.00	\$25,000	100%	\$25,000							
63	Traffic Signs	1	LS	\$1,800.00	\$1,800	100%	\$1,800							
64	Wayfinding Street Name Signs	1	EA	\$2,250.00	\$2,250	100%	\$2,250							
Irrigation and Landscaping														
65	Sidewalk Drip System	20	EA	\$200.00	\$4,000	100%	\$4,000	100%	\$4,000					
66	24" Box Trees	14	EA	\$480.00	\$6,720	100%	\$6,720	100%	\$6,720					
67	5 Gallon Shrubs	84	EA	\$15.00	\$1,260	100%	\$1,260	100%	\$1,260					
68	1 Gallon Shrubs	168	EA	\$6.00	\$1,008	100%	\$1,008	100%	\$1,008					
69	Linear Root Barriers	420	LF	\$8.00	\$3,360	100%	\$3,360	100%	\$3,360					
70	Soil Preparation/Fine Grading	1	LS	\$1,500.00	\$1,500	100%	\$1,500	100%	\$1,500					
71	Maintenance Period	90	DAYS	\$125.00	\$11,250	100%	\$11,250	100%	\$11,250					
Subtotal of Construction Items:					\$1,190,222		\$1,190,222		\$312,254					
Construction Item Contingencies (% of Construction Items):				10.00%	\$119,022									
Enter in the cell to the right														
Total (Construction Items & Contingencies) cost:					\$1,309,244									
Project Cost Estimate:														
Type of Project Delivery Cost					Cost \$									
Preliminary Engineering (PE)														
Environmental Studies and Permits(PA&ED):					\$	-								
Plans, Specifications and Estimates (PS&E):					\$	140,000								
Total PE:					\$	140,000	11%	25% Max						
Right of Way (RW)														
Right of Way Engineering:					\$	-								
Acquisitions and Utilities:					\$	-								
Total RW:					\$	-								
Construction (CON)														
Construction Engineering (CE):					\$	119,000		8%	15% Max					
Total Construction Items & Contingencies:					\$1,309,244									
Total CON:					\$	1,428,244								
Total Project Cost Estimate:					\$	1,568,244								

**Non-Infrastructure Work Plan
(Form 22-R)
Attachment H**

Not Applicable

Narrative Questions
Back-up Information
Attachment I

Attachment I-Screening Criteria 2

1. SCAG 2012-2035 RTP/SCS (Excerpt)
2. Metro Long Range Plan (Excerpt)
3. Metro Countywide Sustainability Planning Policy & Implementation Plan (Excerpt)

COASTAL TRAILS

In addition to bikeways, local trails have played an important role in increasing accessibility and providing opportunities for active transportation. Trails along the coast of California have been utilized as long as people have inhabited the region. In an effort to develop a “continuous public right-of-way along the California coastline, a trail designed to foster appreciation and stewardship of the scenic and natural resources of coastal trekking through hiking and other complementary modes of non-motorized transportation,” the California Coastal Trail (CCT) was established. SCAG proposes the completion of the CCT to increase active transportation access to the coast. Completion of the CCT would provide 183 miles of multipurpose trails.

SAFE ROUTES TO SCHOOL

SAFETEA-LU established the Safe Routes to School (SRTS) program to “enable and encourage primary and secondary school children to walk and bicycle to school” and to support infrastructure-related and behavioral projects that are “geared toward providing a safe, appealing environment for walking and bicycling that will improve the quality of our children’s lives and support national health objectives by reducing traffic, fuel consumption, and air pollution in the vicinity of schools.” Safe Route to School programs can play a critical role in eliminating some of the vehicle trips that occur during peak periods to drop off or pick up students by ensuring safe routes to bike or walk to school.

COMPLETE STREETS

The Complete Streets Act of 2008 (AB 1358) requires cities and counties to incorporate the concept of Complete Streets in their General Plan updates to ensure that transportation plans meet the needs of all users of our roadway system. SCAG supports and encourages implementation of Complete Streets policies in the 2012–2035 RTP/SCS. SCAG will work with the local jurisdictions as they implement Complete Streets strategies within their jurisdictions by providing information and resources to support local planning activities. SCAG also supports the following policies and actions related to active transportation:

- Encourage and support local jurisdictions to develop “Active Transportation Plans” for their jurisdictions if they do not already have one,

- Encourage and support local jurisdictions to develop comprehensive educational programs for all road users,
- Encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts,
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public,
- Encourage children, including those with disabilities, to walk and bicycle to school,
- Encourage local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network,
- Support local jurisdictions to connect all of the cities within the SCAG region via bicycle facilities,
- Encourage local jurisdictions to complete the California Coastal Trail,
- Encourage the use of intelligent traffic signals and other technologies that detect slower pedestrians in signalized crosswalks and extend signal time as appropriate,
- Support the facilitation, planning, development, and implementation of projects and activities that will improve safety and reduce traffic and air pollution in the vicinity of primary and middle schools, and
- Encourage local jurisdictions to prioritize and implement projects/policies to comply with ADA requirements.

Policy Recommendations

While SCAG is not an implementing agency SCAG may work with local jurisdictions to assist them with developing policies and projects that may improve active transportation.

Agencies, Groups and Individuals in Bicycle and Walking Planning

Federal and state regulations require SCAG to plan and accommodate for bicycle and walking transportation. As the region's MPO, SCAG develops regional planning strategies and encourages local jurisdictions to think about transportation at the regional level, since individual travel decisions are not bound by political boundaries and often transverse multiple jurisdictions. A regional approach towards transportation planning will provide increased connectivity and accessibility. The 2012 RTP has been developed in cooperation and collaboration with federal, state and local stakeholders. Each stakeholder plays a different role in the development and final adoption of the RTP.

FEDERAL GOVERNMENT

Federal statutes have mandated Metropolitan Planning Organizations (MPOs) to include pedestrian and bicycle facility strategies as part of their overall systematic approach in addressing current and future transportation demands.

STATE OF CALIFORNIA

The State of California and Caltrans has long supported active transportation planning, design policies and practices.

COUNTIES

Each county within the SCAG region has developed and maintained a bicycle and walking master plan to guide their active transportation development.

CITIES

Many of the cities within the SCAG region have developed and maintained a bicycle and/or walking plan as part of their circulation element or as a separate document. These

plans are used to guide their transportation development and assist them with the implementation of their active transportation policies.

Performance Measures

In addition to the established goals and objectives the following performance measures have been identified in an effort to maximize the benefits of active transportation modes:

1. Change in Active Transportation mode share: Increase bicycling and walking in the SCAG region by creating and maintaining an active transportation system that includes well maintained bicycle and pedestrian facilities, easy access to transit facilities, and increased safety and security.
2. Change in the amount of Active Transportation facilities: Increase accommodation and planning for bicyclists and pedestrians (including persons with disabilities) for all transportation planning projects.
3. Change in the number of accidents involving Active Transportation users: Decrease bicyclist and pedestrian fatalities and injuries by increasing transportation safety.
4. Change in land use patterns and Active Transportation: Support local jurisdictions comply with the Complete Streets Act and the development of local active transportation plans. SCAG will also work with local jurisdictions in developing a regional active transportation plan.

Proposed Policies

The goals, objectives and policies in this report were derived from information gathered over the course of the planning process, including public input, review of bicycle and pedestrian master plans from local jurisdictions throughout the region.

GOAL 1: DECREASE BICYCLIST AND PEDESTRIAN FATALITIES AND INJURIES

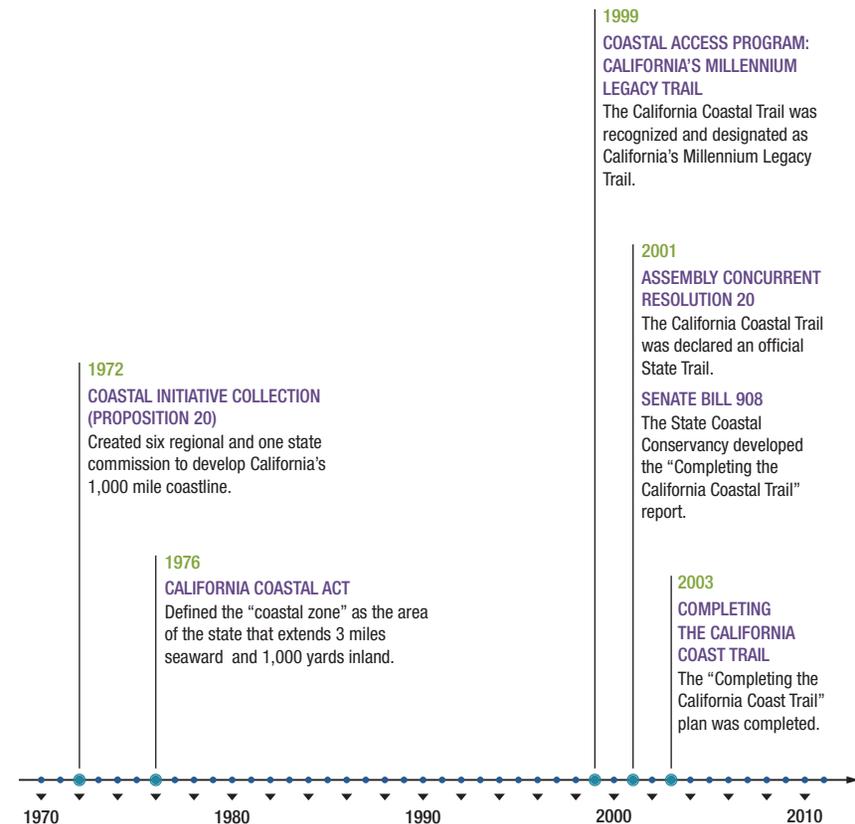
- **Objective 1.1:** SCAG will work with local jurisdictions to support a safe transportation environment in the SCAG Region.
 - Policy 1.1.1: SCAG will work with local jurisdictions to provide comprehensive education for all road users.

- Policy 1.1.2: SCAG will work with local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multi-modal conflicts.
- Policy 1.1.3: SCAG will partner with local advocacy groups and bicycle related businesses to provide bicycle-safety curricula to the general public.

The 2006 Strategic Highway Safety Plan (SHSP) established goals to make walking and street crossing safer; and improve bicycle safety. The SHSP intended on achieving these goals by 2010, reducing the number of pedestrian fatalities attributed to vehicle collisions and the number of bicycle roadway fatalities by 25 percent from their 2000 level. These goals were established by the Legislature in the 2002 California Blueprint for Bicycling and Walking, and assumed that the Legislature's mobility goal of a 50 percent increase in bicycling and pedestrian trips by 2010 would also be achieved.

Improved data collection regarding pedestrian and bicycle trip characteristics, facility conditions and injuries and fatalities would provide local jurisdictions with a clearer understanding of the active transportation conditions within their jurisdictions. Analysis generated from this data would also provide decision makers with a better understanding of the deficiencies and needs within the existing active transportation system.

FIGURE 14 California Coastal Trail Timeline



GOAL 2: DEVELOP AN ACTIVE TRANSPORTATION FRIENDLY ENVIRONMENT THROUGHOUT THE SCAG REGION

- **Objective 2.1:** Produce a comprehensive regional active transportation plan
 - Policy 2.1.1: SCAG will work with local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network
 - Policy 2.1.2: SCAG will work with local jurisdictions to connect all cities in the SCAG region via bicycle facilities
 - Policy 2.1.3: SCAG will work with local jurisdictions to complete the California Coastal Trail

The need for active transportation needs to be fully considered for all transportation planning projects. Increased accommodation for bicyclists and pedestrians requires increased funding, multi-modal planning, programming, and design. As planners increase accommodation for active transportation users, an increase in bicyclist and pedestrian safety should also occur.

Research by Dr. Jennifer Dill, Portland State University Associate Professor, and anecdotal evidence from New York City (NYC) indicate that increases in dedicated bicycle facilities (bicycle lanes and bicycle paths) in those cities have resulted in greater bicycle usage. In addition, in NYC, while bicycling use has doubled along with the number of bicycle facilities, bicycle fatalities have not grown, and injuries have actually declined in total. Collaborative efforts that are capable of integrating the needs of all commuters are essential to developing a safe and accessible transportation system for all users.

Adoption of the SCAG Regional Bikeway Network would increase bicycle facilities by 827.5 miles beyond existing local plans, and may further promote ridership in the SCAG region. In addition, SCAG may partner with local jurisdictions on grant opportunities such as the Caltrans Bicycle Transportation Account (BTA) or Safe Routes to School (SRTS) projects. SCAG may also provide local jurisdictions with assistance in the development of their local active transportation plans and by providing them with Pedestrian Safety Action Plan (PSAP) workshops. The SCAG Compass Blueprint program may further assist local jurisdictions with the development of innovative transportation and land-use planning projects.

Adoption of a Complete Streets Policy that would ensure that all streets are safe, comfortable, and convenient for travel for everyone, regardless of age or ability—motorists, pedestrians, bicyclists, and public transportation riders.

GOAL 3: INCREASE ACTIVE TRANSPORTATION USAGE IN THE SCAG REGION

- **Objective 3.1:** Adoption of a Safe Routes to School Policy
 - Policy 3.1.1: Enable and encourage children, including those with disabilities to walk and bicycle to school
 - Policy 3.1.2: Make bicycling and walking to school a safer and more appealing transportation method, thereby encouraging a healthy and active lifestyle from an early age
 - Policy 3.1.3: Facilitate the planning, development, and implementation of project and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (approximately 2 miles) of primary and middle schools (Grade K-8)
- **Objective 3.2:** Adoption of a Complete Streets Policy
 - Policy 3.2.1: Encourage local jurisdictions to prioritize and implement projects/policies to comply with ADA requirements
 - Policy 3.2.2: Encourage local jurisdictions to develop and implement Complete Streets Policies.

Increasing bicycling and walking requires well maintained bicycle and pedestrian facilities, easy access to transit facilities, and increased safety and security. While pedestrian sidewalks are fairly well established in most areas, it is estimated that there are only 4,315 miles of dedicated bicycle facilities in the region, with an additional 7,154 miles planned.

Reliable data for planning is also needed to increase active transportation and investments. Active transportation data needs include, but are not limited to, comprehensive user statistics, user demographics, bicycle travel patterns/corridors, accident mapping, bikeway system characteristics, and sub-regional improvement projects and funding needs.

GOAL 4: ENCOURAGE THE DEVELOPMENT OF LOCAL ACTIVE TRANSPORTATION PLANS

- **Objective 4.1:** SCAG will assist local jurisdictions with the development and maintenance of their local active transportation plans
 - Policy 4.1.1: SCAG will work with local jurisdictions in the development of bicycle/pedestrian plans for all cities in the region
- **Objective 4.2:** Develop Pedestrian Safety Action Plans
 - Policy 4.2.1: SCAG will work with local jurisdictions in the development of PSAPs by conducting workshops
- **Objective 4.3:** Encourage the use of Intelligent Traffic Strategies
 - Policy 4.3.1: Encourage the use of Intelligent Traffic Signals that are able to detect slower pedestrians in signalized crosswalks and extend the signal time appropriately

SCAG will work with all member counties and cities to develop bicycle and walking plans and policies. Active transportation plans have been created or updated within the previous four years are eligible for BTA funds.

Air Quality Improvements

In addition to increased mobility for all users throughout the SCAG region, implementation of the 2012–2035 RTP/SCS will further improve the environment and congestion of the region through the reduction of vehicle miles traveled (VMT).

Potential VMT Reduction

As described previously, active transportation has grown dramatically in recent years. This trend is expected to continue into the foreseeable future aided by several factors. First, dramatic increase in the bicycle network, as demonstrated earlier, will result in improved access to bicycle network for the Region’s residents by more than 50 percent. Second, more compact mixed use urban forms in the future will be much more conducive to biking and walking. Third, better coordination with other modes, primarily transit, will become an incentive for some to switch to biking or walking. Most importantly, a significant change in the culture that values a healthy lifestyle, bikeability and walkability

will become a greater impetus in promoting active transportation as a viable means of accessing opportunities. Given this context and survey data that supports dramatic increase in bicycling and walking mode shares in recent years, it is reasonable to assume this trend will continue into the future. For example, according to the NHTS data, bicycle mode share increased for all trips from 0.8 percent in 2000 to over 1.7 percent in 2009. This is an increase of almost 9 percent on an annualized basis. The share of walk trips for all trip purposes increased by approximately 6 percent on an annualized basis during the same period.

So, if we assumed annualized increase of 9 percent in mode share of bicycle trips for all trips, the potential bicycle mode share could be as high as 4.4 percent in 2020 and as high as 16 percent in 2035. However, it is somewhat unrealistic to assume that 9 percent growth rate could be sustained over such a long period of time. On the other hand, given the significant investments proposed for active transportation and the current trends, it is reasonable to assume that at least 2/3 of all trips shorter than 3 miles or half of all trips that are 5 miles or less could be converted to active transportation by 2035.

As indicated earlier, based on NHTS-CA Survey for all trips, bicycling and walking mode share for all trips are approximately 1.7 percent and 19.24 percent respectively for 2009. This represents a little over 50 percent of all trips less than 3 miles. Assuming 2/3 of all trips under 3 miles or half of all trips under 5 miles as the upper limit of Active Transportation mode share in 2035, relative increase (from the base year of 2008) in bicycling and walking mode shares can be estimated as 1.7 percent and 3.1 percent in 2020, and 3.9 percent and 6.3 percent in 2035. Relative reduction in VMT resulting from these mode shifts are estimated at approximately 7.8 million miles and 20.4 million miles for 2020 and 2035 respectively.

This 2009 Long Range Plan promotes the development of bicycle facilities and pedestrian improvements throughout Los Angeles County.

Bicycle and pedestrian programs are critical components of a successful transit system, as transit riders should be able to access buses and trains without having to drive a vehicle to and from transit stations. The sustainability of our transportation system depends upon the interface between modes.

According to SCAG's Year 2000 Post-Census Travel Survey, nearly 12 percent of all trips in the SCAG region are bicycling and walking trips. According to the 2001 National Household Travel Survey, many trips in metropolitan areas are three miles or shorter. These trips are targets for bicycling and walking, if facilities are available and safe.

Bicycling and walking produce zero emissions as no fossil fuels are used. These trips can eliminate the "cold start" of a vehicle engine and reduce GHGe, VMT, and energy consumption.

Bicycle Programs

This 2009 Plan will help implement the 2006 Metro Board-adopted Bicycle Transportation Strategic Plan (BTSP). It describes a vision for Los Angeles County to improve bicycling as a viable transportation mode. The BTSP outlines a bicycle infrastructure that improves overall mobility, air quality and access to opportunities. It also shifts the focus in countywide bicycle planning from long arterial bikeways to improvements for bicycle access to 167 bike-transit hubs throughout the County. Focusing improvements at bike-transit hubs is a relatively simple way to link bikes with transit and extend the reach of transit without the use of a car. It increases the viability of public transportation and facilitates ridership without a huge investment in infrastructure and right-of-way.

In 2006, the inventory of existing bicycle facilities in the County totaled 1,252 miles, including facilities such as the Metro Orange Line Bike Path, San Gabriel and Los Angeles River Bike Paths, Whittier Greenway Bike Path, Ballona Creek Bike Path, Santa Monica and Venice Boulevard bicycle lanes and hundreds more miles of bicycle lanes and routes. Another 1,145 miles of bikeway projects have been proposed in local agency bicycle plans that would nearly double the current bikeway system. Further, Metro identified 53 gaps in the inter-jurisdictional bikeway system that can be filled by on-street or off-street bicycle facilities.

Bicycle parking at transit stations is essential to encourage the use of bicycles with transit. Bicycle parking at employment centers and local destinations also help reduce the expanding need for costly automobile parking,



Bicycles and Pedestrians



- > There are more than 1,250 miles of bikeways in Los Angeles County.
- > The Metro Call for Projects will fund an expansion of the bicycle network.
- > Metro will focus on improving bicycle safety and bicycle access on buses and trains, and at transit hubs.
- > Coordinating pedestrian links between transit and the user's final destination is critical to an effective transportation system.
- > Metro will improve pedestrian linkages to bus centers and rail stations.

Attachment I- Screening Criteria 2

particularly in dense urban areas where space is limited. As many as 36 bicycles can be parked in the space of one automobile.

Local governments will continue to build bicycle facilities using their Transportation Development Act (TDA) Article 3 and Proposition C local return funding, while Metro will provide regional funds through the Call for Projects. Eligible projects include on- and off-street bicycle improvements, bicycle parking, safety education, bicycle racks on buses, bicycle stations and other bicycle access improvements. Other sources of funds are Safe Routes to School and State BTA (Bicycle Transportation Account) Grant funds. While acknowledging its role in coordinating bicycle facility planning in the region, Metro recognizes the importance of local bicycle planning and strongly encourages cities to develop their own plans. Metro provides technical assistance to develop those plans and qualify them for BTA funding.

Pedestrian Priority Improvement Program

Nearly all trips within Los Angeles County, regardless of purpose, include a non-motorized component. Although almost nine percent of all the trips within Los Angeles County are exclusively pedestrian trips and about half of these are walking trips to and from home to work, the pedestrian system can be improved further. All non-motorized transport modes should connect to an efficient, aesthetically pleasing and safe pedestrian system that enables a person to successfully complete a trip. Motorized transport modes should seamlessly link to the pedestrian system in a way that efficiently allows people to access primary and secondary destinations as well as to make connections to the public transit system.

Several factors combine to create a pedestrian-friendly environment. Examples include: a wayfinding signage system, ease of access to destinations from the sidewalk network, appropriate street-crossing safety features, and easy connection to public transport modes. Physically attractive features and amenities facilitate the flow of pedestrian movement and encourage people to walk.

The primary challenge to improving the quality of the pedestrian environment is retrofitting the existing built form to make walking a more viable option for more people, more often. Since much of the built form is orientated to access by automobiles and the set of development standards and regulations governing land development are primarily focused on maintaining auto accessibility, significantly increasing the share of non-motorized trips will require time, coordinated policy and program development, and a sustained funding approach. Many cities in Los Angeles County have begun to initiate activities to improve the livability of their neighborhoods, including reducing traffic congestion and improving

Call for Projects

FIGURE BB

Bicycle Program

\$ IN MILLIONS
ESCALATED TO YEAR OF EXPENDITURE

Constrained Plan	\$11.7 m/yr in 2009 dollars	\$ 287
Strategic Plan	\$12.5 m/yr in 2009 dollars	\$ 302

FIGURE CC

Pedestrian Program

\$ IN MILLIONS
ESCALATED TO YEAR OF EXPENDITURE

Constrained Plan	\$11.7 m/yr in 2009 dollars	\$ 287
Strategic Plan	\$10.0 m/yr in 2009 dollars	\$ 242

FIGURE DD

Transportation Enhancements Program

\$ IN MILLIONS
ESCALATED TO YEAR OF EXPENDITURE

Constrained Plan	\$2.3 m/yr in 2009 dollars	\$ 72
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THE SUSTAINABILITY OF OUR TRANSPORTATION SYSTEM DEPENDS UPON THE INTERFACE BETWEEN MODES.

overall mobility. The linkages between development and transportation modes are a critical factor in improving overall mobility while maintaining the economic and social viability and attractiveness of these communities.

Metro's Pedestrian Priority Improvement Program is designed to achieve a qualitative improvement in the pedestrian environment in Los Angeles County. The approach focuses on the development of public policy and adoption of appropriate regulatory standards and targeted funding to develop more safe, connected and walkable pedestrian environments that promote non-motorized transport as a viable alternative for an increasing share of trips made by residents and visitors of Los Angeles County.

Metro Countywide Sustainability Planning Policy & Implementation Plan

Adopted December, 2012



Metro

This policy was developed by the Countywide Sustainability Planning Program as part of a contract with ARUP, the Center for Neighborhood Technology, Fehr and Peers, and Barrio Planners.

Section 1: Overview, Purpose and Background

1.1 Overview

The Los Angeles County Metropolitan Transportation Authority (Metro) is dedicated to the sustainability of Los Angeles County's people, environment, and economy. Many people and organizations share these goals and are pursuing visions of sustainability in their own households, neighborhoods, businesses, cities, and region-wide. Metro's unique role in achieving a sustainable future is to plan, fund, construct, and operate a transportation system that improves residents' health and well-being, strengthens the economy, and enhances the natural environment.

