

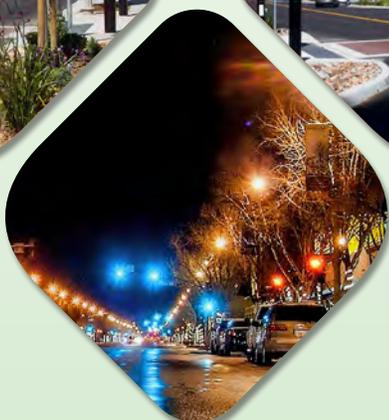


City of Lancaster

Master Plan of Complete Streets



Lancaster Master Plan of Complete Streets



This page intentionally left blank.

TABLE OF CONTENTS

Chapter 1 Introduction

1.1 What are “Complete Streets”?	1
1.2 Benefits of Complete Streets	1
1.3 Complete Streets in Lancaster	2
1.4 Master Plan of Complete Streets Purpose and Objectives	3
1.5 Community Outreach	3
1.6 Master Plan Organization	4
1.7 Applicability	5

Chapter 2 Complete Streets Diagrams

2.1 Existing Lancaster Street Classifications	7
2.2 Complete Streets Cross-Sections	8

Chapter 3 Complete Streets Design Guidelines

3.1 Complete Streets Design Guidelines	15
3.2 Principles and Priorities for Street Design	16
3.3 General Design Guidelines	17
3.4 Sidewalk Area	16
3.5 Roadways	34
3.6 Intersections and Crossings	44

Chapter 4 Potential Complete Streets in Lancaster

4.1 Potential Complete Streets in Lancaster	63
---	----

Chapter 5 Appendices

Appendix A Community Outreach Summary	75
Appendix B Multi-Modal LOS Methodology and Analysis	77

This page intentionally left blank.



1. Introduction

1.1 What are “Complete Streets”?

“Complete Streets” refer to streets, sidewalks, and public rights-of-way that are designed, operated, and maintained to enable safe access for all users – pedestrians, bicyclists, transit riders, and freight and motor vehicle drivers of all ages and abilities. The implementation of Complete Streets is intended to increase access and convenience for all users to adjacent land-uses, such as residential neighborhoods, commercial centers, and public institutions, while still providing functional, multimodal street performance for all modes whether the users are traveling to, from, or through the area.



Each Complete Street is unique and responds to its community context, hence there is no singular design for Complete Streets. A Complete Street may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more. A Complete Street in a rural area will look quite different from a Complete Street in an urban area, but both are designed to balance safety and convenience for everyone using the road.

1.2 Benefits of Complete Streets

Complete Streets can offer many benefits in all communities, regardless of size or location. The following benefits have been identified by the National Complete Streets Coalition.

- Complete Streets improve safety. A Federal Highway Administration safety review found that streets designed with sidewalks, raised medians, better bus stop placement, traffic-calming measures, and enhancements for people with disabilities improve pedestrian safety. Other features, such as medians, enable pedestrians to cross busy roads, reduce left-turning motorist accidents, and improve bicycle safety.
- Complete Streets encourage walking and bicycling for health. The Centers for Disease Control and Prevention named the adoption of Complete Streets policies as a recommended strategy to prevent obesity. Safe places to walk close to home encourages high activity levels and easy access to transit can also contribute to healthy physical activity.
- Complete Streets can lower transportation costs for families. Americans spend an average of 18 cents of every dollar on transportation, with the poorest fifth of families spending more than double that figure. When community members can walk, bike, or take transit, they can replace car trips with these inexpensive options.
- Complete Streets foster strong communities. Complete streets play an important role in livable communities, where all people feel safe and welcome on the streets. A safe walking and bicycling environment is an essential part of improving public transportation and creating friendly, walkable communities.



1.3 Complete Streets in Lancaster

Lancaster has recently completed several street improvements in the City with the goal of providing more facilities for all modes of transportation including bicycles, pedestrians, public transit, and motor vehicles. These roadway projects include dedicated bike lanes, right-sizing of streets, pedestrian features, traffic calming measures, streetscape improvements, and other Complete Streets features.

Lancaster Boulevard (“The BLVD”)

The City of Lancaster used a Complete Streets approach for the redesign of Lancaster Boulevard. The nine-block revitalization project features a center plaza for walking and community events, angled parking, enhanced crosswalks, abundant landscaping and lighting, and outdoor seating. Lancaster’s redesign revitalized this commercial core while making the street safer and more inviting for people walking and biking. The project has spurred economic investment and job growth in the area, supporting existing and new businesses and providing additional sales tax revenue for the City.



Lancaster Boulevard before Complete Streets redesign



Lancaster Boulevard after Complete Streets redesign

Other Streets with Complete Streets Elements

Lancaster also completed or are in the process of completing improvements to the following streets using various Complete Streets elements:

- West Avenue G
- West Avenue I
- West Avenue J
- West Avenue K
- West Lancaster Boulevard
- 10th Street West
- 15th Street West
- 20th Street West
- 25th Street West
- 15th Street East
- Sierra Highway
- Yucca Avenue
- Nugent Street
- Valley Central Way



1.4 Master Plan of Complete Streets Purpose and Objectives

Lancaster's streets serve a much larger purpose than just moving cars. Streets can provide lively gathering places that encourage community building and fosters neighborhood identify. The streets in Lancaster can **not only influence a community's** mobility choices, but also affect the safety and quality of life in its neighborhoods. When streets are designed with only vehicular movement in mind, they create an environment that makes biking more daunting and pedestrian walkways less enjoyable. An overabundance of single-occupancy vehicles slows down traffic, making public transportation, such as buses, less convenient. In 2008, the State Legislature adopted Assembly Bill 1358, the California Complete Streets Act. Implementation of the Act requires cities and counties to plan for a balanced, multimodal transportation network that meets the needs of all users of streets and roads, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation.



Lancaster has recognized the importance of improving the safety and accessibility of all modes, making the street more comfortable and enjoyable for walking and bicycling, improving the connectivity of street network, and balancing the needs and convenience of all users. The Master Plan of Complete Streets identifies existing and potential Complete Streets in Lancaster, and provides guidance on future development of Complete Streets through flexible development standards and design guidelines.

The Master Plan of Complete Streets seeks to:

- Encourage the development of a Complete Streets network throughout Lancaster to create a more balanced transportation system for all users;
- Provide flexible design concepts and best practices that promote Complete Streets features and concepts; and
- Ensure that new and updated street projects are planned, design, maintained, and operated to enable safe, comfortable, and convenient travel to the greatest extent possible for users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders.

1.5 Community Outreach

To engage the community in the process of developing the Master Plan of Complete Streets, Lancaster held a project Open House on April 27, 2016 to provide the public with information and education on Complete Streets concepts, benefits, and policies. The Open House included interactive exercises for participants to gather their input on existing transportation challenges in Lancaster and opportunities for more Complete Streets in the community.

Some comments from the Open House are summarized below. For a more detailed summary of Open House comments, see *Appendix A, Community Outreach Summary*.



- Community members noted that there is still a lack of bicycle facilities around the city which creates connectivity issues. Some residents praised the modifications on Lancaster Boulevard in the Downtown area, but found that it was difficult to get to from further parts of the City.
- Residents identified concerns along most major arterials where vehicles tend to travel at high speeds. Some areas identified were along Avenue K and Avenue L in the central-west area of Lancaster. While bicyclists are willing to detour up to half-mile to choose a safer, alternative path, there may not always be a better alternative given the layout of the City, particularly in the undeveloped areas such as along 40th Street West.
- There are many roads that are lacking sidewalks, either sidewalks on both sides of the street, or a continuous sidewalk path. This, coupled with unsafe crossing locations limit access for travels looking to walk to their destinations. Some places identified by residents are Sierra Highway, 40th Street West, and 30th Street West.
- Community members would like to increase connectivity by adding bike lanes and sidewalks. Some would also like to see increased safety along roadways by finding ways for slow down vehicles using improvements such as, right-sizing streets, adding raised medians, and/or adding landscaping along streets.



1.6 Master Plan Organization

- Chapter 1: Introduction
- Chapter 2: Complete Streets Diagrams
This chapter provides cross-sections of how Complete Streets may be implemented within Lancaster's different street classifications along different networks. The illustrations do not represent a finite list but represent a series of examples that can be applied depending upon the street classification and the network assignment.
- Chapter 3: Complete Streets Design Guidelines
This chapter provides a menu of design concepts and best practices that promote and support Complete Streets concepts. The guidelines are meant to supplement existing engineering practices and requirements to meet the goals of Complete Streets.
- Chapter 4: Potential Complete Streets in Lancaster
This chapter identifies candidate Complete Streets segments in Lancaster and illustrate how Complete Streets measures can be applied to each segment.
- Chapter 5: Appendices
This chapter includes the following appendices: Community Outreach Summary, Multi-Modal LOS Methodology and Analysis.



1.7 Applicability

The Master Plan of Complete Streets accompanies Lancaster’s General Plan 2030, specifically the Plan for Physical Mobility chapter, **which addresses the City’s policies for transportation and mobility.** The General Plan’s emphasis on **safety**, connectivity, access, and street design flexibility are key principles that mirror the objectives of the Master Plan of Complete Streets.

The Master Plan of Complete Streets is meant to supplement existing engineering practices and requirements to meet the goals of Complete Streets. Due to specific site and operational characteristics associated with any given street, any proposed street improvement project must still undergo a detailed technical analysis by the appropriate City departments. Specific design guidance that is in a demonstration phase and has yet to be incorporated into the California Manual on Uniform Traffic Control Devices (CA MUTCD) will require review and approval from the appropriate City departments. These design guidelines do not fully encompass all available pedestrian, bicycle, and other traffic calming measures available to implement Complete Street principles in the City, but it provides initial design principles so that the development of new and existing streets serve all users and travel modes.



There are also several existing standards and guides applicable to many of the Complete Street devices and tools included in these guidelines. Lancaster should refer to these established standards and guides as applicable.

- The American Association of State Highway and Transportation Officials’ (AASHTO) A Policy on Geometric Design of Highways and Streets (the “Green Book”)
- The California Highway Design Manual
- The Manual on Uniform Traffic Control Devices (MUTCD)
- The California Fire Code
- The California Streets and Highways Code and California Vehicle Code
- Urban Street Guide by the National Association of City Transportation Officials
- Other local manuals or street design standards



This page intentionally left blank.



2. Complete Streets Diagrams

2.1 Existing Lancaster Street Classifications

The existing regional and local roadway network in Lancaster is a hierarchical system of highways and local streets developed to provide regional traffic movement and local access.

Regional Arterials

Regional arterials are limited access facilities that provide service to nonlocal through trips with minimal direct access to adjacent land uses. They have a design cross-section of eight lanes (four in each direction) with medians and turn lanes at a limited number of access points. Regional arterials are designated as 106-foot roadways, typically within a 120-foot right-of-way.



Major Arterials

Major arterials are primarily intended to serve through, non-local traffic and provide limited local access. They have a cross-section of three through lanes, and a raised landscape median and turn lanes at a limited number of access points. Major arterials are designated as 84-foot roadways, within a 100-foot right-of-way.

Secondary Arterials

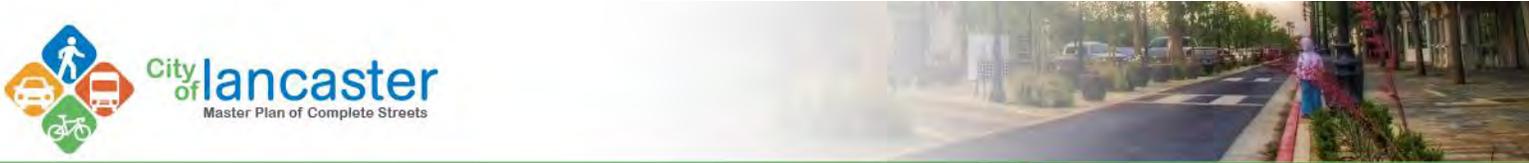
Secondary arterials provide more local access than major arterials, while also providing a reduced level of non-local through traffic service. Secondary arterials have a cross-section of four through lanes, a bike lane in each direction and a left-turn lane within 68 feet of curb-to-curb space, within an 84-foot right-of-way. These roadways are usually undivided with the potential for limited on-street parking, turn lanes at major intersections, and partial control of vehicular and pedestrian access from driveways, cross streets, and crosswalks.

Collectors

The primary role of collector roadways is to provide access between the arterial network and the neighborhoods and commercial development. These roadways are typically two lanes wide with limited access to driveways and cross streets. They are usually undivided and do not have turn lanes at intersections. Collectors in Lancaster are 44 feet, curb to curb, within 64-foot rights-of-way.

Local Residential Streets

These streets serve adjacent residential land uses only, allowing access to residential driveways and providing on-street parking for neighborhoods. Local residential streets in Lancaster are designated as 42-foot roadways within a 60-foot right-of-way. These streets are not intended to serve through traffic traveling from one street to another.



2.2 Complete Streets Cross-Sections

To promote transit, biking, and walking, the current road classification system and right-of-way allocation must be re-imagined to accommodate all modes. Using the future forecast model, the following cross-sections redefine the current right-of-way design to allow the City to add Complete Street elements to existing and future streets. Given the varying nature of Lancaster's neighborhoods, the following cross-sections do not represent a finite list but merely represent a series of examples that could be applied depending upon the street classification.

Each cross-section is categorized by the existing classification system and uses the typical right-of-way width. Given the measurement and traffic volumes, the street elements are presented along with the amount of right-of-way width remaining for Complete Streets elements. The uses of this space may include, but is not limited to: sidewalk extensions, landscaping, on-street parking, bike facilities, transit facilities, and other elements that enhances the character of the street and promotes all modes of travel.

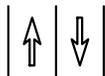
A legend has been provided indicating descriptions of cross-section elements.

LEGEND

SYMBOL XX' (XX') Typical Width (Suggested Minimum Width)



10' (9') Center Turn-Lane
14' (12') Raised Median w/ Turn Lanes



11' (10') Through Travel Lane



11' (10') Class III Shared Bike-Travel Lane



6' (5') Class II Bike Lane



5' (1.5') Painted or Raised Buffer



8' (7') Parallel Parking w/ Landscaping



8' (5') Sidewalk w/ 4' of Clear Path



VARIES City to decide type of street elements to be incorporated

Turn Lanes

Typical minimum widths for both, left and right turn lanes are 10'. If given road segments with lower volumes, lower speeds, or right-of-way constraints, 9' turn lanes may be suggested.

Median with Center Turn Lanes

Typical minimum widths for landscape medians with center turn lanes are 14', which provides a 12' left turn lane and 2' raised median buffer. If given road segments with right-of-way constraints, 12' raised medians with 2' buffers at access points and intersections; or 10' raised medians with only striped turn lanes at access points and intersections, may be suggested.

Through Travel Lanes

Typical minimum widths for through travel lanes are 11'. If given road segments with lower volumes, lower speeds, less heavy vehicles, or right-of-way constraints; 10' lane widths may be suggested.

Shared Bike Lanes/Routes

Typical shared travel lane widths for Class III bike facilities are 11' to ensure safe vehicle travel speeds. Otherwise, minimum travel lane widths of 10' are suggested.

Bike Lanes & Buffers

Typical minimum widths for Class II bike lanes are 6'. If given road segments with right-of-way constraints, 5' bike lanes may be suggested. Typical painted bike lane buffers with 3'-5' widths are suggested where feasible, while 1.5' widths are the suggested minimum. At the discretion of the Development Services Director, buffers may be removed where existing conditions and/or right-of-way cannot accommodate the additional width.

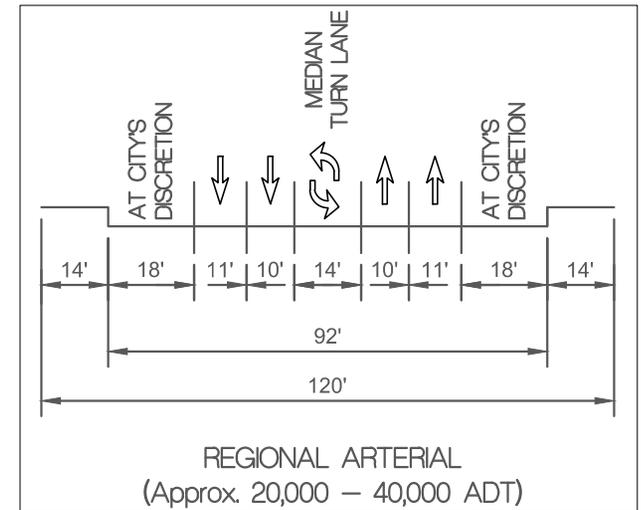
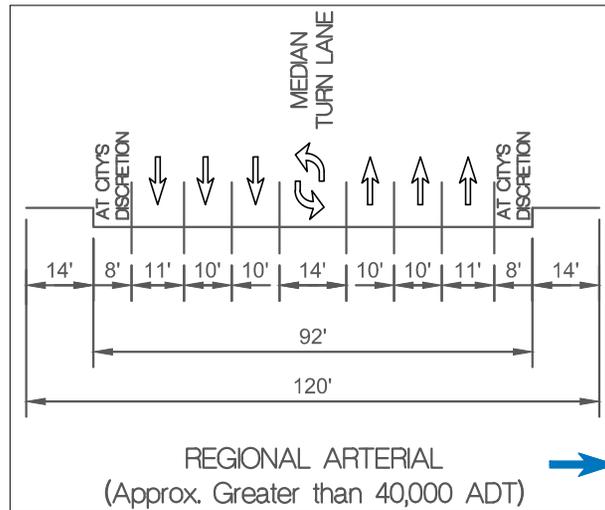
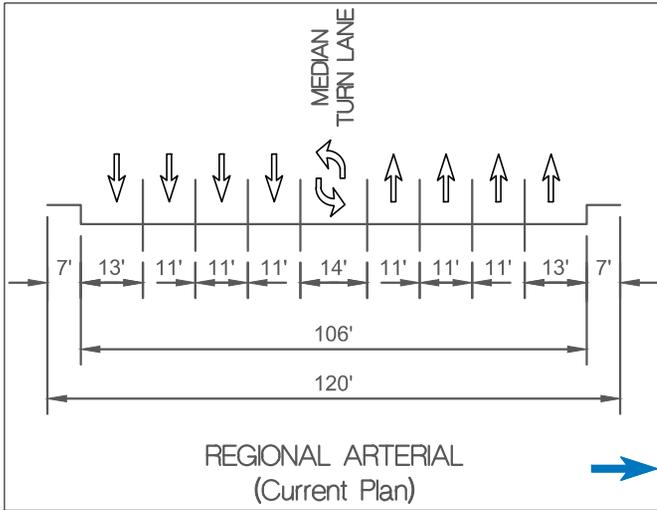
Parking and Landscaping

Typical minimum widths for on-street parking are 8'. If given road segments with right-of-way constraints, 7' parking widths may be suggested. Landscaping can substitute parking lanes at the City's discretion.

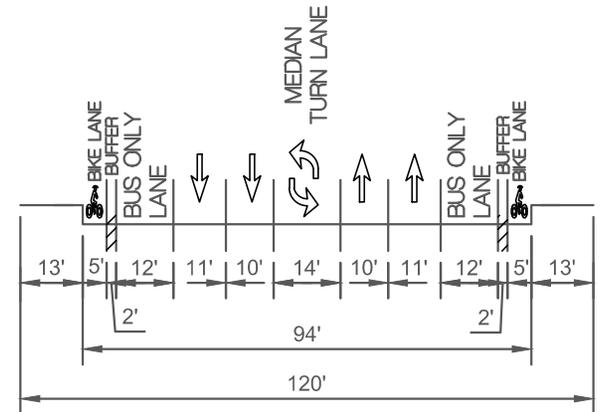
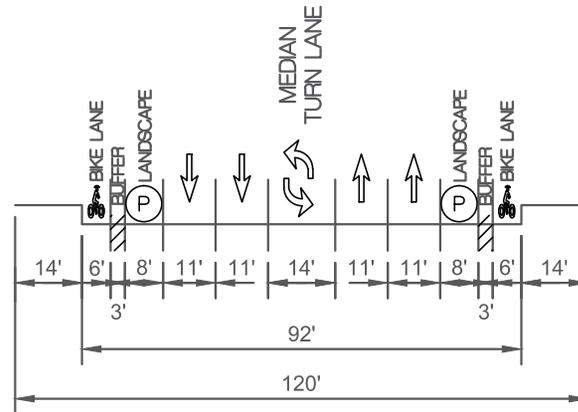
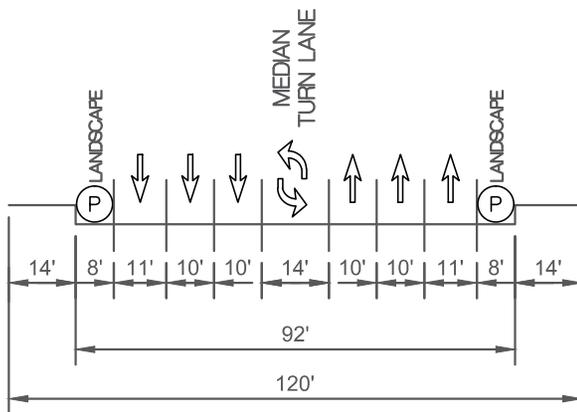
Sidewalks

Typical minimum widths for sidewalks with street furniture are 8' with 4' of clear path for pedestrians. If given right-of-way constraints, 5' sidewalks may be suggested as long as the 4' clear path requirement is met. For pedestrian areas with meandering sidewalks, the typical design is an 8' sidewalk and 6' of landscaping for a total width of 14'. If given right-of-way constraints, a narrower design may be recommended if the 4' clear path requirement is met.

•Utilization of the remaining right-of-way after incorporating the minimum elements will be at the discretion of the City. This may include, but is not limited to: additional travel lanes, bike lanes, buffers, bus lanes, parking, landscaping, sidewalk extensions, and other streetscape amenities. ADT values listed are approximate ranges of volumes that may be accommodated.

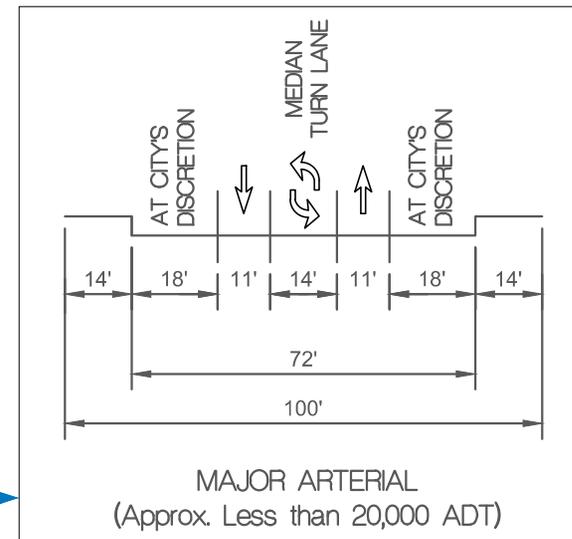
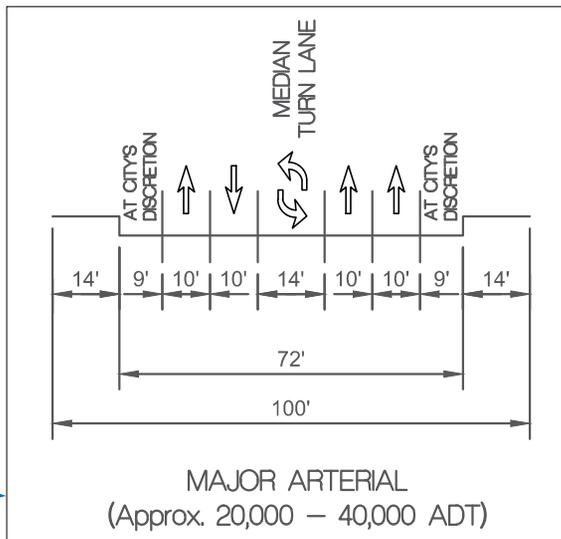
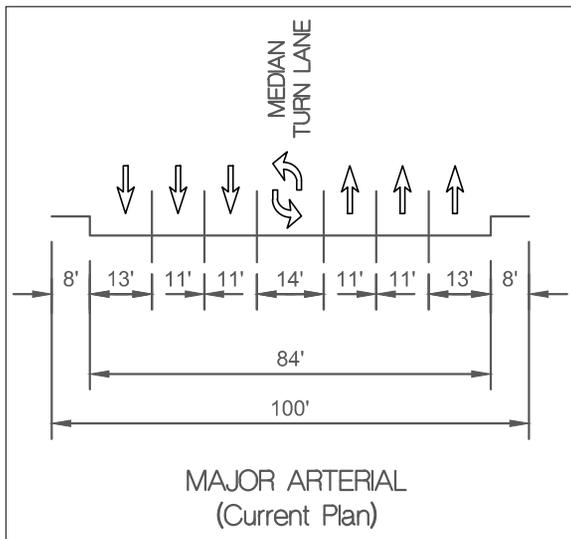


Example Road Cross Section Configurations for City Reference:

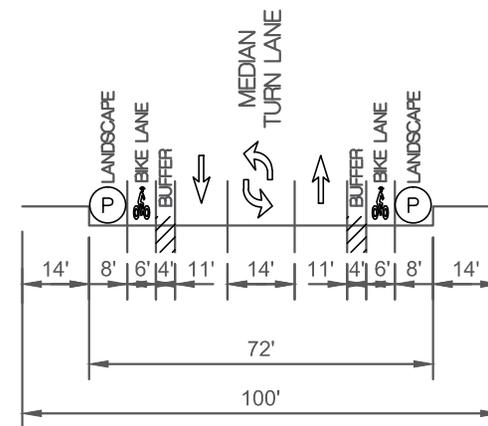
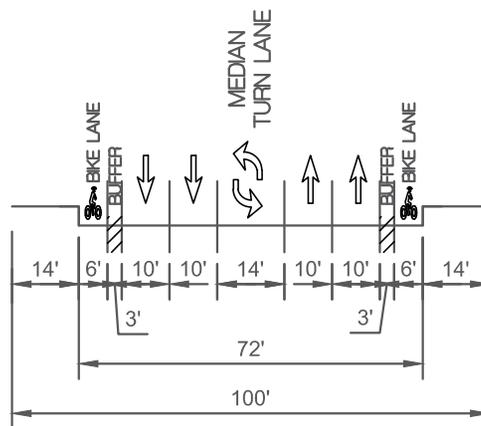
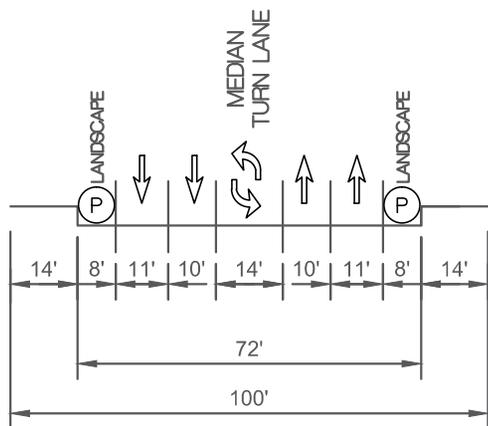


Lancaster Complete Streets - Suggested Road Cross Sections

REGIONAL ARTERIALS: 120'+ ROW

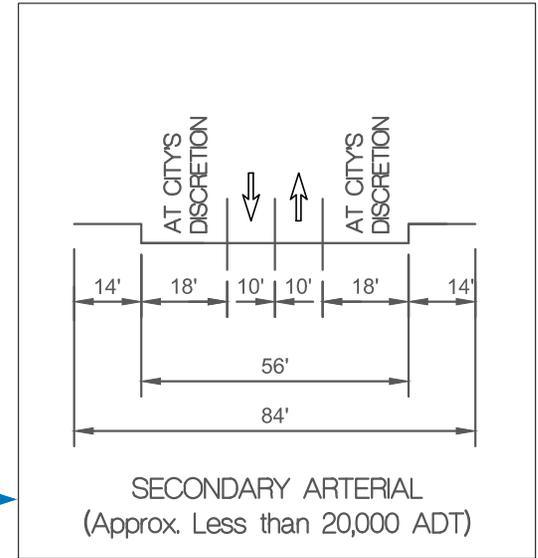
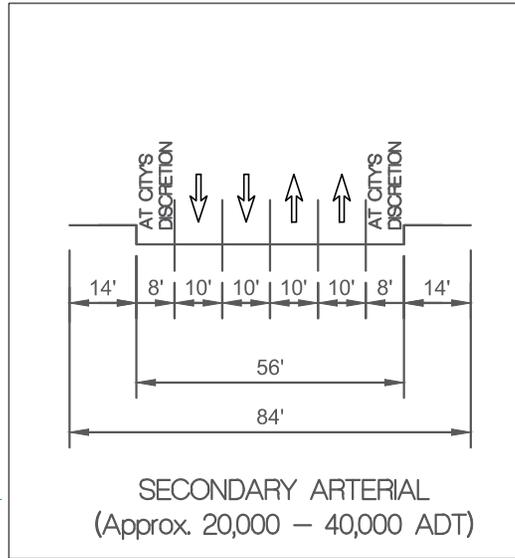
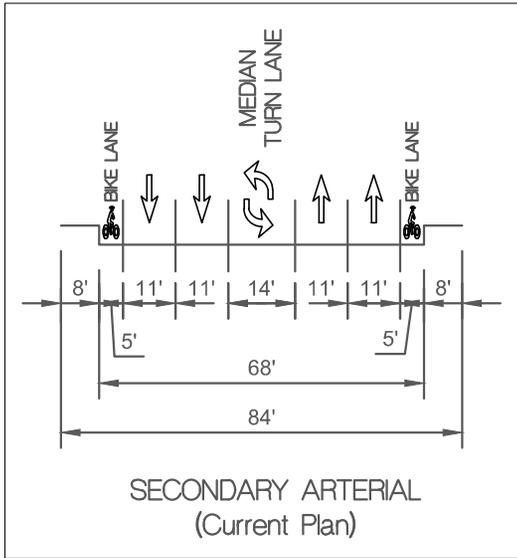


Example Road Cross Section Configurations for City Reference:

