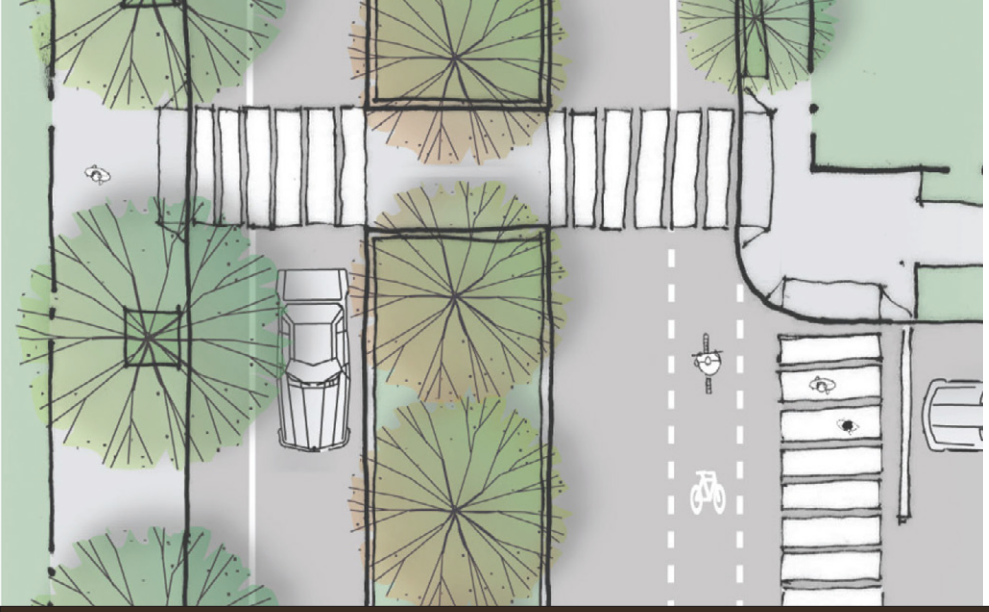

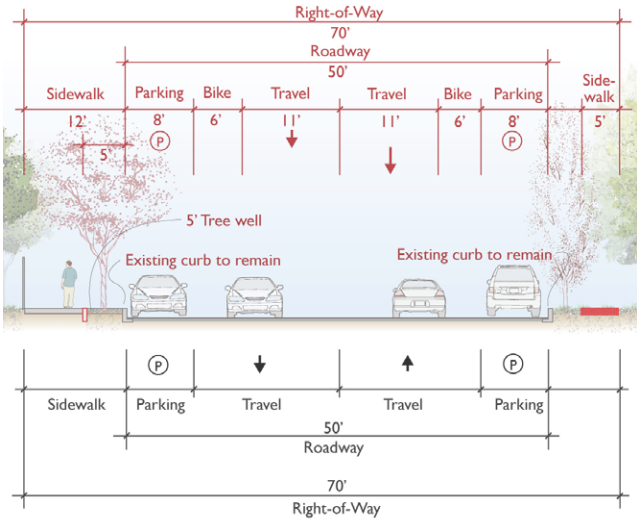

OLD FIG GARDEN

COMMUNITY TRANSPORTATION STUDY

Final Report

Prepared for

Fig Garden Homeowners Association

County of Fresno

City of Fresno

Fresno Council of Government

Prepared by

COMMUNITY DESIGN + ARCHITECTURE

with

VRPA Technologies, Inc.

Davey Resource Group

February 12, 2013

Executive Summary

Introduction

The Fig Garden Homeowners Association, County of Fresno, City of Fresno, and the Fresno Council of Governments (COG) as well as Caltrans District 6 (herein referred to as "Partner Agencies") jointly sponsored the preparation of this Community Transportation and Study for the Fig Garden area. The Fig Garden Homeowners Association initiated the planning process to address local urban design and transportation concerns. These are mostly associated with a continued increase of traffic in and around Old Fig Garden and the planned land use changes along Blackstone and Shaw Avenues along the boundaries of the community.

The study area is bounded by Blackstone Avenue to the east, Shaw Avenue to the north, Shields Avenue to the south, and N. West Avenue to the west and encompasses the County "island" of *Old Fig Garden* under the jurisdiction of the County of Fresno and adjacent neighborhoods located within the City's Council Districts 1 and 7. The entire study area falls within County Supervisorial District 2.

The Old Fig Garden Community Transportation Study recommends a multimodal transportation framework and set of street improvements. These recommendations address pedestrian and bicycle accommodation, traffic calming, safe routes to school, and context-appropriate urban design transitions from the established residential neighborhoods to adjacent major transportation corridors. Recommendations also touch on wayfinding signage, pedestrian-scale lighting and Old Fig Garden's urban forest.

As with other projects funded by Caltrans' Community-Based Transportation Grants, it is hoped that the Study will help stakeholders leverage funds from other program sources. At the same time, integrating Study recommendations into local and regional plans will advance future project activities and contribute to positive local planning practice.

Stakeholder and Community Involvement

The public outreach strategy – developed by the Project Team and endorsed by the Steering Committee – included residents, businesses, commuters, the general public, surrounding neighborhoods, affected public entities, and other stakeholders. It strongly shaped the development of the recommendations and design concepts documented in this report.

The overall goal of the stakeholder and community involvement for the Study was to conduct a comprehensive public engagement process that would effectively capture stakeholder and public input and result in a shared understanding of Study components. The process included the close involvement of the Steering Committee in all aspects of the Study and a variety of public involvement methods intended to keep the public informed of the Study and to invite valuable input from a broad range of stakeholders.

Steering Committee

The Fig Garden Steering Committee was essential in guiding the Old Fig Garden Community Transportation Study through all stages of its development. The committee consisted of sixteen members representing the Fig Garden Homeowners Association, the City of Fresno, Fresno County, and the Fresno Council of Governments as well as other stakeholders, including residents from the City portion of the project area, business owners, and younger residents. Over the course of the project, a total of six Steering Committee meetings were held at key benchmarks and deliverables for the study to provide feedback and guidance for the forthcoming tasks.

The Steering Committee members were vital in generating consensus with respect to the study's recommendations and by providing input from the perspectives of the stakeholders, agencies, and organizations they represented. The Committee ensured that the content of the Study was guided by the input of an informed and active local constituency. For the Project Team, the Steering Committee provided invaluable input on project goals, ideas, and improvement concepts.

Stakeholder Interviews and Survey

The Project Team conducted twenty interview sessions with stakeholders to discuss project issues and needs, as well as a future vision for the study area. The interview results were subsequently used to develop and refine the Guiding Principles for

the project, to identify additional Steering Committee members, and to reconfirm that the Study is addressing issues and concerns of the highest relevance to its stakeholders.

In addition, a general survey was prepared to seek opinions concerning circulation, urban design, and safety issues in the study area. The survey was distributed at the first and second public workshops and provided the Steering Committee and Project Team with feedback from attendees of the workshops. A questionnaire was also developed for distribution at the 2011 Christmas Tree Lane event and for use during the stakeholder interviews. The key results from the interviews and survey highlighted the following key concerns:

- Safety of pedestrians crossing Ashlan Avenue due to high vehicular speeds and lack of crosswalks.
- Lack of pedestrian and bicycling amenities on County Island roads.
- Lack of roadway width on county segments of streets.
- Desire to maintain mature landscape character of the Old Fig neighborhood.
- Reluctance to see extensive changes in land use within the study area.

These concerns became the basis for developing the recommendations for the Study

Public Workshops

Three public workshops were conducted in local area schools during different stages of the study. The first workshop was held at Powers-Ginsburg Elementary School on Thursday, February 23, 2012. This workshop was conducted for the purpose of providing the public with an overview of the Study and a review of existing transportation and urban design conditions in the study area. Participants were involved in providing their opinions on traffic and urban design-related issues as well as providing feedback about a draft vision statement for the project and a set of draft guiding principles developed by the Project Team and Steering Committee.