The Metro Countywide Sustainability Planning Policy is a complement to Metro's efforts to improve air quality and increase transportation choices that have been underway for more than two decades. It is a tool for better defining the agency's long-term, desired sustainability outcomes in order to facilitate greater coordination and collaboration across transportation modes, planning disciplines (land-use, housing, environment, economic development, health, utilities), and government agencies.

The Policy's focus on coordination and collaboration with respect to sustainability comes at a time of great opportunity as Metro is significantly expanding its transit system, implementing highway improvements, and supporting the development of active transportation networks. To successfully implement these projects and gain support for future projects, Metro will be increasingly called upon to quantify its contributions to society, not just in terms of mobility, but with respect to a broad range of social, economic, and environmental indicators. This is evident from the Livability Principles that influence funding decisions made by federal agencies, the addition of climate change metrics in Regional Transportation Plans (per California Senate Bill 375), and the increased interest from local stakeholders in assessing the health impacts of transportation projects. The Policy was developed in consideration of these factors to establish a planning framework for advancing the mission and goals of the agency, in concert with a broader set of sustainability priorities.

1.2 Purpose

The Countywide Sustainability Planning Policy is a guide to:

- > More fully integrate sustainability into the agency's planning functions,
- > Complement and provide a framework for building upon federal, state, regional and local sustainability policies and plans, and
- > Foster collaboration and inspire partnerships that will lead to more sustainable communities.

The policy demonstrates the agency's continued commitment to sustainability as a core business value and as a strategy for enhancing the quality, efficiency, and value of the transportation system for constituents.

The policy is organized into five sections:

1. Overview, Purpose & Background
2. Planning a Sustainable Transportation System
3. Planning Guidance
4. Policy Implementation & Impact
5. Conclusion

1.3 Background

Metro is responsible for the continuous improvement of an efficient and effective transportation system for Los Angeles County. To advance this mission, Metro has adopted a set of values to guide agency actions. These values include a commitment to sustainability. The agency's business goals reiterate the importance of promoting sustainability by reducing greenhouse gas emissions and increasing energy efficiency. "Sustainability" became an official part of the agency's work program in 2007 when the Board of Directors, with guidance from the Ad Hoc Sustainability Committee, adopted the Sustainability Implementation Plan. The Plan included the following Sustainability Mission and Vision, accompanied by a list of short-term and long-term projects through Fiscal Year 2012.

Mission:

We will provide leadership in sustainability within the Los Angeles region without compromising our core mission of moving people efficiently and effectively.

Vision:

We will be the leader in maximizing the sustainability efforts and its benefits to Los Angeles County's people, finances, and environment.

Building on the overarching guidance of the Sustainability Implementation Plan, the Ad Hoc Sustainability Committee and supporting staff have generally focused on advancing strategies in three primary areas:

1. Leadership, Coordination, and Outreach: Lead the region's sustainability efforts by supporting internal coordination and by collaborating with regional stakeholders.
2. Sustainable Agency and Practices: Minimize environmental impacts from the design, construction, operation, and maintenance of Metro's facilities and operations.
3. Sustainable Regional Transportation System: Plan and implement a regional transportation system that increases mobility, fosters walkable and livable communities, and minimizes GHG emissions and environmental impacts.

The Countywide Sustainability Planning Policy is intended to define outcomes and establish measurements related to the third focus area: developing a Sustainable Regional Transportation System and as a result will further the first focus area related to Leadership, Coordination and Outreach. The Policy broadens Metro's approach to sustainability from focusing on a particular project or transportation mode to developing a more holistic and system-based framework for sustainability analysis and planning. In addition to supporting the environmental aspects of sustainability, the framework also more fully embraces the social and economic dimensions of sustainability.

Understanding a place's "accessibility" –residential density and job centrality—can help define appropriate sustainability strategies. For example, while walking to work may be a great option for more sustainable living in a location where many residents and jobs are close together (Clusters C and D); this option will likely not be widely available in locations where residents and jobs are far apart (Clusters A and B).

Applying the Framework to Real Places

The Accessibility Clusters are general. The policies presented in relation to each cluster will be relevant in many cases, but variation to a policy and a greater level of differentiation may be justified in particular circumstances. Any given corridor may traverse multiple Accessibility Clusters and therefore judgment, data, and creativity will be needed to craft solutions and to customize strategies appropriate to the local community. Empirical data at a finer geographic scale (i.e. census block group, census block) should be used to confirm the relevance of the Accessibility Clusters and strategies.

Section 3: Planning Guidance

3.1 Introduction

This section presents guidance to support Metro in implementing the principles and achieving the priorities established by the policy. The guidance recognizes that many of the priorities can be achieved simply by providing the opportunity for more people to drive less, and in more efficient vehicles. A reduction in per capita vehicle miles traveled (VMT), which can be achieved through mode shift, is associated with the following benefits:

1. Reduced vehicular, bicycle, and pedestrian collisions
2. Reduced fuel use
3. Reduced traffic congestion, particularly during rush hour
4. Reduced emissions of criteria pollutants, resulting in reduced respiratory ailments especially for young children and older adults
5. Reduced greenhouse gas emissions (GHGs)
6. Increased use of active transportation and transit
7. Increased physical activity contributing to a reduction in diseases related to a sedentary lifestyle, such as obesity
8. Economic benefits through the reduction of household transportation costs
9. Reduced infrastructure costs and associated environmental benefits accrued from energy, waste, water reduction and land preservation

When measures to reduce VMT are complemented by actions to increase the efficiency of vehicles through enhancements in technology and congestion reduction, the full range of sustainability priorities presented in the policy can be achieved. Advancements in vehicle technology are particularly important for increasing the efficiency and reducing the impacts of trips that are critical to the health of our economy. In goods movement, for example, an increase in vehicle miles travelled is a sign of strong economic growth. To support this growth, while achieving a broader range of sustainability

Attachment I-1

1. City of Lancaster General Plan (Excerpt)
2. City of Lancaster Master Plan of Trails and Bikeways
(Excerpt)

Lancaster provides a bigger mall and

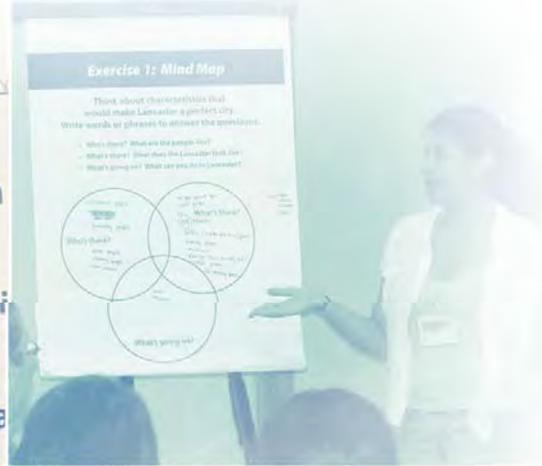
Lancaster is a place where youth

Lancaster is a place where families

Lancaster is a place where we can

Lancaster is a place where we

Lancaster is a place where people



Lancaster General Plan 2030

Soaring Into the Future

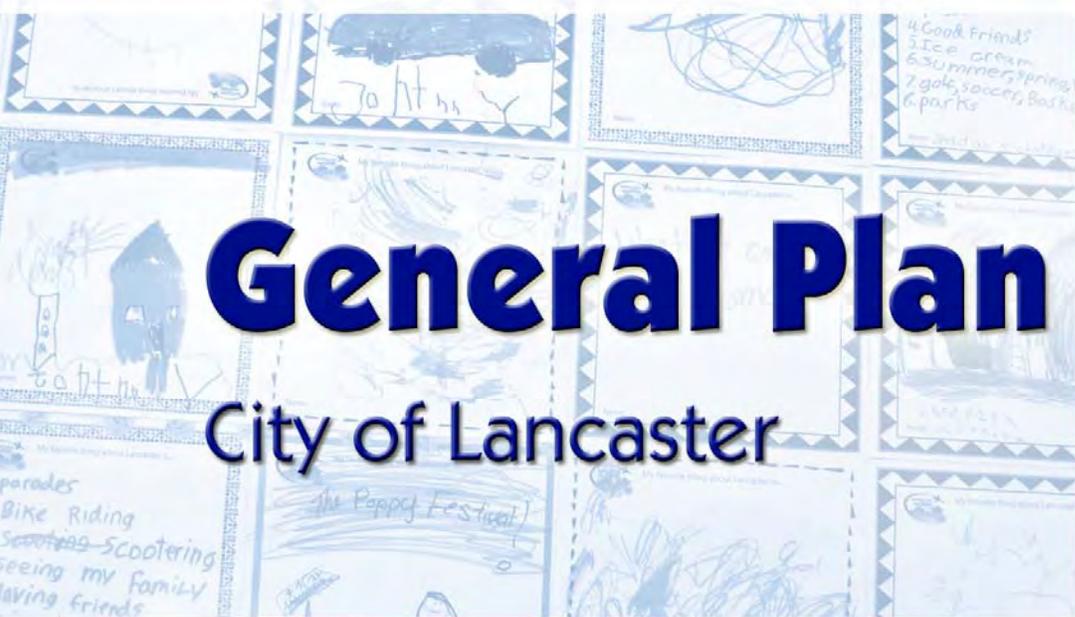


July 14, 2009

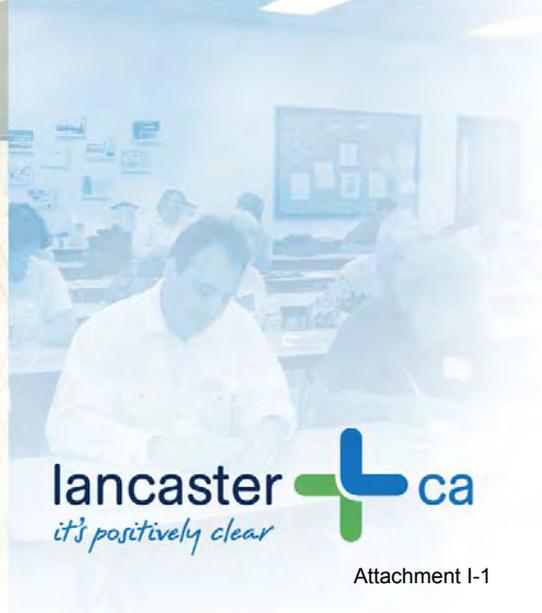
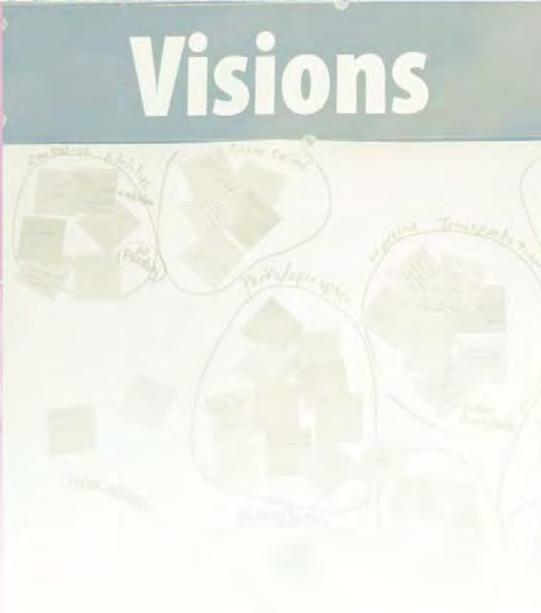
Challenge

General Plan 2030

City of Lancaster



Visions



PLAN FOR PHYSICAL MOBILITY

14.4.1(b)

Work with the California High-Speed Rail Authority and other agencies to support the development of a high speed rail system through the Antelope Valley.

Status: Existing program
Responsibility: Administration, Planning and Public Works
Departments
Time Frame: Ongoing
Funding Source: State and private resources

14.4.1(c)

Support and encourage the development of an efficient transportation system for the entire community, emphasizing the particular needs of the transit dependent individuals in the City, such as senior citizens, the handicapped, and students through such actions as:

- Assisting the local transit providers in the coordination, location and scheduling of public transit services and facilities.
- Working with Palmdale, Los Angeles County, and other agencies to maintain and enhance local transit service routes and schedules into a linked, valley-wide system.
- Urging the timely extension of public transit between urban residential areas and industrial employment centers.
- Examining alternatives to fixed route transit services within rural areas, such as demand response services, volunteer driver programs and taxi voucher programs.

Status: Existing program
Responsibility: Lancaster Public Works Department, Los Angeles Metro City of Palmdale, AVTA and other agencies
Time Frame: Ongoing
Funding Source: Department budgets



Alternative Transportation Modes

Despite the funds committed to roadway and highway construction, Southern California still suffers from significant traffic congestion. Although the City of Lancaster does not experience the degree of traffic congestion of other communities, it is not immune from these problems. If Lancaster continues to rely primarily on the private automobile, congestion problems will mount, and desired levels of service may not be maintained. After conducting significant research on roadway needs, the Southern California Association of Governments (SCAG) and Caltrans have concluded that Southern California cannot build its way out of severe traffic congestion. While the construction of new roadways is critical, roadway construction must be balanced with the expansion of alternatives to the use of the private automobile, including carpooling, public transit, bicycles, and walking. The following presents Lancaster's program to facilitate such alternatives.

“Community members expressed the need to provide for a city-wide interconnecting system of paths and trails that will allow residents to commute by walking or bicycling to residential, commercial, employment and open space areas.”
 – Community Vision Report

OBJECTIVE 14.4

Reduce reliance of the use of automobiles and increase the average vehicle occupancy by promoting alternatives to single-occupancy auto use, including ridesharing, non-motorized transportation (bicycle, pedestrian), and the use of public transit.

Policy 14.4.1:

Under the guidance of the Transportation Master Plan, support and encourage the various public transit companies, ridesharing programs and other incentive programs, that allow residents to utilize modes of transportation other than the private automobile, and accommodate those households within the Urbanizing Area of the City that rely on public transit.

Specific Actions:

14.4.1(a)

Promote programs to increase Metrolink ridership, to lessen traffic congestion on SR14 and to improve local air quality.

Status:	Existing program
Responsibility:	Public Works Department
Time Frame:	Ongoing
Funding Source:	Department budget



14.4.1(d)

Utilize various media resources as addressed in the City's Communications Master Plan to highlight transportation alternatives.

Status: Existing program
Responsibility: Administration (Communications Manager),
Public Works Department
Time Frame: Ongoing
Funding Source: General fund

14.4.1(e)

Implement the recommendations of the Transportation Master Plan to the Transit System.

Status: New program
Responsibility: Public Works
Time Frame: Priority 3
Funding Source: Department budget

Policy 14.4.2:

Promote the use of alternative modes of transportation through the development of convenient and attractive facilities that support and accommodate the services.

Specific Actions:

14.4.2(a)

Through the development review process, ensure that new developments make adequate provision for bus stop and turnout areas as necessary for both public transit and school bus service, as well as park-and-ride facilities identified as necessary.

Status: Existing program
Responsibility: Planning and Public Works Departments
Time Frame: Ongoing
Funding Source: Development review fees

PLAN FOR PHYSICAL MOBILITY

14.4.2(b)

Investigate the potential for development of a transportation hub within the City, providing for connectivity between local and regional transportation services and destinations.

Status: New Program
Responsibility: Public Works and other agencies
Time Frame: Ongoing
Funding Source: Department budgets

14.4.2(c)

Through the Capital Improvement program, implement maintenance and improvement programs to improve bus stop facilities.

Status: New Program
Responsibility: Public Works Department and AVTA
Time Frame: Priority 3
Funding Source: Department budget and Capital Improvement Fund

Policy 14.4.3:

Encourage bicycling as an alternative to automobile travel for the purpose of reducing vehicle miles traveled (VMT), fuel consumption, traffic congestion, and air pollution by providing appropriate facilities for the bicycle riders (see also Policy 10.2.4 and subordinate specific actions of the Plan for Active Living).

Specific Actions:

14.4.3(a)

Revise the zoning ordinance to require commercial and industrial developments to provide reasonable and secure bicycle storage space for both patrons and employees.

Status: New program
Responsibility: Planning Department
Time Frame: Priority 2
Funding Source: Department budget



14.4.3(b)

Provide bicycle racks at public facilities and at convenient locations along major public streets as resources allow.

Status:	Existing program
Responsibility:	Public Works and Parks, Recreation and Arts Departments
Time Frame:	Ongoing
Funding Source:	Department budgets

14.4.3(c)

Through the adoption and implementation of a Master Plan for Trails, require bikeways to link residential neighborhood areas with parks, scenic areas, and other points of interest. These bikeways also should be designed to encourage intra-city travel to employment areas, civic and commercial areas, and schools.

Status:	New program
Responsibility:	Planning and Public Works Departments
Time Frame:	Priority 2
Funding Source:	Development review fees

Policy 14.4.4:

Encourage commuters and employers to reduce vehicular trips by implementing Transportation Demand Management strategies.

Specific Actions:

14.4.4(a)

As part of the development and environmental review process, require implementation of transportation demand management programs for new commercial and industrial development based on local government responsibilities in the Los Angeles County Congestion Management Plan as applicable.

Status:	Existing program
Responsibility:	Public Works Department
Time Frame:	Ongoing
Funding Source:	Department budget, development review fees

PLAN FOR PHYSICAL MOBILITY

14.4.4(b)

Work with local and regional transportation agencies to identify and promote a variety of trip reduction programs.

Status:	Existing program
Responsibility:	Public Works Department
Time Frame:	Ongoing
Funding Source:	Department budget, Capital Improvements Fund

Policy 14.4.5:

Design transportation facilities to encourage walking, provide connectivity, ADA accessibility, and safety by reducing potential auto/pedestrian conflicts.

Specific Actions:

14.4.5(a)

Require ramps and other design features which comply with Federal and State regulations regarding transportation accessibility for the disabled in new developments, and, where practical, construct these facilities in existing urban areas.

Status:	Existing program
Responsibility:	Public Works Department
Time Frame:	Ongoing
Funding Source:	Development review fees

14.4.5(b)

Through the development review process, require developers to include pedestrian access ways to buildings to encourage pedestrian activity.

Status:	Existing
Responsibility:	Planning Department
Time Frame:	Ongoing
Funding Source:	Department budget, development review fees



14.4.5(c)

Encourage transit supportive uses in close proximity to the Metrolink station (see also related policies and Specific Actions under Objective 16.4).

Status:	New program
Responsibility:	Redevelopment Agency and Planning Department
Time Frame:	Priority 2
Funding Source:	General Fund, Planning and Redevelopment Agency budgets

Commodity Movement

In addition to the movement of people within a community, a major function of a city's transportation system is to facilitate the movement of commodities. If the City of Lancaster is to successfully expand its industrial base, the establishment and maintenance of truck routes and rail access to industrial areas will be critical. In addition, it is essential that utility companies have the necessary infrastructure and capacity to transport sufficient energy to serve the needs of the community. It is also important for Lancaster to promote the construction of new alternative energy systems and infrastructure that can produce energy for local demand as well as transport energy for regional use. The following outlines the General Plan's program to facilitate the movement of commodities within the City.

OBJECTIVE 14.5

Ensure the ability to safely move commodities within and through the City of Lancaster, including availability of truck routes, pipelines, and other utility corridors, in such a manner as to minimize impacts on adjacent land uses and enhance Lancaster residents' quality of life.

Policy 14.5.1:

Provide adequate roadways and a support system to accommodate both automobile and truck traffic.



CITY OF LANCASTER MASTER PLAN OF TRAILS AND BIKEWAYS



Attachment I-1



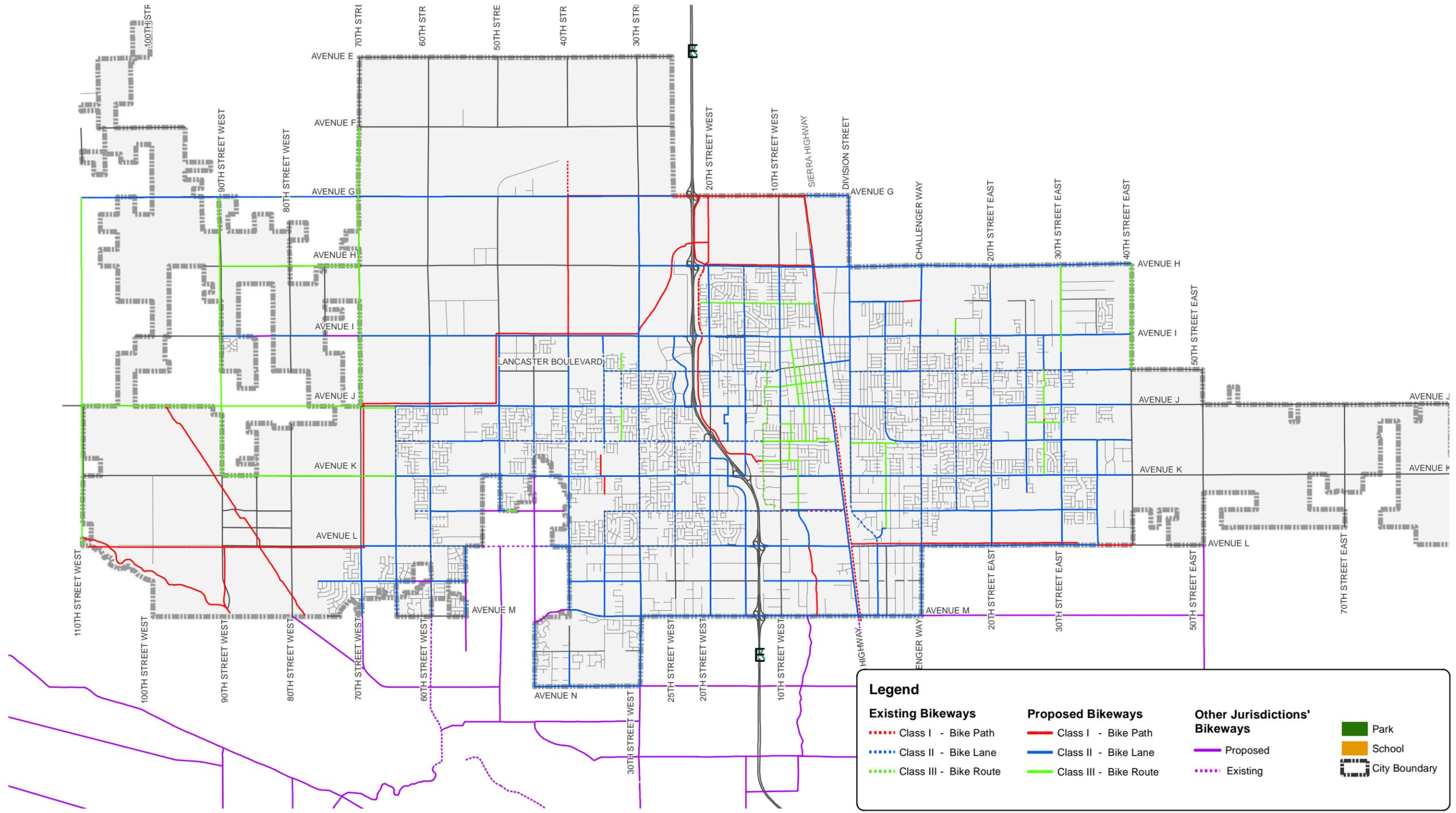
The City will use this Master Plan to create complete streets to provide safer travel for all users. The City also aims to develop a network of trails that serve a variety of recreational needs. The following goals provide broad statements describing a desired vision; the policies and actions provide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