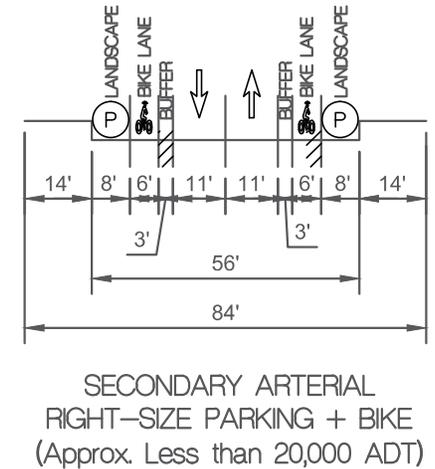
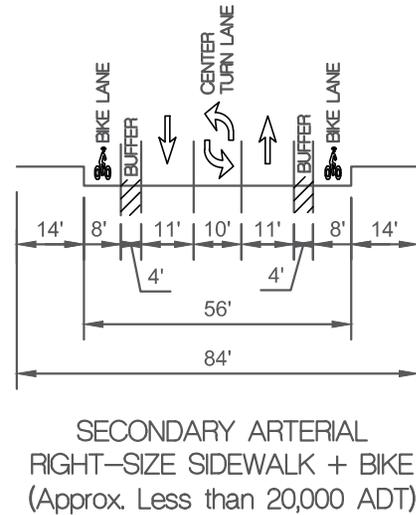
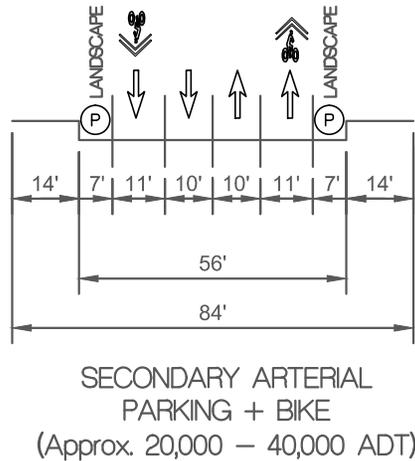
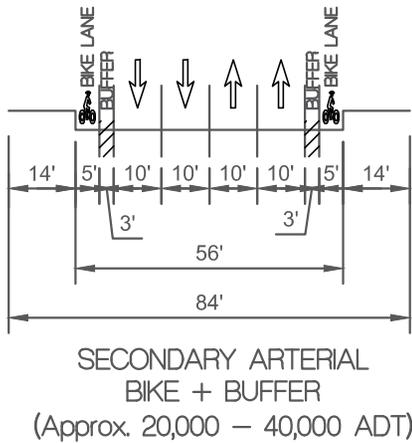


Lancaster Complete Streets - Suggested Road Cross Sections

MAJOR ARTERIALS: 100'+ ROW



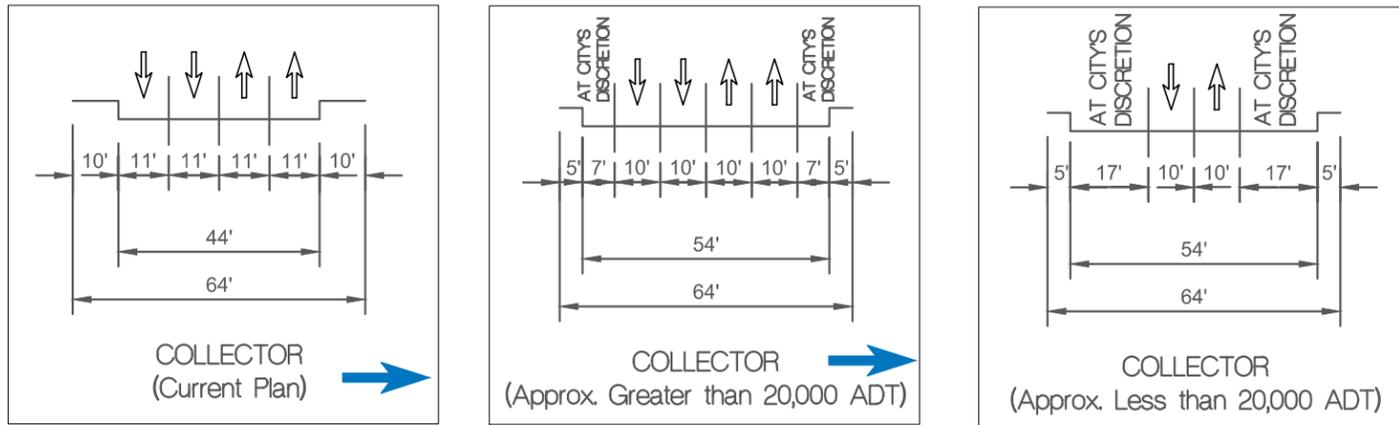
Example Road Cross Section Configurations for City Reference:



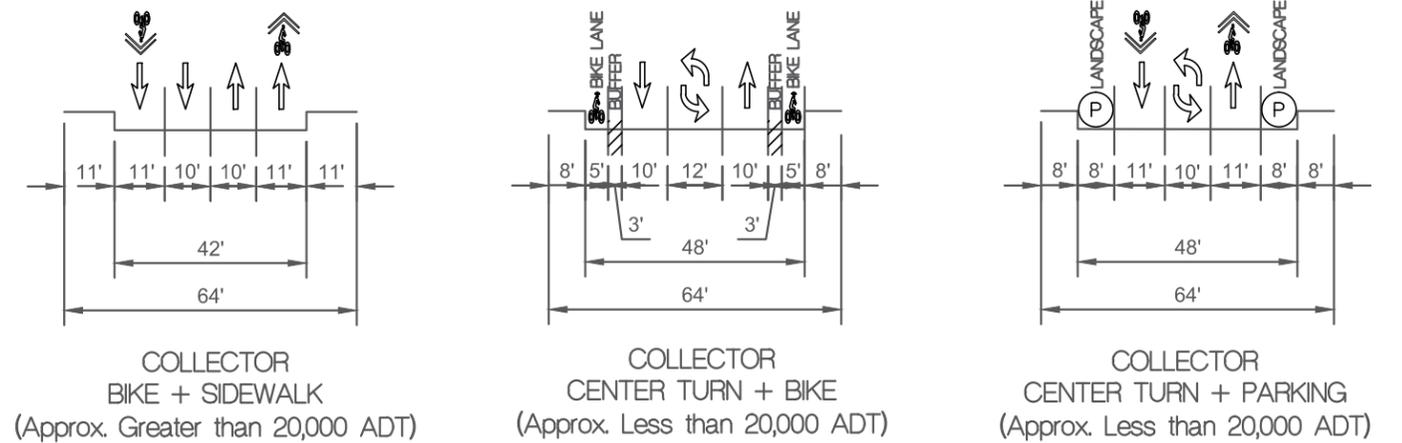
Lancaster Complete Streets - Suggested Road Cross Sections

SECONDARY ARTERIALS: 84'+ ROW

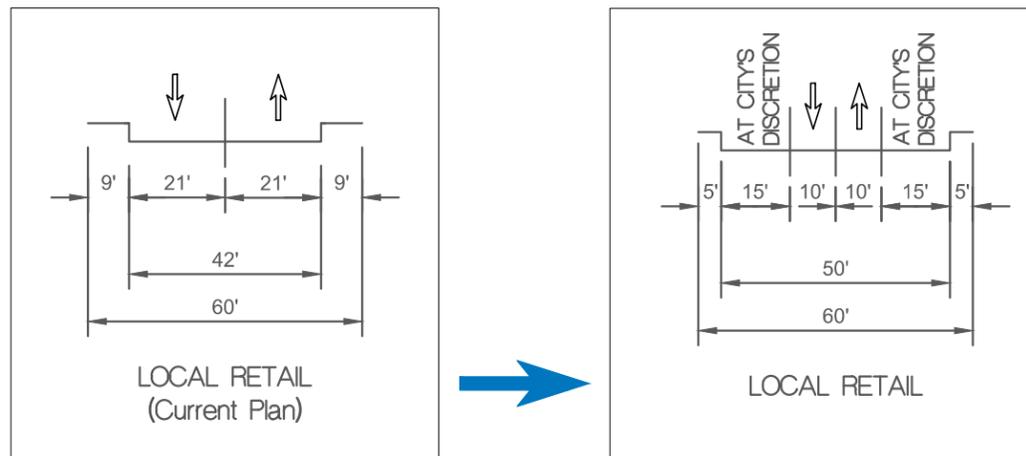
Collector Road Right-of-Way Distribution



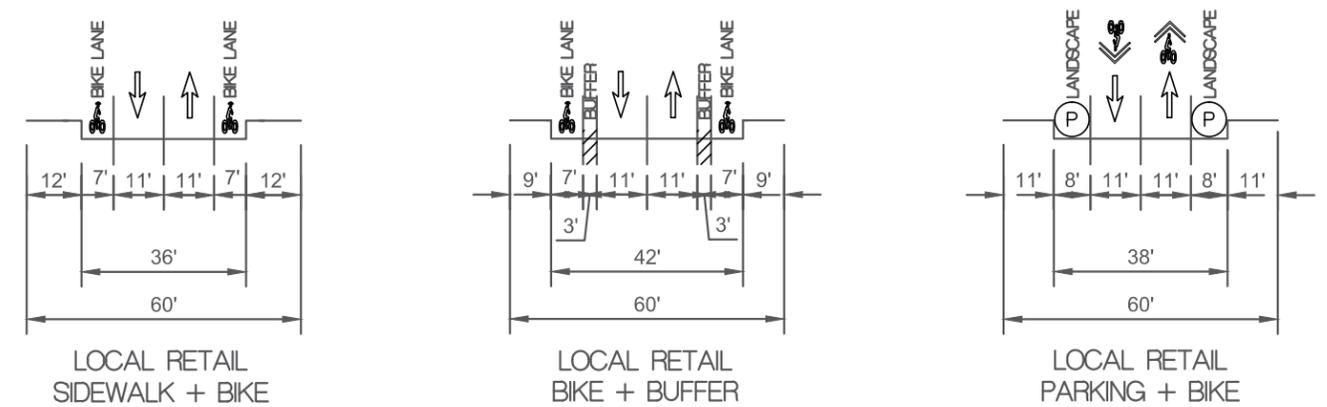
Example Road Cross Section Configurations for City Reference:



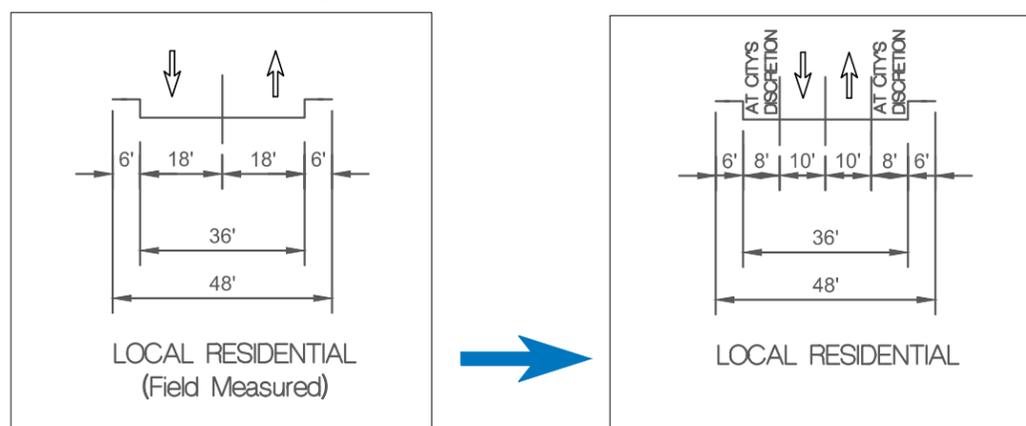
Local Retail Right-of-Way Distribution



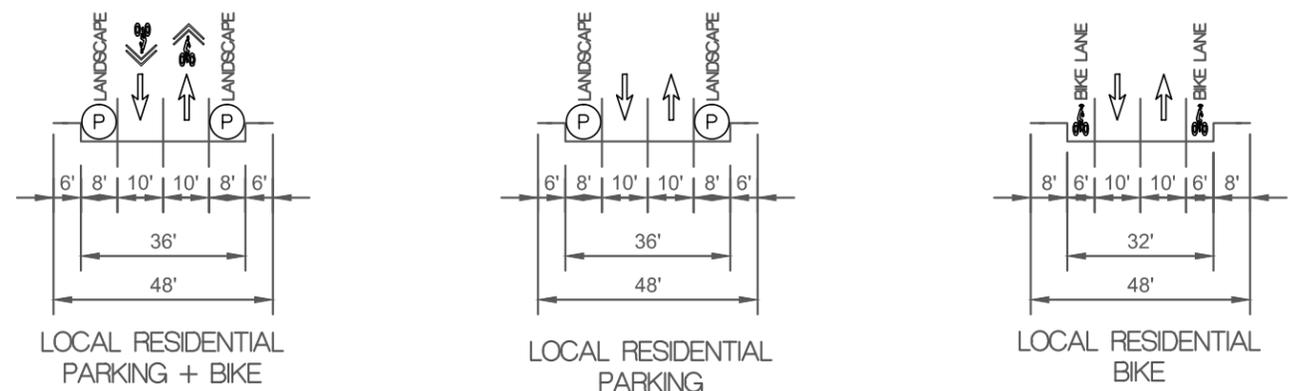
Example Road Cross Section Configurations for City Reference:



Local Residential Right-of-Way-Distribution



Example Road Cross Section Configurations for City Reference:



Lancaster Complete Streets - Suggested Road Cross Sections

COLLECTORS (64'+ ROW) & LOCAL ROADS (60' or Less ROW)

This page intentionally left blank.

3. Complete Streets Design Guidelines

3.1 Complete Streets Design Guidelines

There is no singular design prescription for Complete Streets because each one is unique and responds to its community context. A Complete Street in a rural area will look quite different from a Complete Street in a highly urban area, but both are designed to balance safety, convenience, and connectivity for all users. Designing a street requires an analysis of various site conditions to determine what sort of treatments and solutions are applicable for a given street. Factors that should be considered include the physical characteristics of the street, urban vs. suburban context, surrounding land uses, collision history, and expected pedestrian and roadway demand. Treatments can vary from installing physical infrastructure, to altering signalization, or to simply reinforcing safety efforts with signage. Funding is also a major determinant of what types of treatments are feasible for certain projects.

The design guidelines are intended to promote high-quality design and to ensure that streets in Lancaster promote safety and connectivity for all transportation users. A project may not be required to meet all design guidelines, as not all guidelines may be applicable on a case-by-case basis. In addition, alternative measures may be considered if the measures meet or exceed the intent of the design guidelines. The purpose is to ensure that plans for new development or rehabilitation of existing streets carefully consider the community context and make a conscious effort to develop a compatible relationship with adjacent land uses and appropriate street functionality. During the review process, the review authority may interpret these design guidelines with some flexibility in their application to specific projects, as not all design criteria may be workable or appropriate for each project. Projects will be evaluated on the degree to which the project demonstrates substantial compliance with the intent of the design guidelines, leading to a recommendation of project approval or denial.

The design guidelines are divided into the following categories:

- Sidewalk Area
- Roadways
- Intersections and Crossings

The Master Plan of Complete Streets is not intended to be an “end state” or “build-out” type of plan, with definitive cross sections and fixed street designs. Instead, it is intended to provide the basis for the process of determining street design in the City of Lancaster. This approach recognizes several key concepts:

- Streets serve complex **needs and multiple types of users; the complexity of street design does not lend itself to “one size fits all” solutions.**
- Street design is contextual in nature, requiring the consideration and evaluation of multiple factors.
- Streets must be able to evolve over time to meet the changing needs of the City. The Master Plan of Complete Streets allows for flexible street design to meet these changing needs and circumstances.
- Street design and street networks must be flexible for streets to be resilient and adaptable. If streets are not resilient and adaptable, the City itself is ultimately not resilient and adaptable.



3.2 Principles and Priorities for Street Design

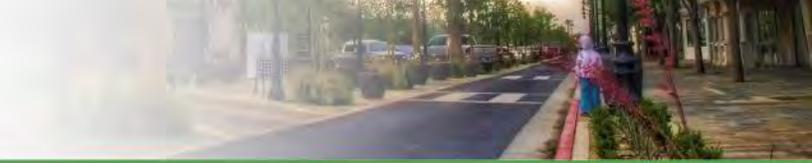
While the design of individual streets is contextual and based on various factors specific to its location and intended function, all street design in the City will be guided by four core principles applied in the following priority order:

1. **Safety:** Street design must provide a safe facility for all expected users, including, but not limited to, pedestrians, motorists, bicyclists, and transit users.
2. **Cost:** Street design must be cost-effective, not only for initial costs of construction, but also for long-term operation and maintenance. Overbuilding of streets, which creates significant short and long-term costs with minimal benefits, must be avoided. Further, the design of the street should improve the value and productivity of adjacent property, not reduce it.
3. **Capacity:** The ability of the street design to reasonably accommodate the type and number of expected users.
4. **Speed:** The ability of the street design to accommodate vehicular traffic at a certain level of speed. Care must be exercised that street design does not become dictated exclusively by the objective to meet a target speed.

Additional Considerations in Street Design

As noted earlier, multiple factors influence and must be considered in the contextual design of streets. Such factors include, but are not limited to, the following:

- **Mobility vs. Accessibility:** In general, streets in developed areas of the City should be designed for accessibility to adjacent land uses, in keeping with the principle that streets should improve the value and productivity of adjacent property. The use of highway geometrics and design to create mobility in conjunction with accessibility will typically result in a street that does not effectively meet either the objective of mobility or accessibility, and will often not meet the priority of safety for all users. In situations where mobility is the objective of the street design, direct access from adjacent land uses and left turning movements should be prohibited and the number of intersections and traffic signals minimized. As the mix and intensity of land use along a street corridor increases over time, the street design should generally evolve to meet the objective of accessibility, recognizing the increase in pedestrians, bicyclists, transit users, and vehicle turning movements that are related to such land use changes.
- **Physical Arrangement of Adjacent Buildings:** The relationship of buildings to the street is an important factor in street design. In general, along streets where buildings are or are expected to be placed near the street, consideration should be given to higher quality pedestrian and biking facilities as part of the street design. In addition, on-street parking may be important both for the economic viability of the adjacent land use and for slowing vehicle speed.
- **Emergency Access:** Street design must consider the needs of emergency service providers. This includes not just the individual street, but the overall street network. Care must be exercised, however, to ensure that provisions for emergency access do not adversely affect other street design objectives.
- **Street Network:** While a focus of the Master Plan of Complete Streets is the design process for individual streets, it must be recognized that the overall street network of the City must also be considered. In general, more highly connected street networks provide benefits in the form of greater productivity, more travel mode options, and better emergency access routes.



- **Tradeoffs in Street Design:** Since streets are complex facilities, design tradeoffs will exist in any street design determination. As examples, the narrowing of vehicular travel lanes (and resulting reduction in travel speeds) may be necessary to ensure an adequate level of safety for bicyclists or for the widening of a sidewalk, or the widening of an intersection may increase pedestrian crossing distance and affect the traffic signal timing associated with such crossing distance. Ultimately, the City has the responsibility for planning, designing, and managing the public street rights of way, and determining the appropriate allocation of space and function within these rights of way, in accordance with the concepts, principles, and priorities laid out in this Master Plan of Complete Streets.
- **Evaluation of Street Performance:** The City has revised the General Plan in conjunction with the adoption of the Master Plan of Complete Streets. This revision recognizes that flexible and adaptable street design cannot be fairly evaluated using only vehicular-based level of service (LOS) measures. Therefore, within the infill area of the City as defined in the General Plan, vehicular-based LOS effects are not sufficient in and of themselves to require modifications to street design; such design modifications must also meet other identified objectives. Outside of the infill area, vehicular-based LOS evaluation is still appropriate, but mitigation of identified impacts must be evaluated against the concepts, principles, and priorities of the Master Plan of Complete Streets. To assist in the evaluation of street performance, the Master Plan of Complete Streets provides some alternative approaches, such as the Multi-Modal Level of Service (MMLOS). Over time, additional forms of evaluation (such as measurements of vehicle miles traveled) will become more refined, and it is the intent of the Master Plan of Complete Streets that the City should use whatever evaluation methods and tools it finds most appropriate.

3.3 General Design Guidelines

Outdoor Furniture and Outdoor Dining Elements

Outdoor furniture and outdoor dining elements should be chosen with consideration to street context, environmental conditions (i.e., durability against weather conditions, etc.), color, style, and both initial and long-term maintenance costs as well as ease of replacement should that become necessary. Any restaurant establishments interested in providing outdoor dining will be required to complete an Outdoor Dining License Agreement with the City of Lancaster.

Bikeways

Bicycle lanes and paths are not included in these guidelines. Design guidelines for bike lanes, bike paths, and other bicycle-related amenities are found in the Lancaster Master Plan of Trails and Bikeways adopted in 2012.



3.4 Sidewalk Area

3.4.1 Building Entries

Intent and Application

Building entries can be improved with lighting, awnings, pavement decoration, and landscaping to enhance the pedestrian environment and sidewalk areas. Improvements highlight building entry points as an important feature of the streetscape character and provides retail businesses better building facades to attract customers.

Building entry enhancements occurs most commonly in pedestrian-oriented districts where building frontages are directly adjacent to the sidewalk, especially in commercial and mixed-use areas. In areas where buildings are set back from the street, sidewalk-adjacent entry points (e.g. entry paths, gates, or paseos) can also be similarly enhanced.



Design Guidance

- Orient primary entrances toward major streets and sidewalks to encourage high level of pedestrian activity; provide clearly defined pedestrian paths to primary entrances.
- Elements including landscaping and lighting should not encroach upon pedestrian access to building entryways and encourage fully-accessible access routes from the walkway zone to the point of entry.
- Entry treatments should complement building design and surrounding streetscape.
- Light fixtures should be oriented and directed to provide light within the entrance area and minimize skyward and horizontal light pollution.
- Pavement textures and/or materials should meet ADA standards for accessible surfaces.
- Planters should be durable and highly visible.
- Awnings may extend over the walkway zone.
- Accent landscaping and enhanced paving are encouraged to highlight project entries.

Additional Resources

- City of Lancaster Design Guidelines (2009)



Building Entries



Elements should not encroach upon pedestrian access path



Ensure ADA-accessibility to building entrances



Provide safe, convenient pedestrian linkages from sidewalk to building entry



Landscape planters can distinguish a building entry



3.4.2 Streetscape Signage and Wayfinding

Intent and Application

Signage on streets and sidewalks provide essential information to motorists, cyclists, and pedestrians. The placement of signs is as important as the information they convey. Poor placement and/or excessive signage can reduce effectiveness and create a cluttered street environment. Signage can be oriented towards pedestrians, bicyclists, and/or motorists and can be placed within the sidewalk area or along roadways depending on the directional information.

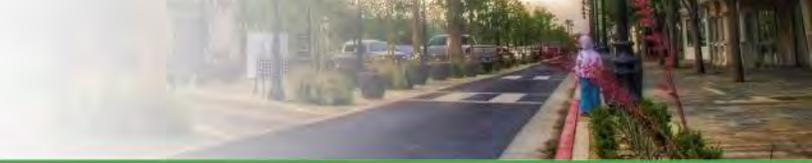
Design Guidance

- Minimize the number of sign poles by consolidating signs onto single poles or existing poles wherever possible without rendering the signs ineffective.
- Traffic and parking signs should be placed so that they are unobstructed by other streetscape elements.
- Signs should be placed away from locations ideal for landscaping, lighting, and site furnishings wherever possible.
- Signs should not be placed in locations where they obstruct the minimum clearance width for, or protrude into, the pedestrian walkway.
- Wayfinding signage should have a distinct and coordinated design that reflects the culture and character of the surrounding neighborhood or district.
- Signage should utilize clear, concise and consistent language and provide easily-understood graphic information.
- Directional and wayfinding signage should be visually distinguishable from vehicle-oriented roadway signage.
- Placemaking signage that provides destination descriptions should be supplemented with tactile information to be accessible to people with visual impairments.
- Sign placement should comply with MUTCD guidelines.



Additional Resources

- California Manual on Uniform Traffic Control Devices (MUTCD)
- City of Lancaster Municipal Code Sign Regulations
- City of Lancaster Design Guidelines (2009)



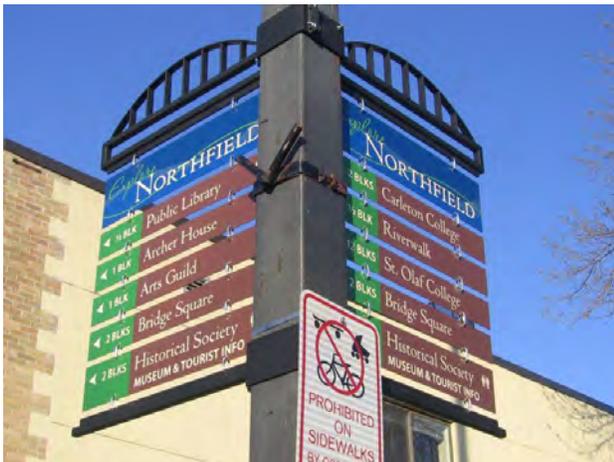
Streetscape Signage and Wayfinding



Signs should not be placed in locations where they do not obstruct the pedestrian walkway



Minimize the number of sign poles by consolidating signs onto single poles



Wayfinding signage should have a distinct and coordinated design



Signage should provide easily-understood graphic information

3.4.3 Street Trees and Landscaping

Intent and Application

Street trees and landscaping enrich the visual qualities of a street and enhance the experience for all users. It provides valuable shade and shelter for pedestrians, contributes to traffic calming, and improves air quality. Landscaping and street trees in the public right-of-way should consider the surrounding land use context, street uses, and other practical considerations such as utility placement and underground infrastructure. The planting of landscaping and trees may occur in the sidewalk directly adjacent to buildings or as a buffer between motor vehicles and pedestrian pathways. Landscaping and trees may be in tree wells, sidewalk-level planters, interspersed with paved areas that provide curbside access, parkway strips, or within sidewalk curb extensions.

Design Guidance

- Use trees and plants appropriate to Lancaster and the Antelope Valley region, and that have low maintenance requirements.
- Group plants in combinations to support desired design themes and based on common environmental conditions, such as soil type, water, sun, temperature, and precipitation, etc.
- Tree wells and planter beds must meet all required clearances to ensure an unobstructed pedestrian access route and access to other street elements such as utilities and emergency apparatus.
- Above-ground planters should generally be considered interim solutions, or they can be used where in-ground landscaping is not possible.
- Avoid planting trees with aggressive root systems known to damage the surrounding pavement, sidewalks, and substructures.
- In choosing a street tree, consider what canopy, form, and height will maximize benefits over the course of its life.
- Closer spacing of canopy trees is encouraged to create a lacing of canopy, as trees in groups or groves can create a more favorable microclimate for tree growth than is experienced by isolated trees exposed to heat and drying from all sides. On commercial streets with existing multi-story buildings and narrow sidewalks, select trees with a narrower canopy than can be accommodated on the limited sidewalk width.
- Adequate clear space should be provided between trees and awnings, canopies, balconies, and signs so they will not come into conflict through normal growth or require excessive pruning to remediate such conflicts.
- Keep landscaping in scale with adjacent buildings and/or appropriate size at maturity.



Additional Resources

- City of Lancaster Design Guidelines (2009)

Street Trees and Landscaping



Group plants in combinations to support desired design themes and based on common environmental conditions



Tree wells must meet all required clearances to ensure an unobstructed pedestrian access route



Keep landscaping in scale with adjacent buildings



Adequate clear space should be provided between trees and awnings and signs



3.4.4 Bicycle Parking

Intent and Application

Secure bicycle parking encourages bicycling as a viable travel option by adding convenience and security for short-term parking. It also promotes an attractive and fully-accessible sidewalk environment by reducing the need to lock bicycles haphazardly to fences, entry gates, and street poles. Bicycle parking facilities should be located frequently and regularly in active retail and commercial districts and near major destinations including parks, libraries, and major transit stops.

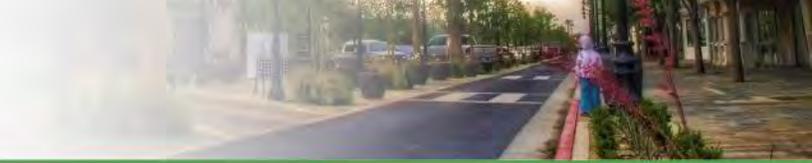


Design Guidance

- Bicycle parking should be provided near transit stops where applicable. Bike racks should be placed near the back of the transit stop or be placed outside of but adjacent to the transit stop, ensuring unobstructed boarding/ alighting at all bus doors.
- Encourage the use of clustered racks, parking shelters, and/or bicycle corrals where adequate space is available.
- Bicycle parking should be placed where sidewalk-area dimensions provide adequate space for pedestrian pathways and ensures ADA compliance.
- Bicycle racks that are parallel to the curb should allow for access to parked vehicles and provide adequate space for cyclists to maneuver.
- To provide added safety for bicyclists, when fronting a curbside vehicular travel lane bicycle parking should be set back further, from the curb line.
- Bicycle parking should maintain adequate clearance from other street furniture (e.g. tree wells, light poles, utility boxes, fire hydrants, trash cans, etc.).
- Bicycle parking should not be installed in a bus stop zone, taxi zone or loading zone.
- Bicycle racks can be placed perpendicular, angled, or parallel to a building or property frontage. Perpendicular or angled parking should be provided if space permits; these orientations allow for better-accessible clustered parking.
- Bicycle racks should generally not be located on corner bulb-outs near intersections because they hinder visibility for pedestrians, bicyclists, and motorists.
- Bike racks along sidewalks should support the bicycle well, and make it easy to lock a U-shaped lock to the frame of the bike and the rack.