The second public workshop was held at the same location on Wednesday, May 23, 2012. This workshop was conducted for the purpose of presenting the public with draft recommendations and treatment options related to the study area circulation system (roadways, bikeways, and pedestrian facilities), safe routes to school, traffic calming, and other issues affecting the area. Attendees were asked to provide specific feedback about optional design concepts presented by the Project team for City and County segments of Ashlan Avenue, Fruit Avenue, and Palm Avenue. This feedback was again solicited through a polling exercise that provided the Project Team with clear information about the preference of those who attended the workshop.

The third public workshop was held at Wawona Elementary School on Wednesday, September 26, 2012. This workshop presented the public with a comprehensive overview of the draft final recommendations, including the multi-modal transportation framework, preferred design concepts for Ashlan, Fruit, and Palm Avenues, recommended treatment options for the accommodation of non-motorized travel on local streets identified as pedestrian and bicycle priority streets, and recommended traffic calming measures for neighborhood streets. Next steps for the implementation and funding of the recommended improvements were also discussed. Finally, the workshop presented recommendations for urban design transitions related to future development along Blackstone and Shields Avenues.

Existing Conditions

The existing character of the Fig Garden study area is a result of the area's history as well as several factors within and outside the study area. The architectural landscape of the Fig Garden area is diverse, from houses on one-acre lots along Van Ness Boulevard to more modest homes and clustered low rise apartments within the boundaries of the study area. This diversity of building stock is tied together by two important landscape features: the canals which wend their way through the study area and the mature landscaping. The Fig Garden area is also historically influenced by the Santa Fe rail line that preceded the development of the residential neighborhoods. The rail line cuts diagonally through the study area, and acts as a distinct boundary between the older neighborhood in the County and the newer neighborhoods that were developed as part of the city. Old Fig Garden has recently been declared a Historic District by the County of Fresno.

The study area's distinct identity is the distinctive foliage and rural character of the streets within the County Island. The historic tree plantings along streets, and the privately managed, landscaping within the public right-of-way (ROW) are highly cherished by residents and visitors. Many of the streets' historic planting of specific tree species have created unique identities for segments or entire streets.

The existing road network is based upon a grid pattern, but the canal and the rail line break connectivity across local streets and disrupt several east-west connections (such as Dakota Avenue). This results in heavier traffic volumes on Ashlan Avenue. The traffic on Ashlan are further affected by the current designation of the street as an arterial street in the city, with access to State Route 41. This heavy volume of traffic causes a constant stream of vehicles between Palm and Maroa Avenues, where the right-of-way is most constrained. The bottleneck makes it difficult for pedestrians, bicyclists and vehicular cross traffic to find opportunities to safely cross Ashlan Avenue. This condition effectively divides the Old Fig area into two where

residents will often take circuitous routes to get across Ashlan Avenue. The high volumes on Ashlan also spill on to Gettysburg Avenue, which also has a constrained right-of-way, making it unsafe for pedestrians and bicyclists.

The lack of sidewalks and bicycle amenities also impact access for residents to transit, schools and community activity centers such as the Fig Garden Swim and Racquet Club or the Fig Garden Shopping Center on the north end of the study area. It also upends the connectivity of bikeways that would have continued on to other parts of the city (See Figure I.1).

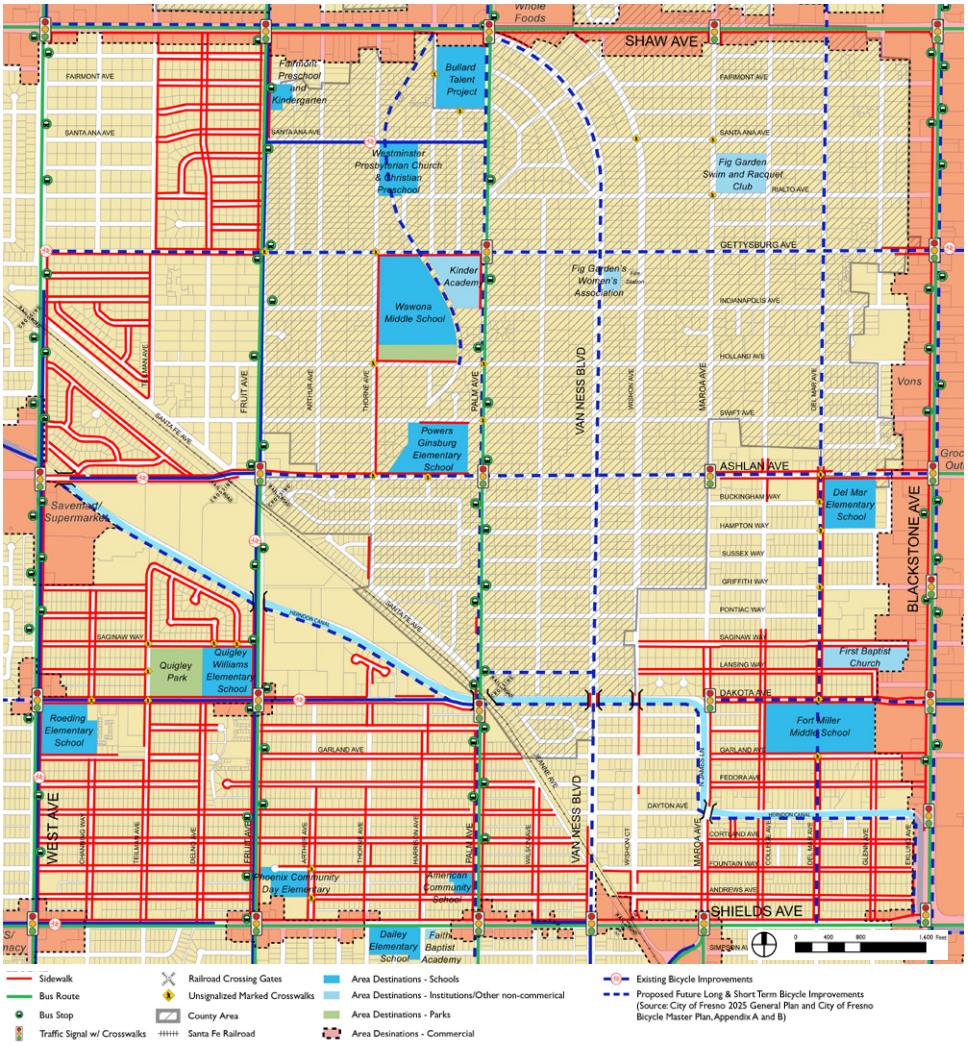

Figure I.1: Existing Pedestrian, Bicycle, and Transit Facilities

Current Policy Framework

The City of Fresno is in the process of updating its General Plan. The Plan will likely intensify the land uses along the commercial corridors of Blackstone and Shaw Avenues along these corridors. In the draft General Plan Update, the parcels within the study area along these corridors are classified as Regional or Corridor/Center Mixed Use. These designations will allow for a mix of residential and non-residential development. The Regional Mixed Use designation is limited to the parcels along Blackstone Avenue south of Ashlan Avenue. Parcels along Shaw Avenue, and on Blackstone Avenue, north of Ashlan Avenue, are designated as Corridor/Center Mixed Use.

For residential parcels in the neighborhoods beyond the corridors, the General Plan Update maintains the existing zoning classifications, indicating the assumption that the City does not foresee any significant change in the uses within the study area. Similarly the County's planned land use map in its existing general plan document does not show any significant changes to existing uses within the County island areas within the study boundary.

Plans for future improvements to transportation facilities are guided by the Circulation Element of the General Plan for each agency. This Study took into consideration the Circulation Elements of the General Plans of the City and the County.