Attachment I-1

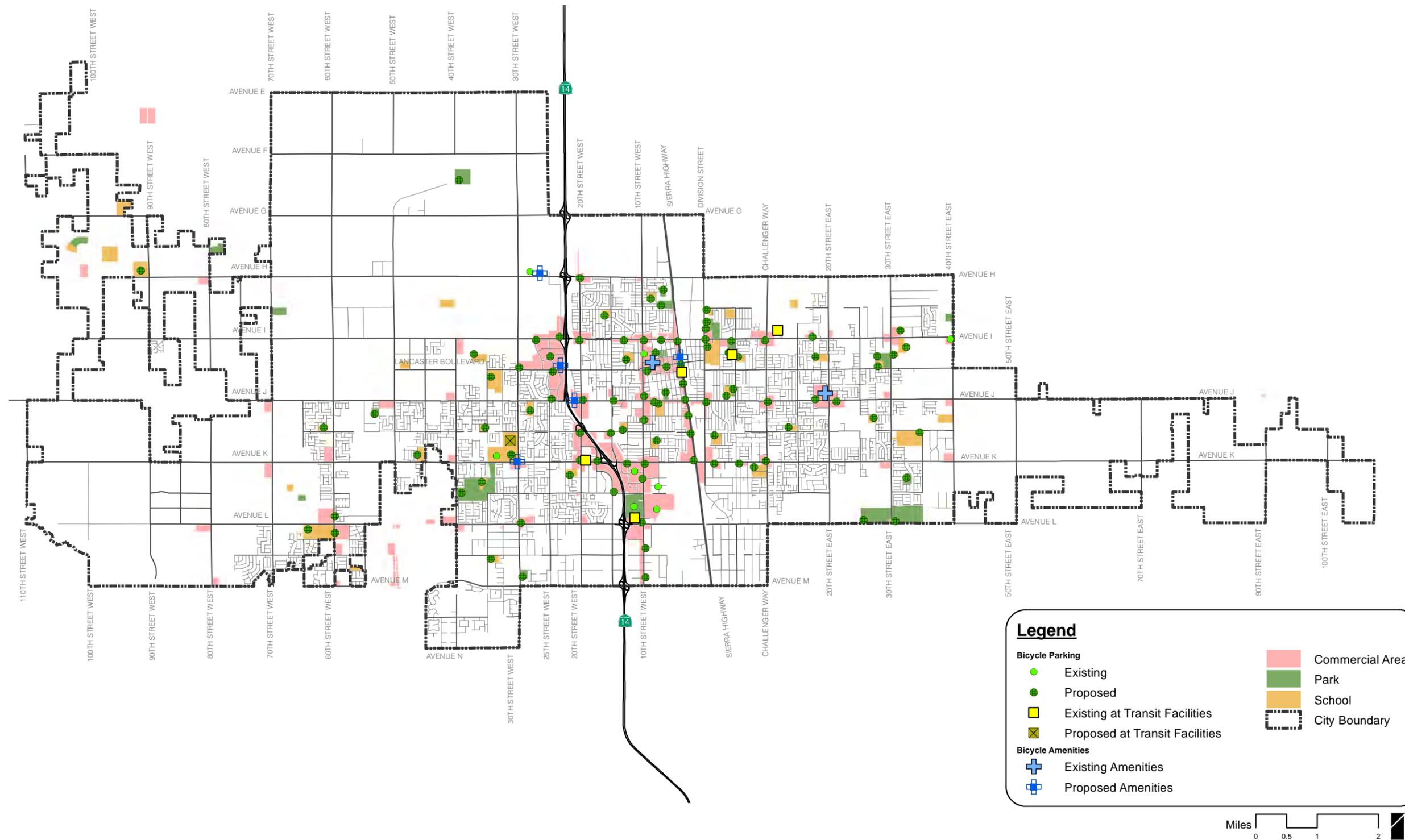
MAP 6-1: EXISTING AND PROPOSED BIKEWAYS



Lancaster Proposed Bikeway Network

Attachment I-1

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



Legend

● Existing	 Commercial Area
● Proposed	 Park
 Existing at Transit Facilities	 School
X Proposed at Transit Facilities	 City Boundary
Bicycle Amenities	
+ Existing Amenities	
+ Proposed Amenities	

Attachment I-2

1. Transportation Injury Mapping System (TIMS)
Collision from 1/1 2009 to 12/21/2012 for the
Project Location and Influence Area
2. TIMS Map of Collisions/Incidents in Project Location
and Influence Area
3. U.S. Department of Transportation Federal Highway
Administration Factsheets on Safety
Countermeasures
4. FHWA's Pedestrian PEDSAFE Safety Guide and
Countermeasure Selection System (Excerpt)
5. FHWA's Medians and Pedestrian Crossing Islands
Factsheets
6. FHWA's Pedestrian BIKESAFE Safety Guide and
Countermeasure Selection System (Excerpt)

Attachment I-2

Source: TIMS, SWITRS GIS MAP

#	Date of Collision	Collision/Incident Description	Severity of injuries	Victim type	Location	
1	1/24/09	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE I	13TH ST WEST
2	1/2/09	Traffic Signals and Signs	Injury (Complaint of Pain)	Bicycle	AVENUE I	10TH ST WEST
3	1/5/09	Pedestrian Violation	Injury (Other Visible)	Pedestrian	AVENUE I	16TH ST
4	1/8/09	Automobile Right of Way	Injury (Complaint of Pain)	Bicycle	DATE AV	AVENUE J-6
5	1/2/09	Pedestrian Violation	Injury (Severe)	Pedestrian	AVENUE J 8	15TH ST WEST
6	2/13/09	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	ELM AV	LANCASTER BL
7	2/18/09	Unknown	Injury (Complaint of Pain)	Pedestrian	10TH ST WEST	AVENUE J
8	2/22/09	Unsafe Starting or Backing	Injury (Complaint of Pain)	Pedestrian	17TH ST WEST	LAKE WY
9	3/5/09	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	TREVOR AV	AVENUE J
10	2/27/09	Improper Turning	Injury (Other Visible)	Bicycle	RT 14	AVENUE K
11	3/18/09	Automobile Right of Way	Injury (Complaint of Pain)	Pedestrian	LANCASTER BL	10TH ST WEST
12	4/24/09	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE K	RT 14
13	4/22/09	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	VALLEY CENTRAL WY	CENTRAL CT
14	4/30/09	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	LANCASTER BL	STANRIDGE AV
15	4/22/09	Not Stated	Injury (Complaint of Pain)	Pedestrian	DIVISION ST	AVENUE I
16	5/5/09	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE K	RT 14
17	5/5/09	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	10TH ST WEST	JACKMAN ST
18	6/12/09	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE I	SIERRA HWY
19	7/12/09	Pedestrian Violation	Fatal	Pedestrian	15TH ST WEST	NORBERRY ST
20	7/10/09	Pedestrian Violation	Injury (Severe)	Pedestrian	10TH ST WEST	NEWGROVE AV
21	8/7/09	Improper Turning	Injury (Complaint of Pain)	Bicycle	DIVISION ST	AVENUE J
22	8/20/09	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	AVENUE I	FERN AV
23	8/24/09	Automobile Right of Way	Injury (Severe)	Bicycle	WEST LANCASTER BL	20TH ST WEST
24	9/9/09	Wrong Side of Road	Injury (Other Visible)	Bicycle	LANCASTER BL	20TH ST WEST
25	9/17/09	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	AVENUE J	SIERRA HWY
26	9/25/09	Automobile Right of Way	Injury (Other Visible)	Bicycle	AVENUE H-8	CEDAR AV
27	9/16/09	Unknown	Injury (Complaint of Pain)	Pedestrian	15TH ST WEST	NEWGROVE ST
28	10/13/09	Traffic Signals and Signs	Injury (Complaint of Pain)	Pedestrian	AVENUE I	13TH ST WEST
29	10/27/09	Improper Turning	Injury (Other Visible)	Bicycle	FIG AV	AVENUE J
30	10/26/09	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE J	20TH ST WEST
31	10/22/09	Pedestrian Violation	Injury (Severe)	Pedestrian	AVENUE I	20TH ST WEST
32	11/16/09	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE J	15TH ST WEST
33	11/5/09	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	NEWGROVE AV	DATE AV
34	11/9/09	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE J	BEECH AV
35	12/2/09	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	10TH ST WEST	JACKMAN ST
36	12/2/09	Automobile Right of Way	Injury (Other Visible)	Pedestrian	15TH ST WEST	YOUNGBLOOD PL
37	12/18/09	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	DIVISION ST	AVENUE J 2
38	1/4/10	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	LANCASTER BL	SIERRA HWY
39	1/13/10	Pedestrian Violation	Fatal	Pedestrian	10TH ST WEST	JACKMAN ST
40	2/2/10	Pedestrian Violation	Injury (Severe)	Pedestrian	SIERRA HWY	JACKMAN AV
41	1/16/10	Unknown	Injury (Complaint of Pain)	Pedestrian	MILLING ST	SIERRA HWY
42	2/1/10	Pedestrian Violation	Injury (Severe)	Pedestrian	LANCASTER BL	DIVISION ST
43	2/15/10	Pedestrian Violation	Injury (Severe)	Pedestrian	10TH ST WEST	AVENUE H-14
44	3/3/10	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE J-2	KINGTREE AV
45	3/3/10	Pedestrian Violation	Injury (Severe)	Pedestrian	DIVISION ST	AVENUE J
46	3/12/10	Pedestrian Violation	Injury (Severe)	Pedestrian	LANCASTER BL	5TH ST EAST
47	3/13/10	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	20TH ST WEST	AVENUE J
48	4/8/10	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	VALLEY CENTRAL WY	CENTRAL CT
49	4/13/10	Unsafe Speed	Injury (Other Visible)	Pedestrian	LANCASTER BL	YUCCA AV
50	4/23/10	Unsafe Starting or Backing	Injury (Other Visible)	Bicycle	RT 14	AVENUE J
51	5/11/10	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE I	FERN AV
52	5/27/10	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	DIVISION ST	AVENUE J
53	6/12/10	Pedestrian Violation	Injury (Other Visible)	Pedestrian	AVENUE I	13TH ST WEST
54	6/10/10	Unsafe Starting or Backing	Injury (Complaint of Pain)	Pedestrian	AVENUE J-12	FIG AV

Attachment I-2

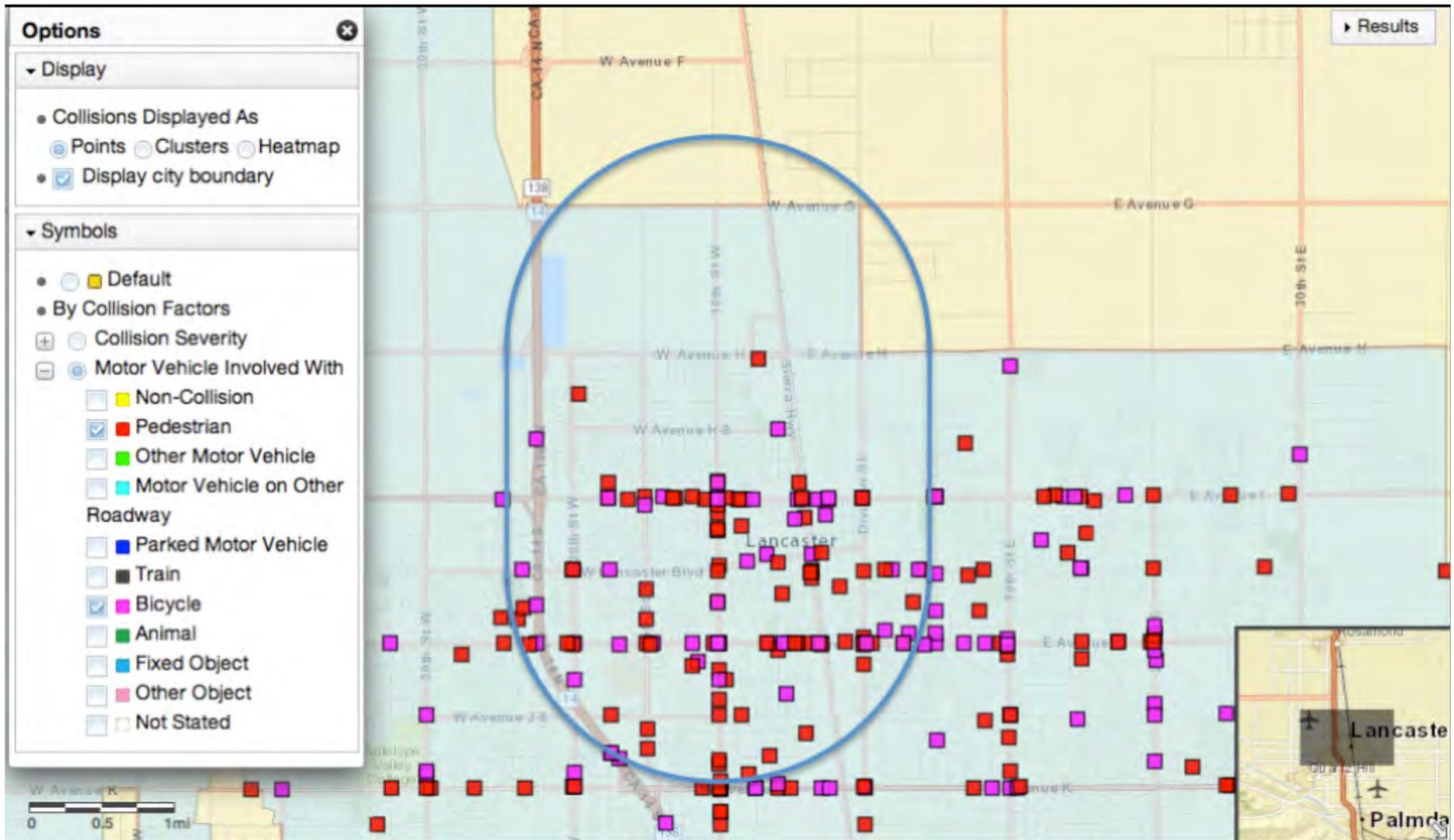
55	8/4/10	Traffic Signals and Signs	Injury (Complaint of Pain)	Pedestrian	SIERRA HWY	AVENUE J
56	8/5/10	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	STRATFORD ST	BERKSHIRE AV
57	8/6/10	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	AVENUE J	15TH ST WEST
58	9/9/10	Unsafe Speed	Injury (Complaint of Pain)	Pedestrian	AVENUE J 8	HEATON AV
59	9/4/10	Pedestrian Violation	Injury (Severe)	Pedestrian	AVENUE J	CEDAR AV
60	9/13/10	Pedestrian Violation	Injury (Other Visible)	Pedestrian	10TH ST WEST	AVENUE I
61	9/22/10	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE I	10TH ST WEST
62	10/8/10	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	10TH ST WEST	LANCASTER WY
63	10/5/10	Not Stated	Injury (Complaint of Pain)	Pedestrian	ELM AV	AVENUE J
64	10/2/10	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE J	RT 14
65	10/13/10	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE I	FERN AV
66	11/4/10	Pedestrian Violation	Injury (Other Visible)	Pedestrian	10TH ST WEST	AVENUE J-4
67	11/16/10	Wrong Side of Road	Injury (Other Visible)	Bicycle	DIVISION ST	AVENUE J
68	11/12/10	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	20TH ST WEST	LANCASTER BL
69	11/9/10	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	AVENUE I	17TH ST WEST
70	11/8/10	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	YUCCA AV	AVENUE I
71	11/14/10	Pedestrian Violation	Injury (Other Visible)	Pedestrian	NUGENT ST	4TH ST EAST
72	4/29/11	Pedestrian Violation	Fatal	Pedestrian	10TH ST WEST	AVENUE J 8
73	12/15/10	Improper Passing	Injury (Complaint of Pain)	Bicycle	TREVOR AV	AVENUE I
74	12/2/10	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE J	10TH ST WEST
75	1/10/11	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	AVENUE I	FERN AV
76	9/24/10	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE J	22ND ST EAST
77	1/24/11	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE I	SIERRA HWY
78	1/16/11	Unsafe Starting or Backing	Injury (Complaint of Pain)	Pedestrian	AVENUE I	15TH ST WEST
79	1/26/11	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	JACKMAN ST	FERN AV
80	2/18/11	Pedestrian Violation	Injury (Severe)	Pedestrian	DIVISION ST	AVENUE J
81	3/6/11	Unsafe Starting or Backing	Injury (Complaint of Pain)	Pedestrian	KINGTREE AV	AVENUE I
82	3/2/11	Improper Turning	Injury (Other Visible)	Bicycle	2ND ST	AVENUE J
83	4/1/11	Traffic Signals and Signs	Injury (Other Visible)	Bicycle	10TH ST WEST	NEWGROVE ST
84	4/18/11	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	HARDWOOD AV	POSTON ST
85	4/15/11	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	MILLING ST	SIERRA HWY
86	5/6/11	Improper Passing	Injury (Complaint of Pain)	Bicycle	PONDERA ST	FOXTON AV
87	5/27/11	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE J	10TH ST WEST
88	7/1/11	Following Too Closely	Injury (Complaint of Pain)	Bicycle	10TH ST WEST	AVENUE H-14
89	6/23/11	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	15TH ST WEST	AVENUE J8
90	6/9/11	Pedestrian Violation	Injury (Other Visible)	Pedestrian	10TH ST WEST	AVENUE J-6
91	6/14/11	Pedestrian Violation	Injury (Severe)	Pedestrian	AVENUE J	DIVISION ST
		Driving or Bicycling Under the Influence of Alcohol or				
92	6/16/11	Drug	Injury (Other Visible)	Pedestrian	10TH ST WEST	AVENUE K
93	7/22/11	Traffic Signals and Signs	Injury (Severe)	Bicycle	AVENUE I	25TH ST WEST
94	7/5/11	Wrong Side of Road	Injury (Other Visible)	Bicycle	DIVISION ST	AVENUE I
95	7/20/11	Pedestrian Violation	Injury (Other Visible)	Pedestrian	AVENUE 1	10TH ST WEST
96	8/12/11	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	LANCASTER BL	2ND ST
97	8/5/11	Pedestrian Violation	Injury (Other Visible)	Pedestrian	TRIXIS AV	PRIMROSE DR
98	8/6/11	Traffic Signals and Signs	Injury (Other Visible)	Bicycle	AV J	10TH ST WEST
99	8/9/11	Traffic Signals and Signs	Injury (Other Visible)	Bicycle	17TH ST WEST	AV I
100	9/16/11	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE J	DIVISION ST
101	8/17/11	Pedestrian Violation	Injury (Other Visible)	Pedestrian	SIERRA HWY	MILLING ST
102	8/22/11	Automobile Right of Way	Injury (Other Visible)	Bicycle	LANCASTER BL	5TH ST EAST
103	9/27/11	Pedestrian Violation	Injury (Other Visible)	Pedestrian	KINGTREE AV	AVENUE J-2
104	9/22/11	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	DATE AV	LANCASTER BL
105	10/20/11	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE J-10	BEECH AV
106	11/5/11	Unsafe Speed	Injury (Complaint of Pain)	Pedestrian	AVENUE J-4	10TH ST WEST
107	11/5/11	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	10TH ST WEST	JACKMAN ST
108	11/10/11	Traffic Signals and Signs	Injury (Other Visible)	Bicycle	AVENUE J	KINGTREE AV
109	6/20/11	Pedestrian Violation	Fatal	Pedestrian	AVENUE J	FOXTON AV
110	12/24/12	Unknown	Injury (Complaint of Pain)	Pedestrian	AVENUE I	DIVISION ST

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111	10/18/12	Improper Turning	Injury (Complaint of Pain)	Bicycle	15TH ST WEST	IVESBROOK ST
112	12/31/12	Unknown	Injury (Complaint of Pain)	Pedestrian	AVENUE J	FIG AV
113	10/5/12	Wrong Side of Road	Injury (Other Visible)	Bicycle	FOXTON AV	AVENUE J
114	11/29/12	Improper Turning	Injury (Severe)	Pedestrian	TREVOR AV	NEWGROVE ST
115	10/12/12	Not Stated	Injury (Complaint of Pain)	Bicycle	AVENUE J	DATE AV
116	9/14/12	Pedestrian Violation	Injury (Severe)	Pedestrian	10TH ST WEST	AVENUE J-13
117	12/4/12	Automobile Right of Way	Injury (Complaint of Pain)	Bicycle	JACKMAN ST	BEECH AV
118	8/29/12	Pedestrian Right of Way	Injury (Other Visible)	Pedestrian	MILLING ST	SIERRA HWY
119	8/31/12	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	AVE J	20TH ST W
120	8/26/12	Wrong Side of Road	Injury (Severe)	Bicycle	AVENUE J4	10TH ST WEST
121	9/26/12	Pedestrian Violation	Injury (Severe)	Pedestrian	10TH ST WEST	AVENUE J12
122	9/13/12	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	VALLEY CENTRAL WY	LANCASTER BL
123	7/21/12	Pedestrian Right of Way	Injury (Complaint of Pain)	Pedestrian	SIERRA HWY	AVENUE I
124	6/27/12	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	AVENUE J	DATE AV
125	7/16/12	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVENUE J	10TH ST WEST
126	6/18/12	Improper Turning	Injury (Other Visible)	Bicycle	JACKMAN ST	TREVOR AV
127	5/17/12	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	FERN AV	LANCASTER BL
128	5/16/12	Unsafe Lane Change	Injury (Other Visible)	Bicycle	20TH ST WEST	AVENUE J
129	5/9/12	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	AVENUE J	15TH ST WEST
130	4/14/12	Unknown	Injury (Other Visible)	Pedestrian	AVENUE J	SUNDELL AV
131	4/17/12	Wrong Side of Road	Injury (Complaint of Pain)	Bicycle	17TH ST WEST	LANCASTER BL
132	3/30/12	Wrong Side of Road	Injury (Other Visible)	Bicycle	LORIMER AV	AVENUE J
133	3/6/12	Pedestrian Violation	Injury (Complaint of Pain)	Pedestrian	SIERRA HWY	AVE I
134	2/10/12	Wrong Side of Road	Injury (Other Visible)	Bicycle	AVE I	TREVOR AV
135	2/3/12	Other Hazardous Violation	Injury (Complaint of Pain)	Bicycle	AVENUE J	SIERRA HWY
136	2/4/12	Pedestrian Violation	Injury (Severe)	Pedestrian	AVENUE J	CEDAR AV
137	1/3/12	Traffic Signals and Signs	Injury (Other Visible)	Bicycle	AVENUE I	10TH ST WEST

Attachment I-2

Bicycle and Pedestrian-Involved Collisions/Incidents within 2 miles of Project Location



Source: TIMS (Transportation Injury Mapping System), SWITRS GIS Map

U.S. Department of Transportation

Federal Highway Administration

1200 New Jersey Avenue, SE
Washington, DC 20590
202-366-4000

Safety

Road Diets (Roadway Reconfiguration)

A roadway reconfiguration known as a Road Diet offers several high-value improvements at a low cost when applied to traditional four-lane undivided highways. In addition to low cost, the primary benefits of a Road Diet include enhanced safety, mobility and access for all road users and a "complete streets" environment to accommodate a variety of transportation modes.

A classic Road Diet typically involves converting an existing four-lane, undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane.



Road Diet on Edgewater Drive, Orlando, Florida

The resulting benefits include a crash reduction of 19 to 47 percent, reduced vehicle speed differential, improved mobility and access by all road users, and integration of the roadway into surrounding uses that results in an enhanced quality of life. A key feature of a Road Diet is that it allows reclaimed space to be allocated for other uses, such as turn lanes, bus lanes, pedestrian refuge islands, bike lanes, sidewalks, bus shelters, parking or landscaping.

Why consider a Road Diet? Four-lane undivided highways experience relatively high crash frequencies — especially as traffic volumes and turning movements increase over time — resulting in conflicts between high-speed through traffic, left-turning vehicles and other road users. FHWA has deemed Road Diets a proven safety countermeasure and promotes them as a safety-focused design alternative to a traditional four-lane, undivided roadway. Road Diet-related crash modification factors are also available for use in safety countermeasure benefit-cost analysis.

Attachment I-2

As more communities desire "complete streets" and more livable spaces, they look to agencies to find opportunities to better integrate pedestrian and bicycle facilities and transit options along their corridors. When a Road Diet is planned in conjunction with reconstruction or simple overlay projects, the safety and operational benefits are achieved essentially for the cost of restriping. A Road Diet is a low-cost solution that addresses safety concerns and benefits all road users — a win-win for quality of life.

Road Diets stand the test of time, having been implemented by transportation agencies for more than three decades. One of the first installations of a Road Diet was in 1979 in Billings, Montana. Road Diets increased in popularity in the 1990s. Cities, including Charlotte, Chicago, New York, Palo Alto, San Francisco and Seattle, have also opted for the positive impact Road Diets bring to their communities.

FHWA is developing a Road Diet Informational Guide to help communities understand the safety and operational benefits and determine if Road Diets may be helpful in their location.