Additional Resources

- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
- City of Lancaster Master Plan of Bikeways and Trails



Bicycle Parking



Bicycle parking should be placed where sidewalk-area dimensions provide adequate space



Bicycle parking should be provided near transit stops where applicable



Bike racks along sidewalks should make it easy to lock a U-shaped lock



Encourage the use of clustered racks

3.4.5 Street Lighting

Intent and Application

Well-designed, properly-located, and appropriately-scaled street lighting improves nighttime safety and security by illuminating the roadway and sidewalk area to benefit all users of the public right-of-way including motorists, bicyclists, transit users, and pedestrians. Generally, taller pole heights afford a larger illuminated area, so spacing between lighting fixtures can be wider and the number of fixtures lower. Pedestrian-scale lighting fixtures should be encouraged to provide supplemental light for the sidewalk area, especially in areas with high nighttime pedestrian volumes such as commercial districts and other areas with higher-density land uses. Pedestrian-scale lighting should be installed in all locations where a wide sidewalk is not well-illuminated by the roadway lights. Critical locations such as ramps, crosswalks, transit stops and seating areas that are used at night should be highly visible and well lit.



Design Guidance

- Use low-level decorative lighting to provide appropriate nighttime visibility for safety and pedestrian movement as well as accent detail.
- Where appropriate, design down-directed, exterior lighting as part of the overall architectural style of the building that highlights interesting architectural features. Lighting of full facades or roofs is discouraged.
- The placement of both roadway and pedestrian lighting should consider street dimensions and function as well as land use contexts.
- Pedestrian lighting should be installed primarily in the sidewalk if a required clear path is maintained. Where a building is set back from the sidewalk area, pedestrian light fixtures may be installed on poles directly adjacent to the property line. Where a building fronts the sidewalk area, pedestrian light fixtures may be attached directly to the building façade.
- The placement of light poles should be coordinated with the placement of landscaping, street furniture, transit stops and other utilities. Their placement should comply with clearance requirements in relation to other facilities, curbs, intersections, and crossings.
- Roadway lighting fixtures should be placed between trees to facilitate maximum lighting and to ensure that the tree canopy is maintained and that excessive tree pruning is avoided.
- Lighting fixture design should complement and be coordinated with the design of other streetscape elements.
- As appropriate, dark sky-compliant lighting should be selected to minimize light pollution cast into the sky while maximizing light cast onto the ground.

Additional Resources

- City of Lancaster Design Guidelines (2009)



Street Lighting



The placement of light poles should be coordinated with the placement of other street elements



Dark sky-compliant lighting should be selected to minimize light pollution cast into the sky



Use low-level decorative lighting



Pedestrian lighting should be installed primarily in the sidewalk if a required clear path is maintained



3.4.6 Bus Stop Location

Intent and Application

All bus stop locations offer specific benefits, whether they are located on the far side, near side, or at the midblock. The ideal bus stop location for riders depends on the physical or operational context of the roadway and transit route/system. The following site conditions should inform bus stop location: available curbside space, sidewalk width and pavement quality, travel lane width and quantity, intersection geometry, sight distances, and the presence of major destinations, on-street parking, bicycle facilities, and/or crosswalks. Proper coordination with the regional transit agency should occur when determining the appropriate location of bus stops.

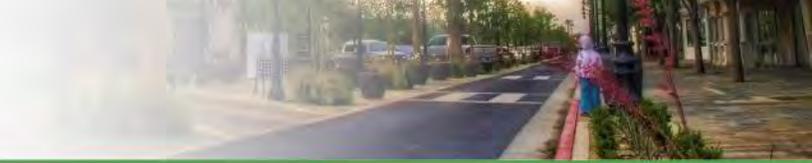


Design Guidance

- Bus stops should not obstruct driveways or other pedestrian paths wherever possible.
- In general, bus stops should be located at the far side of a signalized intersection to enhance the effectiveness of traffic signal synchronization or bus signal priority projects.
- Near-side bus stops are appropriate for stop sign-controlled intersections.
- Priority should be given to the location that best serves the passengers.
- Where feasible, bus stop bulbs can be installed at bus stop locations to help improve on-time performance while also improving the waiting area for passengers. The following conditions should be given priority for the placement of transit bus bulbs:
 - Where transit performance is significantly slowed by the transit vehicle's merging into a mixed-flow travel lane;
 - Roadways served by express or Bus Rapid Transit (BRT) lines;
 - Stops that serve as major transfer points; and
 - Areas with heavy transit and pedestrian activity and where narrow sidewalks do not allow for the placement of a bus shelter without conflicting with the pedestrian zone.

Additional Resources

- Antelope Valley Transit Authority (AVTA)



Bus Stop Location



Priority should be given to the location that best serves the passengers



Near side bus stop



Mid-block bus stop



Bus bulb-out



3.4.7 Outdoor Dining

Intent and Application

Outdoor dining facilities provides opportunities for patrons to enjoy the outdoors and surrounding environment while activating and enlivening the sidewalk. Common features include tables, chairs, sheltering elements (e.g., awnings and umbrellas), and enclosing elements (e.g., planters and fencing). Sidewalk dining areas are encouraged in commercial districts with active pedestrian-oriented environments. They are most commonly located adjacent to the restaurant establishment.

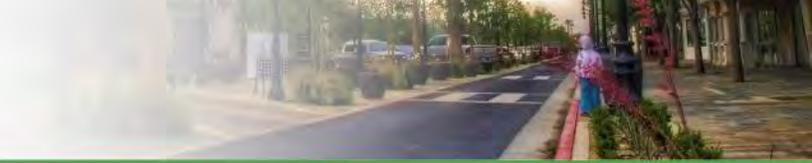
Design Guidance

- Ensure that sidewalk functionality (pedestrian pathway and ADA requirements) is maintained when determining design and layout of outdoor dining facilities.
- Placement of tables and chairs on the sidewalk must not interfere with curb ramps, access to building entries, intersection/driveway/alley visibility, fire escapes, and access to above-ground infrastructure.
- Since the public purpose sidewalk dining is to stimulate activity on the street, the City should prohibit restaurants from fully enclosing the dining area, which effectively privatizes public space. The use of low movable planters to define a sidewalk dining area is encouraged.
- Dining furniture – including tables, umbrellas, chairs, and enclosing elements – can be either freestanding or fixed. In most settings, furniture should be freestanding so it is removable at the end of business hours, yet care must be taken in its placement to ensure a clear walkway. Dining furniture should be fabricated of durable materials that are compatible with the surrounding visual character and that are resistant to sun and water damage. Furniture must be stable and have sufficient weight to avoid being tipped over by wind.
- For outdoor dining located adjacent to travel lanes, sufficient buffering elements (e.g., parked vehicles or landscape planters) must be present to protect patrons from passing vehicles. Generally, dining areas should not be in these areas.



Additional Resources

- City of Lancaster Design Guidelines (2009)



Outdoor Dining



For outdoor dining located adjacent to travel lanes, use buffering elements



Ensure that sidewalk functionality is maintained



Outdoor dining areas shall maintain an open, transparent appearance.



Dining furniture can be either freestanding or fixed



3.4.8 Public Seating

Intent and Application

Public seating contributes to an active pedestrian environment by enhancing the role of the sidewalk as an enjoyable public space. Seating provides valuable places for pedestrians to rest along the sidewalk and helps activate and enliven the environment. Providing well-distributed seating furniture is especially important in areas with high concentrations of pedestrian activity, on streets with pedestrian-oriented destinations, and at transit stops.



Design Guidance

- Seating should not impede the pedestrian pathway or ADA accessibility.
- Seating should not conflict with access to building entries, loading zones, parked vehicles, driveways, and fire hydrants.
- Ensure proper placement so that seating fixtures are situated in areas where people would like to-or need to-be seated. Seating is especially valuable in shaded areas, preferably under trees.
- The placement of seating fixtures must be balanced with other sidewalk elements and functions. Seating should be integrated with the placement and design of other street furniture (e.g., pedestrian lighting and trash receptacles).
- Public seating on the sidewalk should be permanently affixed unless an adjacent business agrees formally to be responsible for its maintenance and security.
- Where there is sufficient space seating can be clustered to form social spaces.
- Curbside seating should be avoided where there is a curbside vehicular travel lane, although it is acceptable at transit stops.
- Informal seating opportunities may be used as an alternative to free-standing benches. These include low walls, sitting rounds, seating built into planter walls, or leaning bars.

Additional Resources

- City of Lancaster Design Guidelines (2009)

Public Seating



Public seating should not impede the pedestrian pathway or ADA access



Seating can be clustered to form social spaces



Other alternatives to traditional bench seating



Public seating should be balanced with other sidewalk elements



3.5 Roadways

3.5.1 Lane Reconfiguration/Right Sizing and Narrowing

Intent and Application

Lane reconfiguration and right sizing prioritizes safer vehicle speeds and a pedestrian- and bicycle-friendly environment. It increases driver awareness of bicyclists and pedestrian by reallocating space on the street for bicycle facilities and potential sidewalk widenings. Right sizing can be applied to multi-lane streets that exhibit unsafe vehicle speeds and history of pedestrian and bicycle safety concerns. Lane narrowing should be considered on roadways with wider lanes, excess traffic capacity, and safety/speeding concerns. Prior to implementation, street right sizing and narrowing projects should have a traffic analysis conducted to determine their feasibility.



Design Guidance

- Consider a street's existing configuration, traffic operations, user needs, and safety concerns to determine lane reconfiguration/right-sizing.
- Lane reconfiguration and right-sizing should balance the needs of motorists, bicyclists, and pedestrians.
- Retain minimum travel lane widths required by City standards, but consider flexibility in design when determining the types of improvements within the street.

Additional Resources

- FHWA "Road Diet" - http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.pdf
- AASHTO's Guide for the Planning, Design, and Operation of Pedestrian Facilities
- AASHTO's Guide for the Development of Bicycle Facilities
- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
- ITE Designing Walkable Urban Thoroughfares
- National Association of City Transportation Officials (NACTO) Urban Street Design Guide



Lane Reconfiguration/Right Sizing and Narrowing



Reallocate space on the street for bicycle facilities and potential sidewalk widenings.



Lane narrowing should be considered on roadways with wider lanes.



Balance the needs of motorists, bicyclists, and pedestrians.



Consider flexibility in design when determining the types of improvements within the street.

3.5.2 Neckdown

Intent and Application

A **neckdown**, also known as a “choker” or “pinchpoint,” consists of curb extensions on both sides of a street. It encourages drivers to slow down and reduces the crossing distance for pedestrians and makes pedestrians more visible for motorists. A neckdown with or without an associated pedestrian crossing can be applied on any local or non-arterial street that exhibits vehicles traveling at unsafe speeds, especially where pedestrians are present. They should be considered around high activity areas, such as schools, commercial destinations, and key transit stops.



Design Guidance

- A neckdown should be narrow enough to discourage drivers from traveling at unsafe speeds.
- **At crossings where pedestrian volumes are high, crosswalk markings should be wider than the typical width of 10’.**
- Install sidewalks that continue in a straight path.
- Design chokers to include curb extensions with landscaping when designed at midblock crossings.
- Consider the operation of larger vehicles such as buses, delivery/ garbage/construction trucks, street sweepers, and emergency vehicles should be addressed before implementation.
- Temporary treatments, such as plastic bollards, planters or striping, can be installed until funding becomes available to construct an actual concrete neckdown.

Additional Resources

- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- Institute of Transportation Engineers – Traffic Calming Measures: Choker <http://www.ite.org/traffic/choker.asp>



Neckdown



Design chokers to include curb extensions with landscaping.



Neckdowns should be narrow enough to encourage slower vehicle speeds.



At crossings with high volume of pedestrians, crosswalks should be wide.



Sidewalks should follow a straight path.

3.5.3 Chicane

Intent and Application

Chicanes are alternating curb extensions on the roadway that encourage motorists to drive at slower, safer speeds. Chicanes form an S-shaped curve, discouraging speeding on local streets and reducing the risk of collisions caused by motorists. This traffic calming measure fosters a friendlier bicycling and pedestrian environment. Chicanes are typically applied on streets in residential contexts where unsafe vehicle speeds pose a threat to pedestrians and bicyclists. They are applied at the midblock on narrower streets where there is a travel lane in each direction, or on one-way roads.

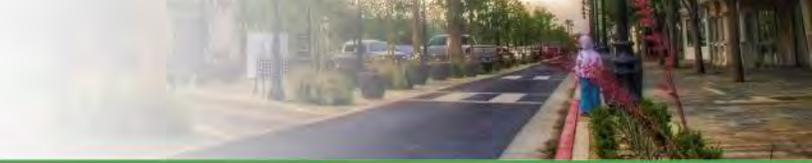


Design Guidance

- Chicanes typically consist of a set of 2 or 3 curb extensions set in an alternating pattern.
- Signage and striping should be used to help alert and guide motorists along the curves on the roadway.
- Landscaping and vegetated planted in chicanes should be low growing to maintain clear sight distances.
- The desired design speed of the street should help inform the degree of horizontal deflection (i.e., the lateral movement of vehicles around the chicane).
- Chicanes should be designed to address any drainage concerns.
- Achieving the traffic calming benefits of chicanes can be achieved by using striping and plastic bollards to demarcate the areas where the curb extensions would be.

Additional Resources

- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- Institute of Transportation Engineers – Traffic Calming Measures: Chicane <http://www.ite.org/traffic/chicane.asp>



Chicanes



Landscaping should be low growing to maintain adequate visibility.



Typically consist of a set of 2 or 3 curb extensions set in an alternating pattern.



Signing should be used to help alert motorists.



Temporary treatments can be used to achieve similar traffic calming benefits.



3.5.4 Landscaped Medians

Intent and Application

Landscaped medians can range from being a tree-lined promenade to an intensively landscaped boulevard median. These types of elements direct vehicular traffic and helps limit mid-block left turns where appropriate. Landscape medians provide a visual separation that makes the roadway appear narrower and thus reduces speeds. Landscape medians can be applied on two-way streets that have more than two travel lanes in each direction; streets being considered for more pedestrian-friendly improvements; and streets that are being considered for lane narrowing and/or lane reduction.



Design Guidance

- Where possible, vegetated gutters and bioswales should be included in the median to expand stormwater drainage efforts along the roadway.
- Appropriate plant materials will vary depending on local conditions and maintenance. Typically, low growing, low maintenance, low water use plants are appropriate.
- Design should account for impact of raised median on emergency vehicle movement and access.
- Trees should be located from a crosswalk or from the limit line at an intersection to provide adequate visibility.
- Landscape medians with trees should be large enough to accommodate soil volume and be adequately separated from the travel lanes.
- Gateway signs or elements, art, pathways on wide medians, and other elements can also be provided on medians. If a median is particularly wide, seating and recreational elements may be provided.

Additional Resources

- City of Lancaster Design Guidelines
- City of Lancaster Municipal Code



Landscaped Medians



Stormwater drainage should be included wherever possible.



Landscape medians with trees should be large enough to accommodate soil volume.



Low growing plants should be used to maintain visibility.



Monument signs can be included in the median.



3.5.5 On-Street Parking

Intent and Application

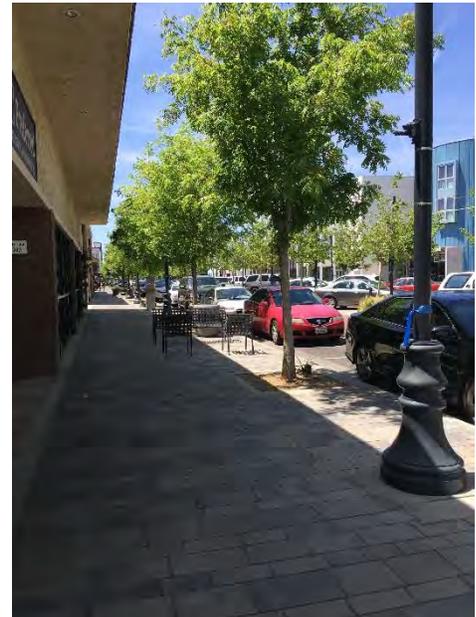
The presence of on-street parking can increase economic activity and safety in urban environments. Its use is generally preferred if the adjacent land-use uses the area facing the street. On-street parking provides easy access to adjacent uses and on-street spaces occupy less area than off-street which require driveways and travel aisles. In addition, on-street parking provides a physical barrier between pedestrians and moving vehicular traffic. Depending on road element configurations, on-street parking can also act as a buffer between bicyclists and general travel lanes.

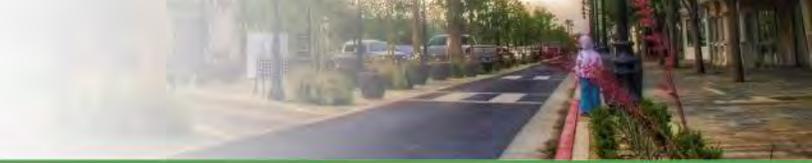
Design Guidance

- On-street parking should be located based on the characteristics of the thoroughfare type, needs of the adjacent land uses and applicable local policies and plans for parking management.
- On-street parking should not obstruct views of drivers executing a crossing or turning maneuver onto a street from an intersecting road or driveway.
- On-street parking should provide adequate sight distance from intersections to increase visibility of pedestrians crossing the street.
- When space is available, angled on-street parking should be considered. Back-in angle (or front out) parking should also be considered in lieu of head-in angled parking.
- Metered parking should be considered in high demand areas where on-street parking is limited.
- Where space is sufficient, a park assist lane or painted buffer can be installed to assist in vehicle maneuvering, while also creating a narrow feel of the adjacent travel lane to reduce speeds and increase safety.
- In developing and redeveloping areas, provide the amount of on-street parking for planned, rather than existing, land use densities. If more parking is needed, consider public or shared parking structures or integrate the design of parking facilities with adjacent land uses

Additional Resources

- City of Lancaster Design Guidelines
- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design and Operation of Pedestrian Facilities

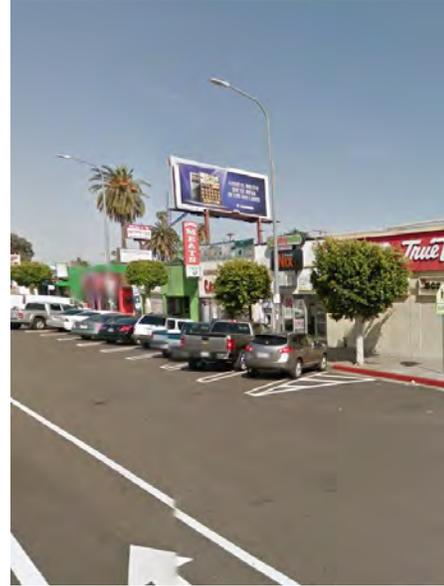




On-Street Parking



On-street parking should be located based on the characteristics of the thoroughfare type.



A park assist lane or painted buffer can be installed where space is available to assist in vehicle maneuvering



On-street parking should provide adequate sight distance from intersections



Back-in angle parking should also be considered where adequate space is available.



3.6 Intersections and Crossings

3.6.1 Crosswalk Markings

Intent and Application

Crosswalk markings provide a direct, visible, and accessible path for pedestrians to cross the street. Marked crosswalks should be provided on all intersections controlled by traffic signals, unless a pedestrian crossing is specifically prohibited **because of an intersection's unique geometry**. The following factors should be considered in determining whether a marked crosswalk should be used: vehicular approach speeds from both directions, vehicular volume and density, vehicular turning movements, pedestrian volumes, roadway width, day and night visibility by both pedestrians and motorists, desirable clarity of pedestrian routes for sighted or sight-impaired pedestrians, discouragement of undesirable pedestrian routes, consistency with marking at adjacent intersections or within the same intersection.



Design Guidance

- Consider the use of marked crosswalks in areas with high pedestrian traffic volumes, including schools, commercial districts, parks, public spaces, transit stations, bus stops, hospitals, and large offices.
- At intersection without traffic signals or STOP signs (uncontrolled intersections), the decision to mark a crosswalk should be guided by an engineering study. Factors considered in the study include vehicular volumes and speeds, roadway width and configuration, stopping sight distance, distance to the next controlled crossing, night time visibility, grade, and pedestrian volumes.
- Use highly visible crosswalk striping, such as continental striping. This type of striping consists of **24" wide bars** (placed perpendicular to the path of travel), with bars generally painted in line with lane and centerline striping; in this arrangement vehicle tire paths go between the bars to reduce wear, reducing the frequency of repainting.
- Crosswalk markings should be considered in conjunction with other measures (e.g., curb extensions, crossing refuge island, unidirectional curb ramps, and flashing beacons) to make crossings safer and more comfortable for pedestrians **while increasing motorists' awareness of pedestrians**.
- Crosswalks should be at least as wide as the sidewalk, but may be wider in locations with high pedestrian demand or narrow sidewalks.
- Crosswalks must be outfitted with curb ramps and tactile warning strips per federal accessibility guidelines.

Additional Resources

- California Manual on Uniform Traffic Control Devices (MUTCD)
- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- California Vehicle Code 2136



Crosswalk Markings



Consider the use of marked crosswalks in areas with high pedestrian traffic volumes



Use highly visible crosswalk striping, such as continental striping.



Crosswalks must be outfitted with curb ramps



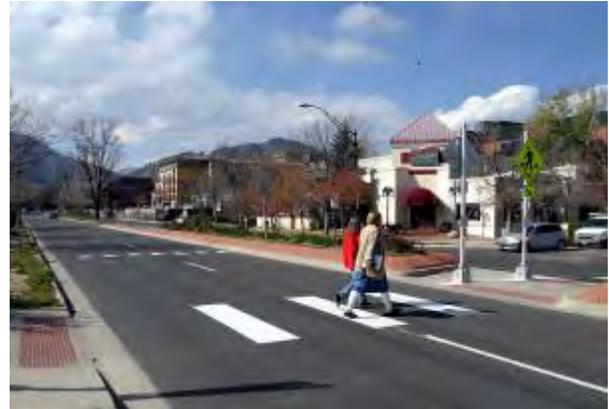
Crosswalk markings should be considered in conjunction with other measures



3.6.2 Advance Yield Markings

Intent and Application

Advance yield markings help prevent multiple threat collisions (i.e., when a yielding vehicle in one lane obscures the vision of the motorist in an adjacent lane, resulting in the latter continuing through an unsignalized or uncontrolled crosswalk and potentially colliding with crossing pedestrians). These street markings consist of a row of white triangles placed across each approach to alert motorists to yield for pedestrians. Advance yield markings are applied in conjunction with unsignalized or uncontrolled crosswalks, which are typically located at midblock locations.



Design Guidance

- **Advance yield markings should be placed 20' to 50' in advance of crosswalks** to provide a driver sufficient sight lines to see a crossing pedestrian when vehicles are present or stopped in adjacent lanes.
- Parking should be restricted between the stop or yield line and the crosswalk to allow for better visibility.
- Combine with signs and beacons, as appropriate.
- Engineering judgment should determine the exact placement of advance yield markings by considering context-specific variables such as vehicle speeds, traffic controls, roadway width, on-street parking, nearby land uses with vulnerable populations, the demand for vehicle-queuing space, and the potential for visual confusion.

Additional Resources

- California Manual on Uniform Traffic Control Devices (MUTCD)
- Federal Highway Administration PedSafe-- http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=13



Advance Yield Markings



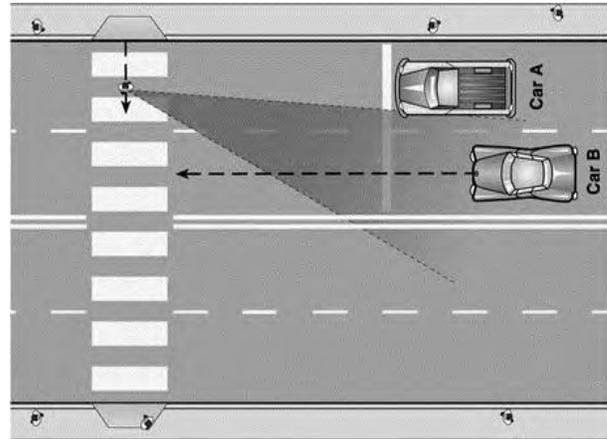
Combine with signs and beacons, as appropriate.



Advance yield markings should be placed 20' to 50' in advance of crosswalks.



Parking should be restricted between the stop or yield line and the crosswalk.



Advance yield markings help prevent multiple threat collisions.



3.6.3 Raised Crosswalks

Intent and Application

A raised crosswalk is a pedestrian walkway that is at the same level of the sidewalk. Raised crosswalks provide accessible and convenient crossing for pedestrians, especially those with mobility and visual impairments, because they do not require vertically transitioning up and down a curb ramp. In addition, a raised crosswalk also serves as a speed table that slows approaching traffic. Raised crosswalks can be applied on local or narrower collector streets at midblock locations. They are useful in situations where unsafe vehicle speeds pose a threat to



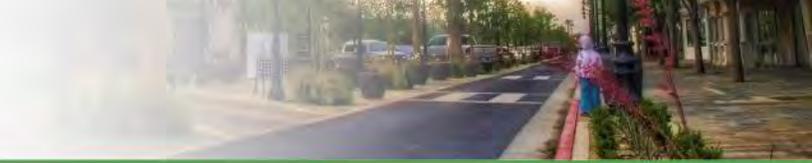
pedestrians, particularly around schools, parks, retail districts, and other pedestrian-heavy destinations. Raised crosswalks may also be considered at crossings where there are issues of poor pedestrian visibility and motorist yielding, or where there is a pattern of collisions indicating points of conflicts between pedestrians and motorists.

Design Guidance

- Raised crosswalks (or **speed tables**) should be 15' to 20' wide, paved with smooth materials, and be flush with the sidewalk in height.
- Raised crosswalks should be wide enough that both the front and rear wheels of a passenger vehicle can sit atop the speed table at the same time when traveling over it.
- Implement in conjunction with curb extensions to decrease crossing distances and make pedestrian more visible to motorists.
- Detectable warning strips should be installed at both ends of the crosswalk for pedestrians with visual impairments.
- Use decorative colors and/or textured materials, as appropriate.
- Raised crosswalks should be avoided on wide multi-lane arterial roadways and on streets with steep grade changes and sharp curves.
- Consider the impact of raised crosswalks on the operational needs of transit buses and emergency vehicles.
- Raised crossing should not impede street drainage patterns.

Additional References

- Institute of Transportation Engineers – Traffic Calming Measure- <http://www.ite.org/traffic/tcdevices.asp>
- National Association of City Transportation Officials (NACTO) Urban Street Design Guide



Raised Crosswalks



Raised crossing should not impede street drainage patterns.



Use decorative colors and/or textured materials.



Raised crosswalks can be applied on local or narrower collector streets at midblock locations.



Raised crosswalks should be wide enough that both the front and rear wheels of a passenger vehicle can sit atop the speed table.



3.6.4 Decorative Pavement

Intent and Application

Decorative pavement materials can utilize different colors, textures, and patterns to distinguish crosswalk markings and/or intersections in certain environments. These improvements can add supplemental placemaking components to neighborhoods and activity nodes. Decorative pavement materials can be applied on crosswalks and intersections in distinct locations such as cultural and civic destinations. They can enhance district identity or physically/visually connect public spaces.

Design Guidance

- Decorative colors, patterns, and textures should not be considered the only pedestrian safety measure. These improvements should be considered secondary to high-visibility crosswalks and other pedestrian safety measures.
- Decorative crosswalks should use stable, durable, and slip-resistant materials that create a smooth surface and provide a high color contrast with the surrounding asphalt.
- Pavement materials should not pose tripping hazards or cause excessive vibration for wheelchair users.
- Periodic maintenance should be completed to prevent colored visibility from deteriorating or uneven textured pavement from forming.



Additional References

- City of Lancaster Design Guidelines (2009)
- Americans with Disabilities Act



Decorative Pavement



Decorative crosswalks should provide a high color contrast with the surrounding asphalt.



Decorative pavement materials can be applied on crosswalks and intersections in distinct locations.



Pavement materials should not pose tripping hazards or cause excessive vibration for wheelchair users.



Decorative pavement materials can add supplemental placemaking components to neighborhoods and activity nodes.



3.6.5 Corner Bulbout

Intent and Application

A corner bulbout is a curb extension at intersection corners. It reduces the distance pedestrians need to cross and encourages drivers to slow down when turning at intersections. Corner bulbouts also delineate direct crosswalk paths and allows more space for smoother grade transitions on the curb ramp. Bulbouts can be applied at corners where on-street parking exists, but not where a curbside peak period travel lane exists. They should be applied where high volumes of pedestrians are present, especially around schools, parks, senior housing, and retail destinations. Bulbouts should be considered on streets at locations where collisions occur between turning vehicles and pedestrian crossings.



Design Guidance

- Corner bulbouts should extend the full width of a parking lane.
- With a bike lane present, bulbouts should be designed to accommodate drainage flows without affecting bicycle travel.
- Width and/or length of bulbouts should consider potential conflict with turning movements of trucks, transit buses, and emergency vehicles.
- Street furniture, landscaping elements, and other sidewalk amenities located on curb bulbouts must not impede pedestrian flows, emergency access, or affect the sightlines of roadway users.
- Stormwater drainage should be accommodated to prevent ponding at the base of curb ramps, which may include designing catch basins or utilizing trench drains to channel water.
- Interim materials, such as delineators, planters, surface treatments or striping, can be used as temporary, low-cost solutions that provide similar safety benefits until funding becomes available for permanent bulbouts.

Additional References

- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design and Operation of Pedestrian Facilities



Corner Bulbout



Street furniture must not impede pedestrian flows



Corner bulbouts should extend the full width of a parking lane



Corner bulbouts should consider potential conflict with turning movements of larger vehicles.



Corner bulbouts reduces the distance pedestrians need to cross



3.6.6 Curb Ramps

Intent and Application

Curb ramps facilitate access between the sidewalk and the roadway for pedestrians. Unidirectional ramps are two curb ramps placed at a corner, while a bidirectional ramp places a single ramp diagonally at the corner of an intersection. Curb ramps should be installed at all intersections and midblock crossings.

Design Guidance

- Curb ramps should be accompanied by detectable warning strips that meet Americans with Disabilities Act standards.
- Unidirectional ramp installation (two ramps per corner) should be prioritized at intersections around schools, senior housing communities, major transit hubs, and other pedestrian-heavy destinations. Unidirectional ramps can be installed in conjunction with a corner bulbout at intersections.
- Curb ramp design should analyze sidewalk widths, crossing distances, curb height, street slope, proximity to traffic, drainage concerns; distance to signal poles, street lights, trees or other obstructions.
- Curb ramps must comply with the Americans with Disabilities Act (ADA) and any other current local, state, and federal regulations.
- Curb ramps should include a level landing pad that measures the width of the ramp, no greater than 2% slope in any direction and a minimum of four feet wide perpendicular to the curb.