The Old Fig Garden Transportation Study will help inform the ongoing update of the desire of the residents with regards to the categorization of their streets in the overall hierarchy of citywide street classifications. It will also be crucial in informing the development of zoning ordinances for the revitalization plans along the arterial corridors, making sure that transitions into the neighborhood are appropriately done, and help preserve the distinct character of the Old Fig neighborhood.

Key Identified Issues

Based on discussions with stakeholders, and field reviews of the study area several key issues were identified that reflect concerns of residents, city and county agencies, and other social and business stakeholders. These included the following:

- Various issues related to pedestrian safety and auto travel along Ashlan Avenue and its cross streets.
- Potential conflicts between auto traffic, bicyclists, and pedestrians on many study area roadways, particularly County roads with no sidewalks or bicycle facilities.
- Pedestrian connectivity to schools, community amenities, and bus stops is significantly fragmented, making it unclear for vehicular and non-vehicular users which streets to use.
- In the County Island, the street right-of-way is constrained by private landscape extensions, limiting space to separate modes of travel.
- Seasonal use of Van Ness Avenue for the Christmas Tree Lane event, including traffic congestion related to drive nights and available parking facilities and associated activity related to walk nights.
- The Herndon Canal and the Santa Fe rail line are significant barriers within the area. They are also informally used by pedestrians and bicyclists to travel along.
- Discontinuity of bikeways within the study area, and, the challenge of retrofitting existing high traffic volume, narrow streets with bike lanes.
- There are significant intensifications of commercial and residential activity planned along the arterial corridors. The intensification would impact the adjacent residential properties, as well as, access to, and parking in the neighborhoods.

Overall Vision and Guiding Principles

Expanding on the initial draft of the vision statement included in the request for proposals for this project, the Steering Committee, with assistance from the Project Team and confirmation (through polling at Workshop #1) by the general public developed the following overall vision for the Study:

> *"The Fig Garden community, bounded by Blackstone, Shaw, Shields, and West Avenues, will have harmonious connections and transitions between the residential buildings and streets in its historic neighborhoods and future development along the growing corridors on its boundaries. Fig Garden residents envision safe and secure movement and access for pedestrians and bicyclists within their neighborhoods, to schools, and to nearby commercial areas. The recommendations for transportation and urban design improvements included in the Fig Garden Study will respect and enhance the community's architectural and landscape heritage."*

In addition to this broad vision statement, Guiding Principles were developed that set out in greater detail what the community wishes to achieve through the planning process. A set of such guiding principles was developed by the Steering Committee with assistance from the Project Team. They were then presented to the larger community during Workshop #1, where attendees indicated their level of support for each guiding principle in a polling exercise. A full overview of all supported guiding principles is included in Appendix A. They included:

- Balancing the needs of pedestrian and bicycle travel with automobile travel.
- Identifying safe routes to neighborhood schools.
- Utilizing way-finding signs to direct traffic.
- Addressing issues with regards to Christmas Tree Lane.
- Addressing transitions from the transportation corridors into the residential neighborhoods.
- Developing recommendations to maintain and enhance the urban forest.
- Preparing a historic and architectural heritage context for the Fig Garden community.

The principles were used during the development of design concepts and recommendations for transportation improvements and urban design transitions.

Recommendations

How Recommendations Were Developed

The Project Team developed its recommendations based on findings from the review of existing conditions, input from the Steering Committee, and stakeholder input received throughout the public outreach process (see Appendix C). In particular, the three public workshops and the feedback from the Steering Committee provided the Project Team with important suggestions and input for the development of preliminary recommendations for improvements.

The recommendations were developed in order to address the major issues and needs raised during the early stages of the project, which included increased pedestrian and bicycle safety; safe access to transit; safe access to schools; reduction of automobile speeds through the area, and; the moderation of the attractiveness of Ashlan Avenue for cross city automobile traffic.

Rather than suggesting spot-improvements in a few locations, the Project Team recommended that the identified transportation issues be solved through an approach that comprehensively addresses the safety and comfort needs for all modes of transportation in the study area. The concept of network-based, multi-modal transportation improvements is such a comprehensive approach and often also referred to as "complete streets". Under this approach, the safety, comfort, and mobility needs of all types of travelers are balanced and improvements that create this balance are considered accordingly.

Overall, the development of concepts and recommendations for improvements that address the transportation issues raised by the Fig Garden community followed the following three major steps:

1. Develop a multi-modal transportation framework that provides better pedestrian and pedestrian and bicycle connectivity throughout the Fig Garden Community and identifies pedestrian and bicycle priority streets, streets with importance to transit, and streets with importance for automobile access to local destinations and travel through the area.
2. Identify, through conceptual designs, how pedestrians and bicyclists – or both – can be safely accommodated on streets designated in the framework as pedestrian priority streets or multi-modal streets (streets that accommodate pedestrian, bicycle, and automobile).
3. Address how travel behavior of drivers on pedestrian and/or bicycle priority streets or multi-modal streets can be modified through traffic calming measures to balance the safety and comfort needs of all users of the street.

Step 1: Fig Garden Multi-modal Framework:

The intent of the multi-modal transportation framework is to clearly outline the separate network layers for pedestrians, bicyclists and automobiles in order to identify key streets that need to be improved in order to achieve the desired multi-modal connectivity and accessibility as well as identified safety and comfort needs for pedestrians and bicyclists in the study area.

An overlay of all routes identified (See Figure I.2) as important for each individual mode (pedestrian, bicycle and automobiles) allows the identification of those routes that are of high importance for all three modes (Multi-modal) versus those that may be of high importance for only one or two modes (pedestrian or bicycle priority streets). The network of streets identified as priority streets for bicycle travel responds to the larger city connectivity as developed under the Bicycle Master Plan. It attempts to provide for both local, casual bicycle riding and regular commuter bicycling. The route network therefore provides access to community destinations on local streets as well as along City and Local Connectors streets. Where there are right-of-way constraints adjacent streets are identified for safety.