Resources

[Comparison of empirical Bayes and full Bayes approaches for before-after road safety evaluations](#) NEW

[Crash Reduction Factors for Traffic Engineering and ITS Improvements](#) NEW

[The Safety and Operational Effects of Road Diet Conversion in Minnesota](#) NEW

[Road Diets Presentation](#) NEW

- [Webinar Recording](#)

[Road Diets Brochure](#) NEW

[Road Diet Informational Guide](#)

"[Going on a Road Diet](#)," article in September/October 2011 *Public Roads* magazine

Page last modified on January 29, 2015.





Bicycle Lanes

Bicycle facilities provide a shared or exclusive space to indicate where bicyclists can predictably travel along streets. Shared bicycle and motor vehicle travel lanes, as well as bicycle lanes, are typically designated by striping, symbols, and/or signage. Physically separated facilities such as cycle tracks (facilities for bicycle use only) or a shared use path for pedestrians and bicyclists are a great way to encourage more bicycling and often follow former railroad rights-of-way or may be desirable as sidepaths along high-speed, high-volume roads. Design and countermeasure details for bicyclist travel are provided in the AASHTO Bicycle Design Guide,¹ the BIKESAFE Guide,² the FHWA MUTCD,³ and the NACTO Guide.⁴

Purpose

Designing streets for bicycle use helps create a more predictable traffic environment by reducing conflicts between all modes of travel, whether the conflict is between bicyclists and motor vehicles or pedestrians and bicyclists. Dedicated bicycle facilities (e.g. bicycle lanes) on the roadway also help provide a buffer between pedestrians and motor vehicle traffic, encourage lower motor vehicle speeds, and reduce pedestrian exposure to motor vehicles at crossings.

Considerations

- Sidewalks may be appropriate for low-speed (less than 5 mph) bicyclists such as children while providing on-street bicycle facilities such as bike lanes may encourage higher speed bicyclists to not ride on sidewalks, thus reducing conflicts between pedestrians and bicyclists on sidewalks.
- Marked crosswalks should be extended across the bicycle lanes to let bicyclists know they must yield to pedestrians. Dashed bicycle lane markings may be continued through intersections or across turning lanes to indicate to drivers that vehicles must cross bicyclists' path.
- When designing facilities such as contra-flow bicycle lanes and cycle tracks, consideration should be given to alert pedestrians and motorists of where to expect bicyclists.
- When a cycle track is located on the same side of the road as transit stops, cycle tracks may be routed behind the stop; pedestrian waiting areas should be provided between the cycle track and the roadway; and crosswalks should be installed across the cycle track to reduce conflicts between bicyclist and pedestrians accessing the transit stop.

[View Other Roadway Design Treatments](#)



Bicycle lane placed between curb and transit stop platform, Seattle, Washington *Source: Michael Hintze, Toole Design Group*



Bike lane provides a buffer for pedestrians.

Attachment I-2

- For off-street facilities such as shared use paths and sidepaths all users should be encouraged to stay right. An exception may be paths along waterways or other features that draw pedestrians-in such cases markings and/or signage may be used to indicate pedestrians to stay on the side of the path closest to the attraction to reduce conflicts associated with pedestrians crossing the pathway.
- Placing the bicycle facility between the curb and bus stop waiting area, and providing clear messaging to for pedestrian crossings (e.g. marked crosswalks and pedestrian crossing warning signs) reduces conflicts between bicycles and pedestrians and improves transit operations.

Estimated Cost

The cost of installing bicycle facilities depends on the type and scope of a project, whether it be restriping, resurfacing, or reconstruction. The cost of striping a bike lane and markings on existing shoulders costs approximately \$1,000-11,000 per mile. Retrofitting bicycle lanes by restriping pavement markings, using techniques such as lane diets or road diets (See Countermeasures 9. Roadway Narrowing, or 10. Lane Reduction for more information) can range from approximately \$5,000 to \$50,000 per mile, depending on the condition of the pavement; the need to eradicate and install new pavement markings, adjust signal timing, and add bicycle signal heads; as well as other site-specific factors.

Moving curb lines to create bicycle lanes or cycle tracks can be much more expensive than restriping. If shoulders must be added, the cost can be approximately \$150,000-500,000 per mile (for both shoulders). Many times there are opportunities to “piggy-back” bicycle facility projects with resurfacing or reconstruction projects in order to optimize funds; bicycle lanes should be considered for all projects, especially during street reconstruction, street resurfacing, or during new developments.

Case Studies

Allegheny County, PA

Tempe, AZ

University Place, WA

Arlington County, VA

Cleveland Heights, Ohio

New York, New York

Tampa, Florida

Seattle, Washington

U.S. Department of Transportation

Federal Highway Administration

1200 New Jersey Avenue, SE
Washington, DC 20590
202-366-4000

Safety

Medians and Pedestrian Crossing Islands in Urban and Suburban Areas



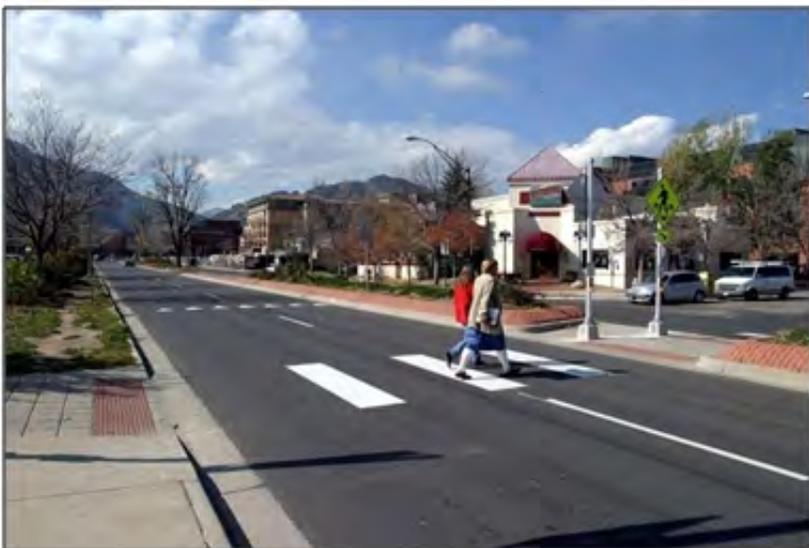
U.S. Department of Transportation
Federal Highway Administration



FHWA-SA-12-011

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You may need the [Adobe Reader](#) to view the PDFs on this page.



A *median* is an area between opposing lanes of traffic, excluding turn lanes. Medians in urban and suburban areas can either be open (pavement markings only) or they can be channelized (raised medians or islands) to separate various road users.

Pedestrian crossing islands (or refuge areas)—also known as center islands, refuge islands, pedestrian islands, or median slow points—are raised islands placed on a street at intersections or midblock locations

Attachment I-2

to separate crossing pedestrians from motor vehicles.

There are several types of medians and pedestrian crossing islands, and if designed and applied appropriately, they improve the safety benefits to both pedestrians and vehicles in the following ways:

- They may reduce pedestrian crashes by 46 percent and motor vehicle crashes by up to 39 percent.
- They may decrease delays (by greater than 30 percent) for motorists.
- They allow pedestrians a safe place to stop at the mid-point of the roadway before crossing the remaining distance.
- They enhance the visibility of pedestrian crossings, particularly at unsignalized crossing points.
- They can reduce the speed of vehicles approaching pedestrian crossings.
- They can be used for access management for vehicles (allowing only right-in/right-out turning movements).
- They provide space for supplemental signage on multi-lane roadways.

Background

Midblock locations account for more than 70 percent of pedestrian fatalities. This is where vehicle travel speeds are higher, contributing to the larger injury and fatality rate seen at these locations. More than 80 percent of pedestrians die when hit by vehicles traveling at 40 mph or faster while less than 10 percent die when hit at 20 mph or less. Installing such raised channelization on approaches to multi-lane intersections has been shown to be especially effective. Medians are a particularly important pedestrian safety countermeasure in areas where pedestrians access a transit stop or other clear origins/destinations across from each other. Providing raised medians or pedestrian refuge areas at marked crosswalks has demonstrated a 46 percent reduction in pedestrian crashes. At unmarked crosswalk locations, medians have demonstrated a 39 percent reduction in pedestrian crashes.

Guidance

Raised medians (or refuge areas) should be considered in curbed sections of multi-lane roadways in urban and suburban areas, particularly in areas where there are mixtures of significant pedestrian and vehicle traffic (more than 12,000 Average Daily Traffic (ADT)) and intermediate or high travel speeds. Medians/refuge islands should be at least 4 feet wide (preferably 8 feet wide to accommodate pedestrian comfort and safety) and of adequate length to allow the anticipated number of pedestrians to stand and wait for gaps in traffic before crossing the second half of the street.

Key Resources

A Review of Pedestrian Safety Research in the United States and Abroad, p. 85-86

<http://www.walkinginfo.org/library/details.cfm?id=13>

Pedestrian Facility User's Guide: Providing Safety and Mobility, p. 56

http://katana.hsrc.unc.edu/cms/downloads/PedFacility_UserGuide2002.pdf

Guide for the Planning, Design, and Operation of Pedestrian Facilities, American Association of State Highway and Transportation Officials, 2004 [Available for purchase from AASHTO]

https://bookstore.transportation.org/item_details.aspx?id=119

Pedestrian Road Safety Audits and Prompt Lists

<http://www.walkinginfo.org/library/details.cfm?id=3955>

Attachment I-2

FHWA Office of Safety Bicycle and Pedestrian Safety

http://safety.fhwa.dot.gov/ped_bike/

Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations, p. 55

<http://www.walkinginfo.org/library/details.cfm?id=54>

Handbook of Road Safety Measures

http://www.cmclearinghouse.org/study_detail.cfm?stid=14

Analyzing Raised Median Safety Impacts Using Bayesian Methods

http://www.cmclearinghouse.org/study_detail.cfm?stid=213

FHWA Contacts

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FHWA Office of Research: Ann Do, ann.do@dot.gov, 202-493-3319

FHWA Resource Center: Peter Eun, peter.eun@dot.gov, 360-753-9551

FHWA Web site: http://safety.fhwa.dot.gov/policy/memo071008/#ped_refuge

Page last modified on October 15, 2014.





Bike-Activated Signal Detection

At signalized intersections that require users to be detected to call a green light, detection should be designed to accommodate bicyclists. Properly designed detection can help deter red light running and unsafe behaviors by reducing delay at signalized intersections.

There are two categories of detection: active or passive. Active detection requires the user to activate the signal phase through a pushbutton. While existing sidewalk-based pedestrian pushbutton detection may adequately serve bicyclists that ride on the sidewalk, it should not be expected that on-road cyclists would leave the roadway to actuate a signal. As such, passive detection (i.e., when the signal system automatically detects the presence of the user) is preferred. The most common motor vehicle detection technology, the loop detector, can also be used to service bicyclists. Additional passive detection devices may include video detection and microwave detection. Passive technologies are continuously being updated, and new innovations in detection should be considered and tested as they are developed.

Bicycle detection devices can be used to call a phase or to prolong the phase to allow a bicyclist to clear an intersection. For bicyclists to prompt the phase at a signalized intersection, bicycle detection devices should be located in the most conspicuous location and supplemented by appropriate signing and pavement markings to inform bicyclists of where to wait.

Purpose

Signalized intersections should include detection for bicyclists to facilitate safe, comfortable, and convenient crossings at intersections for bicyclists while also minimizing delay.

Considerations

- Detection devices should be placed in the expected path of the bicyclists, and aimed to maximize efficiency and responsiveness.
- It may be desirable to install advanced bicycle detection on the approach to the intersection to extend the phase, or to

View Related Treatments



Signal detection for bicyclists using the bike lane. *Photo by Carl Sundstrom*



Example of pavement marking at traffic signal which shows bicycles where to stop to activate the signal. <http://www.pedbikeimages.org/> - Marie Stake

Attachment I-2

prompt the phase and allow for continuous bicycle through movements.

- If a pushbutton is used, the location of the device should not require bicyclists to dismount or be rerouted out of the way or onto the sidewalk to activate the phase. Signage should supplement the signal to alert bicyclists of the required activation to prompt the green phase.
- Signal timings should be adjusted to account for the unique operating characteristics of bicycles. For additional details, see the countermeasure [optimizing signal timing for bicycles](#).
- It is important that the design of loop detectors consider the amount of metal in typical bicycles. Certain types of loop configurations are better at detecting bicyclists than others and settings for loop detectors should be adjusted to properly detect bicycles.



This symbol may be placed in the travel lane to indicate the optimum position for a bicyclist to actuate the signal.
Manual on Uniform Traffic Control Devices

Estimated Cost

Detection devices are used to determine if a pedestrian or bicyclist is waiting for the signal. There are many different ways that these devices detect pedestrians and bicyclists. For instance, bicycle detectors (\$1,920 on average per intersection approach, \$1,070 to \$2,680 range) are usually loop detectors embedded in the pavement, while pedestrian detectors use pushbuttons to detect the presence of pedestrians waiting to cross.

Infrastructure	Description	Median	Average	Min. Low	Max. High	Cost Unit	# of Sources (Observations)
Pedestrian/Bike Detection	Furnish and Install Pedestrian Detector	\$180	\$390	\$68	\$1,330	Each	7(14)
Pedestrian/Bike Detection	Push Button	\$230	\$350	\$61	\$2,510	Each	22(34)

References

To view references for this countermeasure group [click here](#).

Case Studies

Portland, Oregon

Santa Cruz, California

Attachment I-3

1. City of Lancaster General Plan: Public Involvement
(Excerpt)

Attachment I-3

A complete copy of the Lancaster Master Plan of Trails and Bikeways is available at: <http://www.cityoflancasterca.org/index.aspx?page=920>



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.





Attachment I-3

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:

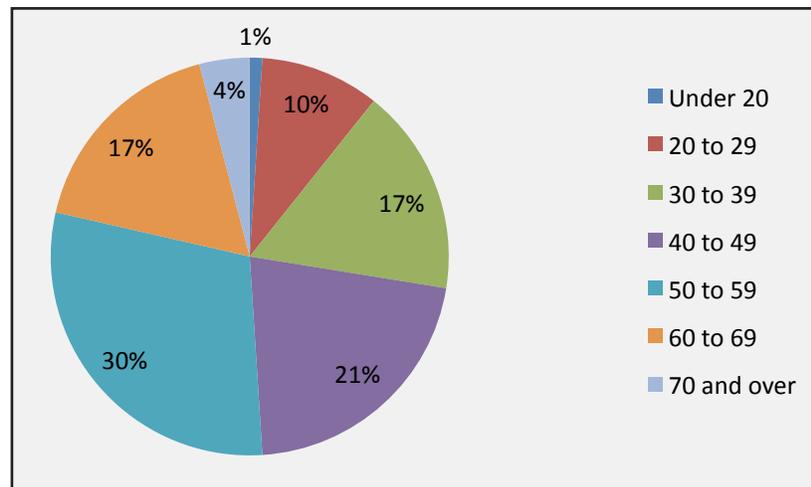
- why the respondent rides a bicycle / walks / uses trails;
- how often he / she rides / walks/ uses trails;
- areas in need of improvement;
- barriers to travel, and
- areas in need of bicycle parking, among others.

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



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*

Attachment I-3

- 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

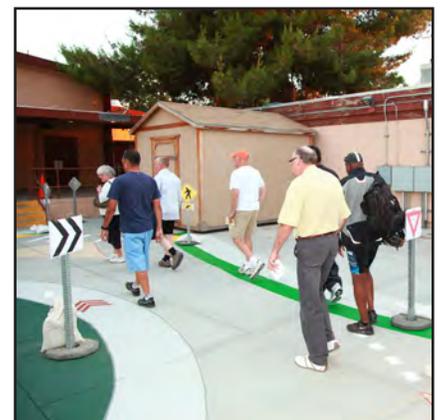
Over 160 people attended the second workshop, including community members and City staff. The City Manager kicked off the workshop with a brief introduction to the planning effort, and the importance of ushering in a new era for Lancaster. The Chair of the Architectural and Design Commission and a representative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



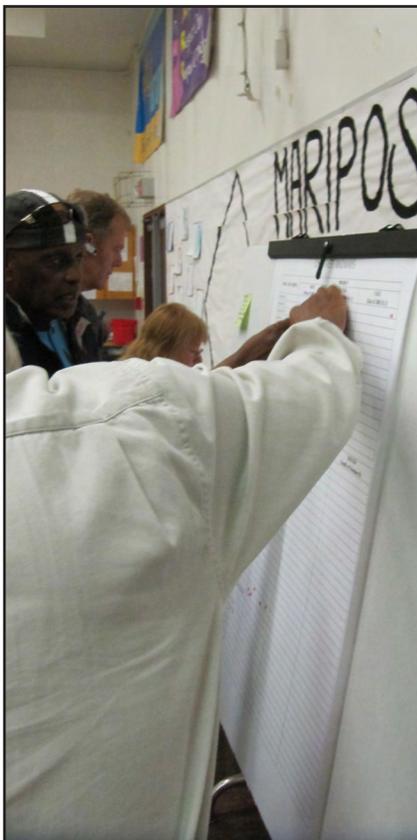
Attachment I-3

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



Attachment I-3

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.

Attachment I-3

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

Attachment I-3

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.



Attachment I-4

1. CHIS Public Health Statistics for Project Location and Influence Area
2. County of Los Angeles Department of Public Health Strategic Plan 2013-2017
3. County of Los Angeles Department of Public Health LA Health Data Snapshot
4. County of Los Angeles Department of Public Health Mortality in Los Angeles County 2011
5. Centers for Disease Control and Prevention CDC Recommendations for Improving Health through Transportation Policy
6. Pedestrian & Bicycle Information Center Health Benefits Fact Sheet
7. Active Living Research “The Role of Transportation in Promoting Physical Activity” Infographic

Attachment I-4

AskCHIS Neighborhood Edition: Lancaster

	California			Los Angeles County			93534			93535			93536		
Indicators	%	95% CI	Population	%	95% CI	Population	%	95% CI	Population	%	95% CI	Population	%	95% CI	Population
Ever diagnosed with asthma (18+)	0.137	0.131 - 0.143	27796500	0.122	0.113 - 0.132	7402100	0.136	0.102 - 0.171	26200	0.129	0.095 - 0.163	46800	0.145	0.111 - 0.179	44700
Ever diagnosed with asthma (1-17)	0.154	0.14 - 0.167	8629700	0.15	0.133 - 0.167	2204000	NA		9800	0.194	0.147 - 0.241	21400	0.196	0.149 - 0.244	15700
Ever diagnosed with diabetes (18+)	0.084	0.079 - 0.088	27796500	0.088	0.08 - 0.095	7402100	0.096	0.075 - 0.117	26200	0.099	0.079 - 0.12	46800	0.087	0.068 - 0.106	44700
Fair or poor health (18-64)	0.179	0.172 - 0.186	23392900	0.214	0.202 - 0.227	6305200	0.185	0.148 - 0.223	22300	0.197	0.159 - 0.234	41300	0.14	0.108 - 0.172	38400
Fair or poor health (65+)	0.274	0.261 - 0.287	4403600	0.33	0.312 - 0.348	1096900	NA		3800	NA		5400	NA		6300
Fair or poor health (0-17)	0.06	0.051 - 0.068	9134500	0.06	0.049 - 0.07	2334000	NA		10400	NA		22600	NA		16500
Obese (BMI >= 30) (18+)	0.248	0.241 - 0.255	27796500	0.247	0.235 - 0.26	7402100	0.325	0.275 - 0.375	26200	0.351	0.3 - 0.402	46800	0.28	0.231 - 0.329	44700
Overweight for age (weight >= 95th percentile) (2-11)	0.136	0.118 - 0.153	4997900	0.144	0.12 - 0.168	1262600	NA		5800	NA		12200	NA		8500
Overweight or obese (BMI >= 85th percentile) (12-17)	0.324	0.295 - 0.353	3127100	0.366	0.333 - 0.399	811500	NA		3300	NA		7900	NA		6500
Regular physical activity (5-17)	0.208	0.191 - 0.225	6610500	0.199	0.177 - 0.22	1684100	NA		7200	0.207	0.157 - 0.256	16400	NA		12500
Walked at least 150 minutes (18+)	0.333	0.325 - 0.341	27796500	0.35	0.335 - 0.364	7402100	0.287	0.251 - 0.323	26200	0.286	0.251 - 0.322	46800	0.318	0.275 - 0.362	44700

Neighborhood Edition are not direct estimates. For more

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County of Los Angeles Department of Public Health

Strategic Plan

2013-2017



Strategic Priority 1

Healthy and Safe Community Environments

Support and develop neighborhoods and institutions that support healthy lifestyles.

Goal 1.1: Increase the capacity of community environments to support active living and healthy eating.

- Obj.1.1.a Increase the number of local jurisdictions that implement transit-oriented districts and other land use planning policies that promote walkable, bikeable, and safe communities and use of mass transit while avoiding displacement of affordable housing.
- Obj.1.1.b Increase hospital and other institutional support for and promotion of breastfeeding.
- Obj.1.1.c Implement policies and practices to improve nutrition and physical activity in schools and child care settings.
- Obj.1.1.d Increase engagement with cities, public institutions, businesses, and community-based organizations to increase access to and demand for healthy food and beverage options, and reduce access to and demand for less healthy options.
- Obj.1.1.e Implement media and other public education efforts to promote increased fruit and vegetable consumption, increased tap water consumption, reduced consumption of beverages with added sugar, reduced salt intake, and reduced food and beverage portion sizes.
- Obj.1.1.f Promote smaller portion options through restaurant industry engagement and consumer education.
- Obj.1.1.g Develop strategies to increase participation in the Supplemental Nutrition Assistance Program (SNAP) and increase healthy food and beverage purchases among SNAP participants, including incentives for purchasing fresh produce.
- Obj.1.1.h Increase the capacity of community-based agencies to improve preconception health through the use of web-based platforms.

Goal 1.2: Increase the capacity of community environments to support tobacco-free living.

- Obj.1.2.a Assist cities with adopting evidence-based strategies to reduce exposure to secondhand smoke in multi-unit housing and outdoor areas.
- Obj.1.2.b Engage with cities and unincorporated areas to reduce youth access to tobacco products.
- Obj.1.2.c Work with businesses to reduce employee exposure to secondhand smoke and increase access to and utilization of effective tobacco cessation services.
- Obj.1.2.d Implement communication campaigns to increase utilization of effective tobacco cessation services.

Attachment I-4

- Obj.1.2.e Work with health care organizations to adopt and implement a standard protocol for tobacco use screening and referral to cessation services.
- Obj.1.2.f Engage with school districts, schools and teachers to provide tobacco-use prevention education and cessation resources at schools with high rates of tobacco use.

Goal 1.3: Increase community safety and decrease potential for injuries.

- Obj.1.3.a Support efforts to reduce gang violence among youth, including the County's Parks After Dark Program and other support services and policy interventions for high-risk youth.
- Obj.1.3.b Expand partnerships and pursue funding to increase injury and violence prevention efforts, including prevention of traffic collisions, fall injuries among seniors, drug-related poisonings, suicide, homicide, intimate partner violence, and trauma and abuse across the lifespan.
- Obj.1.3.c Implement evidence-based strategies to prevent motor vehicle, pedestrian and bicyclist injuries.