Additional References

- ADA Best Practices Tool Kit for State and Local Governments: Chapter 6 - Curb Ramps and Pedestrian Crossings Under Title II of the ADA.



Curb Ramps



Curb ramps should be accompanied by detectable warning strips.



Curb ramps should include a level landing pad.



Curb ramp design should analyze crossing distances.



Unidirectional ramps can be installed in conjunction with a corner bulbout at intersections.



3.6.7 Pedestrian Crossing Island

Intent and Application

A crossing refuge island allows pedestrian to cross wide streets in two stages, which benefits slower walking pedestrians, seniors, children, or those with disabilities. They provide a waiting area on the street median to help pedestrians complete long crossings at both signalized and unsignalized crossings. Crossing refuge islands can be applied on wider multi-lane roadways (at least four total lanes) at the midblock or intersection, when crossing distances cannot be conveniently traversed with one stage. They should be in places where pedestrians commonly cross, such as schools, large offices, retail destinations, senior housing, transit stations, and major midblock bus stops



Design Guidance

- Provide clear visibility for both motorists and pedestrians when determining appropriate locations for crossing refuge islands.
- Pedestrian crossing islands may be enhanced using plantings or street trees. Plantings may require additional maintenance responsibilities and need to be maintained to ensure visibility.
- Consider the use of a neckdown in conjunction with median refuge islands, where feasible, to provide more space on the sidewalk at the crossing.
- Design must account for impact of raised median on emergency vehicle movement and access.
- The suggested minimum width of a crossing island is 6 feet.
- When used on higher speed roads, and where there is space available, inserting a 45-degree bend to the right helps orient pedestrians to the risk they encounter from motorists during the second half of their crossing.

Additional References

- National Association of City Transportation Officials (NACTO) Urban Street Design Guide



Pedestrian Crossing Island



Consider the use of a neckdown in conjunction with median refuge islands.



Pedestrian crossing islands may be enhanced using plantings or street trees.



A crossing refuge island allows pedestrian to cross wide streets in two stages.



Provide clear visibility for both motorists and pedestrians.



3.6.8 Driveways

Intent and Application

While driveways provide vehicular access to off-street destinations, they also pose a potential conflict for pedestrians and bicyclists when drivers cross the sidewalk or enter the roadway. Too many driveways can disrupt pedestrian flows and degrade the pedestrian environment. Ideal driveway design (that incorporates signage, mirrors, and surface treatments) encourages vehicles to yield to pedestrians on the sidewalk, while also helping pedestrians anticipate cars that are exiting and entering. In urban settings, driveway installation should be selective and minimal, to limit potential conflicts with heavy pedestrian and bicycle movements.



Design Guidance

- Driveways that cross the sidewalk should maintain a level walkway.
- Whenever possible, driveways should be equipped with the proper signage, blind spot mirrors, and tactile surface treatments to alert drivers that pedestrians may be crossing the sidewalk.
- Commercial, industrial, and large residential properties should consolidate driveways. Where possible, parking should be shared amongst multiple uses, including loading areas for trucks.
- Corner lots should locate driveways on the minor street to avoid conflicts on the major arterial.
- Driveways should be avoided at points close to the intersection.
- Driveways with entry gates should ensure that the gate is appropriately placed so that vehicles do not obstruct the path of travel for pedestrians on the sidewalk.
- When possible, new driveways should be minimized and old driveways should be eliminated or consolidated, and raised medians should be placed to limit left turns into and out of driveways.

Additional References

- City of Lancaster Design Guidelines (2009)
- City of Lancaster Municipal Code

Driveways



Driveways that cross the sidewalk should maintain a level walkway.



A corridor with closely spaced driveways creates a challenging environment for pedestrians and bicyclists.



Commercial and industrial should consolidate driveways



Driveways with entry gates should ensure that the gate is appropriately placed to allow unobstructed pedestrian travel.

3.6.9 Roundabouts

Intent and Application

Roundabouts reduce vehicle speeds at intersections while facilitating simultaneous vehicle movements from all intersection approaches. They should be considered at locations with heavy vehicle-turning movements, low pedestrian crossing compliance, poor safety records, or where signalization has led or may lead to operational issues for pedestrians or bicyclists. Roundabouts can be used at existing intersections to replace two-way stop control, all-way stop control, or a traffic signal.

Design Guidance

- Roundabout design should reduce the relative speeds between conflicting traffic streams by requiring vehicles to negotiate the roundabout along a curved path.
- **Sidewalks should be set back from the edge of the circulatory roadway by at least 5'** so that pedestrians with visual impairments can clearly follow designated crossing paths.
- Splitter island should be provided as deflection and as refuge island for pedestrian crossings
- Reflective signage should be placed within the center island and reflective paint should be used on the curb
- Signage and detectable warning plates should be provided to delineate pedestrian crossing paths and signal drivers to yield.
- Advance entrance line into the circulatory roadway should be placed at least two feet outside of the vehicle paths.
- Clear sight lines between crosswalks and approaching traffic should be provided.
- At single lane roundabouts, the pedestrian crossing should be at least one vehicle length (25 feet) from the yield line at the intersection with the roundabout to allow one car to queue beyond the crossing.
- To accommodate large vehicles, a truck apron (a paved, load-bearing area) should be included around the edge of the central island.

Additional References

- FHWA Roundabout Design Guidance -- <http://safety.fhwa.dot.gov/intersection/roundabouts/fhwasa10007/#s4>





Roundabouts



Splitter island should be provided as deflection and as refuge island for pedestrian crossings.



At single lane roundabouts, the pedestrian crossing should be at least one vehicle length from the yield line.



Clear sight lines between crosswalks and approaching traffic should be provided.



Roundabout design should reduce relative speeds by requiring vehicles to negotiate the roundabout along a curved path.



This page intentionally left blank.



4. Potential Complete Streets in Lancaster

4.1 Potential Complete Streets in Lancaster

The following list of corridors are a sample of roadways that may be converted into Complete Streets. These street segments were chosen based on existing conditions, community concerns, traffic forecasting analysis, and field observations. The City may consider and prioritize other corridors and street segments for Complete Street design at their discretion. The City of Lancaster is obligated to weigh the cost of proposed street improvements against the expected benefit of those improvements, while also considering both the initial and long-term maintenance obligations. Based on existing and projected traffic volumes, the number of travel lanes can be adjusted and reduced to add other street elements that would make the corridor more complete and favorable to all travel modes. While some corridors may have projected ADT volumes near the upper thresholds, it was determined that excess volumes would be accommodated by the available capacity of nearby, parallel corridors.

A select number of corridors are accompanied by cross section diagrams displaying the existing configuration and potential future, Complete Streets configuration. Corridors with diagrams were chosen based on street classification, adjacent land-use, and projected ADT volumes. Given that right-of-way widths vary along corridors, diagrams indicate the segment where right-of-way and road widths were measured. Numbering, (#) corresponds to the assigned number in attached multi-modal analysis memorandum in Appendix B.

10 th Street West – Between Avenue J and Avenue K (2)	
Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes with 6 travel lanes in some portions 40 mph speed limit along corridor No existing bike facilities High pedestrian activity in residential areas during mid-day Transit route along corridor Sierra Elementary School is within the vicinity 	<ul style="list-style-type: none"> Reduce to 4 travel lanes where applicable Maintain center turn lane Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk

15 th Street West – Between Avenue J and Avenue K (13)	
Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 4 travel lanes 40 to 45 mph speed limit along corridor No existing bike facilities Transit route along corridor Antelope Valley Hospital located at Avenue J Commercial retail center at Avenue K Senior living community is within the vicinity 	<ul style="list-style-type: none"> Maintain 4 travel lanes Install raised median Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk



25th Street West – Lancaster Blvd and Avenue J (11)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 2 travel lanes, 1 in each direction 45 mph speed limit along corridor Bike lanes with buffer on both sides Corridor separates residential community and commercial shopping center 	<ul style="list-style-type: none"> Maintain number of travel lanes Maintain center turn lane Widen sidewalk to incorporate meandering sidewalk

30th Street East – Between Avenue J-8 and Avenue L (7)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes with 2 lanes in each direction 55 mph speed limit along corridor No existing bike facilities Eastside High School located near Avenue J-8 Existing bus route along corridor 	<ul style="list-style-type: none"> Reduce to 2 travel lanes, 1 in each direction Maintain center turn lane Install bike lanes with buffer Widen sidewalk area to incorporate landscaping and meandering sidewalk

30th Street West – Between Avenue J and Avenue L (1)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes, 2 lanes in each direction 50 mph speed limit along corridor Existing bike lanes High pedestrian activity due to Lancaster High School and Antelope Valley College Transit route along corridor 	<ul style="list-style-type: none"> Reduce to 2 travel lanes, 1 lane in each direction Maintain center turn lane Install bike lanes with added buffer Widen sidewalk to incorporate meandering sidewalk



Avenue K – Between 20th Street West and Sierra Hwy (10)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> • Classified as Major Arterial • 6 travel lanes, 3 in each direction • 35-45 mph speed limit along corridor • No bike existing bike facilities • Transit route along corridor • Commercial shopping and residential neighborhood access along corridor 	<ul style="list-style-type: none"> • Reduce to 4 travel lanes, 2 in each direction • Maintain center turn lane • Install bike lanes with buffer • Widen sidewalk to incorporate meandering sidewalk

Lancaster Blvd – Between 30th Street West and 20th Street West (16)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> • Classified as Secondary Arterial • 4 travel lanes, 2 in each direction • 50 mph speed limit along corridor • Existing painted bike lanes with painted buffer • Transit route along corridor • Existing midblock pedestrian crossing • Residential communities adjacent to corridor • Commercial retail center at Valley Central Way 	<ul style="list-style-type: none"> • Reduce to 2 travel lanes where applicable • Maintain center turn lane • Maintain bike lanes with buffer • Widen sidewalk to incorporate meandering sidewalk

Sierra Highway – Between Avenue I and Avenue K (3)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> • Classified as Major Arterial • 4 travel lanes, 2 in each direction • 50 mph speed limit along corridor • Off-street bike path • No sidewalks on west side for portions of corridor • Transit route along corridor – Metrolink station • Predominately commercial and industrial land-use 	<ul style="list-style-type: none"> • Reduce to 2 travel lanes where applicable • Maintain center turn lane • Improve crossing connections for bike path • Install and ensure continuity in sidewalks along corridor



Valley Central Way – Between Avenue I and Avenue J (12)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 2 travel lanes with 4-6 travel lanes in some portions 30-35 mph speed limit along corridor Painted bike lanes at some portions Provides access to multiple commercial retail and major shopping centers 	<ul style="list-style-type: none"> Reduce to 2 travel lanes where applicable Maintain center turn lane and raised median Install bike lanes with buffer where applicable Widen sidewalk to incorporate meandering sidewalk

Avenue K-8 – Between 35th Street West and 10th Street West (18)

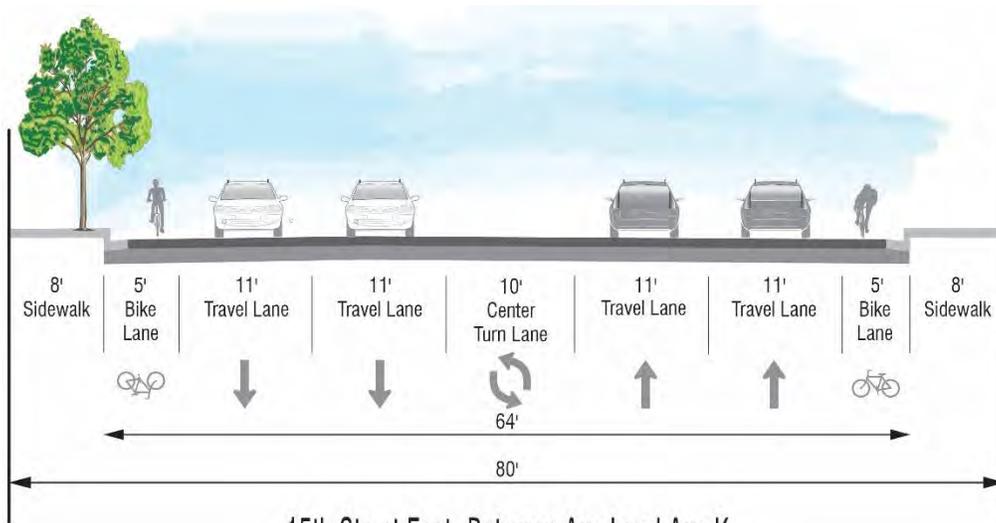
Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 4 travel lanes, 2 in each direction 45 mph speed limit along corridor 5' bike lanes exist Transit route along corridor Primarily residential land-use adjacent to corridor with commercial and recreation near 10th St West 	<ul style="list-style-type: none"> Reduce to 2 travel lanes where applicable Maintain center turn lane Install bike lanes with buffer Widen sidewalk to incorporate landscaping and meandering sidewalk

Avenue L – Between Business Center Parkway and 10th Street West (19)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 6 travel lanes with 4 travel lanes in some portions 50 mph speed limit along corridor No bike existing bike facilities Predominately commercial and industrial land-uses along corridor Medium density residential located at 10th St West Access to SR-14 and Sierra Highway within vicinity of corridor 	<ul style="list-style-type: none"> Reduce to 4 travel lanes where applicable Maintain center turn lane Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk

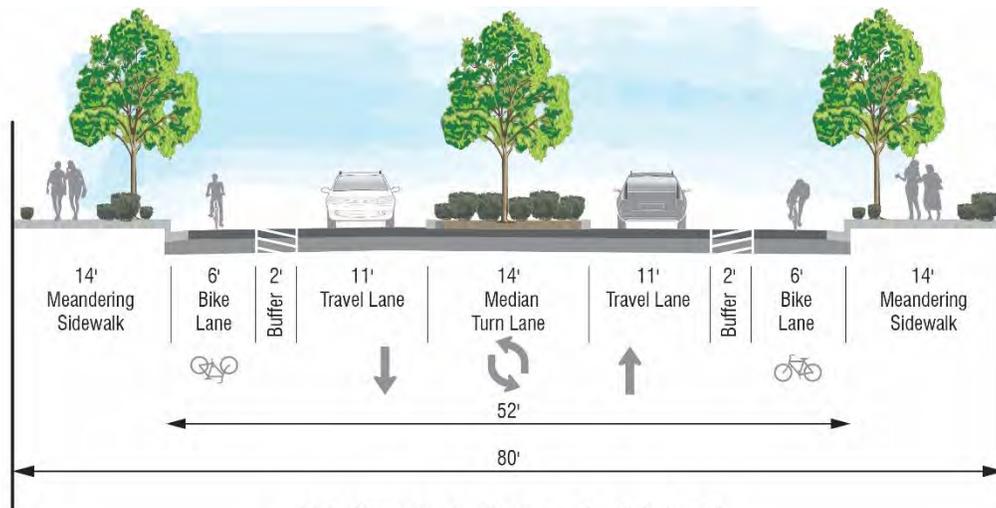
15th Street East – Between Avenue I and Avenue K (15)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 4 travel lanes 45 mph speed limit along corridor Existing bike lanes (5' widths including gutter) Painted median/center turn lane Primarily adjacent to residential land-use Lincoln Elementary School located at Ave J-8 	<ul style="list-style-type: none"> Reduce to 2 travel lanes Maintain center turn lane Restripe bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk



15th Street East- Between Ave I and Ave K

Existing Cross Section Configuration



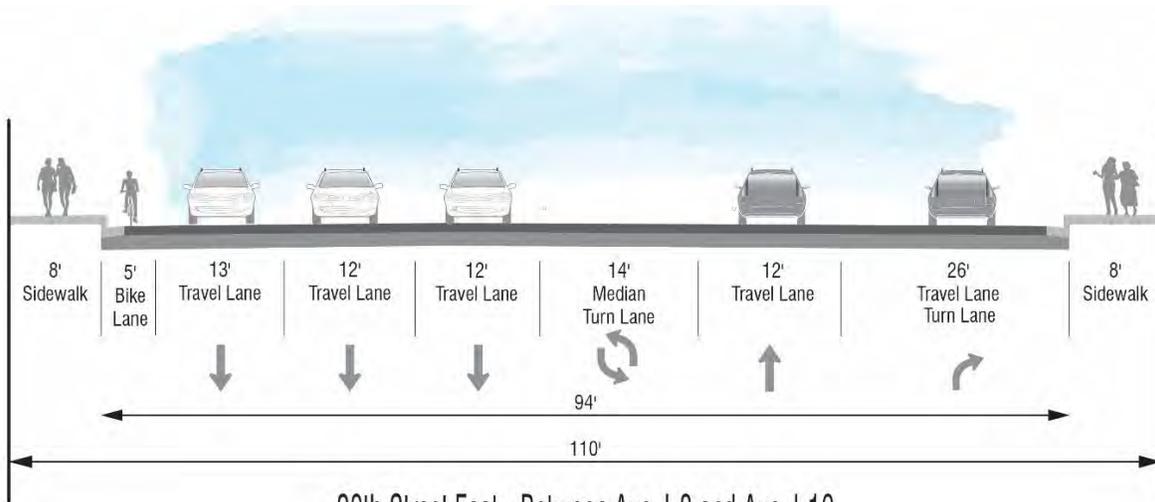
15th Street East - Between Ave I & Ave K

Potential Complete Streets Configuration



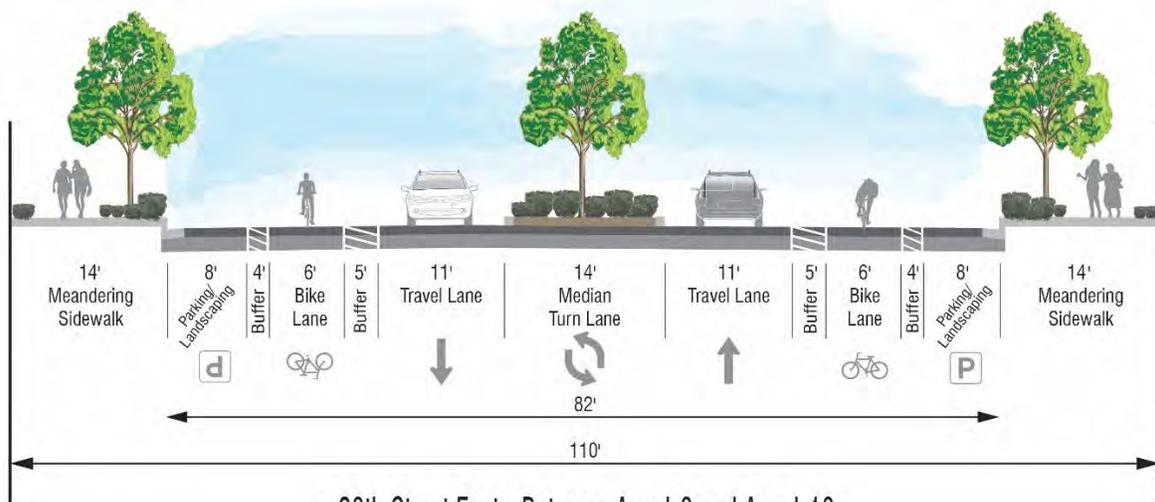
20th Street East – Between Lancaster Blvd and Avenue K (6)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes, 3 SB and 1 NB 50 mph speed limit along corridor 5' bike lanes from Avenue J-8 to Avenue K Transit route along corridor Primarily residential along corridor with commercial retail at major intersections. 	<ul style="list-style-type: none"> Reduce to 2 travel lanes, 1 lane in each direction Maintain center turn lane Install raised median with landscaping Install bike lanes with buffers Optional on-street parking, landscaping, bus bulb-out, sidewalk extension, etc. Widen sidewalk to incorporate meandering sidewalk



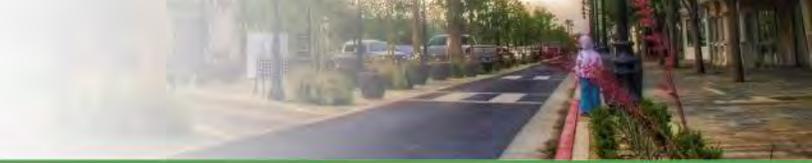
20th Street East - Between Ave J-8 and Ave J-10

Existing Cross Section Configuration



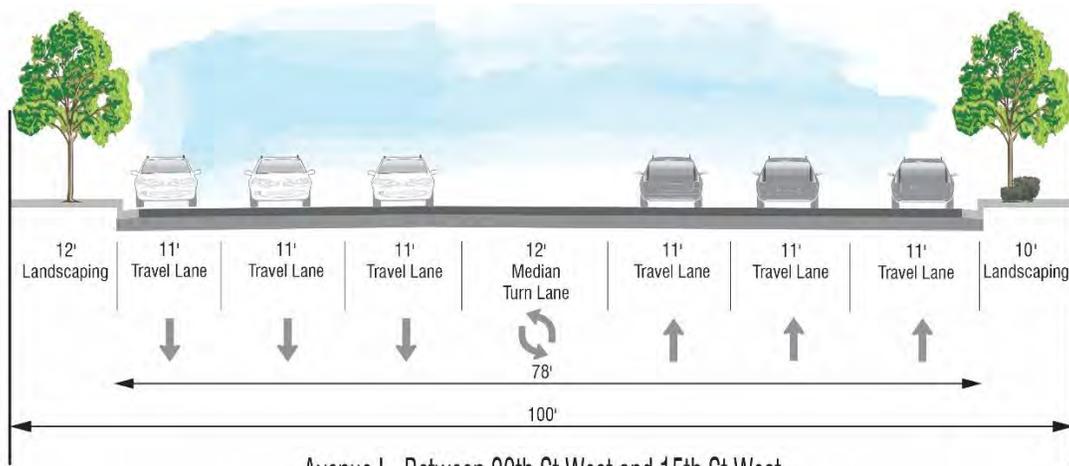
20th Street East - Between Ave J-8 and Ave J-10

Suggested Complete Streets Cross Section



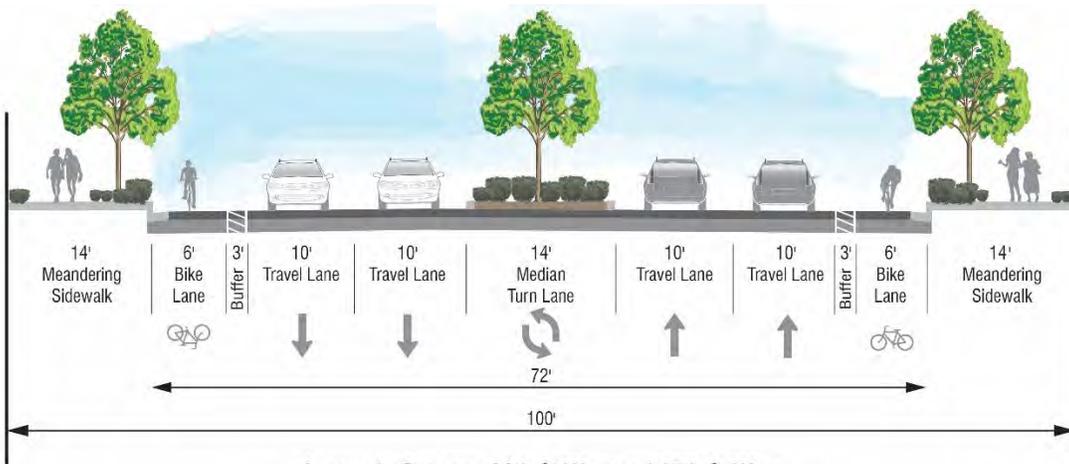
Avenue I – Between 30th Street West and 15th Street West (8)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 6 travel lanes with 8 travel lanes in some portions 45 to 55 mph speed limit along corridor No bike existing bike facilities Transit route along corridor Commercial shopping centers and residential access along corridor Existing corridor provides access to SR-14/138 	<ul style="list-style-type: none"> Reduce to 4 travel lanes, 2 in each direction Maintain center turn lane Install raised median where applicable Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk



Avenue I - Between 20th St West and 15th St West

Existing Cross Section Configuration
(Not including frontage roads)



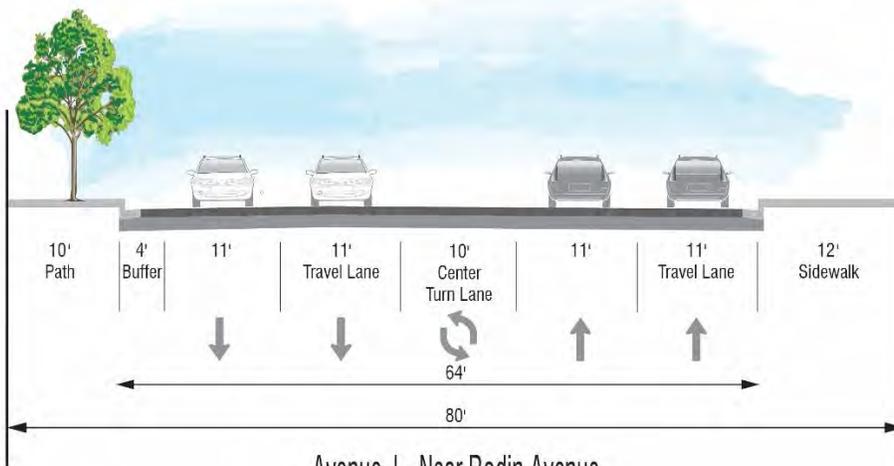
Avenue I - Between 20th St West and 15th St West

Potential Complete Streets Configuration
(Not including frontage roads)



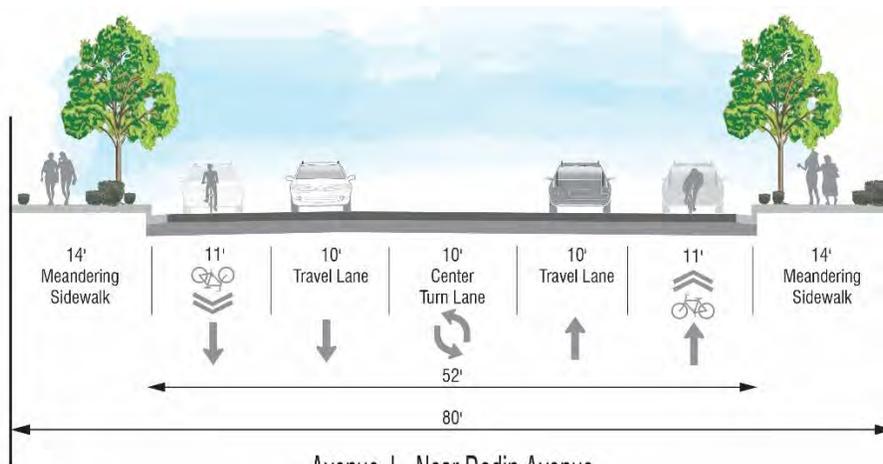
Avenue J – Between Division Street and 20th Street East (9)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes with 6 travel lanes in some portions 50 mph speed limit along corridor Signed bike route and lane buffers Adjacent to Commercial shopping centers and residential neighborhoods Transit route along corridor El Dorado Elementary School is within the vicinity Right-of-way constraints in certain portions 	<ul style="list-style-type: none"> Maintain 4 travel lanes and reduce lane widths Maintain center turn lane if right-of-way is available Install bike lanes with buffer Install bike sharrows where right-of-way is constrained Widen sidewalk to incorporate meandering sidewalk



Avenue J - Near Rodin Avenue

Existing Cross Section Configuration
(Not including frontage roads)



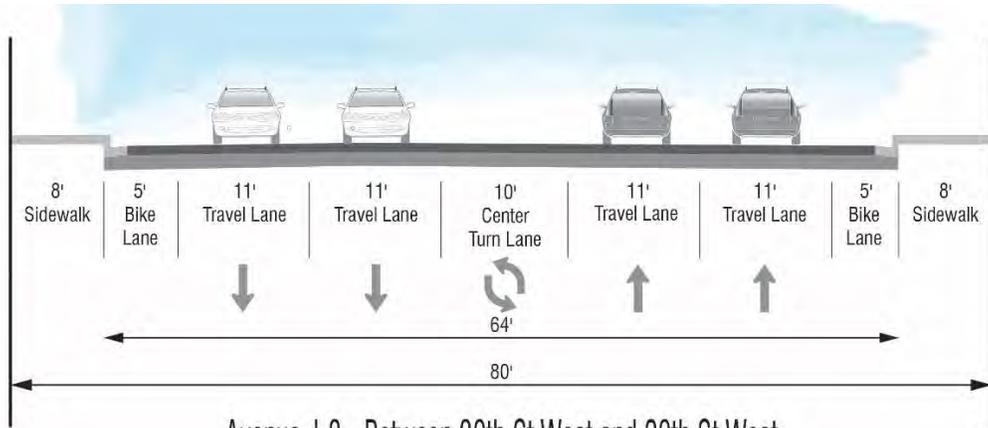
Avenue J - Near Rodin Avenue

Potential Complete Streets Configuration
(Not including frontage roads)