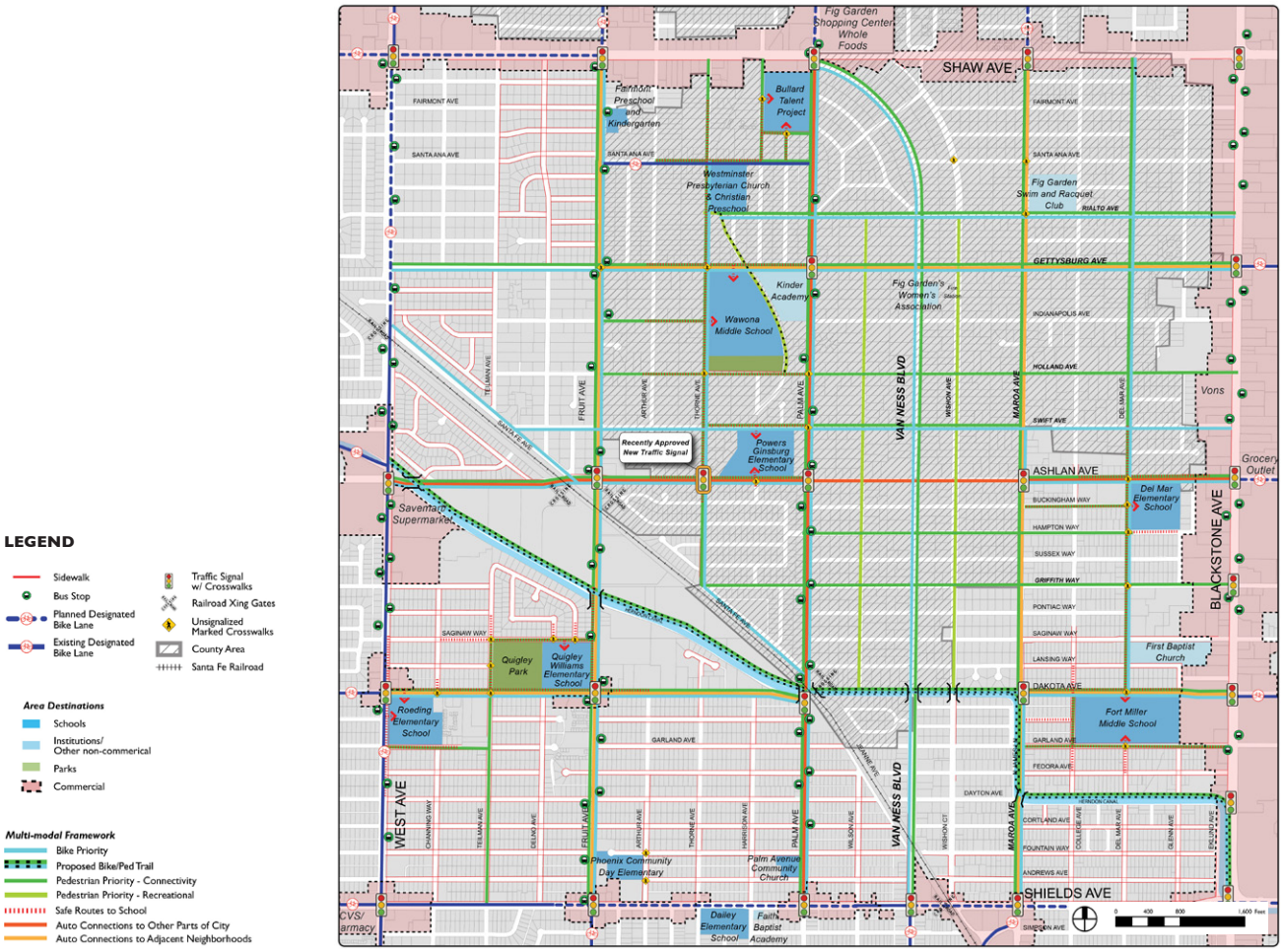

Figure I.2: Preferred Conceptual Multi-modal Transportation Framework

Step 2: Street-specific Improvements and Alternative Public Improvement (API) Standards

After establishing the framework of pedestrian and bicycle priority streets as well as (multi-modal) streets slated to balance the accommodation of all three modes, the Project Team developed improvement concepts for how to accommodate safe and comfortable pedestrian and bicycle travel along multi-modal streets with higher volumes of traffic, as well as for neighborhood streets with bicycle/pedestrian priority street status. Design concepts were also developed for calming vehicular traffic as well as enhanced pedestrian and bicycle safety at crosswalks. The detailed street specific recommendations can be found under Section 5.1.3 of the study document. It should be noted that all concept designs presented in this study require further design development tailored to each street or street segment targeted for improvements. This includes the incorporation of applicable code requirements into the increasingly detailed design plans.[1]

The street specific recommendations address key streets such as Ashlan, Palm, Fruit, Dakota, Maroa, Gettysburg and Van Ness Avenues. Beyond these streets the recommendations are provided based upon the classification of streets as a pedestrian priority street; a bicycle priority street, or; as both. The recommendations largely reflect the community preference from several options presented to them at the second public Workshop. However, some of the recommendations have been modified to address applicable code requirements, and conditions required by both the City and County Public Works departments.

Ashlan Avenue

There are five distinct segments of Ashlan Avenue within the study area. Preferred design options for each segment seek to capitalize on existing roadway infrastructure, provide for additional pedestrian and bicycle infrastructure, and maintain the neighborhood character, particularly the tree foliage. The five segments and their specific preferred design alternatives have been developed with consideration to the following strategies to improve the safety and traffic volumes:

- Within the most constrained area between Palm Avenue and Maroa Avenue, short median islands with pedestrian refuges are recommended (see Figure I.3). These short median islands will be located only at intersections and will provide a refuge area for pedestrians and bicyclists crossing Ashlan Avenue.

[1] *This includes the consideration of applicable City and County street design standards and details, the State of California Department of Transportation Highway Design Manual, California Manual for Uniform Traffic Control Devices (CAMUTCD), Fire Code, and Federal ADA and California Title 24 Standards to name just a few.*

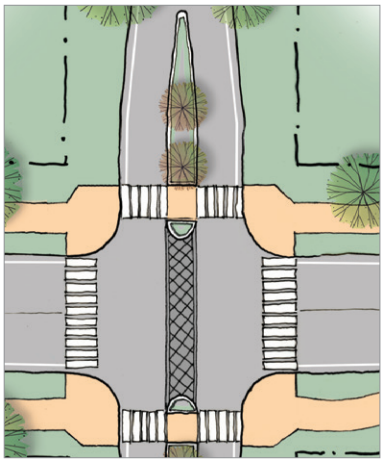

Figure I.3: Ashlan Avenue Between Palm and Maroa Ave. - Short medians & pedestrian refuges

- The city is considering re-classifying Ashlan Avenue within the study area as a Scenic Collector. Therefore, it is recommended that Ashlan Avenue be reduced to one lane of traffic in each direction of travel in order to make this roadway segment more consistent with the constrained segment in the middle of the study area.
- Similarly, on the east side of the study area between Maroa Avenue and Blackstone Avenue, it is recommended that Ashlan Avenue be reduced to one lane of traffic in each direction of travel.
- Six-foot bike lanes and five-foot pedestrian paths (sidewalks in the city) are recommended on Ashlan Avenue with the exception of the segment between Palm and Maroa due to the existing constraints in the right-of-way.

Palm Avenue

Palm Avenue provides important north-south connections to other parts of the city. The preferred design concept therefore addresses the need for improved pedestrian infrastructure by proposing the construction of a five foot wide pedestrian sidewalk along the street segment. Input gathered from the community indicated that most desired minimal intervention on Palm Avenue with the exception of improved sidewalk consistency and improved access to transit stops.

- It should be noted that the Fresno Bike Master Plan recommends a Class II bike lane for this segment of Palm Avenue. Based upon that recommendation, an alternative that included a recommendation with bike lanes was presented for consideration at the second community workshop. That alternative was eliminated from consideration for the time being due to concerns that the reduction in the number of lanes from four to three (road diet), necessary to accommodate bicycle lanes, was not acceptable as long as existing and projected traffic volumes are above 20,000 average daily trips (ADT). This is consistent with the existing City of Fresno Department of Public Works' policy of considering road dieting only for streets below 20,000 ADT. Should the policy change or the daily vehicular trips get reduced below 20,000 ADT, the addition of bike lanes within the existing roadway should be considered.

Fruit Avenue

The Fig Garden transportation framework identifies Fruit Avenue as a combined bike and pedestrian priority street. As such, design recommendations seek to incorporate bikes and pedestrians into the overall street design. The preferred recommended design concepts for Fruit Avenue address the two segments.

- This northern segment of Fruit Avenue has a narrower public right-of-way width as compared to its southern counterpart, south of Ashlan Avenue. The west side of the street, located in the city, has a consistent length of curb and intermittent sidewalks. The eastern edge, as part of the county, is similar to the conditions along Palm Avenue. Landscaping and other private amenities placed in the area between the pavement edge and the property line create a discontinuous and obstructed pedestrian environment that does not meet ADA standards. The improvements recommended for this street include installing a five-foot sidewalk next to the existing curb, and a six-foot wide bike lane in the roadway on the west side. On the east side, an installation of an eight-foot wide multi use path on the eastern side that avoids mature landscaping would allow for bicyclists and pedestrians to travel along the county side.
- It should be noted that the multi-use path on the east side of Fruit Avenue is the result of a compromise based on the community's desire to maintain existing landscaping in the public right-of-way, (resulting in the meander), and the county's reluctance to support the elimination of on-street parking at this time. Should a removal of on-street parking become a possibility in the future the concept alternative presented in Appendix D (Option 3 on page 46.), could be considered. This alternative includes two buffered bicycle lanes.