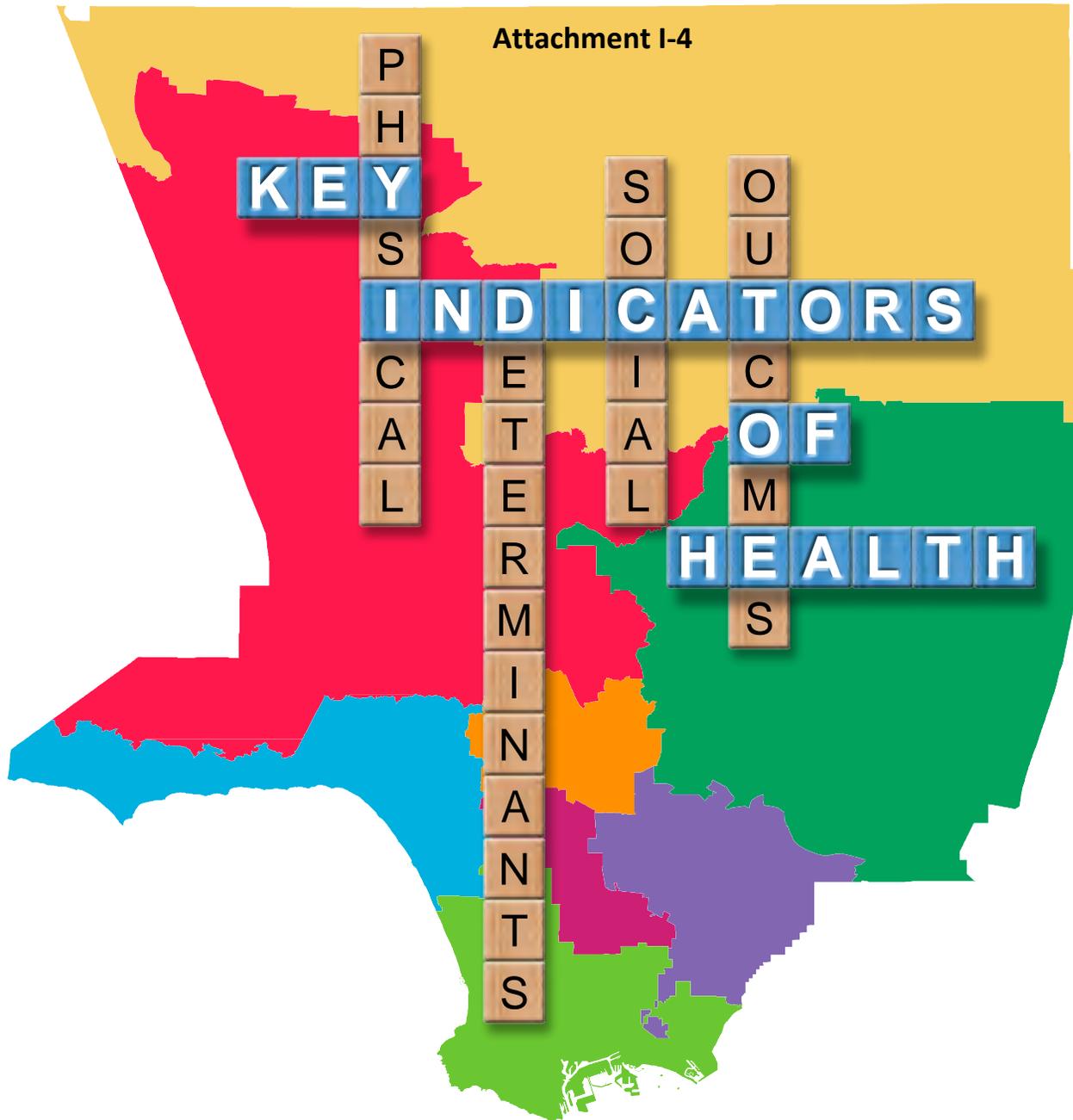
Goal 1.4: Reduce community environmental hazards.

- Obj.1.4.a Work with community organizations to educate residents on strategies to improve healthy conditions in multi-unit housing.
- Obj.1.4.b Quantify the potential short and long-term impacts of environmental hazards by modeling linkages between exposures and diseases and injuries.
- Obj.1.4.c Identify potential interventions to reduce the exposure to and impact of environmental hazards, and quantify the impacts and value of those interventions.
- Obj.1.4.d Address illegal food operations that pose a public health risk through public education and enforcement.
- Obj.1.4.e Improve data reporting, analysis, interpretation, and notification of environmental hazards to the public and affected industry.
- Obj.1.4.f Inform the general public on the nature of climate change, its potential effects, and actions they can take to reduce greenhouse emissions and minimize impacts on health.

Goal 1.5: Reduce the impact of substance abuse and addiction.

- Obj.1.5.a Implement and evaluate evidence-based prevention services that respond to locally identified alcohol and drug problems.
- Obj.1.5.b Improve treatment outcomes by expanding use of evidence based practices, including use of MAT (medication-assisted treatment).
- Obj.1.5.c Develop and begin implementation of a strategic action plan to address the growing public health problem of prescription drug use and abuse.
- Obj.1.5.d Assist cities and communities with adopting evidence-based strategies to reduce youth access and availability to alcohol and other drugs (AOD), and minimize the related health and social consequences.

Attachment I-4



by SERVICE PLANNING AREA

HEALTH STATUS

Health-Related Quality of Life

- Percent of adults reporting their health to be fair or poor²
- Average number of days in past month adults reported regular daily activities were limited due to poor physical/mental health²
- Average number of unhealthy days (due to poor mental or physical health) in the past month reported by adults^{2e}
- Average number of poor mental health days in the past month reported by adults²
- Percent of adults who receive the social and emotional support they need²

Special Health Care Needs

- Percent of children ages 0-17 years who have special health care needs^{2f}
- Percent of children ages 2-17 years ever diagnosed with ADD/ADHD²
- Percent of adults who provided care or assistance during the past month to another adult living with a long-term illness or disability²

*The estimate is statistically unstable (relative standard error ≥ 23%)

	HP 2020	National	LA County	Antelope Valley	San Fernando	San Gabriel	Metro	West	South	East	South Bay
				SPA1	SPA2	SPA3	SPA4	SPA5	SPA6	SPA7	SPA8
Percent of adults reporting their health to be fair or poor ²	N/A	16.1 ^{B2}	20.7	26.7	18.5	20.1	24.5	7.4	30.5	24.1	17.6
Average number of days in past month adults reported regular daily activities were limited due to poor physical/mental health ²	N/A	2.3 ^{B2}	2.1	2.6	2.5	1.8	2.1	1.7	2.5	2.0	1.7
Average number of unhealthy days (due to poor mental or physical health) in the past month reported by adults ^{2e}	N/A	6.2 ^{B2}	5.4	6.2	5.8	5.2	5.7	4.2	6.1	5.3	5.0
Average number of poor mental health days in the past month reported by adults ²	N/A	3.5 ^{B2}	3.3	3.8	3.6	3.0	3.4	2.0	4.0	3.5	2.9
Percent of adults who receive the social and emotional support they need ²	N/A	N/A	64.0	59.6	63.5	60.8	74.8	83.8	53.9	51.2	68.8
Percent of children ages 0-17 years who have special health care needs ^{2f}	N/A	N/A	15.8	20.8	15.5	14.7	16.6	17.5	12.5	15.2	18.2
Percent of children ages 2-17 years ever diagnosed with ADD/ADHD ²	N/A	8.4 ^{NC}	6.0	7.3	7.4	5.3*	7.2*	4.6	4.2	4.6	7.2
Percent of adults who provided care or assistance during the past month to another adult living with a long-term illness or disability ²	N/A	N/A	20.0	20.4*	17.4	24.1	11.3*	16.6*	16.9*	25.5*	24.0

Attachment I-4



	HP 2020	National	LA County	Antelope Valley SPA1	San Fernando SPA2	San Gabriel SPA3	Metro SPA4	West SPA5	South SPA6	East SPA7	South Bay SPA8
Insurance											
• Percent of children ages 0-17 years who are uninsured ²	0.0	7.0 ^{NC}	5.0	2.7*	4.2	4.3*	6.6*	3.0*	8.6*	6.5	2.9*
• Percent of adults ages 18-64 years who are uninsured ²	0.0	21.3 ^{NU}	28.5	19.5	27.0	26.9	35.5	12.7	38.2	32.4	26.7
• Percent of children ages 0-17 years who do not have dental insurance ²	N/A	N/A	21.8	18.0	22.0	22.0	24.3	28.4	24.2	20.8	18.5
• Percent of adults ages 18+ years who do not have dental insurance ²	N/A	N/A	51.8	44.7	49.0	51.0	61.1	39.4	62.9	53.0	49.3
Regular Source of Care											
• Percent of children 0-17 years with no regular source of health care ²	0.0	3.3 ^{NC}	4.8	3.7*	3.8	4.5*	5.2*	4.0*	7.3*	5.1	4.5*
• Percent of adults 18-64 years with no regular source of health care ²	10.6	N/A	23.4	17.6	25.1	22.6	25.4	22.5	29.4	20.0	21.0
Access to Health Care											
• Percent of children ages 0-17 years who have difficulty accessing medical care ²	N/A	N/A	12.3	12.7*	9.6	11.8	12.1	4.5*	17.7	16.4	10.1
• Percent of adults who reported difficulty accessing medical care ²	N/A	N/A	31.7	26.7	28.9	31.9	38.0	17.0	44.6	34.6	28.5
• Percent of children who did not see a doctor when needed in the past year because they could not afford it ²	N/A	1.7 ^{NC}	6.1	5.6*	3.5	6.0*	3.0*	4.9*	9.9*	8.2	6.4
• Percent of adults who did not see a doctor when needed in the past year because they could not afford it ²	N/A	6.5 ^{NA2}	16.0	13.3	16.8	15.1	17.7	12.2	18.7	17.8	14.0
Access to Dental Care											
• Percent of children ages 3-17 years who did not obtain dental care (including check-ups) in the past year because they could not afford it ²	N/A	6.1 ^{NC}	12.6	9.0	9.6	13.9	11.3	8.5	14.9	16.6	12.2
• Percent of adults who did not obtain dental care (including check-ups) in the past year because they could not afford it ²	N/A	N/A	30.3	31.3	29.8	27.7	37.6	19.4	35.0	33.9	27.4
Access to Mental Health Care											
• Percent of children ages 3-17 years who tried to get mental or behavioral health care in the past year ²	N/A	N/A	7.8	11.4	7.7	7.7	8.1	7.0*	5.8*	8.0*	8.3
• Percent of adults who tried to get mental health care in the past year ²	N/A	N/A	7.5	8.3	8.8	6.2	8.4	10.6	6.6	5.8	6.5

Attachment I-4



	HP 2020	National	LA County	Antelope Valley SPA1	San Fernando SPA2	San Gabriel SPA3	Metro SPA4	West SPA5	South SPA6	East SPA7	South Bay SPA8
Overweight & Obesity											
• Percent of children in grades 5, 7, & 9 who are obese (BMI above the 95th percentile) ⁹	N/A	N/A	22.4	20.3	19.8	20.8	26.7	15.3	29.0	25.7	20.7
• Percent of adults who are obese (BMI ≥ 30.0) ²	30.5 ^{HP}	28.3 ^{NA}	23.6	34.8	21.1	23.9	20.1	9.8	32.7	30.1	22.7
• Percent of adults who are overweight (25.0 ≤ BMI < 30.0) ²	N/A	34.5 ^{NA}	37.1	36.1	36.4	35.0	33.2	33.5	37.3	40.1	42.8
Diabetes											
• Percent of adults ever diagnosed with diabetes ²	N/A	9.0 ^{NA}	9.5	10.7	9.3	7.7	7.3	5.5	10.1	15.1	9.8
• Diabetes death rate (age-adjusted per 100,000 population) ¹⁰	N/A	20.8 ^{MH}	20.2	40.6	15.7	19.8	18.1	9.3	34.1	27.5	18.3
Cardiovascular Disease											
• Percent of adults ever diagnosed with hypertension ²	26.9	25.5 ^{NA}	24.0	29.0	23.9	25.4	20.4	17.1	28.4	24.4	24.5
• Percent of adults ever diagnosed with high cholesterol ²	N/A	N/A	25.6	26.4	28.4	23.9	24.1	24.8	22.9	25.4	26.5
• Coronary heart disease death rate (age-adjusted per 100,000 population) ¹⁰	100.8	123.7 ^{MC}	128.6	182.7	129.9	118.1	118.5	101.2	178.2	122.3	130.8
• Stroke death rate (age-adjusted per 100,000 population) ¹⁰	33.8	39.1 ^{MH}	33.7	37.3	32.2	36.0	28.9	28.2	45.5	33.7	33.4
• Stroke death rate for African-Americans (age-adjusted per 100,000 population) ¹⁰	33.8	53.0 ^{MC}	49.6	**	91.5	60.6	47.2	**	55.1	**	41.7
Reproductive Health											
• Rate of births (per 1,000 live births) to teens ages 15-19 years ⁶	N/A	34.2 ^{BH}	28.1	33.9	18.9	22.4	35.5	6.0	51.1	30.9	25.7
• Percent of low weight (<2,500 grams) births (per 100 live births) ⁶	7.8	8.2 ^{BH}	7.1	8.3	7.1	6.4	7.1	6.8	8.1	6.6	7.1
• Percent of low weight (<2,500 grams) African American births (per 100 live births) ⁶	7.8	13.5 ^{BH}	11.8	11.7	10.5	10.5	11.7	9.4	13.4	12.0	10.6
• Infant death rate (per 1,000 live births) ⁶	6.0	6.2 ^{MH}	4.6	5.8	4.4	4.1	5.0	3.2	6.1	3.7	4.7
• African American infant death rate (per 1,000 live births) ⁶	6.0	11.6 ^{MH}	9.8	9.0	6.8	***	14.4	***	9.5	***	11.2
Musculoskeletal											
• Percent of adults diagnosed with arthritis ²	N/A	23.3 ^{NA}	17.4	24.0	16.4	20.1	16.0	17.7	15.7	18.2	15.7
• Percent of women 65 years or older diagnosed with osteoporosis ²	N/A	N/A	26.7	24.7*	27.3	27.3	32.3	24.9	21.6*	30.0	22.1

Attachment I-4



Mental Health

- Percent of adults ever diagnosed with depression²
- Percent of adults with current depression²
- Percent of adults at risk for major depression²
- Percent of adults ever diagnosed with anxiety²
- Percent adults with current anxiety²
- Alzheimer's disease death rate (age-adjusted per 100,000 population)¹⁰

Communicable Diseases

- Incidence of HIV/AIDS (annual new cases per 100,000 population) among adolescents and adults (ages 13+ years)^{11a}
- HIV infection-related mortality rate (age-adjusted per 100,000 population)¹⁰
- Incidence of primary and secondary Syphilis (annual new cases per 100,000 population)^{11b}
- Incidence of Chlamydia (annual new cases per 100,000 population)^{11b}
- Incidence of Gonorrhea (annual new cases per 100,000 population)^{11b}
- Incidence of Tuberculosis annual new cases per 100,000 population¹²

Respiratory Disease

- Percent of children ages 0-17 years with current asthma (ever diagnosed with asthma and reported still have asthma and/or had an asthma attack in the past year)²
- Pneumonia/Influenza mortality rate (age-adjusted per 100,000 population)¹⁰
- COPD/Emphysema mortality rate (age-adjusted per 100,000 population)¹⁰

	HP 2020	National	LA County	Antelope Valley SPA1	San Fernando SPA2	San Gabriel SPA3	Metro SPA4	West SPA5	South SPA6	East SPA7	South Bay SPA8
Percent of adults ever diagnosed with depression ²	N/A	17.5 ^B	12.2	14.6	13.9	10.6	13.4	13.4	10.8	11.7	10.7
Percent of adults with current depression ²	N/A	N/A	8.3	12.6	8.9	6.4	9.3	10.3	8.0	7.6	7.7
Percent of adults at risk for major depression ²	N/A	N/A	10.4	11.9	12.0	8.5	11.6	5.8*	13.3	10.5	9.3
Percent of adults ever diagnosed with anxiety ²	N/A	N/A	11.3	15.9	12.5	9.1	12.0	13.7	10.1	11.4	10.2
Percent adults with current anxiety ²	N/A	N/A	6.4	6.6	7.2	5.3	7.4	7.6	6.9	5.6	5.5
Alzheimer's disease death rate (age-adjusted per 100,000 population) ¹⁰	N/A	25.1 ^{MH}	21.0	30.6	25.7	19.8	13.3	24.0	18.3	21.0	20.1
Incidence of HIV/AIDS (annual new cases per 100,000 population) among adolescents and adults (ages 13+ years) ^{11a}	13.0	19.7 ^A	24.9	15.4	13.2	9.4	79.0	18.1	32.3	15.5	26.3
HIV infection-related mortality rate (age-adjusted per 100,000 population) ¹⁰	3.3	2.6 ^{MH}	3.0	**	1.4	1.7	6.4	**	7.1	1.8	3.5
Incidence of primary and secondary Syphilis (annual new cases per 100,000 population) ^{11b}	N/A	4.5 ^S	8.1	2.1	6.1	2.2	27.1	7.2	10.5	4.9	4.7
Incidence of Chlamydia (annual new cases per 100,000 population) ^{11b}	N/A	457.6 ^S	512.9	538.6	320.5	353.2	587.7	277.5	999.5	488.0	504.9
Incidence of Gonorrhea (annual new cases per 100,000 population) ^{11b}	N/A	104.2 ^S	103.4	73.0	57.9	40.2	204.7	72.8	231.9	58.4	109.2
Incidence of Tuberculosis annual new cases per 100,000 population ¹²	1.0	3.4 ^T	7.3	5.2	5.5	8.1	12.8	3.6	8.1	7.6	5.8
Percent of children ages 0-17 years with current asthma (ever diagnosed with asthma and reported still have asthma and/or had an asthma attack in the past year) ²	N/A	N/A	9.0	12.2*	9.1	7.8	4.3*	4.8	9.4	9.9	11.5
Pneumonia/Influenza mortality rate (age-adjusted per 100,000 population) ¹⁰	N/A	15.1 ^{MH}	21.3	23.0	19.3	20.9	21.0	19.0	24.6	21.5	23.6
COPD/Emphysema mortality rate (age-adjusted per 100,000 population) ¹⁰	N/A	40.6 ^{MC}	30.3	78.8	27.3	33.3	21.3	22.3	31.3	30.7	32.4



BUILT ENVIRONMENT FOR PHYSICAL ACTIVITY

The built environment includes the settings and structures around us, the spaces where we live, play, learn, and work. Growing evidence demonstrates the relationship between features of the built environment and health; the built environment can contribute to disease and injury or promote good health and habits.^{1,2}

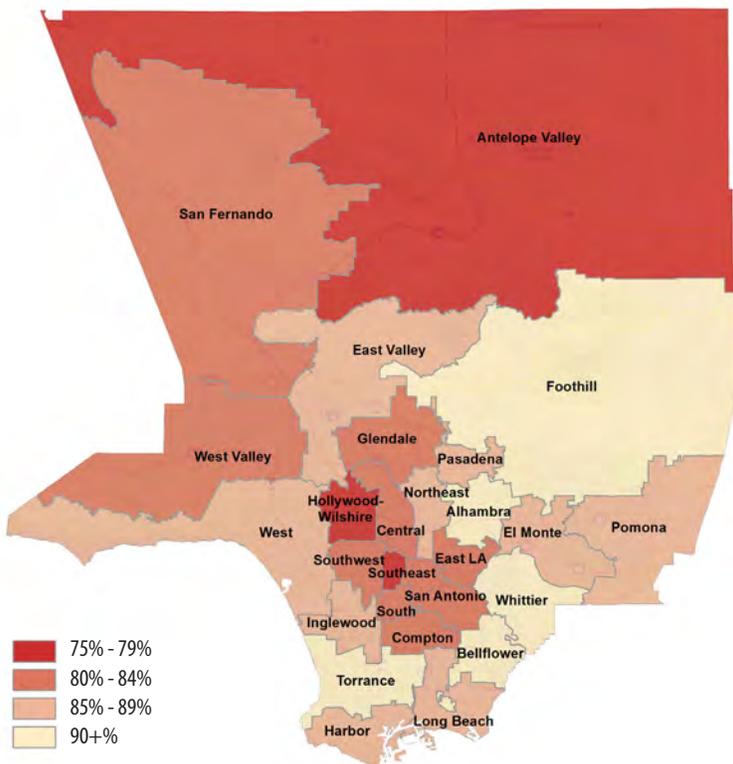
Characteristics of the community or neighborhood that discourage physical activity, such as unsafe walking paths or lack of parks, can increase the risk for obesity, diabetes, and other chronic health conditions.^{3,4,5} Conversely, built environments that allow people to engage in physical activity, including walkable sidewalks, safe bike paths, parks, and open space, improve health and well-being.⁶

To assess perceptions of the built environment among our local population, the 2011 Los Angeles County Health Survey asked adults (18+ years old) about the environments in which they live, walk, and exercise.

Neighborhood Resources for Physical Activity

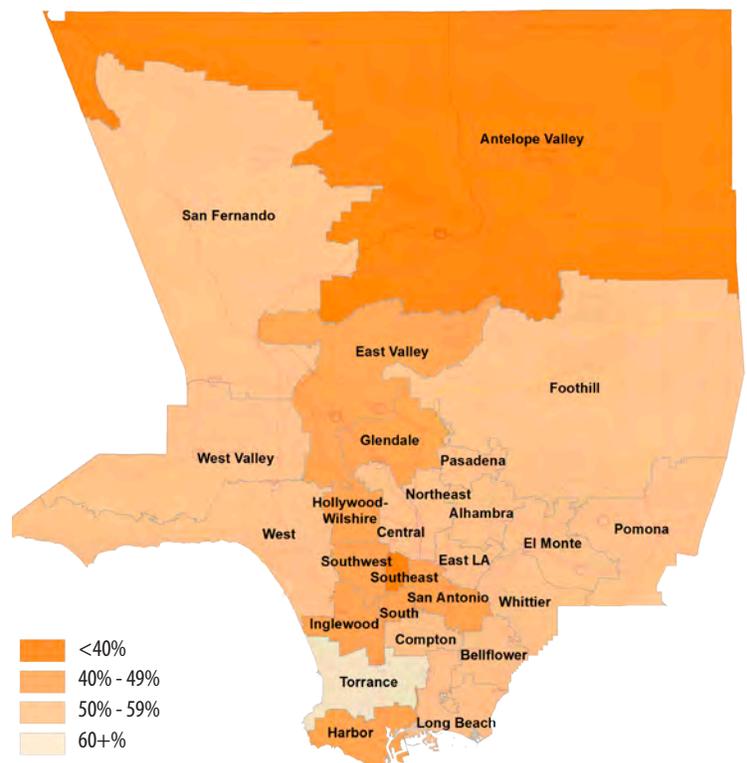
- 52% percent of adults in the County reported they use walking paths, parks, playgrounds or sports fields in their neighborhood, 34% of adults do not use these resources, and 14% reported that their neighborhood does not have these facilities.

Figure 1: Percent of Adults Who Reported That They Have Parks, Playgrounds, or Sports Fields in Their Neighborhood, by Health District, LACHS 2011



- The presence of walking paths, parks, playgrounds, or sports fields varied geographically, with Antelope Valley, Hollywood/Wilshire, and Southeast Health Districts having the lowest percent of residents reporting resources for outdoor physical activity (Figure 1).
- Use of walking paths, parks, playgrounds or sports fields varied by Health District, with the Torrance Health District having the highest use of these facilities, and the Southeast and Antelope Valley Health Districts having the lowest use (Figure 2).