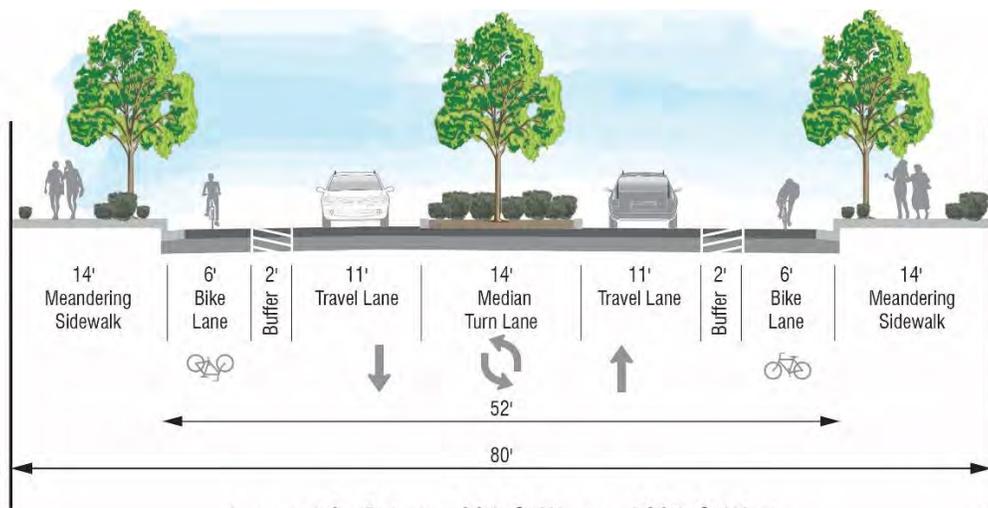
Avenue J-8 – Between 30th Street West and 20th Street West (17)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Secondary Arterial 4 travel lanes, 2 in each direction 45 mph speed limit along corridor Existing 5' bike lanes Existing corridor provides access to SR-14/138 Transit route along corridor Desert Christian High School and Sunnydale Elementary School is within the vicinity 	<ul style="list-style-type: none"> Reduce to 2 travel lanes, 1 in each direction Maintain center turn lane Raised median is optional, otherwise reduce center turn lane to 10' and increase buffer widths Install bike lanes with buffer where applicable Widen sidewalk to incorporate meandering sidewalk



Avenue J-8 - Between 30th St West and 20th St West

Existing Cross Section Configuration
(Not including frontage roads)



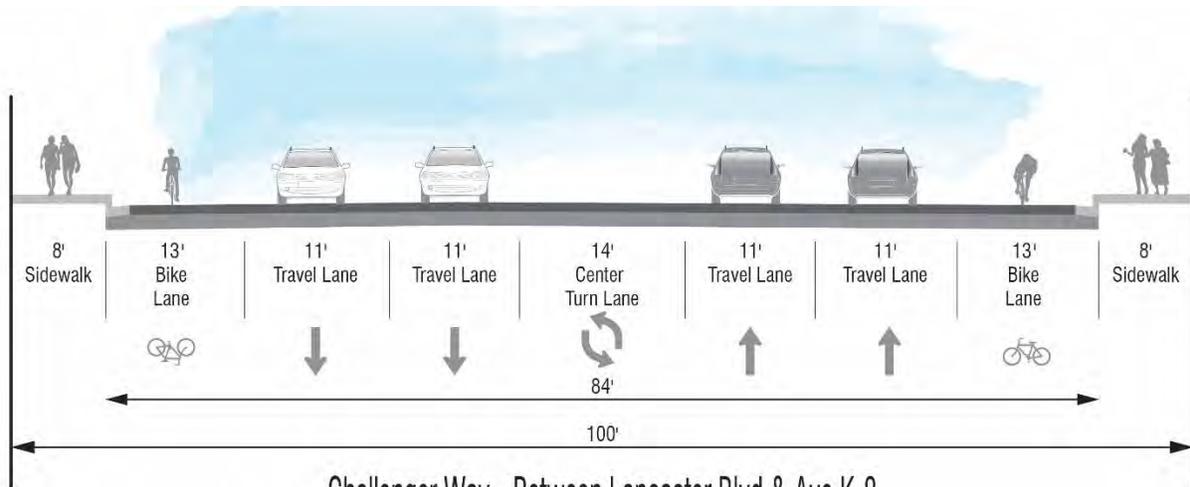
Avenue J-8 - Between 30th St West and 20th St West

Potential Complete Streets Configuration
(Not including frontage roads)



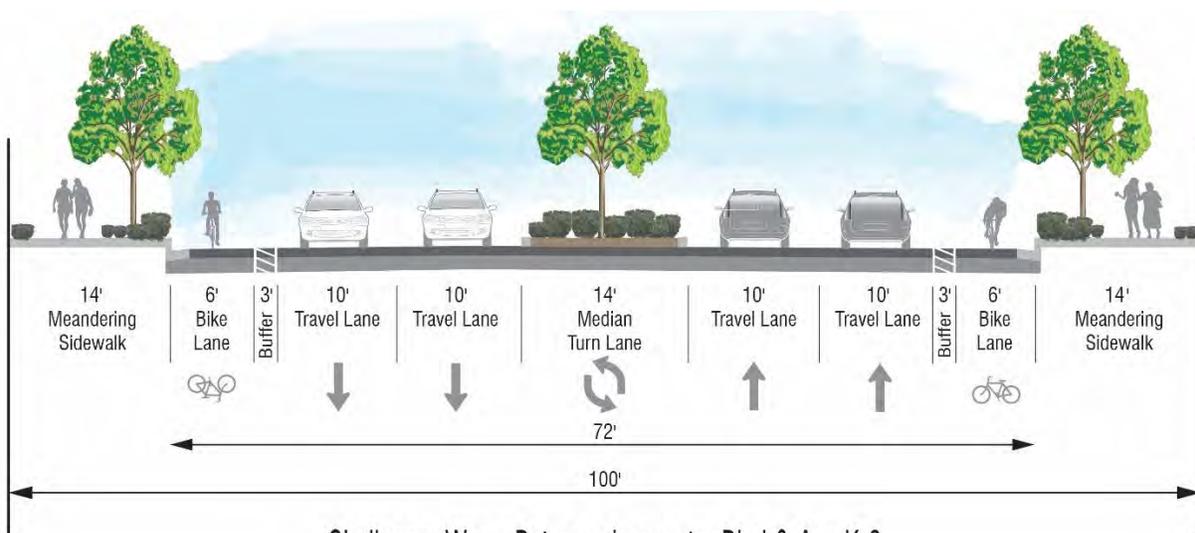
Challenger Way – Between Lancaster Blvd and Avenue K-8 (5)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes. 2 lanes in each direction 50-55 mph speed limit along corridor Painted bike lanes along corridor High pedestrian activity in residential areas during mid-day No transit route along corridor New Vista Elementary School is within the vicinity 	<ul style="list-style-type: none"> Maintain 4 travel lanes Reduce lane widths Maintain center turn lane Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk



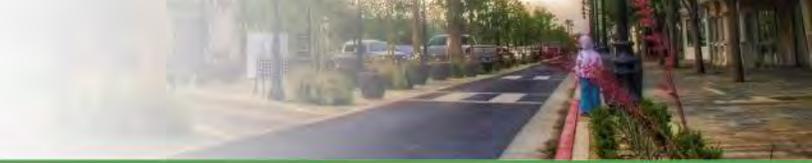
Challenger Way - Between Lancaster Blvd & Ave K-8

Existing Cross Section Configuration



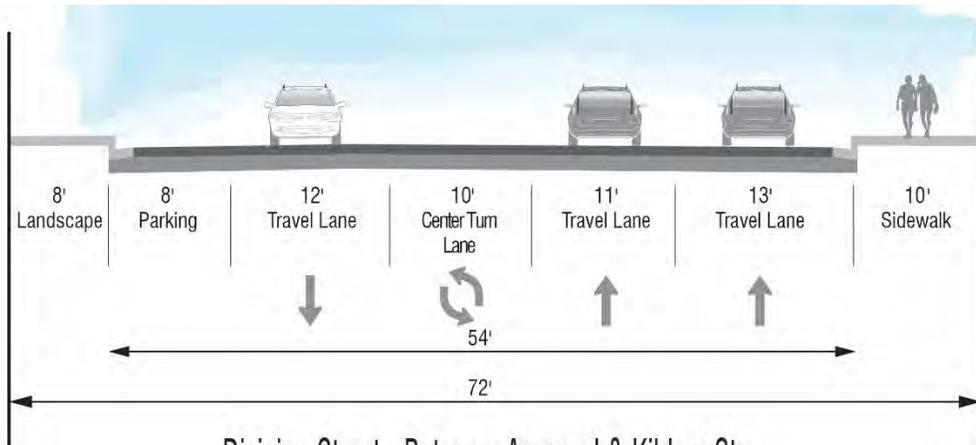
Challenger Way - Between Lancaster Blvd & Ave K-8

Potential Complete Streets Configuration



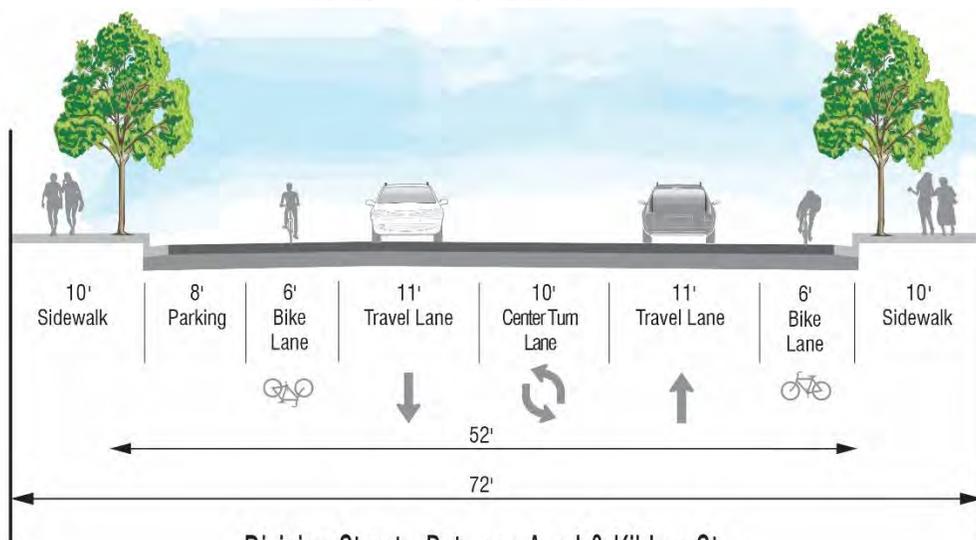
Division Street – Between Avenue I and Avenue J (4)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> Classified as Major Arterial 4 travel lanes, 2 in each direction (Exception: only 1 SB lane from Ave I to Kildare St) 45 mph speed limit along corridor No existing bike facilities Missing sidewalk along western side High pedestrian activity due to Antelope Valley HS Transit service along corridor On-street parking along some areas allowed 	<ul style="list-style-type: none"> Reduce to 2 travel lanes, 1 in each direction Maintain center turn lane Install bike lanes with buffer Widen sidewalk to incorporate meandering sidewalk



Division Street - Between Avenue I & Kildare St

Existing Cross Section Configuration



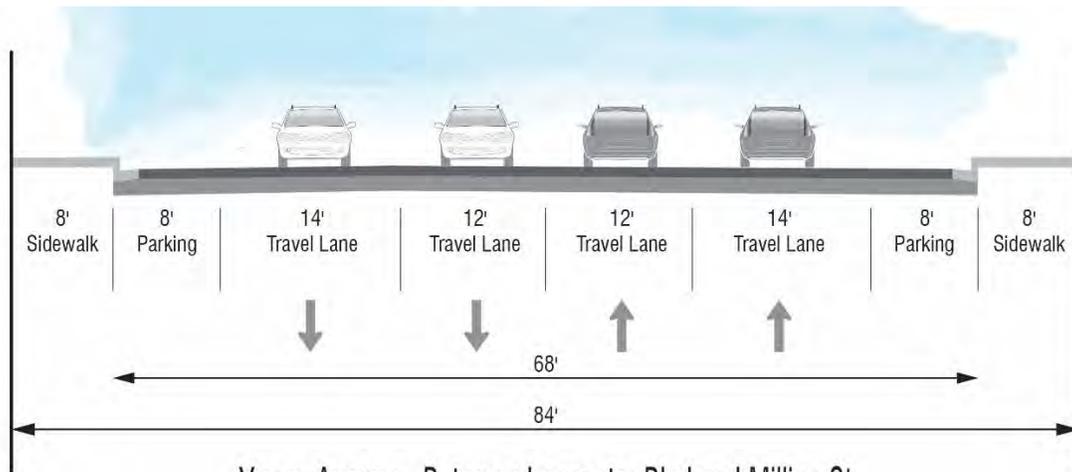
Division Street - Between Ave I & Kildare St

Potential Complete Streets Configuration



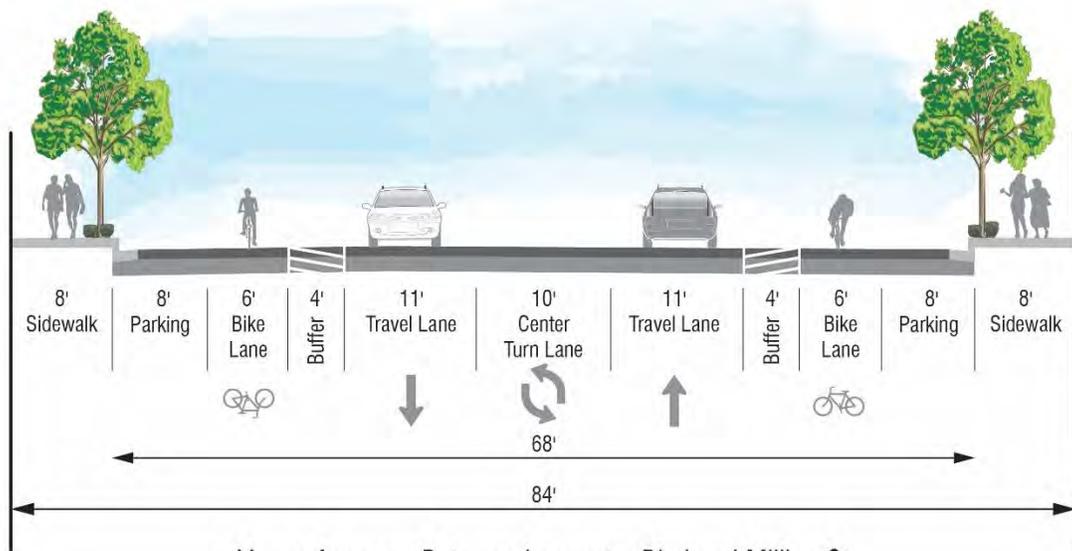
Yucca Avenue – Between Avenue I and Milling Street (14)

Existing Conditions	Suggested Treatments
<ul style="list-style-type: none"> • Classified as Secondary Arterial • 4 travel lanes • 40 mph speed limit along corridor • No existing bike facilities • Bicycle route connection to Lancaster Boulevard • Majority industrial land-use adjacent to corridor 	<ul style="list-style-type: none"> • Reduce to 2 travel lanes where applicable • Maintain center turn lane • Maintain on-street parking • Install bike lanes with buffer • Add landscaping to sidewalk



Yucca Avenue - Between Lancaster Blvd and Milling St

Existing Cross Section Configuration



Yucca Avenue - Between Lancaster Blvd and Milling St

Potential Complete Streets Configuration
(Considering adjacent industrial use)



Appendix A: Community Outreach Summary



This page intentionally left blank.

Community Open House Notes

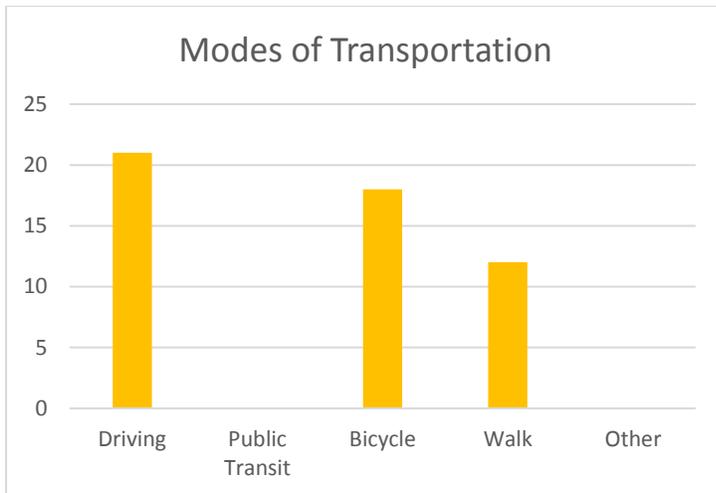
Lancaster Master Plan of Complete Streets Community Open House Notes

On April 27, 2016, the City of Lancaster held a Community Open House for the Lancaster Master Plan of Complete Streets at Lancaster City Park. Attendees learned about Complete Streets principles, including strategies for Lancaster’s street network to enhance community health, safety, and economic success. Participants were given the opportunity to provide input at multiple “stations,” and provided their views on specific transportation issues in the City, important factors in street design, and which streets they thought would benefit from Complete Streets concepts. The following comments were offered by attendees and provided verbatim in this summary.



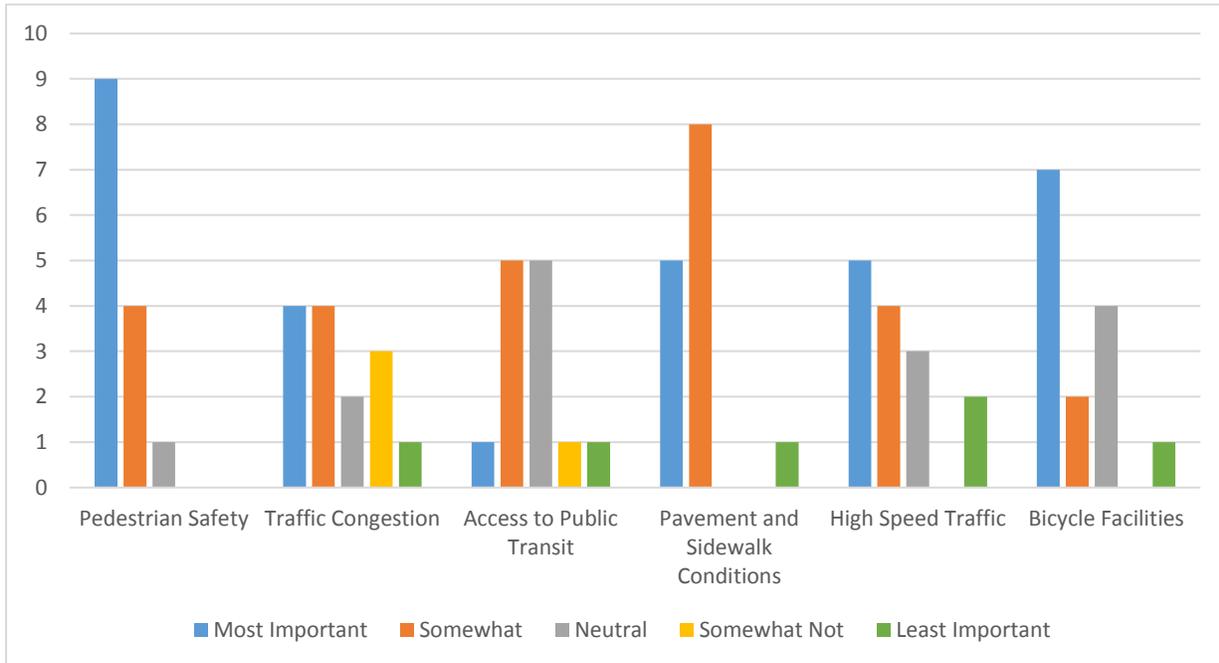
Station 1

What are the top three modes of transportation that you use?



Station 2

Listed below are some of the transportation issues/challenges you may face on a regular basis. Please indicate their importance to you.



Please identify locations in the City where transportation issues/challenges occur.

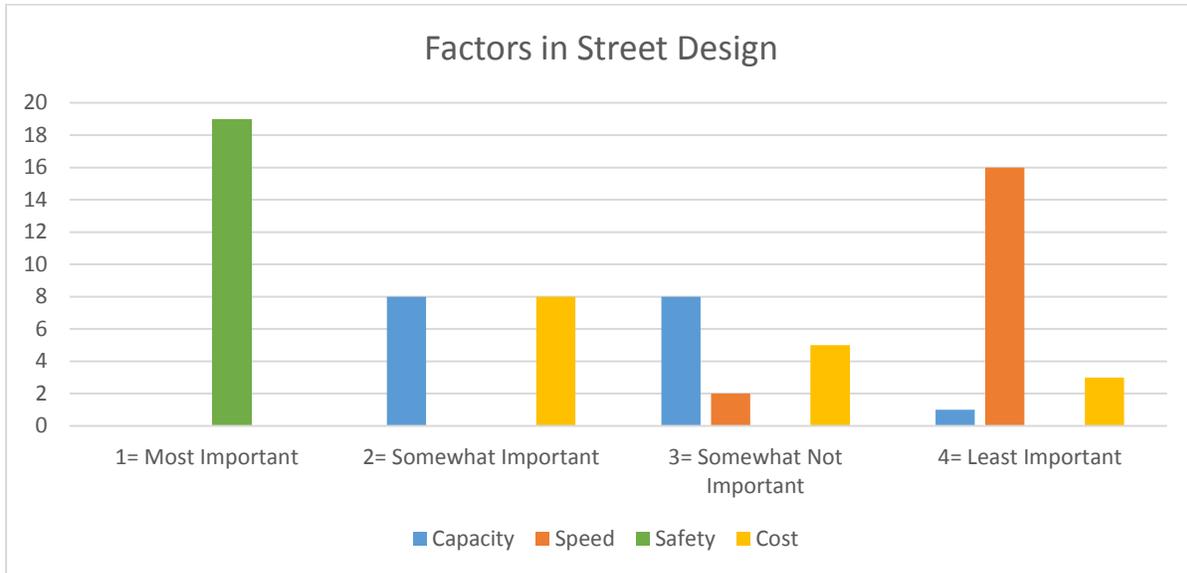
Street Name/Location	Existing Transportation Issues
60 th Between L & K	Bike lane needed
Entire City	More bike lanes
Ave. K/Challenger Way & 30 th West	High-speed traffic with a corresponding lack of bicycle paths/lanes. In particular, between 10 th St. West & Division St.
Ave. K & J/40 th West & extending West	Westbound traffic reduced to one lane. Eastbound on Ave. J much more bike friendly with double-wide lanes.
Ave. I & 50 th West as example	Light does not acknowledge bicycles. This occurs in many areas in Lancaster. Have to get off bike to press pedestrian signal.
To Lancaster Blvd.	No safe way for bicyclists to get to Downtown. Can't use 10 th too dangerous or 20 th . Have to go to 30 th West to BLVD. The no bike lane parts of BLVD. make the 8's bike friendly. L-8, K-8,
	Bicyclists generally willing to go out of way to be safe; will travel ½ mile to safe lanes.
K-8 & Sierra Hwy.	Bike path from 10 th West to Sierra ends. Mark Sierra Hwy with crosswalk & warning lights.

Community Open House Notes

Street Name/Location	Existing Transportation Issues
60 th St. West near K4, K12, near J4, J12	Portions narrow to one lane next to median with no additional pavement for bikes passed by cars
70 th St. West, K to L W Ave. I, 60 th to 30 th	
Ave. K at 42 nd West	Need right turn westbound
30 th West & Ave. K 30 th West & Ave. J-8	Traffic issues during college hours, especially with students crossing along 30 th West. Traffic needs to be slower.
Ave. K between Sierra Hwy & 20 th St. West	Congestion at various times of the day
Ave. L between 20 th St. West & Division St.	Excessive speed
	Traffic calming measures really important. Roundabout fantastic! We need more!
Ave. K- East Lancaster	Drivers moving very fast adjacent to kids coming/going to school. Very unsafe.
	Reckless drivers- too many
Ave. K 40 th West to 45 th West	No sidewalk for pedestrian to walk, dirt shoulder
30 th West/Ave. J-12	Ped crossing
K-4 between 40 th West to Nancy Cory	Widen, build out curb/gutter/sidewalk on southside. Also deep gutters slows traffic, but not enough!!
All streets	Except Valley Central Way, don't feel safe to cycle on
L/off ramp 14 N ramp	Cut across
K/NB 14 off ramp	Stacking/queuing
	More medians
Ave. J (Sierra Hwy to 20 th St. E)	Pedestrians crossing at unsafe locations. Poor lighting creates poor visibility compounding the issue.
Sierra Hwy (Ave. K to Ave. M)	Lack of safe pedestrian crossings. Only one crosswalk exists and not corner to corner crossing points.
Lancaster Blvd. (40 th E to 30 th E)	Poor pavement conditions create safety issues when driving at the posted speed limit.
K & 14 Fwy	Too congested
All major arterials	High speeds, collisions at intersections

Station 3

Rank the following factors of street design in order of priority.



Please provide any comments on streets shown on the Station #3 map. These streets have been improved with Complete Streets elements.

- *The BLVD is the only place outside residential neighborhoods that I feel safe walking in Lancaster. It has made commerce along the BLVD more enjoyable.*
- *The traffic circle at Ave. L and Challenger Way has proved to be very effective in not only reducing speeds through the intersection, but also increasing flow of traffic. I had the opportunity to observe traffic for approximately an hour during heavy traffic time (4:30pm-5:30pm). During this time the eastbound leg of traffic circle was closed. There was no delay of*

Community Open House Notes

more than a few seconds for any vehicle. This short delay is a great improvement over the old signalized intersection at this location.

- *Round-about on Ave. L is great. Please build more!*
- *On Valley Central Way and future similar designs without parking, consider placing bike lane against curb separated from traffic lane. Also consider more right turn only movements.*
- *Streets are narrowed which makes vehicles slow down and improve safety*
- *Bike lanes promote bike riding*
- *Cross walks are highlighted with lights and large cross hatching improving safety*
- *I like it*
- *We should definitely expand the network of streets with Complete Streets elements*
- *Include roundabouts at more intersections*
- *Reduce number of vehicle lanes as necessary*
- *Love the green bike lanes on Valley Central Way*
- *Like full green lanes better than conflict point indicators*
- *Need green paint on 20th W, 15th W, 25th W, etc.*
- *Love the BLVD., but need more driver education on yielding/sharks teeth*
- *Need to finish Complete Streets started on 45th W from Ave. J to Ave. K*
- *They need to connect and more needed on westside*

Station 4

Which streets in Lancaster could use Complete Street elements, such as bicycle lanes, crosswalks, better bus stops, sidewalks, etc.?

Street Name/Location	Type of Complete Streets Element
	Every ½ mile could be complete (I.e. M-8, J-8, 45 th , 55 th , etc.)
	All majors and secondaries should provide for the safety of bicyclists & pedestrians. We need to stop the mentality that streets were made for vehicles only.
45 th W, Ave. J to Ave K	Complete what started near Endeavor road diet, bike lanes, on-street parking. Put in curb/gutter/sidewalk on both sides.
30 th W and Ave. K	On each side of the college, in front of the park and neighborhoods, raised medians, bike lanes, parallel parking, ped xings
60 th W, Ave. K to Ave. L	Road diet, raised medians, buffered bike lanes
46 th , J-13 to Spice?	Speed hump(s)
All	Roundabouts
Ave I	Pedestrian pop-outs
Sierra	Pedestrian pop-outs
Ave. K 15 th -50 th W	Medians/traffic controls for speed control
Sierra Hwy	Crosswalks and pedestrian signals; median islands

Street Name/Location	Type of Complete Streets Element
Ave. K Ave. L Ave. J Ave. H Ave. I	Bike lanes through Downtown areas including buffer zones
Alternating arterial roadways (to increase to all arterials)	Roundabout at intersections
Ave. K between 40 th W and 45 th W	Sidewalk would be good for pedestrians to go to and from school
40 th W between Ave. L and Ave. K	Road requires reconstruction, and sidewalk on the west side of the street.
	All paths to school should be looked at.
Ave. K- 30 th W to 25 th W	Sidewalks and traffic calming, bike lanes. Speeds are too high.
30 th St. E Ave. K to Ave. J	Needs sidewalks, road diets, bike lanes, and speeds are too high.
10 th West	Bicycle lane
20 th West	Bicycle lane
	Make 8's bicycle lanes; Blvd., J-8, K-8, L-8
On J, K, I, & L	Make slow lane share w/ bicycles by just painting on pavement
30 th W & Ave. M	Road narrows at corner. No room for cars to pass.
All bike lanes	Have street sweepers sweep bike lanes and shoulders many times have to ride in lanes because debris in bike lanes.
15 th W and Lancaster Blvd.	Need roundabout
10 th W and Lancaster Blvd.	Need roundabout
20 th W Ave. H to Ave. J	Landscape medians, bike lanes—Anything to narrow the feel of the street
	Need more streets w/ on-street parking...and buildings closer and oriented towards the street
	Reduce size of parking lots to create a more urban feel

Community Open House Notes



Station 5

Do you have any additional comments or ideas for improving Lancaster's streets for all users?

- *Informational campaign to remind people that although "Pedestrians have the right of way," they also have the responsibility to cross streets safely.*

The mindset exists and is scary when seen in person. I once had to stop a 3-year old girl from walking out in front of a moving vehicle. She told me, "They have to stop for me." It never occurred to her that the driver might have never seen her because she has the "right of way."

This page intentionally left blank.



Appendix B: Multi-Modal LOS Methodology and Analysis



This page intentionally left blank.



MEMORANDUM

Date: December 23, 2016
To: Sri Chakravarthy, Kimley-Horn
From: Miguel Núñez and Mike Samuelson, Fehr & Peers
Subject: **Lancaster Complete Streets Multi-Modal Conditions Analysis**

LA16-2794

Fehr & Peers is working with the City of Lancaster to analyze how implementing Complete Streets treatments on corridors throughout the City could improve conditions for people biking, walking and taking transit and how these changes could affect vehicle operations and circulation.

COMPLETE STREETS STRATEGIES

As part of the Master Plan of Complete Streets, the City of Lancaster identified potential cross sections for arterial and collector streets that include additional space for sidewalks, bike facilities, and parking. Example cross sections were provided for existing street types, and for Complete Streets configurations based on vehicle average daily traffic (ADT), and are shown in Appendix A. Multiple configurations were provided for each street type, allowing the City to reconfigure each street based on the local context and the priorities of the adjacent communities. The suggested cross sections include a lane configuration of two travel lanes and a center turn lane for streets with fewer than 20,000 vehicles a day, and a configuration of four travel lanes and a center turn lane for streets with between 20,000 and 40,000 daily vehicles.

CORRIDOR AND STRATEGY SELECTION

Kimley-Horn conducted an initial analysis and recommendations of streets to be evaluated for conversion to Complete Streets in February, 2016, and identified 18 corridors on which Complete Streets treatments may be suitable. Fehr & Peers used this list as a starting point when conducting our own analysis, which examined existing volumes, street classification, average speeds, and existing speed limits. The analysis also considered future land use and traffic patterns in the City of Lancaster to avoid removing travel lanes on streets that are expected to have an increase in vehicle volumes.