The southern segment of Fruit is wider in width and serves a broader range of residential types and uses. Based on input from the community, minor improvements are recommended for this segment as it already incorporates multiple modes and is efficient in handling existing and projected traffic volumes. The improvements include narrowing of the vehicular travel lanes, and adding curb extension at intersections for safer pedestrian crossings.

Gettysburg Avenue

Gettysburg Avenue serves as a neighborhood connector and combined bike and pedestrian priority street. It experiences a wide range of vehicular traffic volumes with different design recommendations addressing this. A threshold of 3,500 average daily traffic (ADT) is considered when looking at how the street is shared among modes. Two segments were identified according to ADT volumes; those that are equal to or above 3,500 trips, and those that are below 3,500 trips.

Figure I.4: A 'sharrow' symbol used to indicate a shared travel lane (image: Flickr user - drdul)

The western segment of Gettysburg terminates at N. West Avenue and lies within the City limits. It carries less than 3,500 ADT. On streets with an ADT of less than 3,500, the travel lanes will be narrow to 10 feet. Bicycle travel can be accommodated through striping travel lanes as shared between automobiles and bicycles. The symbol that is applied to the pavement at regular intervals is called a "sharrow" (see Figure I.4). The intention of these symbols is to clearly indicate for drivers that the travel lane has to be shared with bicyclists. The majority of this segment of Gettysburg lies within the County Island and does not have sidewalks or curbs. It carries a volume of traffic greater than 3,500 ADT, necessitating greater mode separation and attention to traffic calming. In an effort to retain as much of the existing landscaping and provide pedestrian circulation, a separated pedestrian pathway is being proposed to maintain walking pathway continuity of the western segment of Gettysburg. The roadway would be restriped to narrow the travel lanes to 10 feet each way and an addition of six foot wide bike lanes on the edges.

Dakota Avenue

Dakota Avenue should be a half-mile neighborhood connector street, but due to the Herndon Canal it is disjointed and impedes an additional east-west connection that could otherwise be made across the study area. It also carries traffic higher than 3,500 ADT on both segments; therefore the preferred improvements include completion of sidewalks and incorporation of bike lanes along the heavy traffic segments. Future detailed studies are required to determine the best way accommodate the bicycle lanes envisioned by the Fresno Bicycle Master Plan through the narrow (60-foot) segment of Dakota between Maroa and Blackstone Avenues. Here, bicycle lanes can only be achieved by eliminating parking on one side of the street. The application of "sharrows" is not an option due to the ADT of more than 3,500 vehicles, which includes busy traffic during school drop-off and pick-up times at the Fort Miller Middle School.

Maroa Avenue

Maroa Avenue is a street with average daily traffic (ADT) of over 3,500 trips that is often used as a parallel route to Blackstone Avenue. The width of Maroa Avenue is consistent from Shaw Avenue to Ashlan Avenue, where the street has no curbs and private landscaping regularly encroaches onto the public right-of-way. South of Pontiac Avenue, with the street has curbs and sidewalks on both sides. The transportation framework shows the street primarily as a pedestrian priority street for its entire length with small segments as a bicycle priority street. The preferred improvements along the County segment are to narrow the travel lanes to 10 feet, and adding five-foot wide pedestrian meandering paths that consider the existing mature landscaping when being laid out.

Van Ness Boulevard

Van Ness Boulevard has special significance to residents of Old Fig Garden. Its central location within Old Fig Garden neighborhood, its stately residences and historic plantings of large cedar trees make it an ideal street to stroll along. The space for trees and other landscaping between the edge of the pavement and adjacent property lines along Van Ness Boulevard is wider than on other streets because of its 120-foot wide right-of-way. However, the full width is not available to be used for improvements due to the presence of mature trees and other long-standing landscaping as well as fencing, rock features, and other amenities all of which are considered as defining the character of this flagship street or the Old Fig Garden neighborhood and the Christmas Tree Lane event. Due to the strong association of the street with the identity of the Old Fig Garden neighborhood, the community expressed concern about the possibility that improvements could significantly interfere with the character of the street and the setup of decorations during the Christmas Tree Lane event.

In consideration of the community's concerns, the recommended pedestrian and bicycle improvements on this street popular with pedestrians and bicyclists do not include the option of a pedestrian path through the landscaped area with the public right-of-way. The recommended improvements include maintaining the existing roadway width and retain existing private landscape within right-of-way, and preparing detailed, block-by-block design concepts that preserve the existing landscaping and other features to the largest extent possible.

- The recommended improvements include widening narrower roadway segments to be consistent with the prevailing 35 feet width for most of the boulevard's length. The widened roadway would be able to accommodate two seven and a half-foot wide painted pedestrian paths. The installation of vertical delineators, such as a series of six-inch high concrete wheel stops or strips of asphalt, along the one-foot painted stripe of the pedestrian path to provide a buffer against the

adjacent traffic lane and a level of pedestrian safety desired by that meets the ADA requirement for a tactile edge definition for visually impaired pedestrians. The travel lanes would be shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.

- However, input from area residents at the public workshops indicated that the introduction of a curb-like element would require continued efforts to build support among residents for the implementation of this pedestrian safety improvement. Under these circumstances, community and approving agencies could give consideration to an "**initial implementation option**", which would provide for some level of traffic calming and an improved accommodation of bicycle travel. Under this option, the roadway could be restriped with two six-inch wide painted edge stripes to reduce the paved area designated for automobile travel to twenty feet in width (without a painted median stripe) in order to create two seven-foot wide shoulders that can be used by pedestrians.

Pedestrian and Bicycle Priority Streets

The pedestrian and bicycle priority streets identified under the multi-modal transportation framework (section 5.1.2) include streets beyond the specific streets already discussed in the previous sections. Within the County Island[2], streets are typically local neighborhood streets without sidewalks, a low average daily traffic (ADT) volume, and a right-of-way of 60 feet. The pavement width of the existing roadway averages around 24 to 25 feet. This Study recommends that – based on local preference – one of the design alternatives described in the section is applied to those 60-foot rights-of-way without sidewalks that have been identified as a pedestrian priority street, a bicycle priority street, or both. The described design options establish a range of Alternative Improvement Standards that can be applied to any street with similar base conditions. Slight variations in the provided dimensions may be necessary to address location-specific conditions. The improvement standards seek to balance the needs of all users while maintaining the neighborhood character and existing landscaping of Old Fig Garden streets to the greatest extent possible.

The recommended improvements address the project goals of increased pedestrian and bicycle safety while also meeting the requirements of the Americans with Disabilities Act (ADA). These require that a vertical edge be provided as delineation between areas of the roadway used by cars and those safe to use for blind or visually impaired pedestrians. The vertical edge is intended to allow for the detection of the edge of the safe pedestrian area with a cane. A vertical delineation is not required along landscaped areas. For this reason, the recommended design alternatives or standards described in for these streets include two principal alternatives for the accommodation of pedestrians along curbless streets:

[2] *Unincorporated portions of the County within the City limits and under its sphere of influence known as County Island areas.*

1. Designation of a pedestrian area on a portion of the existing or widened roadway through use of paint and a vertical curb (such as a series of wheel stops installed in a line and with breaks to allow for drainage).
2. Construction of one or two, four to five-foot wide pedestrian paths through the existing landscaped setbacks within the public right-of-way.

- Both design approaches establish the level of pedestrian safety desired by the community and meet the ADA requirements discussed above. However, input from area residents at the public workshops indicated that both the introduction of a curb-like element or the loss of existing landscaping would require continued efforts to build support among residents for the implementation of either alternative.
- Under these circumstances, community and approving agencies could give consideration to the "initial implementation option", which would provide for some level of traffic calming and an improved accommodation of bicycle travel.