Figure 2: Percent of Adults Who Used Walking Paths, Parks, Playgrounds, or Sports Fields in Their Neighborhood, by Health District, LACHS 2011



LA Health

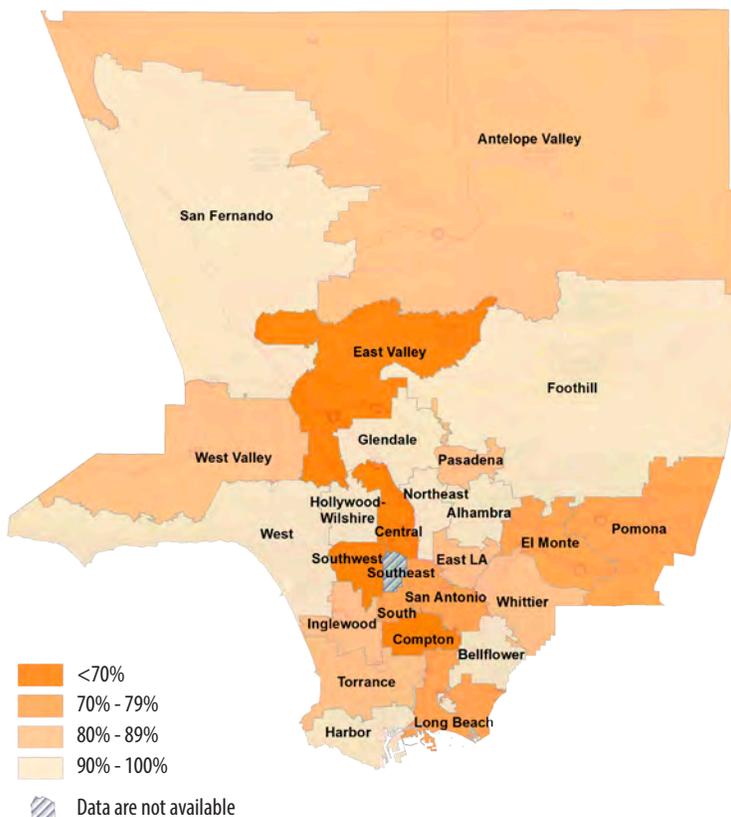
DATA SNAPSHOT



Perceived Safety of Neighborhood

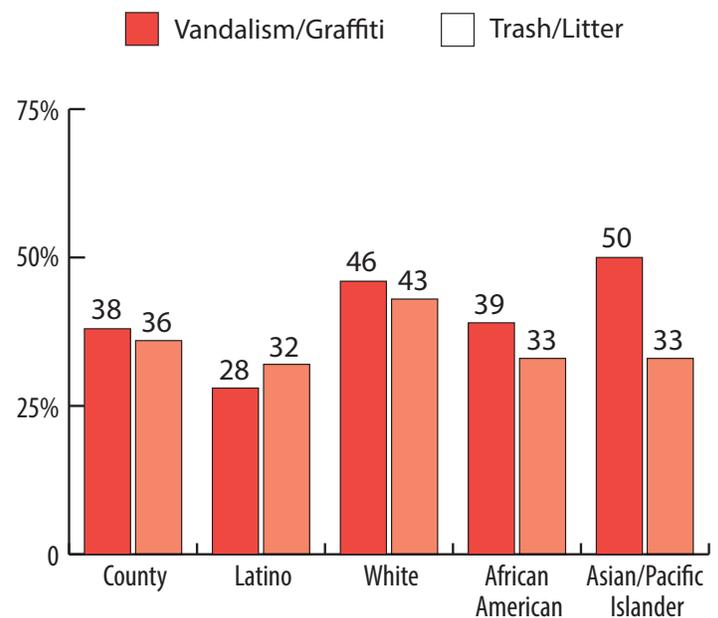
- Among those who reported using walking paths, parks, playgrounds, or sports fields in their neighborhood, 91% reported they were safe to use. However, among those who did not use these places, 81% reported they were safe, while 9% did not know if they were safe.
- Overall, 84% of adults in the County reported that they perceived their neighborhood to be safe from crime. Perceived neighborhood safety from crime varied geographically by Health District (Figure 3).
- 69% of adults reported that there was adequate lighting around buildings and on streets, and that the streets and sidewalks were well-maintained in their neighborhood.
- Only 62% of residents living in poverty reported having well-maintained streets and sidewalks, and adequate lighting in their neighborhood, compared to 71% of residents with higher household incomes.

Figure 3: Percent of Adults Who Perceived Their Neighborhood to be Safe from Crime, by Health District, LACHS 2011



- Graffiti, vandalism, trash or litter on the streets can deter residents from walking and engaging in other healthy forms of exercise.
 - A higher percentage of Asians/Pacific Islanders (50%) and whites (46%) reported no vandalism or graffiti in their neighborhood compared to 39% of African Americans and 28% of Latinos (Figure 4).
 - More whites (43%) reported that their neighborhood did not have trash and litter on the streets or properties compared to 33% of Asians/Pacific Islanders, 33% of African Americans, and 32% of Latinos.

Figure 4: Percent of Adults Who Reported No Vandalism/ Graffiti or Trash/Litter in their Neighborhood, by Race/Ethnicity, LACHS 2011



1. Urban Land Institute. Intersections: Health and the Built Environment. Washington, D.C.: Urban Land Institute, 2013.
2. The Impact of the Built Environment on Community Health: The State of Current Practice and Next Steps for a Growing Movement. Produced by PolicyLink for The California Endowment, August 2007. Available from http://www.calendow.org/uploadedfiles/the_built_environment_report.pdf.
3. Sallis JF, Saelens BE, Frank LD, Conway TL, Slymen DJ, Cain KL, Chapman JE, Kerr J. Neighborhood Built Environment and Income: Examining Multiple Health Outcomes. Soc Sci Med. 2009; 68:1285-93.
4. Mujahid MS, Diez Roux AV, Shen M, Gowda D, Sa' nchez B, Shea S, Jacobs DR, Jackson SA. Relation between Neighborhood Environments and Obesity in the Multi-Ethnic Study of Atherosclerosis. Am J Epidemiol 2008;167:1349-1357.
5. Sallis JF, Floyd MF, Rodríguez DA, Saelens BE. Role of Built Environments in Physical Activity, Obesity, and Cardiovascular Disease. Circulation. 2012;125:729-737.
6. Yañez E, Muzzy W. Healthy Parks, Healthy Communities: Addressing Health Disparities and Park Inequities through Public Financing of Parks, Playgrounds, and Other Physical Activity Settings. Trust for Public Land. October 2005. Available from http://www.healthjustice.org/wp-content/uploads/2011/07/HPHC_Policy_Brief.pdf.

CDC Recommendations for Improving Health through Transportation Policy

Centers for Disease Control and Prevention

The U.S. transportation system has been shaped by multiple policy inputs and concrete actions which have arisen from transportation and community planners, funding agencies and others at Federal, state and local levels. Today, the system is designed to move people and goods efficiently; however, there is a growing awareness across communities that transportation systems impact quality of life and health. Government and non-government agencies are seeking innovative policies and programs that protect and promote health while accomplishing the primary transportation objectives.

The Opportunity

Expanding the availability of, safety for, and access to a variety of transportation options and integrating health-enhancing choices into transportation policy has the potential to save lives by preventing chronic diseases, reducing and preventing motor-vehicle-related injury and deaths, improving environmental health, while stimulating economic development, and ensuring access for all people.

With this goal in mind, the Centers for Disease Control and Prevention (CDC) has identified transportation policies that can have profound positive impact on health. CDC supports strategies that can provide a balanced portfolio of transportation choices that supports health and reduces health care costs. Transportation policy can:

- Reduce injuries associated with motor vehicle crashes
- Encourage healthy community design
- Promote safe and convenient opportunities for physical activity by supporting active transportation infrastructure
- Reduce human exposure to air pollution and adverse health impacts associated with these pollutants
- Ensure that all people have access to safe, healthy, convenient, and affordable transportation

Rationale

The current U.S. transportation infrastructure focuses on motor vehicle travel and provides limited support for other transportation options for most Americans.

- Physical activity and active transportation have declined compared to previous generations. The lack of physical activity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke and other chronic health conditions in the United States.
- Motor vehicle crashes continue to be the leading cause of injury-related death for many age groups. Pedestrians and bicyclists are at an even greater risk of death from crashes than those who travel by motor vehicles.
- Many Americans view walking and bicycling within their communities as unsafe because of traffic and the lack of sidewalks, crosswalks, and bicycle facilities.

CDC Recommendations for Improving Health through Transportation Policy

Centers for Disease Control and Prevention

- Although using public transportation has historically been safer than highway travel in light duty vehicles, highway travel has grown more quickly than other modes of travel.
- A lack of efficient alternatives to automobile travel disproportionately affects vulnerable populations such as the poor, the elderly, people who have disabilities and children by limiting access to jobs, health care, social interaction, and healthy foods.
- Although motor vehicle emissions have decreased significantly over the past three decades, air pollution from motor vehicles continues to contribute to the degradation of our environment and adverse respiratory and cardiovascular health effects.
- Transportation accounts for approximately one-third of all U.S. greenhouse gas emissions contributing to climate change.

Recommendations

The following are key recommendations for bringing public health considerations into transportation issues.

Reduce injuries associated with motor vehicle crashes

Motor vehicle travel has become safer over time, but motor vehicle crashes are still the leading cause of death for people ages 1–34. Improving the safety and efficiency of motor vehicles and their occupants is critical to improving transportation policy and the public’s health.

Transportation policies are needed to improve the safety of motor vehicles and their occupants to prevent crashes, and advances in medical care are needed to increase the survivability of victims of crashes that do occur.

Recommendations:

- Provide incentives to states that implement, strengthen, and/or continue to use effective interventions that improve road traffic safety. Examples of interventions include:
 - Primary seatbelt laws
 - Child safety seat and booster seat laws
 - Alcohol-impaired driving countermeasures
 - Motorcycle and bicycle helmet laws
 - Distracted driving laws
 - Lower speed limits and other efforts to reduce speeding within communities.
 - Comprehensive graduated driver licensing systems
 - Roadway design measures such as installation of centerline rumble strips
 - Education on safe driving, bicycling, and walking
 - Community designs that promote reduced traffic speeds in neighborhoods
- Increase support for new and existing technologies to improve the safety of motor vehicles. Examples include:
- Technologies that enable vehicles to withstand crashes with lower risk of injuries to occupants
- Vehicle designs and technologies that lower risk for non-occupants

Attachment I-4

CDC Recommendations for Improving Health through Transportation Policy

Centers for Disease Control and Prevention

- Technologies to prevent alcohol impaired driving
- Study the effectiveness of providing incentives for Americans to reduce vehicle miles traveled by using alternatives to single occupancy vehicle travel. Examples of strategies include:
 - High occupancy vehicle lanes
 - Congestion pricing
 - Parking pricing
 - Carpools, vanpools, and improved public transportation
- Bring health, transportation and community planners together to address roadway safety issues through community design.
- Ensure access to trauma care for victims of motor vehicle crashes in order to improve survival outcomes after a crash.

Improve Air Quality

Transportation-related air pollutants are one of the largest contributors to unhealthy air quality. Exposure to traffic emissions has been linked to many adverse health effects including: premature mortality, cardiac symptoms, exacerbation of asthma symptoms, diminished lung function, increased hospitalization and others. Motor vehicles are a significant source of air pollution in urban areas.

Recommendations:

- Reduce human exposure to transportation-related air pollution and the adverse health impacts associated with air pollutants by:
 - Retrofitting existing diesel vehicles with current pollution control measures to reduce emissions.
 - Requiring effective inspection and maintenance programs for medium- and heavy-duty vehicles.
 - Providing incentives for motor vehicle drivers to purchase vehicles with technologies designed to control pollution and reduce emissions.
 - Strengthening congestion mitigation and air quality programs.
 - Seeking solutions to reduce pollution generated by ports, high-volume roadways and railroads
- Improve the respiratory and cardiovascular health of the U.S. population by improving air quality. Possible strategies include:
 - Promoting transportation choices and innovative transportation measures that reduce emissions
 - Shifting to active transportation and public transportation modes
 - Reducing vehicle miles traveled per capita
- Support policies that reduce environmental pollution (including greenhouse gas emissions) by changing to renewable energy sources, strengthening fuel efficiency

CDC Recommendations for Improving Health through Transportation Policy

Centers for Disease Control and Prevention

policies, and expanding programs that reduce the number of vehicles in the fleet with poor fuel economy.

Expand Public Transportation

Public transportation systems reduce the necessity for single occupancy vehicle trips, reduce the production of automobile emissions, increase incidental physical activity, and provide necessary transportation access for people with physical, economic, or other limitations that impede their access to and use of a single occupancy motor vehicle. Policies that encourage public transportation infrastructure are needed to improve access for all people.

Recommendations:

- Explore opportunities to increase funding to strengthen the positive health impacts associated with expanded public transportation options. For example:
 - Encourage funding decisions that strengthen public transportation
 - Encourage states to increase investments in public transportation, congestion relief, air quality improvements, and other options, and to remove barriers to use of gas tax revenues for public transportation and bicycle-pedestrian improvements
 - Give state, regional, and local governments more flexibility to choose from transportation funding categories to meet local transportation needs
 - Explore the extent to which program requirements and resources can be made to be more comparable for public transportation, highways, non-motorized and rail travel alternatives to encourage investments in all modes of transportation
 - Provide incentives to support a strong network of public transportation options, including bus rapid transit and light rail, which connect housing and jobs as well as improve access to healthy foods, medical care, and other services
- Work with government and non-government organizations to develop and implement model transportation planning policies that encourage transit-oriented developments and other mixed-use development, and increase connectivity among neighborhoods and communities for all transportation modes.
- Work with federal agencies and non-governmental organizations to establish a federal policy that would promote bicycling and walking to public transportation stations by making these connecting trips easier, faster, and safer by:
 - Providing bicycle storage at public transportation stations, bus stops, and city car-share point of departure locations
 - Assessing and addressing safety hazards for pedestrians and bicyclists through safety measures such as well-lighted crosswalks and signal timing, and integrating those safety enhancements for pedestrian and bicycle access to public transportation stations, bus stops, and city car-share locations
 - Removing barriers to pedestrians and bicyclists on roads and intersections near public transportation stations and bus stops
 - Enhancing the public transportation system to accommodate bicyclists and pedestrians

CDC Recommendations for Improving Health through Transportation Policy

Centers for Disease Control and Prevention

Promote Active Transportation

Active transportation systems should connect the places where people live, learn, work, shop, and play by providing safe and convenient walking and bicycling facilities. The safety of all road users can increase as more people choose active transportation.

Recommendations:

- Promote safe and convenient opportunities for physical activity by supporting active transportation infrastructure, such as:
 - Well-lit sidewalks, shared-use paths, and recreational trails
 - Safe roadway crossings
 - Creation of bicycle-supporting infrastructure including shared-use paths and interventions that reduce motor vehicle traffic and vehicle speed on neighborhood streets (e.g. bicycle boulevards)
 - Safe pedestrian and bicycling connections to public transportation
 - Safe and convenient pedestrian and bicycling connections to public park and recreation areas
- Increase opportunities for physical activity by devoting increased resources to non-motorized transportation options.
- Consider incentives for states and regions that reduce vehicle miles traveled per capita and implement active living environments that promote walking and bicycling, using public transportation, and reducing air pollution (including greenhouse gas emissions).
- Provide states with tools necessary to evaluate and effectively increase investments in bicycle and pedestrian infrastructure and programming. Activities to be evaluated could include:
 - Comprehensive street design measures, such as “complete streets,” which provide safe and convenient travel for all users of the street, such as expanding space for bicycle lanes and sidewalks, placing bus stops in safe and convenient locations, and making improvements accessible for disabled users
 - Complementary systems of shared-use paths connected to roadways that provide safe places to walk and bicycle for children, the elderly, and the general public
 - Bicycle-supporting infrastructure including shared use paths and interventions that reduce motor vehicle traffic and speed on neighborhood streets to provide direct, safe routes for bicyclists
 - “Safe Routes to School” initiatives including the development of sidewalks, shared-use paths and bicycle infrastructure to ensure that children can walk and bicycle safely to school. Safe Routes to School programs also include support activities, such as education, encouragement, enforcement, and evaluation
- Bring health, transportation and community planners together to develop safe, convenient, and complete pedestrian and bicycle master plans, including an inventory of current sidewalks, bicycle facilities, recreational trails, and shared-use paths, which can be incorporated into city general plans and capital improvement programs.

CDC Recommendations for Improving Health through Transportation Policy Centers for Disease Control and Prevention

- Work with state and local transportation and planning officials to integrate and enforce use of pedestrian and bicycle design guidelines and evidence-based safety standards into transportation planning practice and support evaluation of innovative designs.
- Bring together specialists in transportation, energy, community planning and health to establish federally recommended guidelines for the inclusion of active transportation infrastructure in building and development efforts.
- Explore opportunities for increasing availability of funds for establishing active transportation initiatives.

Encourage Healthy Community Design

Healthy community design incorporates elements (such as transportation networks, street designs, and zoning/land use policies) that work synergistically to promote health and safety.

Recommendations:

- Work with government and non-government organizations to develop and implement model transportation and land use planning policies that encourage transit-oriented and mixed-use developments. Encourage:
 - Dense networks of connected streets which serve the needs of all transportation modes; for example, adopting measures such as “complete streets”
 - Roads that include robust infrastructure for bicycling and walking while mitigating the potential adverse effects of motor vehicle travel
- Enable state and local planners to protect residents from local air pollution and noise from high-volume roadways, ports, and airports by discouraging development (including schools) near these air pollution and noise pollution sources and, where possible, constructing barriers to reduce nearby residents’ exposure.
- Support research to assist transportation agencies to develop street networks that facilitate active transportation and public transportation by increasing connectivity and limiting block size.
- Provide assistance to local planners to design and locate destinations for children (such as schools, parks, and libraries) within neighborhoods so that children can reach destinations without having to cross busy streets.
- Work with federal, state, and local transportation officials to ensure that all people have access to safe, healthy, convenient, and affordable transportation options regardless of age, income and other socioeconomic factors.
- Support policies that reduce vehicle miles traveled per capita, including land use policies that reduce vehicular travel, increase public transportation service, and increase active transportation infrastructure.

Design to Minimize Adverse Health and Safety Consequences

Attachment I-6: BC Tool

City of Lancaster 10th Street W Road Diet & Bike Lane

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Figure 2-17. Discounted Benefits scaled up over Life of Project..... 18

1 Results Overview for Project

Table 1. Results by Benefits Category

Result Category	Result Value
Total Mobility Benefits	\$4,123,795
Health Benefits	\$976,126
Recreational Benefits	\$3,426,640
Safety Benefits	\$21,267,958
Gas & Emission Benefits	\$115,743
Sum Total Benefits	\$29,910,261
Sum Present Value Benefits	\$19,808,953
Sum Total Project Cost	\$1,568,244
Sum Present Value Cost	\$1,507,927
Net Present Value	\$18,301,026
BCA Ratio	13.14
Net Present Cost of Funds Requested	\$753,963
Benefits to Funds Requested Ratio	26.27

Table 1 includes the benefits and costs of the Project. As shown in the table, overall the Project will generate \$19.81 million in benefits (present value), and cost \$1.51 million (present value) to implement. This translates to a net present value of \$18.30 million, and a benefit to cost ratio of 13.14. Thus the benefits that will be generated by the Project will greatly exceed the costs. LA Metro is requesting \$784,122 (or in present value \$753,963) from the State to implement this Project, which equates to a benefit to funds requested ratio of 26.27. With such a large benefit to cost ratio, the Project will certainly leverage funding to generate large-scale benefits.

The largest type of benefit expected from the Project is safety, followed by mobility and recreational benefits. The Project will achieve these benefits by creating a “complete street” with designated bike lanes, pedestrian lighting and landscaping, and raised medians. Vehicle lanes will be reduced to create more space for pedestrians and cyclists, and a striped center median. The improvements will encourage more cyclists and pedestrians to use the corridor, either for recreation or to access the nearby transit stations. The Project features will also improve the safety of current and future cyclists and pedestrians. Given the history of collisions in the area—some of which resulted in fatalities—the Project’s safety design elements are valued greatly, contributing to the large-scale benefits of the Project.

2 Screenshots of Model Results for Project

The following sections illustrate the results from the B/C Tool for the Project. Each section provides a screen shot of a worksheet in the B/C Tool with results of the Project.

2.1 Parameters

This screenshot illustrates the parameter values assumed in the model.

Figure 2-1. Parameters in the Tool

PARAMETERS		
Mobility Parameters		
CA Statewide Hourly Wage (2014)	\$26.07	
Value of Time (VOT)- adult	\$13.03	
Value of Time (VOT)- child	\$5.42	
Bike Path (Class I)	20.38	min/trip
Bike Lane (Class II)	18.02	min/trip
Bike Route (Class III)	15.83	min/trip
Health Parameters		
Cycling	\$146	annual\$/person
Walking	\$146	annual\$/person
Accident Cost Parameters		
Cost of a Fatality (K)	\$4,130,347	\$/crash
Cost of an Injury	\$81,393	\$/crash
Cost of Property Damage (PDO)	\$7,624	\$/crash
Source: Appendix D, Local Roadway Safety: A manual for CA's Local Road Owners Caltrans. April 2013.		
Recreational Values Parameters		
Biking		
New Users	\$10	per trip
Existing Users	\$4	per trip
Walking		
All Users	\$1	per trip
VMT Reduction		
Price of gasoline (per gallon incl. tax)	\$3.41	Average fuel price (November 2013-November 2014) based on EIA's Table 9.4: Retail Motor Gasoline and On-Highway Diesel Fuel Prices http://www.eia.gov/totalenergy/data/monthly/pdf/sec9_6.pdf
Price of CO2 (per ton)-adj to 2014\$	\$25	Interagency Working Group on Social Cost of Carbon, United States
Price of Co2 (per lb)	\$0.01	Government, Technical Support Document: Social Cost of Carbon for
Working days	250	Regulatory Impact Analysis Under Executive Order 12866, February 2010.
2%	Average CA Annual Growth of Population (1955-2011)	
4%	Discount Rate used (same as Cal B/C Model)	

2.3 Infrastructure Inputs

This screenshot illustrates the data inputs in the case of an infrastructure project.

Figure 2-3. Infrastructure Inputs

Bike Projects (Daily Person Trips for All Users) (Box 1A)		Project Costs (Box 1D)		
Existing	Without P project: 190 With P project: 286	Non-SR2S Infrastructure Project Cost	\$1,568,244	
Forecast (1 Yr after completion)	Without P project: 195 With P project: 286	SR2S Infrastructure Project Cost	\$0	
Existing Trips	Commuters: 25 Recreational Users: 64	ATP Requested Funds (Box 1E)		
New Daily Trips (estimate)	Commuters: 12 Recreational Users: 30	Non-SR2S Infrastructure	\$784,122	
(1 YR after completion) (actual)	Commuters: 12 Recreational Users: 30	SR2S Infrastructure	\$0	
Project Information- Non SR2S Infrastructure		CRASH DATA (Box 1F)		
Bike Class Type	Bike Class II	Fatal Crashes (Last 5 Yrs)	1	
Average Annual Daily Traffic (AADT)	11283	Injury Crashes (Last 5 Yrs)	9	
		PDO (Last 5 Yrs)	0	
		Fatal Crashes (Annual Average)	0.2	
		Injury Crashes (Annual Average)	1.8	
		PDO (Annual Average)	0	
Pedestrian Projects (Daily Person Trips for All Users) (Box 1B)		SAFETY COUNTERMEASURES (improvements) (Box 1G)		
Existing	Without P project: 1894 With P project: 2639	Signalized Intersection	Pedestrian countdown signal heads	Y
Forecast (1 YR after project completion)	Without P project: 1894 With P project: 2639		Pedestrian crossing	Y
Existing step counts (600 steps=0.3mi=1trip)	Without Project: 0 With Project: 0	Unsignalized Intersection	Advance stop bar before crosswalk	N
Existing miles walked	Without Project: 0 With Project: 0		Install overpass/underpass	N
			Raised medians/refuge islands	Y
Safe Routes to School (SR2S) (Box 1C)		Roadways	Pedestrian crossing (new signs and markings only)	N
Number of student enrollment	Total: 0		Pedestrian crossing (safety features/curb extensions)	Y
Approximate no. of students living along school route proposed for improvement	0		Pedestrian signals	Y
Percentage of students that currently walk or bike to school	0%		Bike lanes	N
Projected percentage of students that will walk or bike to school after the project	0.00%	Sidewalk/pathway (to avoid walking along roadway)	N	
		Pedestrian crossing (with enhanced safety features)	Y	
		Pedestrian crossing	Y	
		Other reduction factor countermeasures	N	

2.4 Non-Infrastructure Inputs

This screenshot illustrates the data inputs in the case of a non-infrastructure project.