In addition to the corridors identified by Kimley-Horn, other corridors were identified in portions of the City where walking and biking were most likely to occur. Three additional corridors were added to the list, and one corridor identified by Kimley-Horn was removed because the corridor already had a funded Complete Streets project included in the City's Capital Improvement Plan (CIP). The final list of study corridors is presented in Table 1.

Table 1. Study Corridors Boundaries

Corridor Number	Study Corridor	Corridor Beginning	Corridor End
1	30th Street W	Avenue J	Avenue L
2	10th Street W	Avenue J	Avenue K
3	Sierra Highway	Avenue I	Avenue K
4	Division Street	Avenue I	Avenue J
5	Challenger Way	Lancaster Boulevard	Avenue K-8
6	20th Street E	Lancaster Boulevard	Avenue K
7	30th Street E	Avenue J-8	Avenue L
8	Avenue I	30th Street W	15th Street W
9	Avenue J	Division St	20th Street E
10	Avenue K	20th Street W	Sierra Highway
11	25th Street W	Lancaster Boulevard	Avenue J
12	Valley Central Way	Avenue I	Avenue J
13	15th Street W	Avenue J	Avenue K
14	Yucca Avenue	Avenue I	Milling St
15	15th Street E	Avenue I	Avenue K
16	Lancaster Blvd	30th Street W	20th Street W
17	Avenue J-8	30th Street W	20th Street W
18	Avenue K-8	35th Street W	10th Street W
19	Avenue L	Business Center Parkway	10th Street W

Once the study corridors were identified, each corridor was analyzed for contextually appropriate design options. Street classifications from the City's General Plan were used to identify the proper street type for each corridor, and each corridor's daily vehicle volumes (based on 2014 daily count data from the City) were used to determine the number of general travel lanes the corridor would have in the future. Table 2 provides additional information regarding existing volumes on these corridors. Table 3 shows the change in conditions on each corridor. The data presented in Table 3 shows a typical configuration along each corridor, although the final design details may vary based on the street cross-sections and adjacent land uses.



Table 2. Existing Corridor Conditions

Corridor Number	Study Corridor	Corridor Beginning	Corridor End	2014 ADT
1	30th Street W	Avenue J	Avenue L	16,000
2	10th Street W	Avenue J	Avenue K	17,900
3	Sierra Highway	Avenue I	Avenue K	18,500
4	Division Street	Avenue I	Avenue J	11,430
5	Challenger Way	Lancaster Boulevard	Avenue K-8	20,400
6	20th Street E	Lancaster Boulevard	Avenue K	13,100
7	30th Street E	Avenue J-8	Avenue L	6,800
8	Avenue I	30th Street W	15th Street W	22,550
9	Avenue J	Division St	20th Street E	26,900
10	Avenue K	20th Street W	Sierra Highway	29,800
11	25th Street W	Lancaster Boulevard	Avenue J	7,300
12	Valley Central Way	Avenue I	Avenue J	7,550
13	15th Street W	Avenue J	Avenue K	19,400
14	Yucca Avenue	Avenue I	Milling St	3,250
15	15th Street E	Avenue I	Avenue K	5,930
16	Lancaster Blvd	30th Street W	20th Street W	15,200
17	Avenue J-8	30th Street W	20th Street W	14,100
18	Avenue K-8	35th Street W	10th Street W	8,950
19	Avenue L	Business Center Parkway	10th Street W	34,700



Table 3. Corridors Configuration Changes

Corridor Number	Study Corridor	Existing			Future		
		Travel Lanes	Parking	Bike Facilities	Travel Lanes	Parking	Bike Facilities
1	30th Street W	4	No	Lanes	2	Parallel	Lanes
2	10th Street W	4	No	No	4	No	No
3	Sierra Highway	4	No	Off Street Path	2	Parallel	Off Street Path
4	Division Street	4	No	No	2	No	Lanes
5	Challenger Way	4	No	Lanes	4	No	Lanes
6	20th Street E	4	No	No	2	Parallel	Lanes
7	30th Street E	4	No	No	2	Parallel	Lanes
8	Avenue I	6	No	No	4	Parallel	Lanes
9	Avenue J	4	No	Route	4	No	Lanes
10	Avenue K	6	No	No	4	No	Lanes
11	25th Street W	2	No	Lanes	2	No	Lanes
12	Valley Central Way	2	No	Lanes	2	No	Lanes
13	15th Street W	4	No	No	4	No	No
14	Yucca Avenue	4	Parallel	No	2	Parallel	Lanes
15	15th Street E	4	No	Lanes	2	No	Lanes
16	Lancaster Blvd	4	No	Lanes	2	No	Lanes
17	Avenue J-8	4	No	Lanes	2	No	Lanes
18	Avenue K-8	4	No	Lanes	2	No	Lanes
19	Avenue L	6	No	No	4	Parallel	Lanes



VEHICLE CIRCULATION

The City of Lancaster subarea travel demand model was used to evaluate the changes in traffic volumes and travel patterns. Lane conversion on Complete Streets corridors were included in the future travel demand model to analyze how changes in travel lanes could impact vehicle circulation within the City. Table 3 shows the number of lanes in the existing travel demand model and the changes made in the future (Year 2035) model.

Volumes on most streets are expected to increase in line with the expected growth of the City. Table 4 shows the estimated percent growth in vehicle volumes on the study corridors if no Complete Streets treatments were applied (Future Base network).

Table 4. Changes in Volume from Existing to Future Base Model

Corridor Number	Study Corridor	2014 Corridor Volumes	Future Base Model Volumes	Volume Difference	Volume Percent Difference
1	30th Street W	16,000	20,600	4,600	29%
2	10th Street W	17,900	25,500	7,600	42%
3	Sierra Hwy	18,500	23,800	5,300	29%
4	Division St	11,430	13,200	1,770	15%
5	Challenger Way	20,400	20,800	400	2%
6	20th Street E	13,100	16,300	3,200	24%
7	30th Street E	6,800	8,400	1,600	24%
8	Avenue I	22,550	30,900	8,350	37%
9	Avenue J	26,900	30,700	3,800	14%
10	Avenue K	29,800	34,300	4,500	15%
11	25th Street W	7,300	8,400	1,100	15%
12	Valley Central Way	7,550	9,800	2,250	30%
13	15th Street W	19,400	22,100	2,700	14%
14	Yucca Ave	3,250	3,900	650	20%
15	15th Street E	5,930	5,700	-230	-4%
16	Lancaster Blvd	15,200	18,000	2,800	18%
17	Avenue J-8	14,100	17,000	2,900	21%
18	Avenue K-8	8,950	10,200	1,250	14%
19	Avenue L	34,700	31,800	-1,200	-8%



Volumes typically increased on the study corridors between 15 and 30%. Volume decreases on Avenue L can be attributed to cross-town trips being diverted to Avenues M and K due to congestion caused by new development adjacent to Avenue L on the western part of the City. However, travel patterns throughout the City in the Future Base model are similar to those shown in the existing model. Table 5 shows the change in vehicle volumes between a Future Base model and the Future model with Complete Streets reconfiguration.

Table 5. Changes in Volume from Future Base Model to Complete Streets Reconfiguration

Corridor Number	Study Corridor	Corridor Future Base Model Volumes	Future with Project Model Volumes	Volume Difference	Volume Percent Difference
1	30th Street W	20,600	15,600	-5,000	-24%
2	10th Street W	25,500	22,300	-3,200	-13%
3	Sierra Highway	23,800	16,900	-6,900	-29%
4	Division Street	13,200	18,800	5,600	42%
5	Challenger Way	20,800	21,300	500	2%
6	20th Street E	16,300	14,000	-2,300	-14%
7	30th Street E	8,400	9,200	800	10%
8	Avenue I	30,900	30,000	-900	-3%
9	Avenue J	30,700	30,100	-600	-2%
10	Avenue K	34,300	30,300	-4,000	-12%
11	25th Street W	8,400	8,400	0	0%
12	Valley Central Way	9,800	9,700	-100	-1%
13	15th Street W	22,100	23,200	1,100	5%
14	Yucca Avenue	3,900	3,900	0	0%
15	15th Street E	5,700	5,900	200	4%
16	Lancaster Blvd	18,000	17,600	-400	-2%
17	Avenue J-8	17,000	12,900	-4,100	-24%
18	Avenue K-8	10,200	11,500	1,300	13%
19	Avenue L	31,800	31,800	0	0%



The lane conversions from Complete Streets projects would result in fewer vehicles on streets already near capacity, such as 15th Street W and Challenger Way that have existing daily volumes near or above 20,000 and would provide two lanes with the implementation of Complete Streets treatments. These volumes would be absorbed on adjacent streets, such as 25th Street W (south of Avenue J), Division Street and Avenue J (between 15th and 30th Streets W) that have additional capacity. Most other streets experience small volume decreases compared to the Future Base model or modest increases as they absorb vehicles that shift from other study corridors with Complete Streets treatments. The volume decreases anticipated are primarily attributable to changes in capacity to the roadway network. With the implementation of Complete Streets strategies and the development of active transportation networks, shifts to walking, biking, and transit modes may be observed.

MULTI-MODAL CONDITIONS

Multi-Modal Conditions (MMC) analyses were conducted on all study corridors to analyze how the Complete Streets treatments would affect the comfort, safety, and operations for people biking, walking, and taking transit. A separate MMC grade is given on each corridor for biking, walking and transit. To be consistent with vehicle level of service (LOS), these grades are on a scale of A to F, with A being the best and F the worst condition. The MMC methodology considers facilities and amenities provided for each mode in addition to general street characteristics (speed limit, daily vehicles, number of lanes, etc.). The methodology can be viewed in Appendix B. Table 6 shows the change in MMC on each corridor.



Table 6. Change in Configuration and Resulting MMC

Corridor Number	Study Corridor	Existing			Future		
		Bike MMC	Ped MMC	Transit MMC	Bike MMC	Ped MMC	Transit MMC
1	30th Street W	D	E	E	C	C	C
2	10th Street W	F	E	E	D	C	C
3	Sierra Highway	D	F	F	C	C	C
4	Division Street	E	F	F	C	D	F
5	Challenger Way	D	E	F	D	D	F
6	20th Street E	E	E	F	C	B	E
7	30th Street E	E	E	F	C	C	F
8	Avenue I	F	E	F	D	D	C
9	Avenue J	E	E	F	D	D	C
10	Avenue K	F	E	F	C	D	E
11	25th Street W	C	C	F	B	A	F
12	Valley Central Way	C	B	F	A	A	C
13	15th Street W	F	E	F	D	D	C
14	Yucca Avenue	E	C	F	C	A	C
15	15th Street E	D	E	F	B	B	F
16	Lancaster Blvd	D	E	E	C	D	C
17	Avenue J-8	D	E	F	B	B	F
18	Avenue K-8	D	D	F	B	B	E
19	Avenue L	F	E	F	D	D	F



The data presented in Table 6 shows a typical configuration along each corridor, although the configuration may vary along each street. Several assumptions were made as part of the analysis:

- Bike amenities such as racks, facility signs, and green paint at conflict areas would be provided.
- Good pavement with clear markings would be present.
- Left turns would be protected at signalized intersections.
- Curb ramps would be well maintained.
- Street furniture, shade trees, pedestrian lighting and transit shelters would be provided.
- No improvements to transit headways would be made, as this is outside of the direct control of the City.

Much of the improvements in MMC are the result of these assumptions and potential changes to roadway configurations. If the improvements described above are not implemented, and/or if further improvements outlined in the MMC methodology are implemented, corridors could receive a different grade in the future.

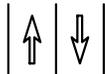
APPENDIX A

LEGEND

SYMBOL XX' (XX') Typical Width (Suggested Minimum Width)



10' (9') Center Turn-Lane
14' (12') Raised Median w/ Turn Lanes



11' (10') Through Travel Lane



14' (10') Class III Shared Bike-Travel Lane



6' (5') Class II Bike Lane



5' (3') Painted or Raised Buffer



8' Parallel Parking w/ Landscaping



8' (6') Sidewalk w/ 4' of Clear Path



VARIES City to decide type of street elements to be incorporated

The following cross sections show the minimum road elements (with suggested minimum widths) based on the existing and projected ADT and speed limits on a road segment.

Utilization of the remaining right-of-way after incorporating the minimum elements will be at the discretion of the City. This may include, but is not limited to: additional travel lanes, bike lanes, buffers, bus lanes, parking, landscaping, sidewalk extensions, and other streetscape amenities.

Turn Lanes

Typical minimum widths for both, left and right turn lanes are 10'. If given road segments with lower volumes, lower speeds, or right-of-way constraints, 9' turn lanes may be suggested.

Median with Center Turn Lanes

Typical minimum widths for landscape medians with center turn lanes are 14', which provides a 10' left turn lane and 4' raised median buffer. If given road segments with right-of-way constraints, 12' raised medians with 2' buffers at access points and intersections; or 10' raised medians with only striped turn lanes at access points and intersections, may be suggested.

Through Travel Lanes

Typical minimum widths for through travel lanes are 11'. If given road segments with lower volumes, lower speeds, less heavy vehicles, or right-of-way constraints; 10' lane widths may be suggested.

Shared Bike Lanes/Routes

Typical shared travel lane widths for Class III bike facilities are 14' to allow for safe passing. Otherwise, minimum travel lane widths of 10'-11' are suggested.

Bike Lanes & Buffers

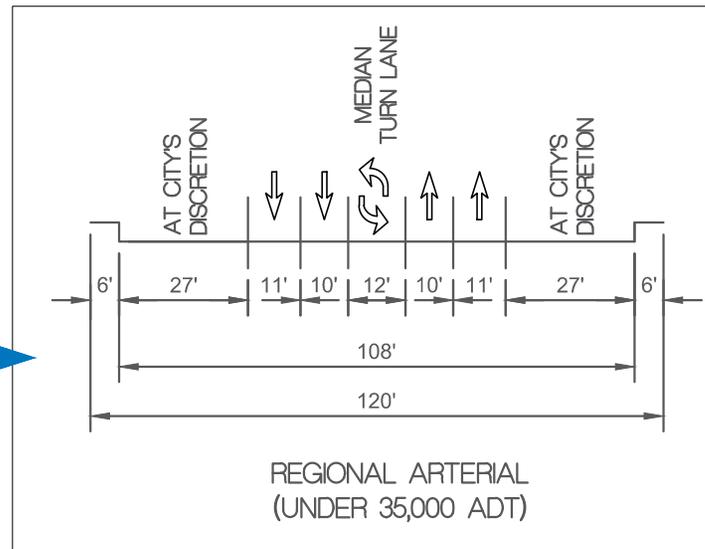
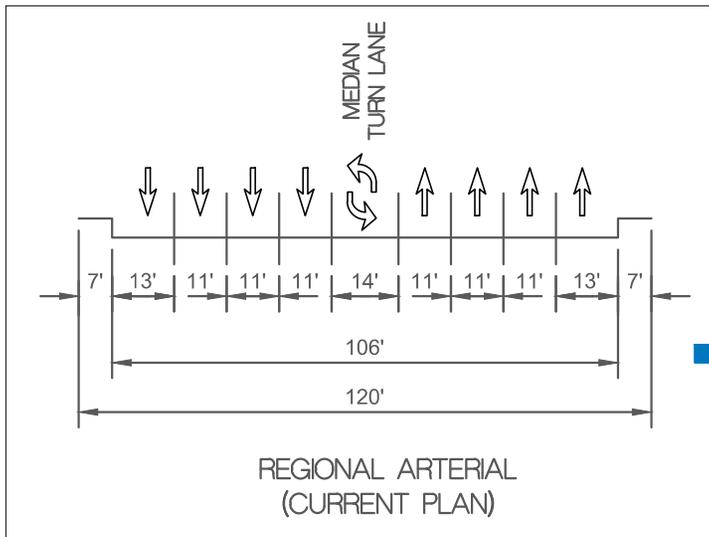
Typical minimum widths for Class II bike lanes are 6'. If given road segments with right-of-way constraints, 5' bike lanes may be suggested. Minimum 3' painted bike lane buffers are suggested where feasible.

Parking and Landscaping

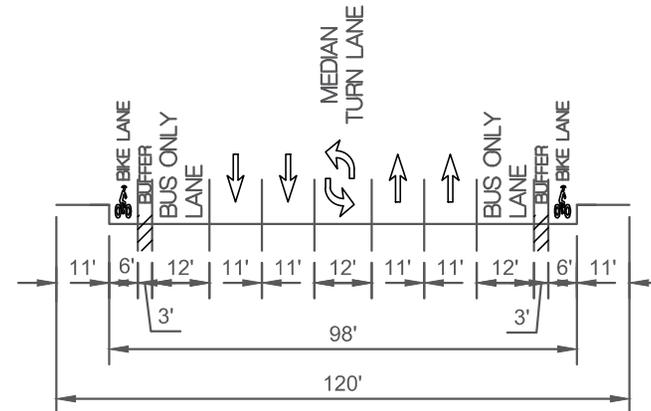
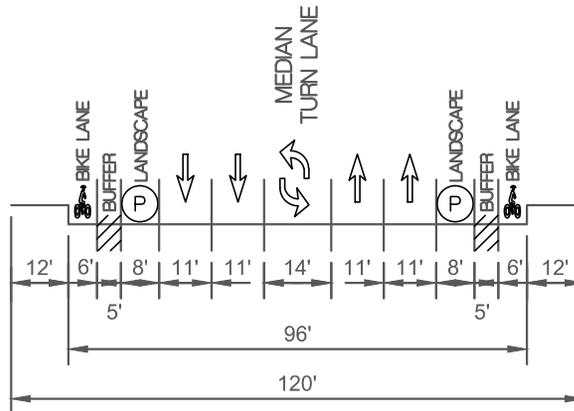
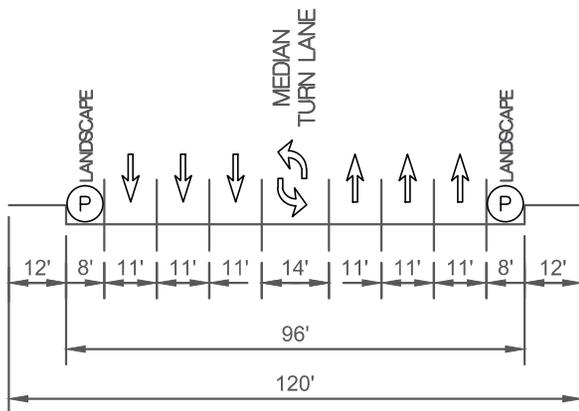
Typical minimum widths for on-street parking are 8'. If given road segments with right-of-way constraints, 7' parking widths may be suggested. Landscaping can substitute parking lanes at the City's discretion.

Sidewalks

Typical minimum widths for sidewalks with street furniture are 8' with 4' of clear path for pedestrians. If given right-of-way constraints, 6' sidewalks may be suggested as long as the 4' clear path requirement is met.

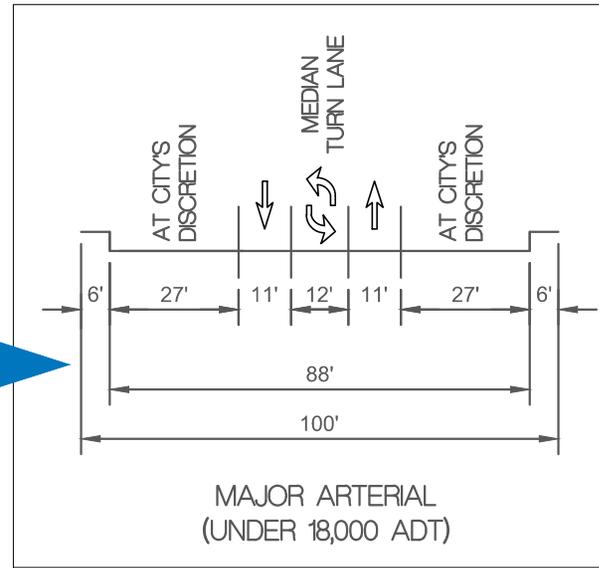
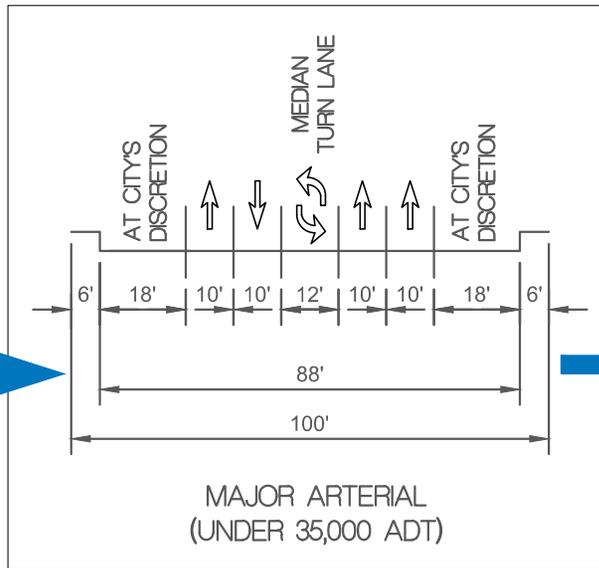
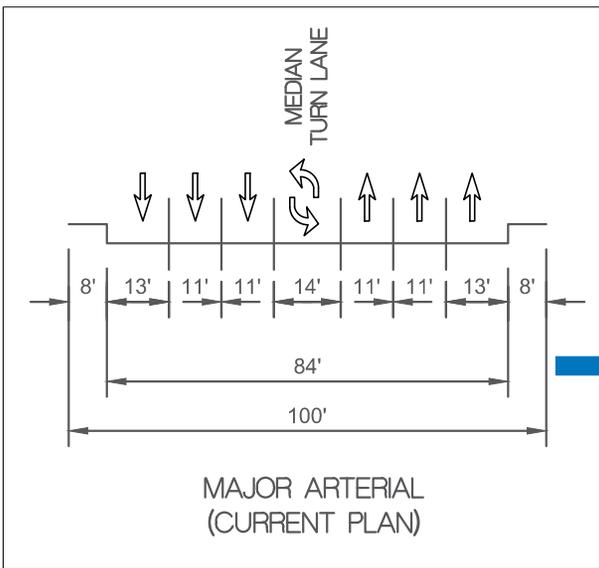


Example Road Cross Section Configurations for City Reference:

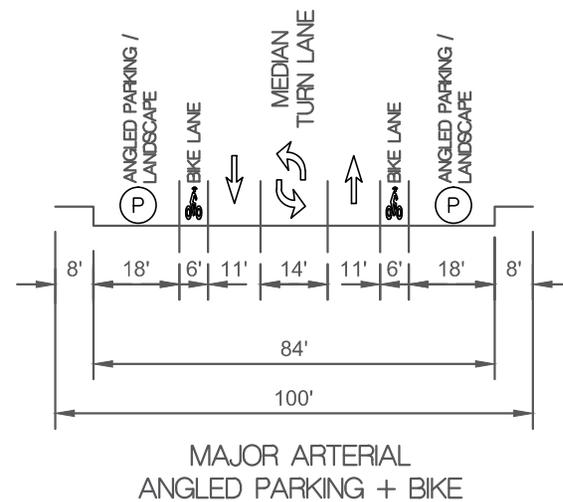
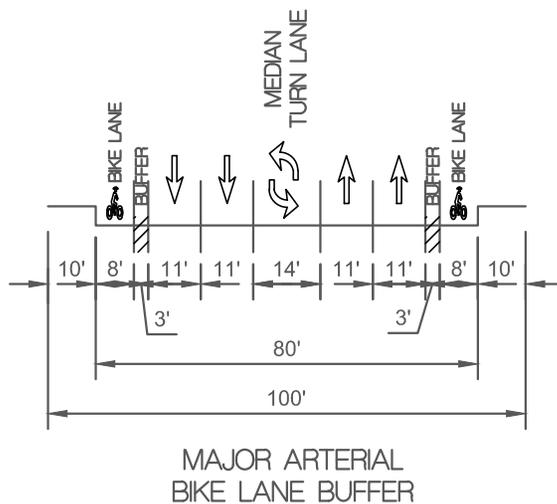
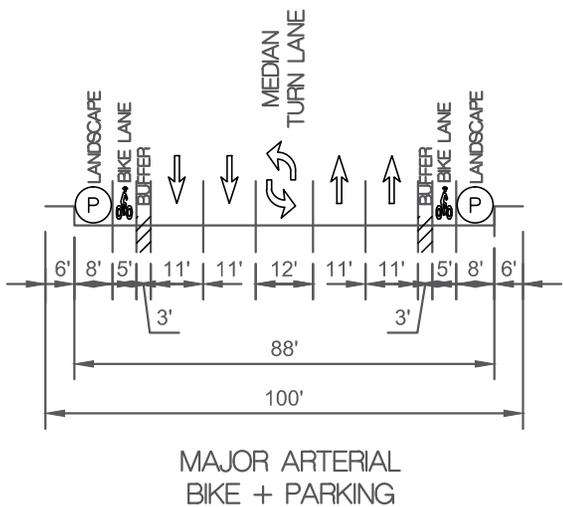


Lancaster Complete Streets - Suggested Road Cross Sections

REGIONAL ARTERIALS: 120'+ ROW

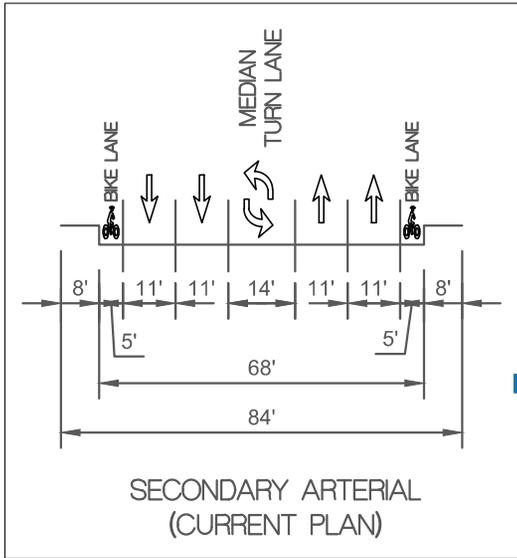


Example Road Cross Section Configurations for City Reference:

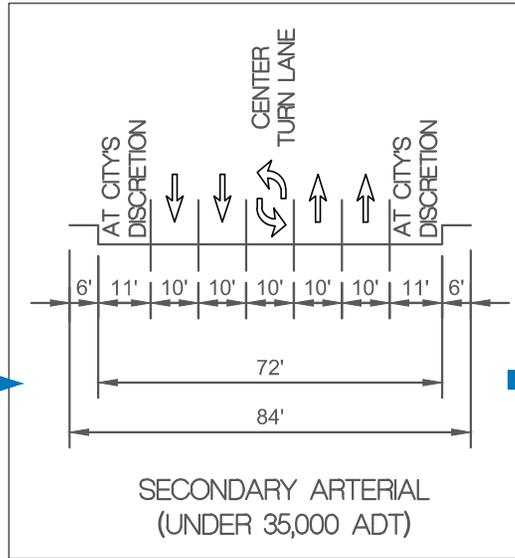


Lancaster Complete Streets - Suggested Road Cross Sections

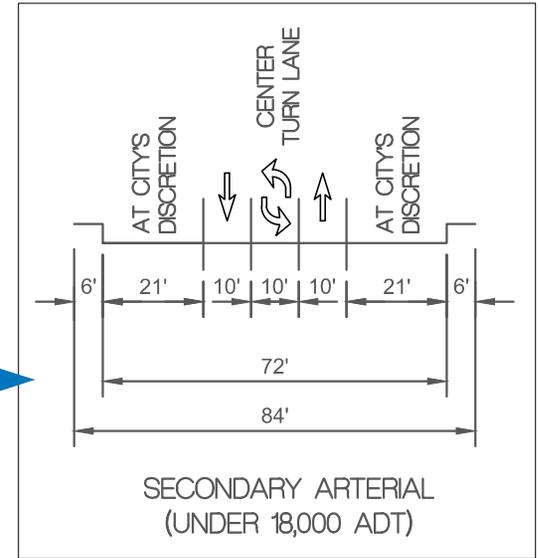
MAJOR ARTERIALS: 100'+ ROW



SECONDARY ARTERIAL
(CURRENT PLAN)

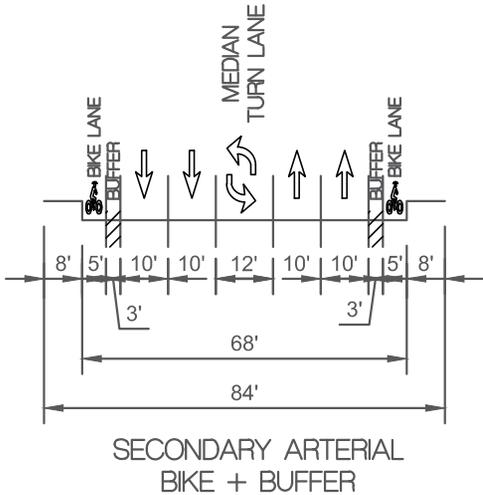


SECONDARY ARTERIAL
(UNDER 35,000 ADT)

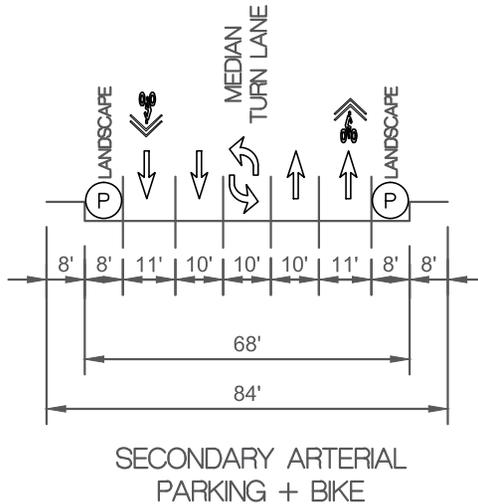


SECONDARY ARTERIAL
(UNDER 18,000 ADT)