Safe Routes to School

Many of the sidewalk, path, crosswalk and traffic calming improvements described in this report will provide safety benefits to routes that give access to the many schools in the Fig Garden study area. The improvements will not only increase access and safety for students and parents already traveling to school on foot or by bicycle, but hopefully also encourage increased use of these modes because of the increased safety and convenience that results from the implementation of the recommended multi-modal improvements in the study area. Specific sidewalk and crosswalk and signal improvements have been identified in the vicinity of schools for the purpose of facilitating safe conditions on segments identified as safe routes to school on Figure 5.3 of the report.

Step 3: Traffic Calming and Speed Management

The identification of a street as pedestrian priority street and appropriate spatial accommodation of pedestrians and bicycles are not enough to ensure the desired level of safety and comfort if automobiles are still traveling above the speed limit. Affecting a change in the travel behavior of drivers on pedestrian and/or bicycle priority streets as well as multi-modal streets, such as Ashlan Avenue and Gettysburg Avenue is therefore an important part of the recommended strategy to provide adequate safety and comfort to all users of Fig Garden streets. The Project Team therefore developed a range of traffic calming measures specifically tailored to the Fig Garden Area (see Section 5.1.4 of the report for details), that include textured crosswalks; short landscaped medians at intersections; traffic circles, and other measures. While specific locations were identified for some of the recommended measures, others can be applied over time in order to flexibly address speeding issues as they arise, or are further identified by Fig Garden residents.

Supporting Streetscape Improvements

In addition to the pedestrian and bicycle facilities on the streets within the Old Fig Garden study area, several other streetscape elements facilitate additional safety and ease for residents and visitors in navigating efficiently through the neighborhoods. Pedestrian-scale lighting; wayfinding signage; and continuous and complete street landscaping not only provide additional safety and act as traffic calming measures, but also are crucial to develop or enhance a neighborhood's identity. The study provides recommendations for these supporting streetscape improvements, which include:

- Identifying key streets for installation of pedestrian scale lighting (Section 5.1.5.1 of the report);
- Development of specific way-finding signage for pedestrians, bicyclists, and vehicles;
- Location recommendations for a historic district gateway signage to identify the Old Fig neighborhood within the study area;
- Extending existing rows of trees to the edge of the neighborhood-bounding arterials, and;
- Incorporating trees in traffic calming features like planted median islands.

Trails along Irrigation Canals

As part of the City of Fresno's Bicycle, Pedestrian and Trails Masterplan (BMP), both the Herndon and Enterprise-Holland Canals are identified as planned Class I bike paths. The plan identifies these canals for further detailed study, and recognizes that significant work would need to be done to make them safe for pedestrians and bicyclists to use. While the cost of developing the entire length of the Herndon Canal as a Class I bike path may be prohibitive, the Dakota Avenue segment between Palm and Maroa Avenues, would be a viable segment to develop. It would also help connect the existing pedestrian and bicycle connections along Dakota Avenue, and help complete an important mobility framework connection.

Recommended Land Use and Urban Design Transitions

The current draft of the City of Fresno's 2035 General Plan Update includes plans for the intensification of the Blackstone and Shaw corridors, and potential infill growth at nodes along Shields and West Avenues. These would create several new destinations for residents within the study area and those traveling on these corridors. In this context, Fig Garden stakeholders have concerns over the potential

for cut-through traffic generated by this intensification as well as concerns related to the scale of future development relative to adjacent residential buildings, solar access, yard privacy, and others. The recommendations in the report address these potential issues, and provide a framework for building and development guidelines that would address these issues at a detailed level. This framework can be used to inform the further preparation of new, detailed zoning and design guidelines for development that will be part of the City's continuing work on these detailed aspects of the General Plan Update for these corridors and nodes.

Land Use and Urban Design Transitions

The existing land use transitions along the arterial streets that bound the study area are fragmented with several different conditions. The neighborhoods in the study area are considered by the City as stable uses and city planners do not foresee any likelihood of more intensive development within these neighborhoods. However, the City is looking to intensify uses on the arterial streets, particularly on Blackstone corridor where a bus rapid transit (BRT) system is being planned. Therefore the recommendations in this study are to develop a landuse transition wherein the placement of different uses with the mixed use corridor allow for a transition from heavy retail intensity uses along the corridor to more complementary residential or low intensity commercial uses adjacent to the existing neighborhoods.

The urban design recommendations are complementary to the land use recommendations as they outline design strategies that can be pursued to minimize the physical and visual impact of intensification of uses along the major corridors on the existing neighborhoods. These include identifying controls such as building setbacks, upper floor step-backs; landscape buffers; limiting vehicular access to offsite commercial parking from neighborhood streets, and; streetscape design recommendations that would provide strong visual cues to motorists that they are transitioning into a residential neighborhood. The design transition components are illustrated under section 5.3.2 of the report wherein key built form controls are illustrated, and should be addressed by the City's future building standards for Blackstone and the other arterial corridors that bound the Fig Garden Area.

Implementation Recommendations

The Old Fig Garden Community Transportation Study is a first – but critical – step in a longer project planning and development process required for practically any project that results in improvements located in the public right-of-way of streets. The report provides an overview of the typical project implementation steps for the types of transportation and urban design improvement discussed in this document.

With the completion of this Study, its content will begin to inform City and County policy, such as City and County Land Use, Transportation, and Capital Improvement Plans. It can also serve as a tool to coordinate planning, design, and funding activities between the two jurisdictions as well as the COG and stakeholders in the Fig Garden Community.

Funding Sources

A range of sources are available for the funding of the transportation improvements discussed in this Study Report. These include Federal and State grant programs, City of Fresno Capital Improvement Program, Local tax initiatives, such as Measure C funding, and County of Governments (COG) – includes County/City projects in Regional Transportation Plan and Federal Transportation Improvement Plan. In addition, there may be opportunities to fund some of the less costly improvements through contributions from homeowners associations and local residents.

It is important to understand that in today's funding environment grant programs are typically highly competitive and often tied to specific goals and measurable outcomes as determined by the funding agency or entity. It is therefore important to closely study these criteria in order to gauge the possibility of success. For instance, a significant amount of funds is available for multi-modal and complete streets-type improvements. In this context, it is important to be able to provide the funding agency with documentation of goals and principles, policies, and design concepts that clearly demonstrate that the applicant's desired improvements do match the goals of the funding program.

The report provides an overview of the funding sources currently available to fund the further design and construction of the improvements recommended as a result of the Study.

OLD FIG GARDEN

COMMUNITY TRANSPORTATION STUDY

Final Report

Prepared for

City of Fresno

Prepared by

COMMUNITY DESIGN + ARCHITECTURE

with

VRPA Technologies, Inc.