Figure 2-4. Non-Infrastructure Inputs

Outreach (SR2S)- (Box 2A) Participants (School Enrollment) <input type="text" value="0"/> Current Active Trans Walker/Bicyclist Users <input type="text" value="0"/> Percentage of Current Active Trans Walkers/Bicyclists <input type="text" value="0%"/> Project Cost <input type="text" value="\$0"/> ATP Requested Funds <input type="text" value="\$0"/> Duration of Outreach (months) <input type="text" value="0"/> Outreach to new users <input type="text" value="0"/>		Outreach (Non SR2S)- (Box 2B) Participants <input type="text" value="0"/> Current Active Trans Walker/Bicyclist Users <input type="text" value="0"/> Percentage of Current Active Trans Walkers/Bicyclists <input type="text" value="0%"/> Project Cost <input type="text" value="\$0"/> ATP Requested Funds <input type="text" value="\$0"/> Duration of Outreach (months) <input type="text" value="0"/> Outreach to new users <input type="text" value="0"/>													
Perception (must be marked with an "x")- (Box 2C) <i>Mark all applicable categories with an "x"</i> Outreach is Hands-on (self-efficacy) <input type="checkbox"/> Overcome Barriers (e.g., dist, time, etc.) <input type="checkbox"/> Eliminates Hazards/Threats (speed, crime, etc.) <input type="checkbox"/> Connected or Addresses Connectivity Challenge <input type="checkbox"/> Creating Value in Using Active Transportation <input type="checkbox"/> Weighted Score <input type="text" value="0"/>		Promotional Effort (must be marked with an "x")- (Box 2D) <i>Mark all applicable categories with an "x"</i> Effort Targets 5 E's or 5 P's <input type="checkbox"/> Knowledgeable Staff/Educator <input type="checkbox"/> Partnership/Volunteers <input type="checkbox"/> Creates Community Ownership/Relationship <input type="checkbox"/> Part of Bigger Effort (e.g., political support) <input type="checkbox"/> Weighted Score <input type="text" value="0"/>													
Age (must be marked with an "x")- (Box 2E) <i>Mark only one category with an "x"</i> Younger than 10 <input type="checkbox"/> 10-12 <input type="checkbox"/> 13-24 <input type="checkbox"/> 25-55 <input type="checkbox"/> 55+ <input type="checkbox"/> Weighted Score <input type="text" value="FALSE"/>		Duration (must be marked with an "x")- (Box 2F) <i>Mark only one category with an "x"</i> One Day <input type="checkbox"/> One Month <input type="checkbox"/> One Year <input type="checkbox"/> Multiple Years <input type="checkbox"/> Continuous Effort <input type="checkbox"/> Weighted Score <input type="text" value="FALSE"/>													
Projected New Active Trans Riders Outreach to New Users <input type="text" value="0"/> Weighted Value of Outreach <input type="text" value="0.00"/> Longitudinal New Users <input type="text" value="0.00"/>		Projected New Active Trans Riders Outreach to New Users <input type="text" value="0"/> Weighted Value of Outreach <input type="text" value="0.00"/> Longitudinal New Users <input type="text" value="0.00"/>													
CRASH DATA - (Box 2G) <table border="1"> <thead> <tr> <th></th> <th>Last 5 Yrs</th> <th>Annual</th> </tr> </thead> <tbody> <tr> <td>Fatal Crashes</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> <tr> <td>Injury Crashes</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> <tr> <td>PDO</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> </tbody> </table>			Last 5 Yrs	Annual	Fatal Crashes	<input type="text" value="0"/>	<input type="text" value="0"/>	Injury Crashes	<input type="text" value="0"/>	<input type="text" value="0"/>	PDO	<input type="text" value="0"/>	<input type="text" value="0"/>	Assumption: Benefits only accrue for five years, unless the project is ongoing.	
	Last 5 Yrs	Annual													
Fatal Crashes	<input type="text" value="0"/>	<input type="text" value="0"/>													
Injury Crashes	<input type="text" value="0"/>	<input type="text" value="0"/>													
PDO	<input type="text" value="0"/>	<input type="text" value="0"/>													

2.5 Non-Infrastructure—All

This screenshot illustrates calculations and benefit results in the case of a non-infrastructure project.

Figure 2-5. Non-Infrastructure Benefits—All

Non Infrastructure- All				
Projected New ATP Users				0.00
Annual Mobility Benefits		\$0		Did not quantify mobility benefits.
Annual Health Benefits		\$0		
Annual Recreational Benefits		\$0		Did not quantify recreational benefits.
Annual Safety Benefits		\$0		reduction in Other Reduction Factor Countermeasures.
Fuel saved		\$0		
Emissions Saved		\$0		
Fuel and Emissions Saved		\$0		
Underlying assumptions for calculations:				
1) 1 mile driven is ~ 0.05 gal ~ 1 lb of CO2 based on US average 20mpg. Source: Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking. Rails to Trails Conservancy, page 22. http://www.railstotrails.org/resourcehandler.ashx?id=2948				
2) Assume users divert 1040 miles (4 miles (bike 3 mi, walk .6 mi) * 5days *52 weeks)				
3) Gasoline price per gallon is \$3.41 (incl. tax)				
4) Carbon price is \$25 per ton (updated \$2014 value)				
5) 2,000 lbs = 1 ton				
ESTIMATED SAFETY BENEFITS FROM POTENTIAL CRASH REDUCTION				
Countermeasures				OTHER REDUCTION FACTOR
Crash Reduction Factors (CRFs)				10%
Service Life				5
1st year				\$0
	Fatal	Injury	PDO	Total
Frequency	0	0	0	0
Cost/crash	\$3,750,837	\$80,000	\$6,924	

2.6 SR2S Infrastructure

This screenshot illustrates calculations and benefit results in the case of a safe-route-to-school (SR2S) infrastructure project.

Figure 2-6. SR2S Infrastructure Project Benefits

SAFE ROUTES TO SCHOOL			
Infrastructure			
Before Project			
No. of students enrollment	0		
Approximate no. of students living along school route proposed for improvement	0		
Percent that currently walks/bikes to school	0%		
Number of students that walk/bike to school	0		
Assumptions:			
		1) 180 school days	
		2) 2 miles distance to school = 1 hour walk	
		3) Takes 1 hour back and forth to school grounds, used distance of 1 mile (composite for bike and walk)	
		4) Approximate no. of students living along school route proposed for improvement- we used this number for before and after to get an actual increase number of ATP users or corresponding percentage.	
		5) We used the value of time for adults for SR2S since we did not quantify parents' time, and the community in general. Value of time for adults \$13.03 vs. \$5.42 for kids.	
		6) Safety benefits are assumed to be the same as non-SRTS infrastructure projects.	
After Project			
No. of students enrollment	0		
Approximate no. of students living along school route proposed for improvement	0		
Projected percentage of students that will walk or bike because of the project	0%		
Number of students that will walk/bike to school after the project	0		
ATP Shift			
Fuels Saved	\$0.00		
Emissions Saved	\$0.00		
Annual Benefits			
Annual Mobility Benefits	\$0		
Annual Health Benefits	\$0		
Annual Safety Benefits	\$437,660		
Fuel and Emissions Saved	\$0		
Recreational Benefits	\$0		

Note that annual safety benefits are calculated here in the Tool even though the Project does not include SR2S data inputs. We believe this calculation should read zero.

2.7 Results

This screenshot illustrates the results of the project, including project costs, total benefits, and benefits by category.

Figure 2-7. Results

20 Year Invest Summary Analysis	
Total Costs	\$1,568,244
Net Present Cost	\$1,507,927
Total Benefits	\$29,910,261
Net Present Benefit	\$19,808,953
Benefit-Cost Ratio	13.14
20 Year Itemized Savings	
Mobility	\$4,123,794.59
Health	\$976,126.20
Recreational	\$3,426,640
Gas & Emissions	\$115,743
Safety	\$21,267,958
Funds Requested	\$784,122
Net Present Cost of Funds Requested	\$753,963
Benefit Cost Ratio	26.27

2.8 Mobility

This screenshot illustrates the calculations and results of mobility benefits in the case of a non-SR2S infrastructure project.

Figure 2-8. Mobility Benefits for non-SR2S Infrastructure Projects

ESTIMATED DAILY MOBILITY BENEFITS FROM THE PROJECT							
Current Walk Counts		Project Types					
Total miles walked	0.00	For M values:					
Total person Trips walked	2,181.00	20.38 min/trip	OFF STREET			Bike Class I	
Total Steps walked	0.00	18.02 min/trip	ON STREET w/o parking benefit			Bike Class II	
		15.83 min/trip	ON STREET w/ parking benefit			Bike Class III	
After the Project is Completed							
Total miles walked	0.00	\$13.03	Value of Time				
Total person trips walked	2,639.00						
Total Steps walked	0.00	600 steps=0.3mi=1 trip					
Converted miles walked to trips	0	\$1 Value of Total Pedestrian Environmental Impacts per trip					
Difference of person trips walked	458						
Converted steps walked to trips	0						
Current Bike Counts							
Existing Commuters	25						
New Commuters	12						
Benefits, 2014 values							
Annual Mobility Benefit (Walking)	\$97,325.00						
Annual Mobility Benefit (Biking)	\$72,396.85						
Total Annual Mobility Benefits	\$169,721.85						
Sources:							
NCHRP 552 Methodology (Biking)							
Heuman (2006) as reported by UK Dept of Transport and Guidance (walking)							

2.9 Health

This screenshot illustrates the calculations and results of health benefits in the case of a non-SR2S infrastructure project

Figure 2-9. Health Benefits for non-SR2S Infrastructure Projects

YEARLY ESTIMATED HEALTH BENEFITS FROM THE PROJECT				
INFRASTRUCTURE				
Cycling:				
New Cyclists	45.5			
		GDP Deflator		
Value of Health (ave.annual)	\$146	2006	0.9429	
		2014	1.0781	
Annual Health Benefits	\$6,659.10			
Walking:				
New Walkers	229			
Value of Health	\$146			
Annual Health Benefits	\$33,515.05			
Total Annual Health Benefits	\$40,174			
Source: NCHRP 552- Guidelines for Analysis of Investments in Bicycle Facilities, Appendix G. (Estimated annual per capita cost savings of direct and/indirect of physical activity)				

2.10 Reduced Gas & Emissions Benefits

This screenshot illustrates the calculations and results of benefits from reduced gas and greenhouse gas emissions in the case of a non-SR2S infrastructure project

Figure 2-10. Reduced Gas & Emissions Benefits for non-SR2S Infrastructure Projects

YEARLY ESTIMATED GAS AND EMISSION SAVINGS FROM THE PROJECT	
INFRASTRUCTURE	
New Pedestrians	229
New Bicyclists	46
Avoided VMT due to Walking	14,599
Avoided VMT due to Biking	11,432
Fuel Saved	4,438
Emissions Saved	325
Fuel and Emissions saved	\$4,764
Underlying assumptions for calculations:	
1) Bike miles traveled= 1.5 mi, walk miles traveled= .3 (CHTS)	
2) Assume 50% of new walkers and cyclists choose not to drive their cars	
3) 1 mile driven is ~ 0.05 gal ~ 1 lb of CO2 based on US average 20mpg.	
Source: Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking. Rails to Trails Conservancy, page 22.	
http://www.railstotrails.org/resourcehandler.ashx?id=2948	
4) Gasoline price per gallon is \$3.41 (incl. tax)	
5) Carbon price is \$25 per ton	
6) 250 working days	
7) 2,000 lbs = 1 ton	

2.11 Recreational Benefits

This screenshot illustrates the calculations and results of recreational benefits in the case of a non-SR2S infrastructure project

Figure 2-11. Recreational Benefits for non-SR2S Infrastructure Projects

YEARLY ESTIMATED RECREATIONAL BENEFITS FROM THE PROJECT			
Biking			
New Recreational Users	30	\$10	per trip
New Commuters	12		
Existing Recreational Users	64	\$4	per trip
Value of Spending Recreational Time for New Recreational Users	\$37,200		
Value of Spending Recreational Time for Existing Recreational Users	\$31,744		
Potential number of recreational time outdoors	124		
Annual Biking Recreational Benefits	\$68,944		
Sources: NCHRP 552 for New Users and Commuters, TAG (January 2010 UK's Department of Transport Guidance on the Appraisal of Walking and Cycling Schemes) for Existing Users, World Health Organization's HEAT for cycling (124 days- the observed number of days cycled in Stockholm)			
Walking			
Total Recreational pedestrians	69	15%-	See Misc. Tab
Value of Spending Recreational time for all pedestrians	\$25,076	\$1	per trip
Potential number of recreational time outdoors	365		
Annual Walking Recreational Benefits	\$25,076		
Sources: Pedestrian and Bicycle Information Center. TAG (January 2010 UK's Department of Transport Guidance on the Appraisal of Walking and Cycling Schemes) for Existing Users.			
Total Annual Recreational Benefits	\$94,020		

2.12 Safety Benefits

This screenshot illustrates the calculations and results of safety benefits in the case of a non-SR2S infrastructure project

Figure 2-12. Safety Benefits for non-SR2S Infrastructure Projects

ESTIMATED SAFETY BENEFITS FROM POTENTIAL CRASH REDUCTION															
Countermeasures	SIGNALIZED INTERSECTION COUNTERMEASURES				UNSIGNALIZED INTERSECTION COUNTERMEASURES				ROADWAY COUNTERMEASURES				OTHER REDUCTION FACTOR	Average of 3 highest countermeasures	Annual Benefits
	Install pedestrian countdown signal heads	Install pedestrian crossing	Install advance stop bar before crosswalk (bicycle box)	Install pedestrian overpass/underpass	Install raised medians/refuge islands	Install pedestrian crossings (new signs and markings only)	Install pedestrian crossing (with enhanced safety measures/curb extensions)	Install pedestrian signal	Install bike lanes	Install sidewalk/pathway (to avoid walking along roadways)	Install pedestrian crossing (with enhanced safety measures)	Install Pedestrian crossing			
Applicable Countermeasures	Y	Y	N	N	Y	N	Y	Y	N	N	Y	Y	N		
Crash Reduction Factors (CRFs)	25%	25%	15%	75%	45%	25%	35%	55%	35%	80%	30%	35%	10%		
Service Life	20	20	10	20	20	10	20	20	20	20	10	10	20		
	\$243,144	\$243,144	\$145,887	\$729,433	\$437,660	\$243,144	\$340,402	\$534,917	\$340,402	\$778,062	\$291,773	\$340,402	\$97,258		
	\$243,144	\$243,144	FALSE	FALSE	\$437,660	FALSE	\$340,402	\$534,917	FALSE	FALSE	\$291,773	\$340,402	FALSE		
1st year	\$243,144	\$243,144	\$0	\$0	\$437,660	\$0	\$340,402	\$534,917	\$0	\$0	\$291,773	\$340,402	\$0	\$437,660	\$437,660

	Fatal	Injury	PDO	Total
Frequency	0.2	1.8	0	2
Cost/crash	\$4,130,347	\$81,393	\$7,624	

Assumption:
For Other Reduction Factor countermeasure, EAB assumes 20 years service life.

Figure 2-14. Undiscounted Benefits scaled up over Life of Project—Image 2 of 4

NON-INFRASTRUCTURE-Non-SR2S and SR2S								INFRASTRUCTURE- SR2S									
Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost	Growth Factor	Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost	Growth Factor
PROJECT OPEN								PROJECT OPEN									
1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.02	1	\$0	\$0	\$0	\$437,660	\$0	\$437,660	\$0	1.02
2	\$0	\$0	\$0	\$0	\$0	\$0	\$0		2	\$0	\$0	\$0	\$446,413	\$0	\$446,413	\$0	
3	\$0	\$0	\$0	\$0	\$0	\$0	\$0		3	\$0	\$0	\$0	\$455,341	\$0	\$455,341	\$0	
4	\$0	\$0	\$0	\$0	\$0	\$0	\$0		4	\$0	\$0	\$0	\$464,448	\$0	\$464,448	\$0	
5	\$0	\$0	\$0	\$0	\$0	\$0	\$0		5	\$0	\$0	\$0	\$473,737	\$0	\$473,737	\$0	
6									6	\$0	\$0	\$0	\$483,212	\$0	\$483,212	\$0	
7									7	\$0	\$0	\$0	\$492,876	\$0	\$492,876	\$0	
8									8	\$0	\$0	\$0	\$502,733	\$0	\$502,733	\$0	
9									9	\$0	\$0	\$0	\$512,788	\$0	\$512,788	\$0	
10									10	\$0	\$0	\$0	\$523,044	\$0	\$523,044	\$0	
11									11	\$0	\$0	\$0	\$533,505	\$0	\$533,505	\$0	
12									12	\$0	\$0	\$0	\$544,175	\$0	\$544,175	\$0	
13									13	\$0	\$0	\$0	\$555,058	\$0	\$555,058	\$0	
14									14	\$0	\$0	\$0	\$566,159	\$0	\$566,159	\$0	
15									15	\$0	\$0	\$0	\$577,483	\$0	\$577,483	\$0	
16									16	\$0	\$0	\$0	\$589,032	\$0	\$589,032	\$0	
17									17	\$0	\$0	\$0	\$600,813	\$0	\$600,813	\$0	
18									18	\$0	\$0	\$0	\$612,829	\$0	\$612,829	\$0	
19									19	\$0	\$0	\$0	\$625,086	\$0	\$625,086	\$0	
20									20	\$0	\$0	\$0	\$637,587	\$0	\$637,587	\$0	
						Sum Total Benefits	Total Project Cost								Sum Total Benefits	Total Project Cost	
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0		Total	\$0	\$0	\$0	\$10,633,979	\$0	\$10,633,979	\$0	

Figure 2-15. Undiscounted Benefits scaled up over Life of Project—Image 3 of 4

COMBO PROJECTS- Non SR2s Infrastructure and NonInfrastructure								COMBO PROJECTS- NonSR2S & SR2S Infrastructure							
Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost	Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost
PROJECT OPEN								PROJECT OPEN							
1	\$169,722	\$40,174	\$94,020	\$218,830	\$4,764	\$527,509	\$1,568,244	1	\$84,861	\$20,087	\$94,020	\$437,660	\$2,382	\$639,009	\$1,568,244
2	\$173,116	\$40,978	\$95,900	\$223,206	\$4,859	\$538,059		2	\$86,558	\$20,489	\$95,900	\$446,413	\$2,429	\$651,789	
3	\$176,579	\$41,797	\$97,818	\$227,671	\$4,956	\$548,820		3	\$88,289	\$20,899	\$97,818	\$455,341	\$2,478	\$664,825	
4	\$180,110	\$42,633	\$99,774	\$232,224	\$5,055	\$559,797		4	\$90,055	\$21,317	\$99,774	\$464,448	\$2,528	\$678,121	
5	\$183,712	\$43,486	\$101,770	\$236,868	\$5,156	\$570,993		5	\$91,856	\$21,743	\$101,770	\$473,737	\$2,578	\$691,684	
6	\$187,387	\$44,356	\$103,805	\$241,606	\$5,259	\$582,412		6	\$93,693	\$22,178	\$103,805	\$483,212	\$2,630	\$705,518	
7	\$191,134	\$45,243	\$105,881	\$246,438	\$5,365	\$594,061		7	\$95,567	\$22,621	\$105,881	\$492,876	\$2,682	\$719,628	
8	\$194,957	\$46,147	\$107,999	\$251,367	\$5,472	\$605,942		8	\$97,479	\$23,074	\$107,999	\$502,733	\$2,736	\$734,020	
9	\$198,856	\$47,070	\$110,159	\$256,394	\$5,581	\$618,061		9	\$99,428	\$23,535	\$110,159	\$512,788	\$2,791	\$748,701	
10	\$202,833	\$48,012	\$112,362	\$261,522	\$5,693	\$630,422		10	\$101,417	\$24,006	\$112,362	\$523,044	\$2,846	\$763,675	
11	\$206,890	\$48,972	\$114,609	\$266,752	\$5,807	\$643,030		11	\$103,445	\$24,486	\$114,609	\$533,505	\$2,903	\$778,948	
12	\$211,028	\$49,952	\$116,901	\$272,087	\$5,923	\$655,891		12	\$105,514	\$24,976	\$116,901	\$544,175	\$2,961	\$794,527	
13	\$215,248	\$50,951	\$119,239	\$277,529	\$6,041	\$669,009		13	\$107,624	\$25,475	\$119,239	\$555,058	\$3,021	\$810,418	
14	\$219,553	\$51,970	\$121,624	\$283,080	\$6,162	\$682,389		14	\$109,777	\$25,985	\$121,624	\$566,159	\$3,081	\$826,626	
15	\$223,944	\$53,009	\$124,057	\$288,741	\$6,285	\$696,037		15	\$111,972	\$26,504	\$124,057	\$577,483	\$3,143	\$843,159	
16	\$228,423	\$54,069	\$126,538	\$294,516	\$6,411	\$709,958		16	\$114,212	\$27,035	\$126,538	\$589,032	\$3,206	\$860,022	
17	\$232,992	\$55,151	\$129,069	\$300,406	\$6,539	\$724,157		17	\$116,496	\$27,575	\$129,069	\$600,813	\$3,270	\$877,222	
18	\$237,652	\$56,254	\$131,650	\$306,415	\$6,670	\$738,640		18	\$118,826	\$28,127	\$131,650	\$612,829	\$3,335	\$894,767	
19	\$242,405	\$57,379	\$134,283	\$312,543	\$6,804	\$753,413		19	\$121,202	\$28,689	\$134,283	\$625,086	\$3,402	\$912,662	
20	\$247,253	\$58,526	\$136,969	\$318,794	\$6,940	\$768,481		20	\$123,626	\$29,263	\$136,969	\$637,587	\$3,470	\$930,915	
Sum Total Benefits							Total Project Cost	Sum Total Benefits							Total Project Cost
Total	\$4,123,795	\$976,126	\$2,284,427	\$5,316,989	\$115,743	\$12,817,080	\$1,568,244	Total	\$2,061,897	\$488,063	\$2,284,427	\$10,633,979	\$57,872	\$15,526,237	\$1,568,244

Figure 2-16. Undiscounted Benefits scaled up over Life of Project—Image 4 of 4

COMBO PROJECTS- SR2S Infrastructure and NonInfrastructure									SUMMARY OF QUANTIFIABLE BENEFITS AND COSTS								
Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost	Growth Factor	Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Total Project Cost	Benefit Cost Ratio
PROJECT OPEN									PROJECT OPEN								
1	\$0	\$0	\$0	\$218,830	\$0	\$218,830	\$0	1.02	1	\$169,721.85	\$40,174	\$141,029	\$875,319	\$4,764	\$1,231,008	\$1,568,244	19.07
2	\$0	\$0	\$0	\$223,206	\$0	\$223,206			2	\$173,116	\$40,978	\$143,850	\$892,826	\$4,859	\$1,255,628		
3	\$0	\$0	\$0	\$227,671	\$0	\$227,671			3	\$176,579	\$41,797	\$146,727	\$910,682	\$4,956	\$1,280,741		
4	\$0	\$0	\$0	\$232,224	\$0	\$232,224			4	\$180,110	\$42,633	\$149,661	\$928,896	\$5,055	\$1,306,356		
5	\$0	\$0	\$0	\$236,868	\$0	\$236,868			5	\$183,712	\$43,486	\$152,655	\$947,474	\$5,156	\$1,332,483		
6	\$0	\$0	\$0	\$241,606	\$0	\$241,606			6	\$187,387	\$44,356	\$155,708	\$966,423	\$5,259	\$1,359,133		
7	\$0	\$0	\$0	\$246,438	\$0	\$246,438			7	\$191,134	\$45,243	\$158,822	\$985,752	\$5,365	\$1,386,315		
8	\$0	\$0	\$0	\$251,367	\$0	\$251,367			8	\$194,957	\$46,147	\$161,998	\$1,005,467	\$5,472	\$1,414,041		
9	\$0	\$0	\$0	\$256,394	\$0	\$256,394			9	\$198,856	\$47,070	\$165,238	\$1,025,576	\$5,581	\$1,442,322		
10	\$0	\$0	\$0	\$261,522	\$0	\$261,522			10	\$202,833	\$48,012	\$168,543	\$1,046,088	\$5,693	\$1,471,169		
11	\$0	\$0	\$0	\$266,752	\$0	\$266,752			11	\$206,890	\$48,972	\$171,914	\$1,067,009	\$5,807	\$1,500,592		
12	\$0	\$0	\$0	\$272,087	\$0	\$272,087			12	\$211,028	\$49,952	\$175,352	\$1,088,350	\$5,923	\$1,530,604		
13	\$0	\$0	\$0	\$277,529	\$0	\$277,529			13	\$215,248	\$50,951	\$178,859	\$1,110,117	\$6,041	\$1,561,216		
14	\$0	\$0	\$0	\$283,080	\$0	\$283,080			14	\$219,553	\$51,970	\$182,436	\$1,132,319	\$6,162	\$1,592,440		
15	\$0	\$0	\$0	\$288,741	\$0	\$288,741			15	\$223,944	\$53,009	\$186,085	\$1,154,965	\$6,285	\$1,624,289		
16	\$0	\$0	\$0	\$294,516	\$0	\$294,516			16	\$228,423	\$54,069	\$189,807	\$1,178,065	\$6,411	\$1,656,775		
17	\$0	\$0	\$0	\$300,406	\$0	\$300,406			17	\$232,992	\$55,151	\$193,603	\$1,201,626	\$6,539	\$1,689,910		
18	\$0	\$0	\$0	\$306,415	\$0	\$306,415			18	\$237,652	\$56,254	\$197,475	\$1,225,658	\$6,670	\$1,723,709		
19	\$0	\$0	\$0	\$312,543	\$0	\$312,543			19	\$242,405	\$57,379	\$201,424	\$1,250,172	\$6,804	\$1,758,183		
20	\$0	\$0	\$0	\$318,794	\$0	\$318,794			20	\$247,253	\$58,526	\$205,453	\$1,275,175	\$6,940	\$1,793,346		
						Sum Total Benefits	Total Project Cost								Sum Total Benefits	Total Project Cost	Benefit Cost Ratio
Total	\$0	\$0	\$0	\$5,316,989	\$0	\$5,316,989	\$0		Total	\$4,123,795	\$976,126	\$3,426,640	\$21,267,958	\$115,743	\$29,910,261	\$1,568,244	19.07

2.14 Discounted Benefits

This screenshot illustrates the calculations of benefits over the life of the project, and then discounted into present value terms. Discounted benefits are calculated on this sheet regardless of the type of project (non-infrastructure SR2S, non-infrastructure non-SR2S, infrastructure SR2S, and infrastructure non-SR2S).