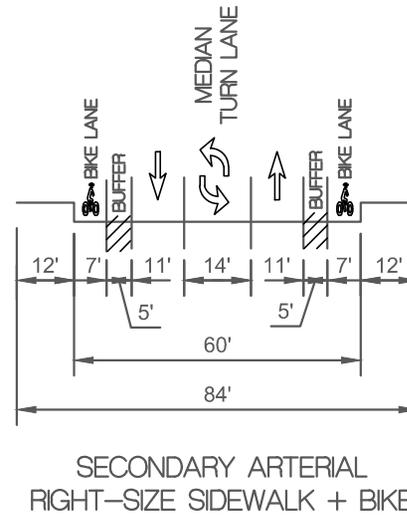
Example Road Cross Section Configurations for City Reference:



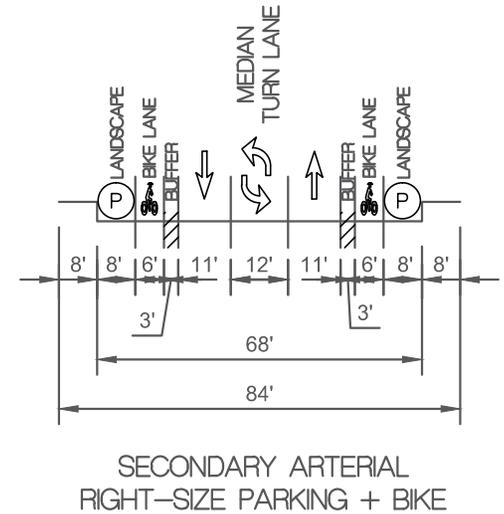
SECONDARY ARTERIAL
BIKE + BUFFER



SECONDARY ARTERIAL
PARKING + BIKE



SECONDARY ARTERIAL
RIGHT-SIZE SIDEWALK + BIKE

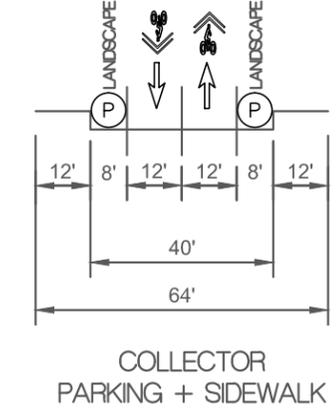
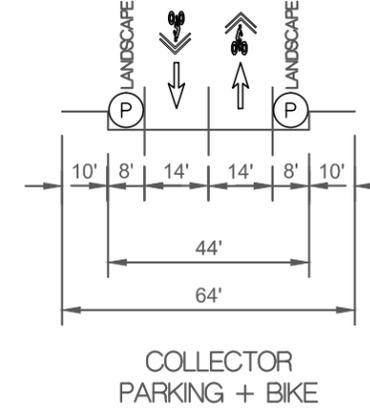
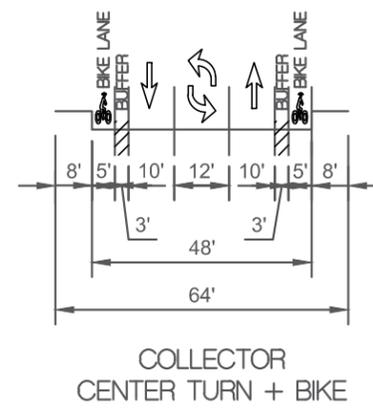
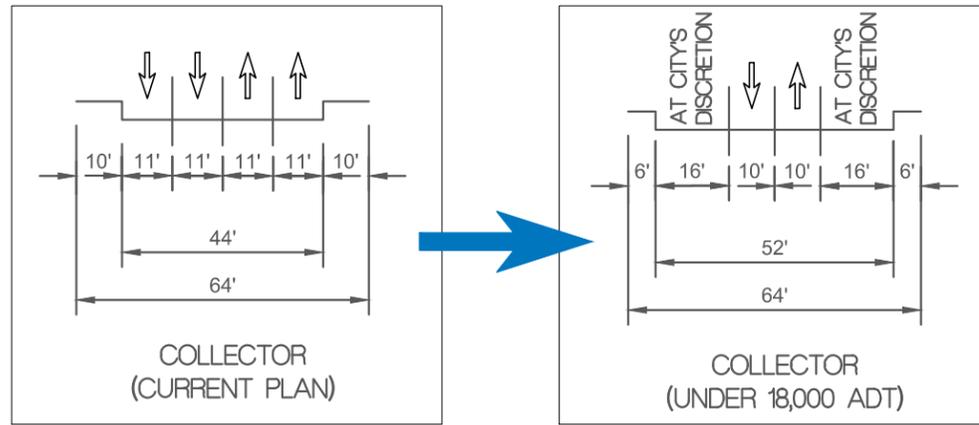


SECONDARY ARTERIAL
RIGHT-SIZE PARKING + BIKE

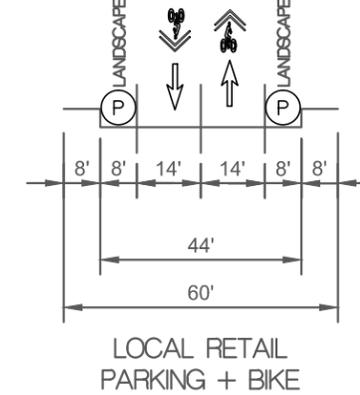
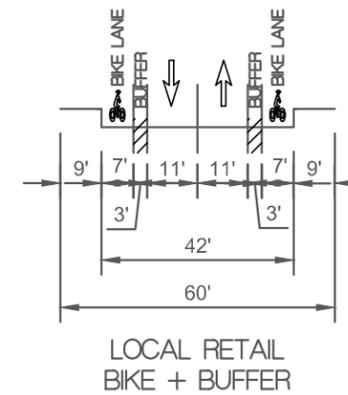
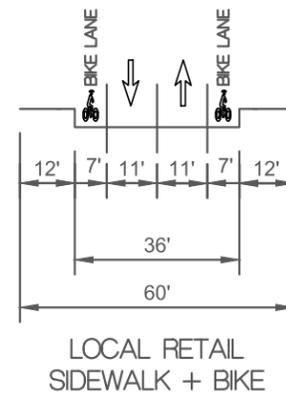
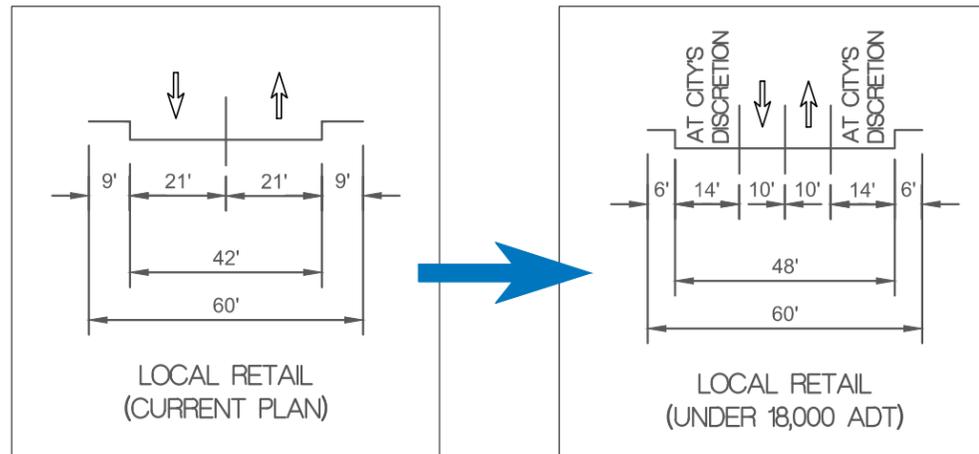
Lancaster Complete Streets - Suggested Road Cross Sections

SECONDARY ARTERIALS: 80'+ ROW

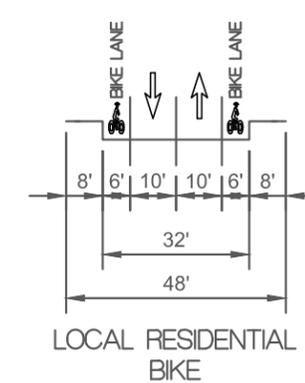
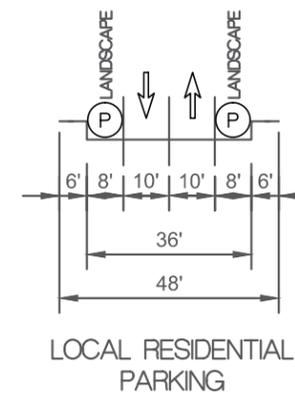
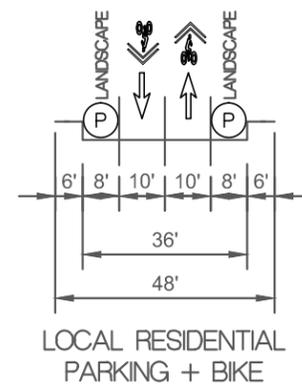
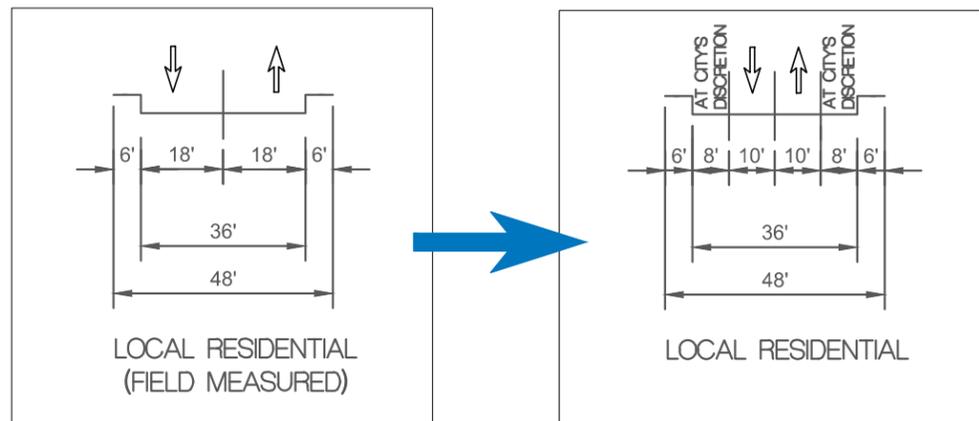
Example Road Cross Section Configurations for City Reference:



Example Road Cross Section Configurations for City Reference:



Example Road Cross Section Configurations for City Reference:



Lancaster Complete Streets - Suggested Road Cross Sections

COLLECTORS (60'+ ROW) & LOCAL ROADS (Less than 60' ROW)

APPENDIX B

Pedestrian MMLOS

Street		Segment Between	and				
Pedestrians					VALUE	SCORE	
	Street Segment Right-of-Way (Choose One)						
	Average Daily Traffic						
	Posted Speed Limit						
	Signalized Crossing	Leading pedestrian interval present					
		No right turn on red					
		Protected left turns					
		Stop bars					
		Curb ramps well maintained					
		Well marked crosswalks					
	Unsignalized Crossing	Curb ramps well maintained					
		Yield lines and crossing beacons present					
		Presence of median for pedestrian refuge (at least 6' wide with low plantings or feaures)					
		Well-marked crosswalk and mid-block crossings at safe and convenient locations					
		Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing					
		Drivers and pedestrians have unobstructed views of each other					
	Other Elements	Active building frontages					
		Pedestrian lighting					
		Street trees providing shade					
		Quality street furniture facing businesses					
		Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise					
		High quality sidewalks without cracks or ridges					
		Sense of security by presence of other people and clear sight lines					
		On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic					
		Sidewalk fronting brick wall					
		No pedestrian push buttons at signalized intersections					
		Where present, landscape buffer/parkway is at least 4 feet wide					
		TOTAL				0	
	MMLOS GRADE					F	

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Biking MMLOS

Street		Segment Between	and					
BIKING MMLOS						VALUE	SCORE	
	Street Segment Right-of-Way (Choose One)							
	Average Daily Traffic							
	Number of Lanes to Cross (curb to curb)							
	Posted Speed Limit							
	Connectivity	Multiple direct connections to both North-South and East-West on-street lanes or off street facilities						
		Directly connects to both North-South and East-West on-street lanes or off street facilities						
		Directly Connects to both North-South or East-West on-street lanes or off street facilities						
		No direct connection but within a quarter mile of on-street lanes or off street facilities						
	Amenities	Bike racks provided frequently (at least two per block on average)						
		Bike facility signs provided frequently (at least one per half mile per direction on average)						
		Bike-friendly intersections (bicyclists are not trapped by right-turn lanes)						
		Inpavement or video bicycle detection at intersection						
		Conflict areas marked with green paint						
	Other Elements	Signals timed for 15 mph speed						
		Good Pavement Conditions (including lack of obstacles such as storm drains)						
		Clear pavement markings						
	Adjacent Vehicle Parking (Choose)	No parking						
		Back-in Angled						
		Parallel						
		Angled Parking						
	TOTAL						0	
	MMLOS GRADE							F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street		Segment Between		and		VALUE	SCORE		
TRANSIT	Right-of-Way								
	Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)						1		
	Service Frequency and Performance	Provides at least 10 minute headways during the peak hours						3	
		Provides at least 15 minute headways during the peak hours						2	
		Provides at least 30 minute headways during the peak hours						1	
		Buses on-time 90% or more of the time						2	
	Service Diversity	Lines serving all directions						1	
		Lines serving east/west or north south only						0	
		Rapid or express service offered on segment						0.5	
	Visual Interest and Amenity	Provides covered bus stop						1	
		Provides Bench						0.5	
		Bus stop well lit and have a sense of security						0.5	
		Bus stop benches at least five feet away from curb						0.5	
		Transit information screens displaying real time arrivals						0.5	
	Other Elements	Corridor has transit preemption to reduce delays along the entire corridor						0.5	
		Seat is always available						0.5	
		Multiple other transit routes connect to corridor						1	
		Free transfers						0.5	
		Bike parking is available at busstop						0.5	
		Buses provide on-board bike rack						0.5	
Bus has all door boarding						1			
Trash receptacle present that is emptying when full						0.5			
Transit stop is well maintained and clean						0.5			
TOTAL							0		
MMLOS GRADE							F		

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Transit MMLOS

Street **30th Street West** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL	5
MMLOS	E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **30th Street West** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **30th Street West** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	4 No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	2 Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	1 Yes	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	0.5 No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	0.5 No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	0.25 No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	0.5 No	0
Inpavement or video bicycle detection at intersection	0.25 No	0
Conflict areas marked with green paint	0.5 No	0
Other Elements		
Signals timed for 15 mph speed	2 No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	0.5 Yes	0.5
Clear pavement markings	0.5 Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	1.5 Yes	1.5
Back-in Angled	1 No	N/A
Parallel	0.5 No	N/A
Angled Parking	0 No	N/A

TOTAL 9.5
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **30th Street West** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	4 Yes	4
Directly connects to both North-South and East-West on-street lanes or off street facilities	2 Yes	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	1 Yes	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	0.5 No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	0.5 No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	0.25 No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	0.5 No	0
Inpavement or video bicycle detection at intersection	0.25 No	0
Conflict areas marked with green paint	0.5 Yes	0.5
Other Elements		
Signals timed for 15 mph speed	2 No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	0.5 Yes	0.5
Clear pavement markings	0.5 Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	1.5 No	0
Back-in Angled	1 No	0
Parallel	0.5 Yes	0.5
Angled Parking	0 No	0

TOTAL 15
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **10th Street West** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 5.5
MMLOS E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **10th Street West** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours		0
Provides at least 15 minute headways during the peak hours		0
Provides at least 30 minute headways during the peak hours	Yes	1
Buses on-time 90% or more of the time	Yes	2
Service diversity		
Lines serving all directions	No	0
Lines serving east/west or north south only	Yes	0
Rapid or express service offered on segment	No	0
Visual Interest and Amenity		
Provides covered bus stop	Yes	1
Provides Bench	Yes	0.5
Bus stop well lit and have a sense of security	Yes	0.5
Bus stop benches at least five feet away from curb	Yes	0.5
Transit information screens displaying real time arrivals	No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	Yes	0.5
Seat is always available	Yes	0.5
Multiple other transit routes connect to corridor	No	0
Free transfers	No	0
Bike parking is available at busstop	No	0
Buses provide on-board bike rack	Yes	0.5
Bus has all door boarding	No	0
Trash receptacle present that is emptying when full	Yes	0.5
Transit stop is well maintained and clean	Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Biking MMLOS

Street **10th Street West** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5 or more	0
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 2.5
MMLOS F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **10th Street West** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class III Bike Lane	3
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 12.25
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4.5
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class I Shared Use Pa	5
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5 or more	0
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 9.5
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class I Shared Use Pa	5
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 16.75
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Division Street** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Division Street** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Division Street** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	5	1
2 or fewer	4	
3	3	
4	2	
5	1	
6 or more	0	
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 8
MMLOS E

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Division Street** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 15.75
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Challenger Way** Segment Between **Lancaster E** and **Avenue K-8**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 1
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Challenger Way** Segment Between **Lancaster E** and **Avenue K-8**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 3.5
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Challenger Way** Segment Between **Lancaster Blvd** and **Avenue K-8**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 11
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Challenger Way** Segment Between **Lancaster Blvd** and **Avenue K-8**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 12.75
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **20th Street** Segment Between **Lancaster E** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 Yes	1
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 2
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **20th Street** Segment Between **Lancaster E** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 Yes	1
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL	5
MMLOS	E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	4	2
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 6.5
MMLOS E

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 13.25
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue I** Segment Between **30th Street** and **15th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue I** Segment Between **30th Street** and **15th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue I** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5 or more	0
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL	3
MMLOS	F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue I** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	0
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 10.25
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4.5

MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class III Bike Lane	3
Average Daily Traffic	Above 15,000	0
Below 3,000	3	
3,000 - 9,000	2	
9,000-15,000	1	
Above 15,000	0	
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 7.25
MMLOS E

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 12.75
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue K** Segment Between **20th Street** and **Sierra Hwy**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 Yes	1
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL	4
MMLOS	F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue K** Segment Between **20th Street** and **Sierra Hwy**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 Yes	1
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL	5
MMLOS	E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue K** Segment Between **20th Street W** and **Sierra Hwy**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 3.5
MMLOS F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue K** Segment Between **20th Street W** and **Sierra Hwy**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 13.25
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **25th Street W** Segment Between **Lancaster E** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **25th Street W** Segment Between **Lancaster E** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **25th Street W** Segment Between **Lancaster Blvd** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	2 or fewer	4
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 14.75
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **25th Street W** Segment Between **Lancaster Blvd** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 18.25
MMLOS B

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 Yes	0.5
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	2 or fewer	4
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 16.75
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	2 or fewer	4
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	Yes	2
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 21.25
MMLOS A

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4.5
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 4.5
MMLOS F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class III Bike Lane	3
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 12.25
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 Yes	0.5
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	4	2
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	0
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 5
MMLOS E

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 14.25
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **15th Street E** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	No	0
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 12.5
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **15th Street E** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 18.25
MMLOS B

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Lancaster Blvd** Segment Between **30th Street** and **20th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 5.5
MMLOS E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Lancaster Blvd** Segment Between **30th Street** and **20th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3	0
Provides at least 15 minute headways during the peak hours	2	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 Yes	2
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 Yes	0.5
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 7
MMLOS C

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Lancaster Blvd** Segment Between **30th Street W** and **20th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 12.5
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Lancaster Blvd** Segment Between **30th Street W** and **20th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 16.25
MMLOS C

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue J-8** Segment Between **30th Street** and **15th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue J-8** Segment Between **30th Street** and **15th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 No	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 No	0
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 No	0
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 No	0
Transit stop is well maintained and clean	0.5 No	0

TOTAL 0
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue J-8** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	9,000-15,000	1
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 12.5
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue J-8** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 17.25
MMLOS B

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue K-8** Segment Between **35th Street** and **10th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 2.5
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue K-8** Segment Between **35th Street** and **10th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 Yes	1
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 5
MMLOS E

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue K-8** Segment Between **35th Street W** and **10th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	5	1
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	Yes	2
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	N/A
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A

TOTAL 11.75
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue K-8** Segment Between **35th Street W** and **10th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	3,000 - 9,000	2
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A

TOTAL 18.25
MMLOS B

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Transit MMLOS

Street **Avenue L** Segment Between **Business C** and **10th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 No	0
Provides Bench	0.5 No	0
Bus stop well lit and have a sense of security	0.5 No	0
Bus stop benches at least five feet away from curb	0.5 No	0
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 No	0
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 1
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Transit MMLOS

Street **Avenue L** Segment Between **Business C** and **10th Street W**

	VALUE	SCORE
Right-of-Way		
Dedicated right-of-way lane for transit only (BRT corridor or bus-only lane)	1 No	0
Service frequency and performance		
Provides at least 10 minute headways during the peak hours	3 No	0
Provides at least 15 minute headways during the peak hours	2 No	0
Provides at least 30 minute headways during the peak hours	1 No	0
Buses on-time 90% or more of the time	2 No	0
Service diversity		
Lines serving all directions	1 No	0
Lines serving east/west or north south only	0 Yes	0
Rapid or express service offered on segment	0.5 No	0
Visual Interest and Amenity		
Provides covered bus stop	1 Yes	1
Provides Bench	0.5 Yes	0.5
Bus stop well lit and have a sense of security	0.5 Yes	0.5
Bus stop benches at least five feet away from curb	0.5 Yes	0.5
Transit information screens displaying real time arrivals	0.5 No	0
Other Elements		
Corridor has transit preemption to reduce delays along the entire corridor	0.5 No	0
Seat is always available	0.5 Yes	0.5
Multiple other transit routes connect to corridor	1 No	0
Free transfers	0.5 No	0
Bike parking is available at busstop	0.5 Yes	0.5
Buses provide on-board bike rack	0.5 Yes	0.5
Bus has all door boarding	1 No	0
Trash receptacle present that is emptying when full	0.5 Yes	0.5
Transit stop is well maintained and clean	0.5 Yes	0.5

TOTAL 4
MMLOS F

MMLOS KEY	
10+	A
9	B
8	C
7	D
5-6	E
0-4	F

Top score 16

Biking MMLOS

Street **Avenue L** Segment Between **Business Center PKWY** and **10th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	No Bike Lane	0
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	6 or more	0
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	No	0
Bike facility signs provided frequently (at least one per half mile per direction on average)	No	0
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	No	0
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	No	0
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	Yes	N/A
Angled Parking	No	N/A
TOTAL		3.5
MMLOS		F

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Avenue L** Segment Between **Business Center PKWY** and **10th Street W**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	4	2
Posted Speed Limit	40 or above	0
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	No	0
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	0
Directly Connects to both North-South or East-West on-street lanes or off street facilities	Yes	1
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	N/A
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	Yes	0.5
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	No	0
Back-in Angled	No	
Parallel	Yes	0.5
Angled Parking	No	0

TOTAL 10.25
MMLOS D

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Biking MMLOS

Street **Division Street** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Street Segment Right-of-Way (Choose One)	Class II Bike Lane	4
Average Daily Traffic	Above 15,000	0
Number of Lanes to Cross (curb to curb)	3	3
Posted Speed Limit	35	1
Connectivity		
Multiple direct connections to both North-South and East-West on-street lanes or off street facilities	Yes	4
One direct connection to both North-South and East-West on-street lanes or off street facilities	No	N/A
Directly Connects to both North-South or East-West on-street lanes or off street facilities	No	0
No direct connection but within a quarter mile of on-street lanes or off street facilities	No	0
Amenities		
Bike racks provided frequently (at least two per block on average)	Yes	0.5
Bike facility signs provided frequently (at least one per half mile per direction on average)	Yes	0.25
Bike-friendly intersections (bicycle position is clear and minimizes conflict with turning vehicles)	Yes	0.5
Inpavement or video bicycle detection at intersection	No	0
Conflict areas marked with green paint	Yes	0.5
Other Elements		
Signals timed for 15 mph speed	No	0
Good Pavement Conditions (including lack of obstacles such as storm drains)	No	0
Clear pavement markings	Yes	0.5
Adjacent Vehicle Parking (Choose One)		
No parking	Yes	1.5
Back-in Angled	No	N/A
Parallel	No	N/A
Angled Parking	No	N/A
TOTAL	15.75	
MMLOS	C	

MMLOS KEY	
20+	A
17-20	B
13-16	C
9-12	D
5-8	E
0-4	F

Top Score 24.5

Pedestrian MMLOS

Street **30th St W** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses		
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 7
MMLOS E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue I** Segment Between **30th Street W** and **15 Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	6 or more	0
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 4.5
MMLOS F

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		6.5
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **10th St W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 7.5
MMLOS E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Partial

Pedestrian MMLOS

Street **15th Street E** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		14
MMLOS	B	

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **15th Street E** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curbs well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curbs well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 7.5
MMLOS E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curbs ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curbs ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 7
MMLOS E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **20th Street E** Segment Between **Lancaster Blvd** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		6.5
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **25th Street W** Segment Between **Lancaster Blvd** and **Avenue J**

	VALUE	SCORE	
Number of Lanes to Cross (curb to curb)	2 or fewer	4	
Average Daily Traffic	3,000 - 9,000	2	
Posted Speed Limit	40 or above	0	
Signalized Crossing			
Leading pedestrian interval present	No		
No right turn on red	No		
Protected left turns	No		
Stop bars	No		
Curbs ramps well maintained	Yes	1	
Well marked crosswalks	Yes	0.5	
Unsignalized Crossing			
Curbs ramps well maintained	Yes	1	
Yield lines and crossing beacons present			
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)			
Well-marked crosswalk and mid-block crossings at safe and convenient locations			
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5	
Other Elements			
Active building frontages	No		
Pedestrian lighting	No		
Street trees providing shade	Yes	1	
Quality street furniture facing businesses	No		
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5	
High quality sidewalks without cracks or ridges	Yes	1	
Sense of security by presence of other people and clear sight lines			
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5	Bike lane buffer
Sidewalk fronting brick wall	No		
No pedestrian push buttons at signalized intersections	No		
Where present, landscape buffer/parkway is at least 4 feet wide	No		

TOTAL 12.5
MMLOS C

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	4	2
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curbs ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curbs ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	No	
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 6.5
MMLOS **E**

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **30th St W** Segment Between **Avenue J** and **Avenue L**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses		
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 12.5
MMLOS C

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **30th Street E** Segment Between **Avenue J-8** and **Avenue L**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	4	2
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curbs ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curbs ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	No	
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 11
MMLOS **C**

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue L** Segment Between **Business Center** and **10th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	4	2
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	Yes	0.5
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 10
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Challenger Way** Segment Between **Lancaster Bl** and **Avenue K-8**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 10
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue I** Segment Between **30th Street W** and **15 Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 9
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	No	
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		11.5
MMLOS		C

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue J** Segment Between **Division** and **20th Street E**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		8.5
MMLOS		D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **10th St W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		11.5
MMLOS		C

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **15th Street W** Segment Between **Avenue J** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	Yes	0.5
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 10
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **25th Street W** Segment Between **Lancaster Blvd** and **Avenue J**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	2 or fewer	4
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or feaures)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines		
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		15.5
MMLOS	A	

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue J-8** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		13.5
MMLOS	B	

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue K** Segment Between **20th Street W** and **Sierra Hwy**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		9
MMLOS		D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue K-8** Segment Between **35th Street W** and **10th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		13.5
MMLOS		B

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Lancaster Blvd** Segment Between **30th Street W** and **20th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	Yes	0.5
TOTAL		9.5
MMLOS		D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	2 or fewer	4
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 16.5
MMLOS A

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **20th Street E** Segment Between **Lancaster Blvd** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	Yes	0.5
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		14
MMLOS	B	

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	Yes	0.5
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	Yes	0.5
Pedestrian lighting	Yes	0.5
Street trees providing shade	Yes	1
Quality street furniture facing businesses	Yes	0.5
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		15.5
MMLOS		A

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue J-8** Segment Between **30th Street W** and **15th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curbs ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curbs ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		7.5
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue K** Segment Between **20th Street W** and **Sierra Hwy**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		6
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue K-8** Segment Between **35th Street W** and **10th Street W**

	VALUE	SCORE	
Number of Lanes to Cross (curb to curb)	5	1	
Average Daily Traffic	3,000 - 9,000	2	
Posted Speed Limit	40 or above	0	
Signalized Crossing			
Leading pedestrian interval present	No		
No right turn on red	No		
Protected left turns	No		
Stop bars	No		
Curb ramps well maintained	Yes	1	
Well marked crosswalks	Yes	0.5	
Unsignalized Crossing			
Curb ramps well maintained	Yes	1	
Yield lines and crossing beacons present	No		
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No		
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No		
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No		
Drivers and pedestrians have unobstructed views of each other	Yes	0.5	
Other Elements			
Active building frontages	No		
Pedestrian lighting	No		
Street trees providing shade	Yes	1	
Quality street furniture facing businesses	No		
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5	
High quality sidewalks without cracks or ridges	Yes	1	
Sense of security by presence of other people and clear sight lines	No		
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5	Bike lane
Sidewalk fronting brick wall	Yes	-0.5	
No pedestrian push buttons at signalized intersections	No		
Where present, landscape buffer/parkway is at least 4 feet wide	No		

TOTAL 8.5
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Avenue L** Segment Between **Business Center** and **10th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	6 or more	0
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		5.5
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Challenger Way** Segment Between **Lancaster Bl** and **Avenue K-8**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 6.5
MMLOS E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Division St** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	No	
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	No	
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 4
MMLOS F

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Lancaster Blvd** Segment Between **30th Street W** and **20th Street W**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	9,000-15,000	1
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	Yes	0.5
TOTAL		7.5
MMLOS		E

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Sierra Hwy** Segment Between **Avenue I** and **Avenue K**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	5	1
Average Daily Traffic	Above 15,000	0
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	No	
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	No	
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	No	
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	No	
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	
TOTAL		3
MMLOS		F

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Valley Central** Segment Between **Avenue I** and **Avenue J**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	3	3
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	35	1
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	Yes	0.5
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	Yes	0.5
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	Yes	1
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	Yes	0.5
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	Yes	0.5
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	No	
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	No	
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	No	
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	Yes	-0.5
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 13.5
MMLOS B

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

Pedestrian MMLOS

Street **Yucca** Segment Between **Avenue I** and **Lancaster Blvd**

	VALUE	SCORE
Number of Lanes to Cross (curb to curb)	4	2
Average Daily Traffic	3,000 - 9,000	2
Posted Speed Limit	40 or above	0
Signalized Crossing		
Leading pedestrian interval present	No	
No right turn on red	No	
Protected left turns	No	
Stop bars	No	
Curb ramps well maintained	Yes	1
Well marked crosswalks	No	
Unsignalized Crossing		
Curb ramps well maintained	Yes	1
Yield lines and crossing beacons present	No	
Presence of median for pedestrian refuge (at least 6' wide with low plantings or features)	No	
Well-marked crosswalk and mid-block crossings at safe and convenient locations	No	
Amenities, signing, sidewalk and roadway character strongly suggest the presence of a pedestrian crossing	No	
Drivers and pedestrians have unobstructed views of each other	Yes	0.5
Other Elements		
Active building frontages	Yes	0.5
Pedestrian lighting	No	
Street trees providing shade	Yes	1
Quality street furniture facing businesses	No	
Sidewalks are 10 feet (adjacent to retail) or 6 feet (adjacent to residential uses) or 8 feet otherwise	Yes	0.5
High quality sidewalks without cracks or ridges	Yes	1
Sense of security by presence of other people and clear sight lines	Yes	0.5
On-street parking and/or landscaping as a pedestrian "buffer" from vehicle traffic	Yes	0.5
Sidewalk fronting brick wall	No	
No pedestrian push buttons at signalized intersections	No	
Where present, landscape buffer/parkway is at least 4 feet wide	No	

TOTAL 10.5
MMLOS D

MMLOS KEY	
15+	A
13-14	B
11-12	C
8-10	D
5-7	E
0-4	F

This page intentionally left blank.