Davey Resource Group

February 12, 2013

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Table of Contents

1. Introduction 1

2. Stakeholder and Community Involvement 3
- 2.1 Steering Committee 3
- 2.2 Community Participation 4

3. Existing Conditions Summary 21
- 3.1 A Brief History 21
- 3.2 Land Use and Urban Design 22
- 3.3 Transportation 34

4. Overall Vision and Guiding Principles 49
- 4.1 Community-Supported Guiding Principles 50

5. Recommendations 55
- 5.1 Transportation 55
- 5.2 Assessment of Traffic Impacts of Recommended Improvements 146
- 5.3 Recommended Land Use and Urban Design Transitions 148
- 5.4 Implementation and Funding 156

Acknowledgements 163

Appendix (contained within separate document)

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1 Introduction

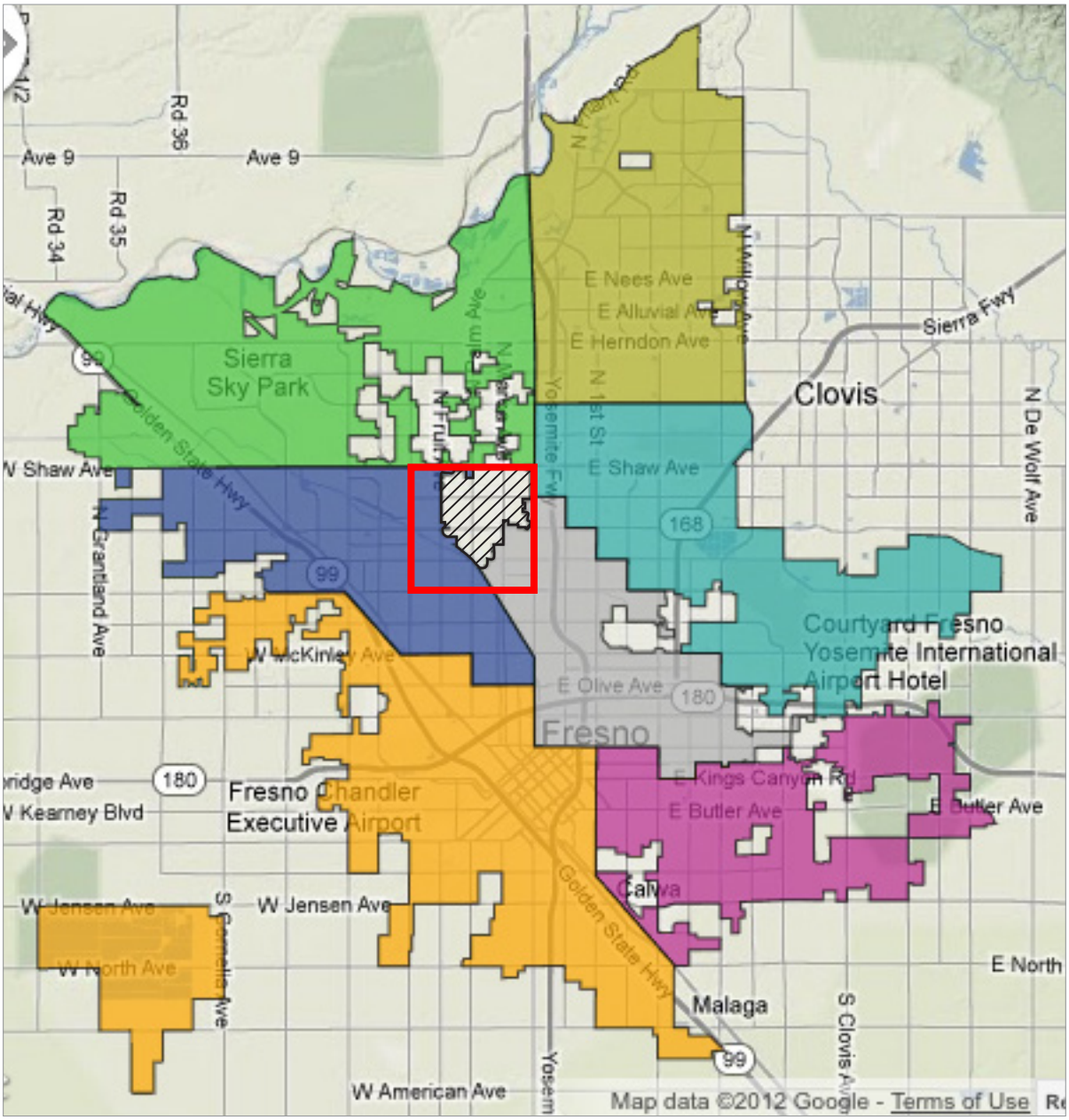
The Fig Garden Homeowners Association, County of Fresno, City of Fresno, and the Fresno Council of Governments (COG) as well as Caltrans District 6 (herein referred to as "Partner Agencies") jointly sponsored the preparation of this Community Transportation Study for the Fig Garden area. The study area is bounded by Blackstone Avenue to the east, Shaw Avenue to the north, Shields Avenue to the south, and N. West Avenue to the west and encompasses the County "island" of *Old Fig Garden* under the jurisdiction of the County of Fresno and adjacent neighborhoods located within the City's Council Districts 1 and 7 (Reference Figure 1.1). The entire study area falls within County Supervisorial District 2.

The Fig Garden Homeowners Association initiated the planning process documented in this report. The Fig Garden Homeowners Association approached the other Partner Agencies with the desire to address pressing local land use and transportation concerns. The concerns were mostly associated with a continued increase of traffic in and around Old Fig Garden and the planned land use changes along Blackstone and Shaw Avenues along the boundaries of the community. The Homeowners Association's initiative resulted in the joint application by the Association, the City, County, and COG for a grant from Caltrans' Community-Based Transportation Planning Program. This program is specifically geared toward communities that wish to expand transportation choices, increase safety, encourage a healthy lifestyle, foster transit-oriented and mixed-use development, and reflect community values. On August 16, 2010, Caltrans officially awarded the County of Fresno and its sub-recipients a grant of $297,000, with the City in the role of Grant Administrator, and the County of Fresno as the Grant Fiscal Manager..

The resulting Old Fig Garden Community Transportation Study defines a multimodal transportation framework and set of street improvements. These recommendations address pedestrian and bicycle accommodation, traffic calming measures, safe routes to school, and context-appropriate urban design transitions from the established residential neighborhoods to adjacent major transportation corridors. The recommendations also address Old Fig Garden's historic fabric and urban forest.

As with other projects funded by Caltrans' Community-Based Transportation Grants, it is hoped that the Study will help stakeholders leverage funds from other program sources. At the same time, integrating Study recommendations into local and regional plans will advance future project activities and contribute to positive local planning practice.

It should be noted that City of Fresno historic preservation staff is conducting a study of the historic context of the Old Fig Garden neighborhood as part of Caltrans' grant for this Community Transportation Study. This related report is published as a separate document.



source: www.fresno.gov

Council Districts 1 2 3 4 5 6 7

Old Fig Study Area

County Island within Study Area

Figure 1.1: Fresno city council districts

2 Stakeholder and Community Involvement

This chapter of the study report recounts the stakeholder and community involvement process for the Old Fig Garden Community Transportation Study. It also summarizes the input received from the public, stakeholders, and Steering Committee. Readers most interested in the descriptions of the Study's results may want to skip ahead to Chapter 3 and the following chapters.

2.1 Steering Committee

The Fig Garden Steering Committee was essential in guiding the Old Fig Garden Community Transportation Study through all stages of its development.

Steering Committee members were vital in generating consensus with respect to the Study's recommendations. By providing input from the perspectives of the stakeholders, agencies, and organizations they represented, the Committee ensured that the content of the Study was guided by the input of an informed and active local constituency. For the Project Team, the Steering Committee provided important input on project goals, ideas, and improvement concepts as well as tradeoffs between conflicting project objectives.

While the Steering Committee provided comments and input on questions related to existing conditions and issues as well as the development of recommendations for solutions to the identified issues, the final decisions on the endorsement or approval of recommendations related to zoning and development standards, policies, and public improvement standards as reflected in this report, will be the responsibility of the Fresno County Board of Supervisors, the Fresno Council of Governments Policy Board, and the Fresno City Council.

The Steering Committee initially consisted of seven members representing the Fig Garden Homeowners Association (3), the City of Fresno (1), Fresno County (1), and the Fresno Council of Governments (1). The membership was expanded after the first workshop in order to capture the input and perspectives of stakeholders not already represented on the committee, including residents from the City portion of the project area, business owners, and younger residents.