Figure 2-17. Discounted Benefits scaled up over Life of Project

SUMMARY OF QUANTIFIABLE BENEFITS AND COSTS														
Year	Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Total Benefits	Present Value Benefit	Total Project Cost	Present Value Cost	Discount Rate	Net Present Value	BCA Ratio	Funds Requested	PV of Funds Requested
PROJECT OPEN														
										4.00%	\$18,301,026.38	13.14		
1	\$169,722	\$40,174	\$141,029	\$875,319	\$4,764	\$1,231,008	\$1,183,662	\$1,568,244	\$1,507,927				784,122	753,963
2	\$173,116	\$40,978	\$143,850	\$892,826	\$4,859	\$1,255,628	\$1,160,899		\$0					
3	\$176,579	\$41,797	\$146,727	\$910,682	\$4,956	\$1,280,741	\$1,138,574		\$0					
4	\$180,110	\$42,633	\$149,661	\$928,896	\$5,055	\$1,306,356	\$1,116,678		\$0					
5	\$183,712	\$43,486	\$152,655	\$947,474	\$5,156	\$1,332,483	\$1,095,204		\$0					
6	\$187,387	\$44,356	\$155,708	\$966,423	\$5,259	\$1,359,133	\$1,074,142		\$0					
7	\$191,134	\$45,243	\$158,822	\$985,752	\$5,365	\$1,386,315	\$1,053,486		\$0					
8	\$194,957	\$46,147	\$161,998	\$1,005,467	\$5,472	\$1,414,041	\$1,033,226		\$0					
9	\$198,856	\$47,070	\$165,238	\$1,025,576	\$5,581	\$1,442,322	\$1,013,357		\$0					
10	\$202,833	\$48,012	\$168,543	\$1,046,088	\$5,693	\$1,471,169	\$993,869		\$0					
11	\$206,890	\$48,972	\$171,914	\$1,067,009	\$5,807	\$1,500,592	\$974,756		\$0					
12	\$211,028	\$49,952	\$175,352	\$1,088,350	\$5,923	\$1,530,604	\$956,011		\$0					
13	\$215,248	\$50,951	\$178,859	\$1,110,117	\$6,041	\$1,561,216	\$937,626		\$0					
14	\$219,553	\$51,970	\$182,436	\$1,132,319	\$6,162	\$1,592,440	\$919,595		\$0					
15	\$223,944	\$53,009	\$186,085	\$1,154,965	\$6,285	\$1,624,289	\$901,910		\$0					
16	\$228,423	\$54,069	\$189,807	\$1,178,065	\$6,411	\$1,656,775	\$884,566		\$0					
17	\$232,992	\$55,151	\$193,603	\$1,201,626	\$6,539	\$1,689,910	\$867,555		\$0					
18	\$237,652	\$56,254	\$197,475	\$1,225,658	\$6,670	\$1,723,709	\$850,871		\$0					
19	\$242,405	\$57,379	\$201,424	\$1,250,172	\$6,804	\$1,758,183	\$834,508		\$0					
20	\$247,253	\$58,526	\$205,453	\$1,275,175	\$6,940	\$1,793,346	\$818,460		\$0					
	Total Mobility Benefits	Health Benefits	Recreational Benefits	Safety Benefits	Gas & Emission Benefits	Sum Total Benefits	Sum Present Value Benefit	Sum Total Project Cost	Sum Present Value Cost				Sum Funds Requested	Sum PV Funds Requested
	\$4,123,795	\$976,126	\$3,426,640	\$21,267,958	\$115,743	\$29,910,261	\$19,808,953	\$1,568,244	\$1,507,927				\$784,122	\$753,963

3 Potential for Model Enhancements

Below we provide Caltrans with some feedback on the Benefit/Cost Tool as requested in Question 6B of this application. Feedback is divided by category, as described in Question 6B:

Types of Inputs

- **Applicability of mobility parameters**—we note that several of the parameters used in the model come from the National Cooperative Highway Research Program (NCHRP) 552 report. While this source provides good data, some of the assumptions may not be well-suited to the types of projects proposed by LA Metro. For instance, the bike path projects proposed by LA Metro are mostly small (.25 to 5 miles). The value of mobility benefits provided in the NCHRP report range from 15.83 minutes per trip to 20.38 minutes per trip, depending on the class of the bike lane. But in the case of LA Metro's bike projects, it may not make sense to assume a person would be willing to spend an additional 20.38 minutes per trip just to take a 5 mile bike path. Another difference to consider is location—the NCHRP study was conducted in Minnesota. Thus the value of having access to a bike path might be greater in a city like Los Angeles where there are more days each year of suitable weather for biking.
- **City-specific parameters**—we understand that this first version of the B/C Tool was kept general so that it could be used by different cities throughout California. However, this means that some of the parameters used may not be appropriate for a particular city. For example, the two percent population growth rate assumed in the model is an average for California from 1955 to 2011. However, currently the population growth rate in Los Angeles is closer to 0.5 percent¹, much smaller than the California average.
- **Construction start and end dates**—allowing the B/C Tool to adapt to different construction start and end dates depending on the project will provide a more precise estimate of net benefits.

Calculation Logic

- **Discount methodology**—the B/C Tool currently discounts the project costs and benefits starting the same year, implying that benefits and costs begin at the same time. Benefits generally start accruing after the project is complete, while costs are experienced at the beginning. Caltrans may want to consider adapting the discounting formulas so that benefits start after construction is complete.
- **Forecast methodology**—currently the BC Tool grows each benefit category by the population growth rate. Caltrans may want to consider adapting the B/C Tool to allow for different growth factors for each benefit category, as the future growth of these benefit categories may differ. For instance, generally a person's value of time is expected to

¹ Average annual growth rate for population of Los Angeles. Retrieved from Southern California Association of Governments, Draft , 2016 RTP/SCS Growth Forecast by Jurisdictions

grow at approximately 1.2 percent per year². Thus benefit categories that depend on a person's value of time will be affected by this growth rate.

- **SR2S Safety Benefits**—it appears the B/C Tool includes safety benefits for SR2S infrastructure projects into the project's total benefits even when data is only entered for non-SR2S infrastructure projects. Because the SR2S safety data is linked directly to the result for safety benefits of non-SR2S infrastructure projects, this benefit is counted in two places. Thus safety benefits are likely over-estimated for all non-SR2S projects.
- **Non-infrastructure project crash rate data**—the B/C Tool uses the five-year crash rate data provided (rather than the annual data) to calculate safety benefits for non-infrastructure projects. This methodology differs from that of the infrastructure projects, where the B/C Tool uses the annual crash rate data. We wanted to point out this inconsistency.

Other Recommendations

- **Discounting benefit categories**—Caltrans may want to consider discounting by benefit category, rather than only discounting total benefits. This allows the user to compare the present value of each type of benefit.
- **Potential time savings benefits**—the B/C Tool could also consider the potential benefits of travel time savings. For instance, if an ATP project improves bicycle access on a commute route, it may in fact be quicker to bicycle to work rather than drive depending on the level of traffic congestion, and the distance of the trip. Several streets in Los Angeles currently suffer from gridlock congestion during certain hours of the day. Another instance of time savings might occur for long-distance commuters when transferring from Metrolink rail to the bus. Installing a bike path that improves the connection from rail to bus could result in time-savings for public transit users

User Interface

- **Format of model parameters**—many of the parameters assumed in the B/C Tool are currently hard-coded into the cell formulas. To allow for a more adaptable and error-free model, it is considered good practice to list all parameters on one sheet in the model, and link formulas to this sheet. This way if the user wants to change an assumption, the edit is only required in one location, and the change is automatically made throughout the model.

² U.S. DOT. The Value of Travel Time Savings: Departmental Guidance for Conducting Economic Evaluations Revision 2 (2014 Update). July, 2014. Please refer to page 14.
<http://www.dot.gov/sites/dot.gov/files/docs/USDOT%20VOT%20Guidance%202014.pdf>

Attachment I-8

1. Email Correspondence with the California Conservation Corps
2. Email Correspondence with the Community Conservation Corps

Attachment I-8

Friday, May 22, 2015 at 4:09:49 PM Pacific Daylight Time

Subject: RE: Lancaster - ATP Cycle 2 Grant Project - 10th Street West
Date: Wednesday, May 6, 2015 at 8:52:07 AM Pacific Daylight Time
From: ATP@CCC (sent by Hsieh, Wei@CCC <Wei.Hsieh@CCC.CA.GOV>)
To: Carrillo, Stephen
CC: ATP@CCC, Hsieh, Wei@CCC, inquiry@atpcommunitycorps.org, Rochte, Christie@CCC, Lino, Edgar@CCC

Hi Stephen,

Edgar Lino, the Conservation Supervisor at our CCC Los Angeles location has accepted the partnership for your project: 10th Street West Road Diet and Bikeway Improvements.

Please include this email with your application as proof that you reached out to the CCC. Feel free to contact Edgar Lino Edgar.Lino@ccc.ca.gov directly if your project receives funding.

Thank you,

Wei Hsieh, Manager
Programs & Operations Division
California Conservation Corps
1719 24th Street
Sacramento, CA 95816
(916) 341-3154
Wei.Hsieh@ccc.ca.gov

From: Carrillo, Stephen [mailto:scarrillo@cityoflanasterca.org]
Sent: Tuesday, May 05, 2015 1:45 PM
To: ATP@CCC
Subject: Lancaster - ATP Cycle 2 Grant Project - 10th Street West

Please see the below information for our proposed ATP Cycle 2 grant project, 10th Street West Road Diet and Bikeway Improvements. Please let me know if the California Conservation Corps would wish to participate on this project.

Project Title: 10th Street West Road Diet and Bikeway Improvements

Project Description:

The City of Lancaster proposes to develop a complete street on 10th Street West through comprehensive bicycle and pedestrian improvements and removing vehicular traffic lanes. The 1.5-mile project area is a four lane over-built thoroughfare spanning residential, commercial, and school zones with speed limits up to 50 mph. These improvements will increase safety for cyclists and pedestrians, including dramatically increasing safety along two school routes. This project will increase access to regional transit facilities including Antelope Valley Transit Authority and Metrolink, and will connect to regional and the larger regional bicycle network, including The Sierra Highway Bike Path which runs between the Metrolink tracks and Sierra Highway, connecting the communities of Palmdale and Lancaster. It will promote use of active transportation

Attachment I-8

by connecting to existing bikeways, filling a gap in the city of Lancaster by connecting to existing Class II and Class III bike lanes on Lancaster Blvd.

Pedestrian improvements include: Bulbouts at intersections and mid-block school crossings, curb ramps at corners, Ladder-style crosswalks and LED lighting, Raised right turn islands, protective planters and a road diets for the entire project.

Bicycle facility improvements include: raised and striped center medians, buffered, Class II Bike Lanes, Class I protected cycle track, bicycle parking, countdown signal heads and bicycle detection.

Road Diets throughout the project length will increase safety for all users

Thank you,

Stephen Carrillo, P.E.
Assistant Engineer
City of Lancaster
Development Services Department
P: (661) 945-6861
F: (661) 723-6221



Subject: Re: Lancaster - ATP Cycle 2 Grant Project - 10th Street West
Date: Wednesday, May 13, 2015 at 11:27:57 AM Pacific Daylight Time
From: Active Transportation Program
To: Carrillo, Stephen
CC: atp@ccc.ca.gov

Hi Stephen,

Thank you for reaching out to the local conservation corps. Unfortunately, we are not able to participate in this project. Please include this email with your application as proof that you reached out to the Local Corps.

Thank you

Monica

On Tue, May 5, 2015 at 1:44 PM, Carrillo, Stephen <scarrillo@cityoflancasterca.org> wrote:

Please see the below information for our proposed ATP Cycle 2 grant project, 10th Street West Road Diet and Bikeway Improvements. Please let me know if the Community Conservation Corps would wish to participate on this project.

Project Title: 10th Street West Road Diet and Bikeway Improvements

Project Description:

The City of Lancaster proposes to develop a complete street on 10th Street West through comprehensive bicycle and pedestrian improvements and removing vehicular traffic lanes. The 1.5-mile project area is a four lane over-built thoroughfare spanning spans residential, commercial, and school zones with speed limits up to 50 mph. These improvements will increase safety for cyclists and pedestrians, including dramatically increasing safety along two school routes. This project will increase access to regional transit facilities including Antelope Valley Transit Authority and Metrolink, and will connect to regional and the larger regional bicycle network, including The Sierra Highway Bike Path which runs between the Metrolink tracks and Sierra Highway, connecting the communities of Palmdale and Lancaster. It will promote use of active transportation by connecting to existing bikeways, filling a gap in the city of Lancaster by connecting to existing Class II and Class III bike lanes on Lancaster Blvd.

Pedestrian improvements include: Bulbouts at intersections and mid-block school crossings, curb ramps at corners, Ladder-style crosswalks and LED lighting, Raised right turn islands, protective planters and a road diets for the entire project.

Bicycle facility improvements include: raised and striped center medians, buffered, Class II Bike Lanes, Class I protected cycle track, bicycle parking, countdown signal heads and bicycle detection.

Attachment I-8

Road Diets throughout the project length will increase safety for all users

Thank you,

Stephen Carrillo, P.E.

Assistant Engineer

City of Lancaster

Development Services Department

P: [\(661\) 945-6861](tel:6619456861)

F: [\(661\) 723-6221](tel:6617236221)



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Monica Davalos | Legislative Policy Intern
Active Transportation Program
California Association of Local Conservation Corps
1121 L Street, Suite 400
Sacramento, CA 95814
[916.426.9170](tel:9164269170) | inquiry@atpcorps.org

Letters of Support
Attachment J



Metro[®]

Attachment J

May 19, 2015

Malcolm Dougherty
Director
California Department of Transportation
P.O. Box 942873
Sacramento, CA 94273-0001

Re: Letter of Support for City of Lancaster 10th Street West Road Diet and Bikeway Improvements Active Transportation Program (ATP) Application

Dear Director Dougherty:

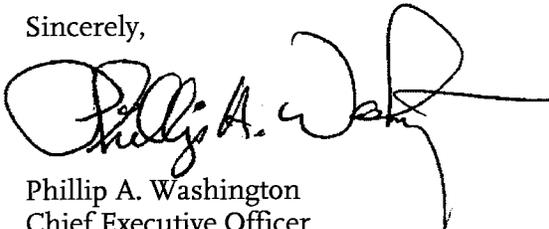
The Los Angeles County Metropolitan Transportation Authority (Metro) is pleased to support the Active Transportation Program (ATP) funding request for the City of Lancaster 10th Street West Road Diet and Bikeway Improvements in the City Lancaster. This project will develop a complete street on 10th Street West through comprehensive bicycle and pedestrian improvements and removing vehicular traffic lanes, adding 3 miles (1.5 miles in each direction) of bicycle facilities, and dramatically increasing

Metro is committed to promoting sustainability through the implementation of policies, programs, and projects that increase safety and mobility, enhance public health, and help achieve greenhouse gas reduction goals across all of our communities. To this end, active transportation is a key planning priority for Metro.

The 2012-2035 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) adopted by the Southern California Association of Governments (SCAG) identifies active transportation as a key component. In furthering regional goals, Metro has developed multiple initiatives and programs to address the challenges associated with bicycling and walking trips, including the Bicycle Transportation Strategic Plan, Complete Streets Policy, the Countywide Sustainability Planning Policy, the First/Last Mile Strategic Plan, the Safe Routes to School Pilot Program, and financial commitments as part of the Long Range Transportation Plan (LRTP) and the biannual Call for Projects.

This project is consistent with the SCAG RTP/SCS and the LRTP, as well as the shared priorities and goals of our agency and the ATP. We endorse the City Lancaster's efforts and contribution towards a sustainable transportation future, and respectfully request a favorable consideration of the City of Lancaster 10th Street West Road Diet and Bikeway Improvements for the ATP grant.

Sincerely,



Phillip A. Washington
Chief Executive Officer



CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

Policies for Livable, Active Communities and Environments
Jean Armbruster, M.A.
Director

695 South Vermont Avenue, South Tower, Suite 1400
Los Angeles, California 90005
TEL (213) 351-1907 – FAX (213) 637-4879

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

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First District

Mark Ridley-Thomas
Second District

Sheila Kuehl
Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

May 11, 2015

**Re: Caltrans Active Transportation Program Cycle 2 - City of Lancaster 10th Street West Road
Diet and Bikeway Improvements**

To Whom It May Concern:

The Los Angeles County Department of Public Health (DPH) is pleased to support the City of Lancaster's Caltrans Active Transportation Program Cycle 2 Call for Projects.

DPH funded the development of Lancaster's Master Plan of Trails and Bikeways and Lancaster's Citywide Safe Routes to School Plan, both made possible by funding through the Centers for Disease Control and Prevention. Both plans identified the 10th Street West project as a priority because it connects residents of all ages to important destinations such as downtown Lancaster (the BLVD), Antelope Valley Transit Area bus stops, a health center, Metrolink Station, two school routes, and the Sierra Highway bike path.

The proposed project will add a road diet and bike lanes on 10th Street West from Avenue H to Lancaster Boulevard, increasing safety for non-motorized users through expected traffic speeds and reduced chances of multiple-threat collisions. Additional elements of the project include increased pedestrian safety from protective planters, marked crosswalks, LED lighting, and dual curb ramps.

By adding three miles of bike lanes (1.5 miles in each direction), this project will significantly improve the bicycle infrastructure in Lancaster, strengthening local and regional connectivity. Due to its proximity to two schools, many residences and commercial centers, it is expected to have an immediate and lasting impact in encouraging increased use of active transportation modes.

We believe this project has the potential to improve connectivity and provide increased safety, mobility, and transportation options for people using all modes, and provide more opportunities for residents to live active, healthy lives. The Project is consistent with the Southern California Association of Government's Regional Transportation Plan, DPH goals, and Lancaster's goals to make the city a safe and healthy community. We respectfully request that you give favorable consideration to this application.

Sincerely,



Jean Armbruster
Director, PLACE Program

AVPH
Antelope Valley Partners for Health
Community Collaborative Promoting Health and Wellness

Attachment J

May 20, 2015

City of Lancaster
Mark V. Bozigian
City Manager
44933 Fern Avenue
Lancaster, CA 93534

Re: Caltrans Active Transportation Program Cycle 2
10th Street West Road Diet and Bikeway Improvements

Dear Mr. Bozigian:

On behalf of Antelope Valley Partners for Health, we wish to express our strong support for the Caltrans ATP Call for Projects proposal submitted by the City of Lancaster.

This important project will add a road diet and bike lanes on 10th Street West from Avenue H to Lancaster Blvd, dramatically increasing safety for non-motorized users. Additional elements include increased pedestrian safety from protective planters, crosswalks, LED lighting, and curb ramps. Improvement to traffic signals will benefit cyclists and pedestrians.

By adding three miles of bike lanes (1.5 miles in each direction), this project will significantly improve the bicycle infrastructure in the city of Lancaster, strengthening local and regional connectivity. Due to its proximity to two schools, many residences and commercial centers, it is expected to have an immediate and lasting impact in encouraging increased use of active transportation modes.

The new bike lanes will connect with other bicycle improvements the City has made, increasing access for residents to a variety of local destinations, including the BLVD, AVTA bus stops, and health center destinations. Regional mobility will be improved by improving the connection to the Lancaster Metrolink Station and the Sierra Highway Bike Path. Pedestrians, especially school children, will enjoy increased safety along this dangerous school route. Additionally, the health of the entire community can benefit from improved access to active transportation.

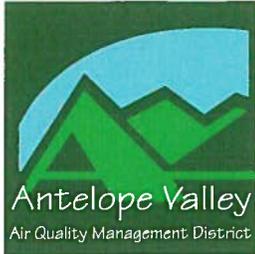
This project is consistent with the City's goals to make Lancaster a safe and healthy community. We are deeply supportive of this project that would bring great benefit to all residents of Lancaster.

Sincerely,



Michelle Kiefer
Executive Director

Attachment J



Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070
Fax 661.723.3450

Eldon Heaston, Executive Director

In reply, please refer to AV0515/045

May 20, 2015

City of Lancaster
Mark V. Bozigian
City Manager
44933 Fern Avenue
Lancaster, CA 93534

Re: Caltrans Active Transportation Program Cycle 2, 10th Street West Road Diet and Bikeway Improvements

Dear Mr. Bozigian:

On behalf of the Antelope Valley Air Quality Management District, we wish to express our strong support for the Caltrans ATP Call for Projects proposal submitted by the City of Lancaster.

This important project will add a road diet and bike lanes on 10th Street West from Avenue H to Lancaster Blvd, dramatically increasing safety for non-motorized users. Additional elements include increased pedestrian safety from protective planters, crosswalks, LED lighting, and curb ramps. Improvement to traffic signals will benefit cyclists and pedestrians.

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Attachment J

This project is consistent with the City's goals to make Lancaster a safe and healthy community. We are supportive of this project that would bring great benefit to all residents of Lancaster.

Sincerely,

A handwritten signature in black ink, appearing to read "Bret S. Banks". The signature is stylized with several loops and flourishes.

Bret S. Banks
Deputy Executive Director

BSB/bsb



Jim McDonnell, Sheriff

County of Los Angeles
Sheriff's Department Headquarters

*4700 Ramona Boulevard
Monterey Park, California 91754-2169*



May 28, 2015

City of Lancaster
Mark V. Bozigian
City Manager
44933 Fern Avenue
Lancaster, CA 93534

Re: Caltrans Active Transportation Program Cycle 2
10th Street West Road and Bikeway Improvements

Dear Mr. Bozigian:

On behalf of Lancaster Sheriff Station, we wish to express our strong support for the Caltrans ATP Call for Projects proposal submitted by the City of Lancaster.

This important project will add road improvements and bike lanes on 10th Street West from Avenue H to Lancaster Blvd, dramatically increasing safety for non-motorized users. Additional elements include increased pedestrian safety from protective planters, crosswalks, LED lighting, and curb ramps. Improvement to traffic signals will benefit cyclists and pedestrians.

By adding three miles of bike lanes (1.5 miles in each direction), this project will significantly improve the bicycle infrastructure in the city of Lancaster, strengthening local and regional connectivity. Due to its proximity to two schools, many residences and commercial centers, it is expected to have an immediate and lasting impact in encouraging increased use of active transportation modes.

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This project is consistent with the City's goals to make Lancaster a safe and healthy community. We are deeply supportive of this project that would bring great benefit to all residents of Lancaster.

Sincerely,

JIM McDONNELL, SHERIFF

A handwritten signature in black ink, appearing to read "P. Nelson", with a long horizontal flourish extending to the right.

Patrick A. Nelson, Captain
Lancaster Station