MEMORANDUM

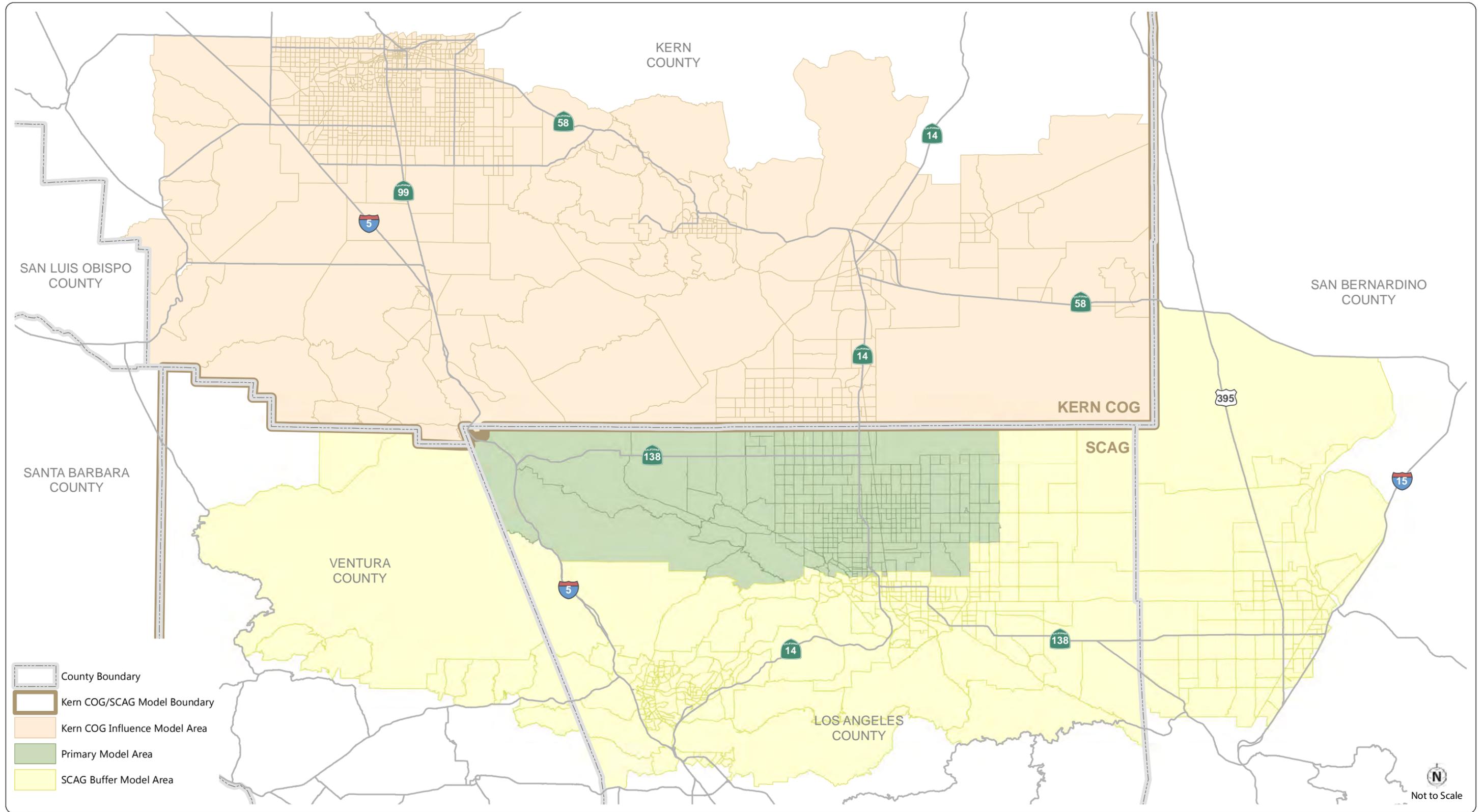
Date: May 23, 2016
To: Bob Blume and Sri Chakravarthy, Kimley-Horn
From: Sarah Brandenburg and Miguel Nunez, Fehr & Peers
Subject: **Lancaster Complete Streets Model Plots**

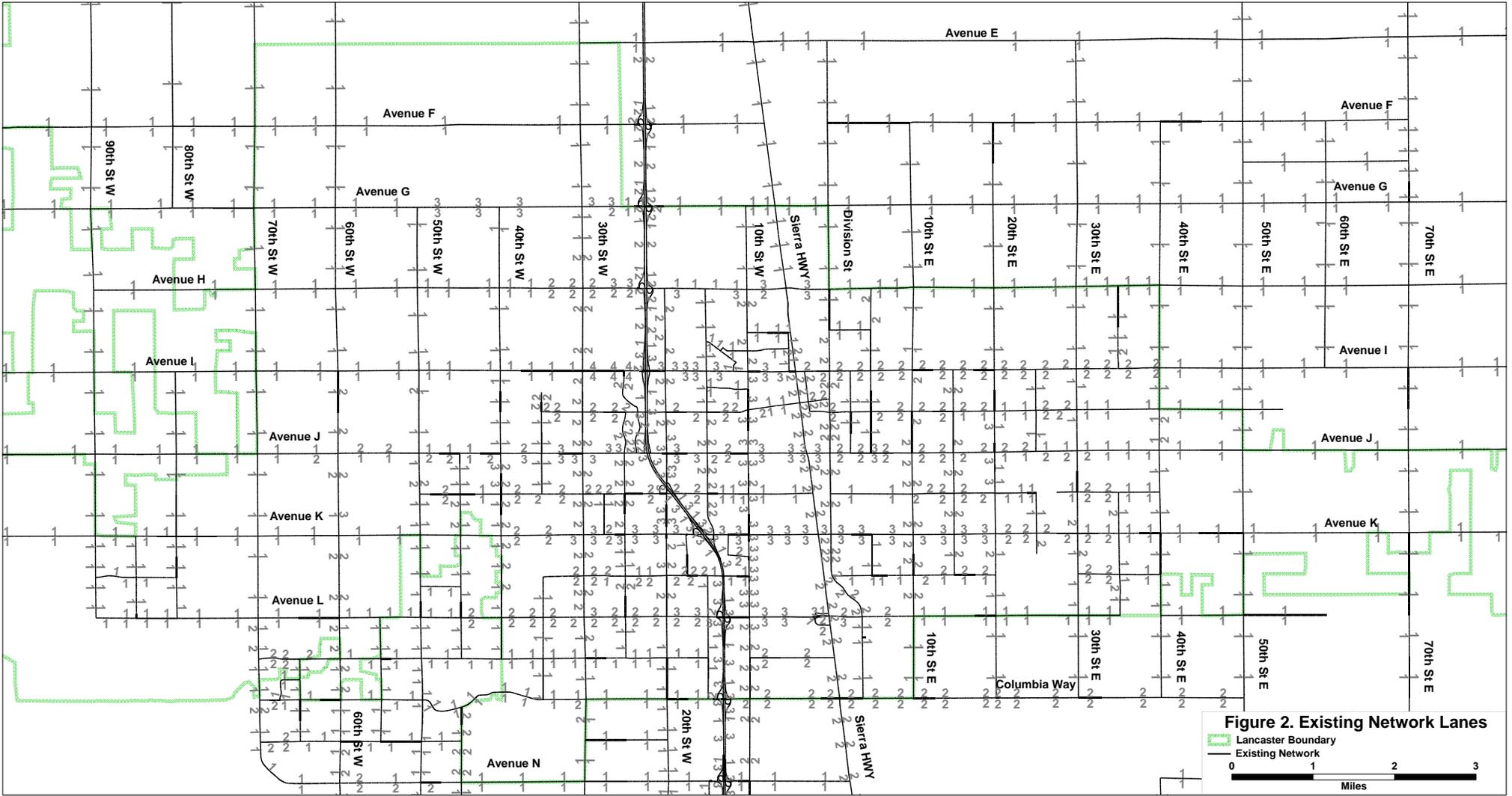
LA16-2694

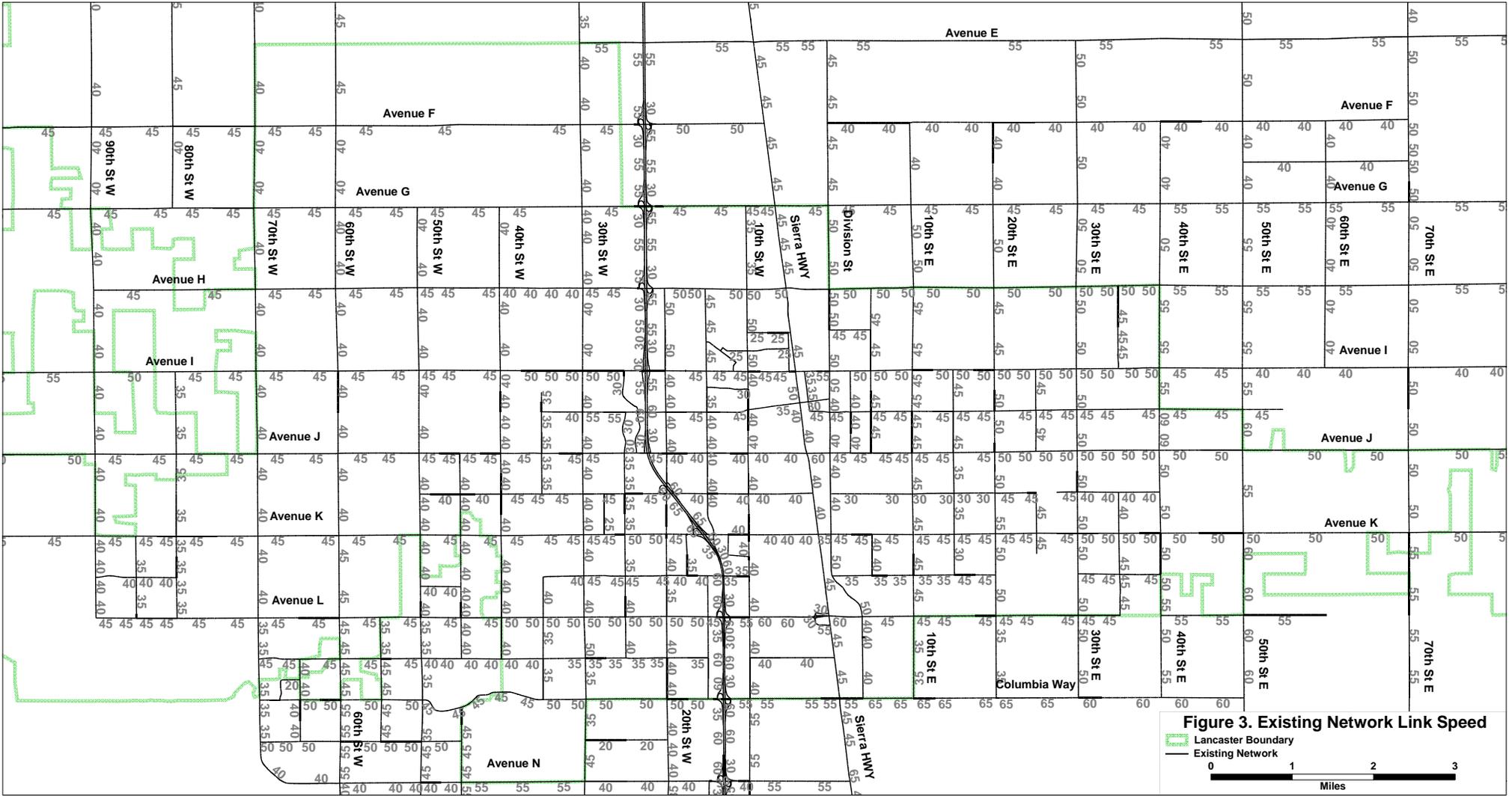
Fehr & Peers is working with the City of Lancaster to develop future traffic forecasts for use in the City of Lancaster Master Plan of Complete Streets and for the Measure R infrastructure projects along SR-14. The following figures are attached to this memo, which provide an update on the model development:

- Figure 1: Model Extent
- Figure 2: Existing Network Lanes
- Figure 3: Existing Network Link Speeds
- Figure 4: 2035 Network Lanes
- Figure 5: 2035 Network Link Speeds
- Figure 6: City of Lancaster Capital Improvement Projects (CIP) Changing Roadway Capacity
- Figure 7: Existing Network Average Daily Traffic (ADT)
- Figure 8: 2035 Network ADT

Figure 1 shows the extent of the model network for both the existing and future models. Figures 2 and 4 show the number of lanes on each link by direction for the existing and future models, respectively. Figures 3 and 5 show the speed by link for the existing and future models, respectively. Figure 6 shows links within the future model that are affected by the City of Lancaster CIP. The 2035 model network (Figures 4 and 5) reflects the implementation of the City's CIP. Figures 7 and 8 show the ADT volumes by link for the existing and future networks, respectively.







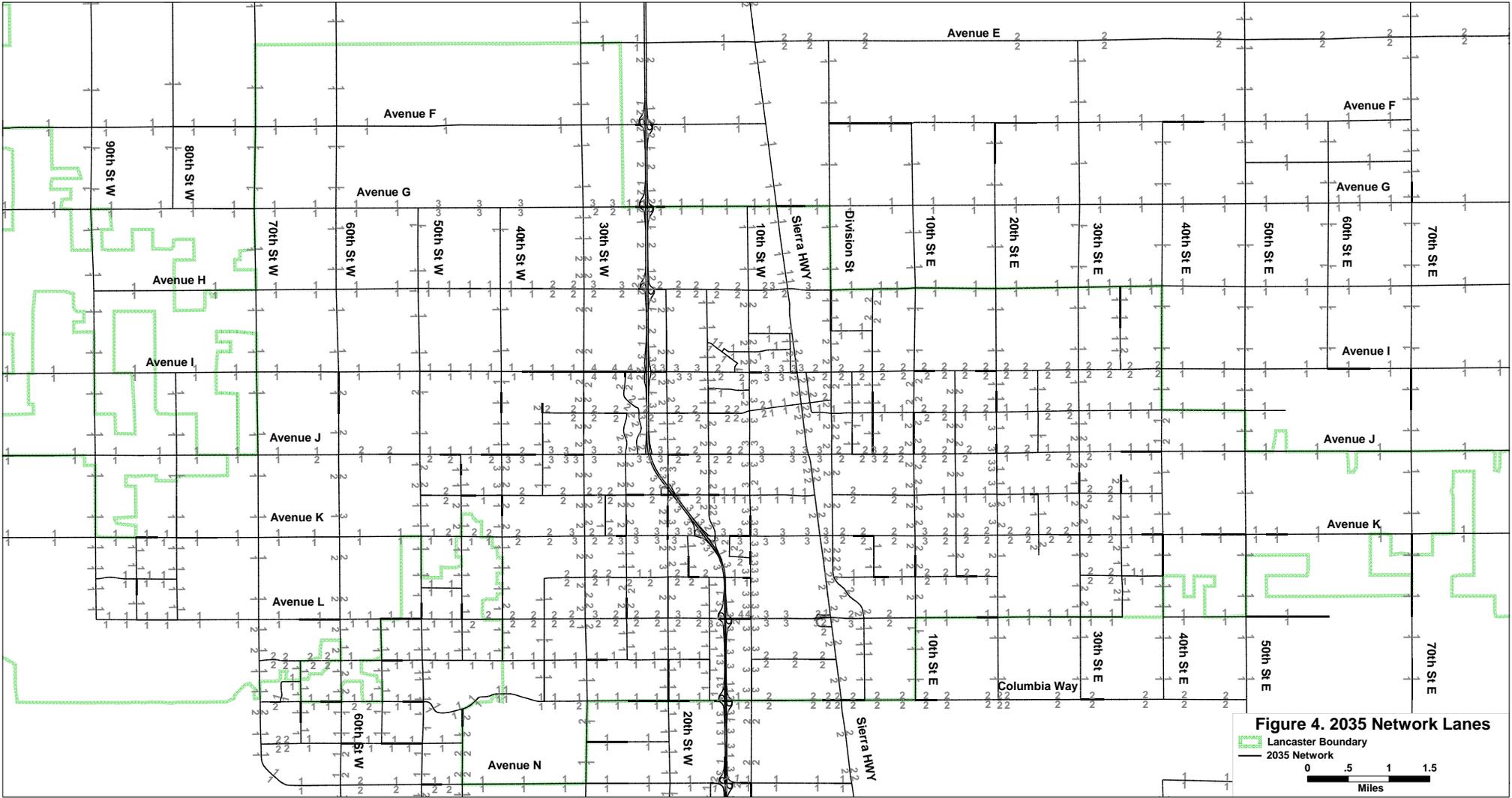
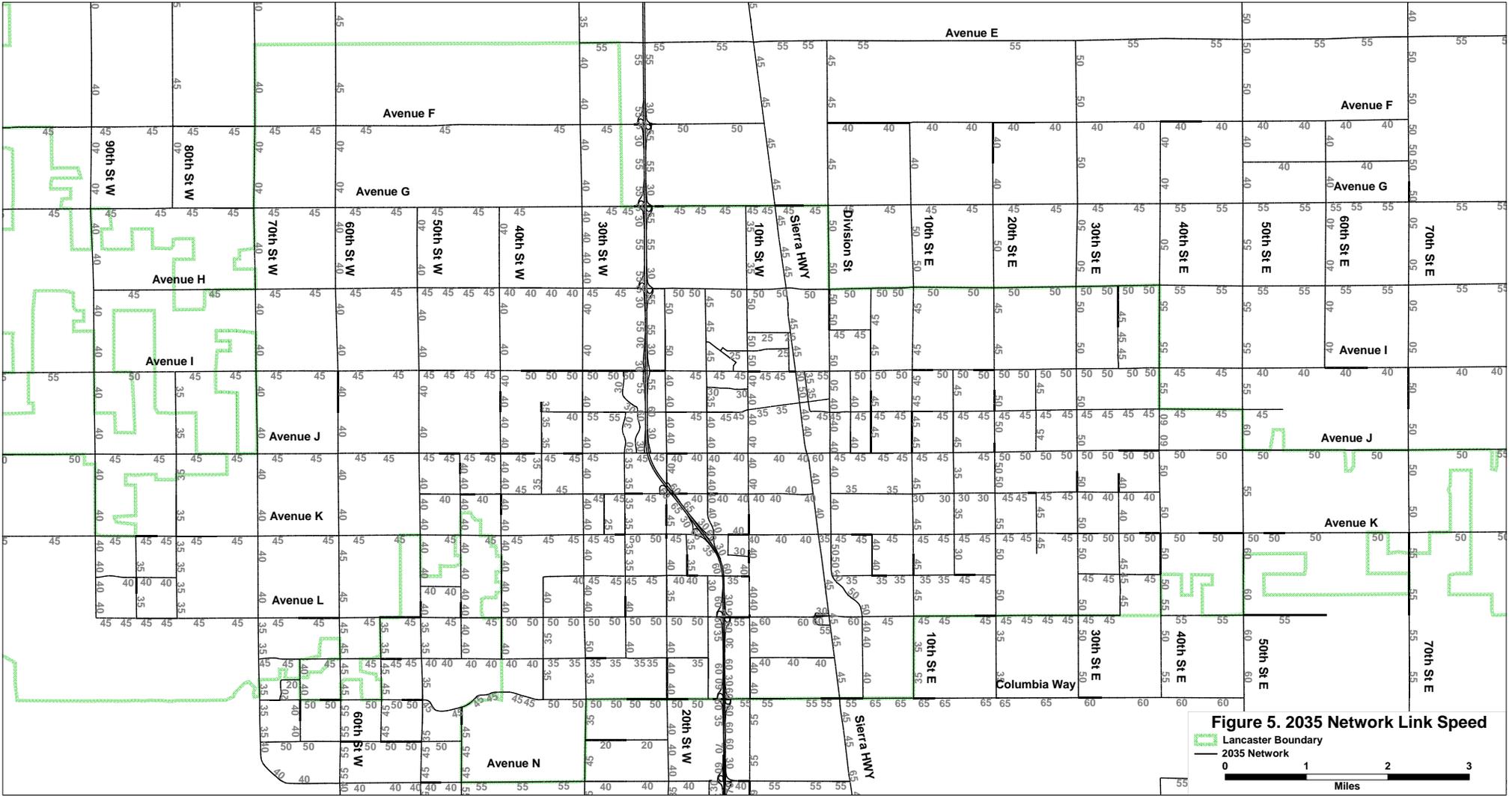
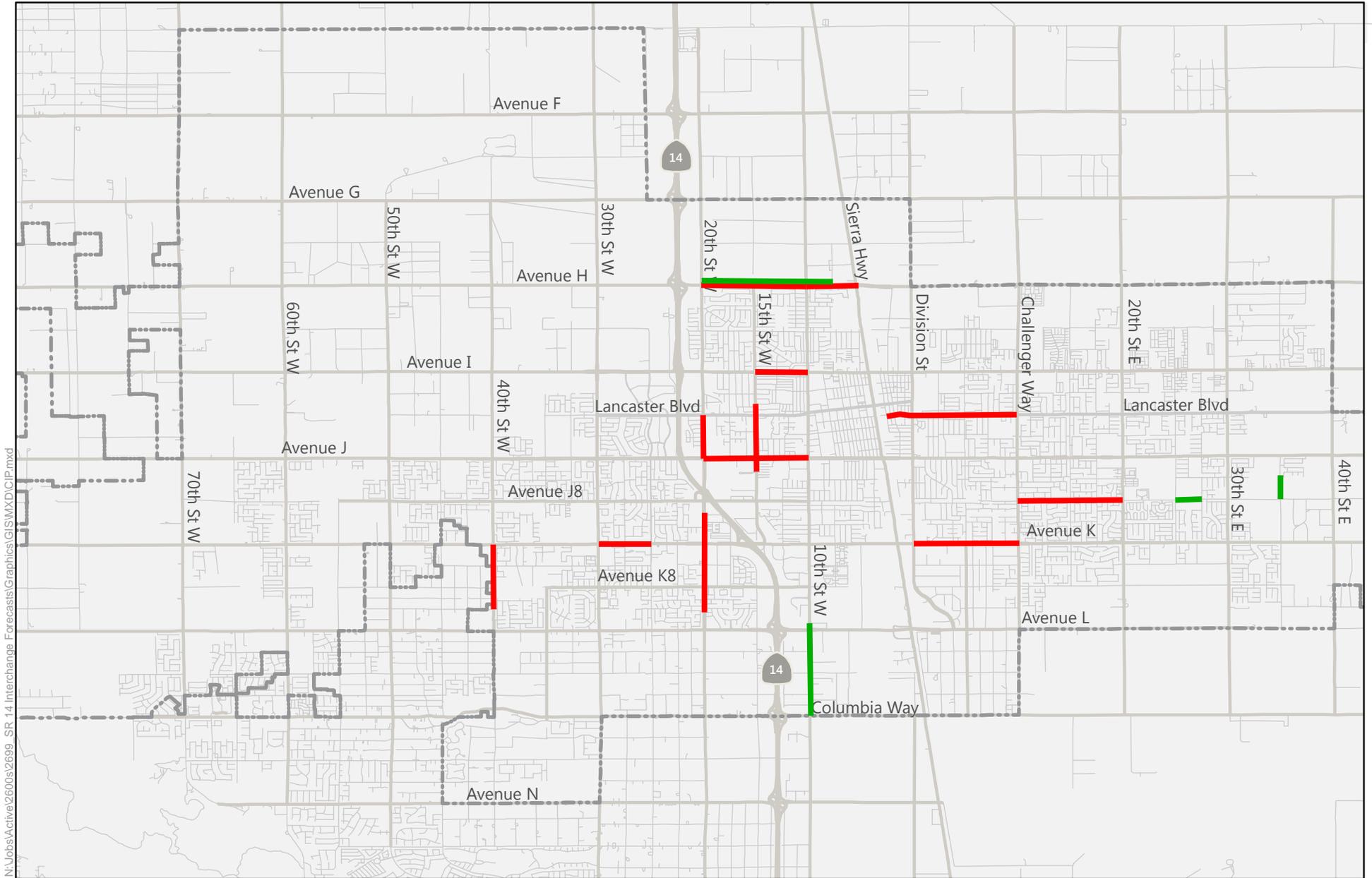


Figure 4. 2035 Network Lanes
 - - - Lancaster Boundary
 — 2035 Network
 0 0.5 1 1.5
 Miles





N:\Jobs\Active\2600s\2699_SR_14 Interchange Forecast\Graphics\GISMXDCIP.mxd

-
-
-
- Roadway capacity to be added
- Roadway capacity to be removed
- Lancaster City Boundary

Figure 6. Lancaster Capital Improvement Projects Changing Roadway Capacity



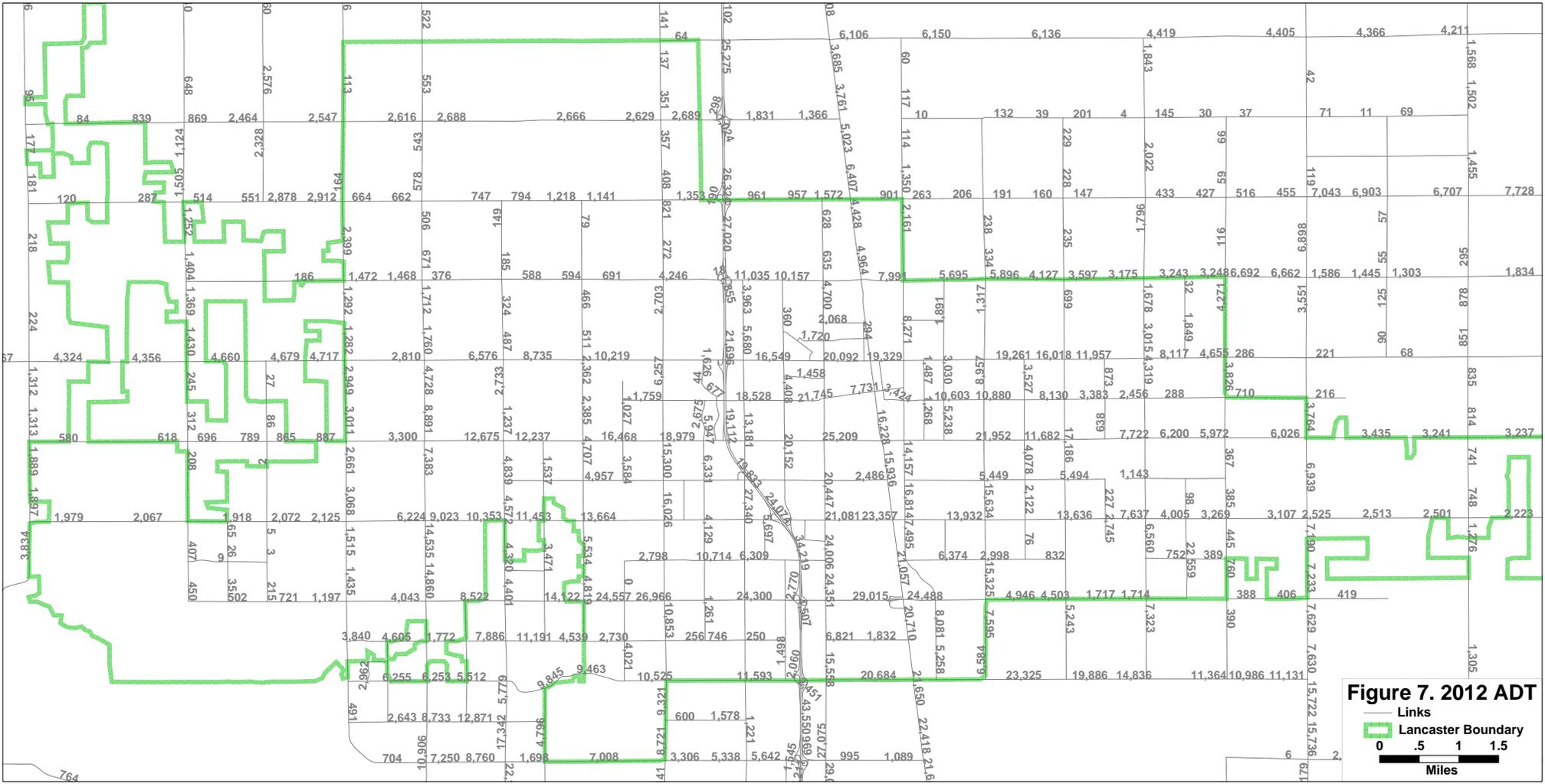


Figure 7. 2012 ADT
 — Links
 — Lancaster Boundary
 0 .5 1 1.5
 Miles