The final Steering Committee consisted of the following members:

- City of Fresno (1 representative)
- County of Fresno (1 representative)
- Fresno Council of Governments (1 representative)
- Caltrans (1 representative)

- Fig Garden Home Owners Association (5 representatives)
- Other project area representatives (7 representatives)

Steering Committee meetings were also regularly attended by representatives from Caltrans District 6, the funding agency for the Study.

Over the course of the project, a total of six Steering Committee meetings were held covering the following major subjects:

- Steering Committee #1: Kick-off Meeting and Site Tour
- Steering Committee #2: Review of Outreach Strategy and Draft Guiding Principles
- Steering Committee #3: Review of input received at Workshop #1 and Discussion of Concept Development
- Steering Committee #4: Review of Street Improvements Concepts
- Steering Committee #5: Follow-up Review of Street Improvements Concepts
- Steering Committee #6: Review of Draft Study Report

2.2 Community Participation

2.2.1 Public Outreach Process

The overall goal of the outreach strategy was to conduct a comprehensive public engagement process that would effectively capture stakeholder and public input, and result in a shared understanding of Study components. The outreach strategy included a variety of public involvement methods that were utilized to keep the public informed of the Study development and to invite valuable input from stakeholders.

The public outreach strategy[1] – developed by the Project Team and endorsed by the Steering Committee – involved a wide range of project stakeholders (residents, businesses, commuters, the general public, surrounding neighborhoods, affected public entities, and other stakeholders). Public involvement was a key component of the Study and strongly shaped the development of the recommendations documented in this report. The Project Team sought stakeholder input early on and throughout development of the Study to gather feedback on Study or subject related issues that needed addressing, draft work products, interpretation of public input, and suggestions for the refinements of Study recommendations.

[1] *The full outreach strategy for the Old Fig Garden Community Transportation Study is a standalone document and not included in the appendix document.*

2.2.1.1 Stakeholder Identification and Interviews

The outreach process focused on the general public and stakeholders, which included the engagement of various public agencies. The first step taken to initiate the public engagement process was to identify the most relevant stakeholders to be interviewed for this Study. The Project Team and Steering Committee jointly developed the following list of stakeholders for the interview process:

- Accessibility Challenged
- Affected Government Agencies
- Apartment Owners Associations
- Bicycle/Pedestrian/Trail Users/ Organizations
- Business Organizations
- Christmas Tree Lane Organizers
- Community-Based Organizations
- Community Service Districts/ Organizations
- Education Providers
- Elected Officials
- Employer/Business Organizations
- Environmental Groups
- Environmental Justice Groups/Organizations
- General Public
- Industry Peers & Associations
- Neighborhoods/Residential
- Non-Profit Groups and Churches
- Commercial & Retail Establishments
- Residents
- Safety and Emergency Service Providers/ Organizations
- Senior Citizen Organizations
- Transit Riders
- Transportation Advocates

Following the identification of relevant stakeholders, the Project Team conducted twenty interview sessions with stakeholders to discuss Project issues and needs, as well as a future vision for the study area. Each stakeholder was provided the choice of participating in the interview session via telephone or email. The Project Team was successful in conducting twenty-seven interview sessions with stakeholders. The findings from the stakeholder interview sessions were summarized and are contained in Appendix C. The interview results were subsequently used to develop and refine the Guiding Principles for the project, to identify additional Steering Committee members, and to reconfirm that the Study is addressing issues and concerns of the highest relevance to its stakeholders.

In particular, each of the study area school principals or vice principals were contacted to:

- Determine their interest in being on the Study Steering Committee or to identify a parent or other school representative that may have interest
- Participate in the stakeholder survey (one principal and a Fresno Unified School District representative did complete stakeholder interviews – reference Appendix C)
- Attend each of the scheduled workshops held over the course of the study

2.2.1.2 Media Relations and Website

The media were informed about the Study to generate interest in the Study and to convey information about the Study and public workshops to the public and stakeholders. News articles were drafted and submitted to the Fresno Bee and Fig Garden Homeowners Association (HOA). Prior to each of the public workshops, public service announcements (PSA) in both English and Spanish were prepared and aired on local radio stations to announce the workshop details.

A Study website was established at *http://www.fresno.gov/oldfig,* which is connected to the main City of Fresno website. The County of Fresno also included a link on their website that diverted users directly to the Study website. All pertinent materials and documents that were developed during the Study were sent to City of Fresno staff for posting to the website so the public could access them. The Study website provided general information and documents, including the Outreach Strategy, Christmas Tree Lane Survey results, workshop presentations, storyboards, and summaries of input received at workshops as well as the draft and final reports. The website address was listed on all workshop invitations. The Project Team also created several social media sites (Twitter and Facebook) for the Study. These, however, received minimal traffic.

2.2.1.3 Transportation and Urban Design Survey

A general survey was prepared to seek opinions concerning circulation, urban design, and safety issues in the study area. The survey was distributed at the first and second public workshops and provided the Steering Committee and Project Team with feedback from attendees of the workshops. Details regarding the survey are provided in Appendix B

A questionnaire was also developed for distribution at the 2011 Christmas Tree Lane event and for use during the stakeholder interviews. The results of this survey (reference Appendix E) were intended to gain a better understanding of issues related to traffic and pedestrian safety during walk nights along the Lane, as well as the majority of nights when vehicles travel the Lane. Chapter Five, Section 5.1.7 provides a summary of survey findings and recommendations for improving traffic conditions and pedestrian safety during the Christmas Tree Lane event.

2.2.1.4 Comment Management

Throughout the public process, members of the public were encouraged to submit written comments. Comment cards were distributed during each of the public workshops with the request for completed cards to be returned to the Project Team. Stakeholders were also encouraged to submit comments and feedback to the Project Team via telephone and email. All recorded written comments and feedback received at each public workshop and throughout the Study process were routinely brought to the Steering Committee's attention and subsequently discussed between members of the Project Team and Steering Committee so that the content of the comments could be duly considered as the Study progressed.

2.2.2 Public Workshops

Three public workshops and one special outreach event were conducted throughout the Study's outreach process. The workshops utilized various public involvement techniques and strategies that together provided a set of hands-on workshop materials and activities and presentations that fostered learning and understanding of the proposed concepts and potential tradeoffs. The workshops also invited conversations about perceived issues and concerns as well as potential solutions and improvement concepts between Project Team members, agency representatives, and engaged community members.

A variety of outreach methods were employed to publicize the workshops. For the first workshop, the Project team sent postcard invitations (in English and Spanish), shown in Figure 2.1 & 2.2. The English postcards were mailed out to every residence and business inside the study area, as well as the immediately adjacent areas. The Spanish invitations were distributed to schools within the study area to be sent home with students and the remainder being available at the school offices.

For the following workshops, the Steering Committee and the Project Team focused mailing invites to previous attendees, and distribution to all businesses located within and adjacent to the study area. In addition, Steering Committee members distributed the invitations to their neighbors as well.

Details related to each of the workshops are discussed below.

You're Invited!

The City and County of Fresno and the Old Fig Garden Home Owners Association invite you to attend the 1st Public Workshop regarding the ***Old Fig Garden Transportation and Land Use Study***. The purpose of the public meeting is to provide an overview of the Study, review existing transportation and urban design conditions found in the Study Area, outline the Study process/schedule, and gather public feedback about what you like about the area, your opinion about traffic and urban design related issues, as well as how you move about the area in your car, as a pedestrian, or as a bicyclist.

What: **Old Fig Garden Transportation and Land Use Study, Public Workshop**

When: **Thursday, February 23, 2012, 5:30pm – 7:30pm**

Where: **Powers-Ginsburg Elementary School, 110 E. Swift Ave., Fresno, CA**

If possible, please RSVP to (559) 269-6703 or gvivian@vrpatechnologies.com. For more information about the Study, please visit www.fresno.gov/oldfig or http://cofinterstage/departmentpage.aspx?id=6030

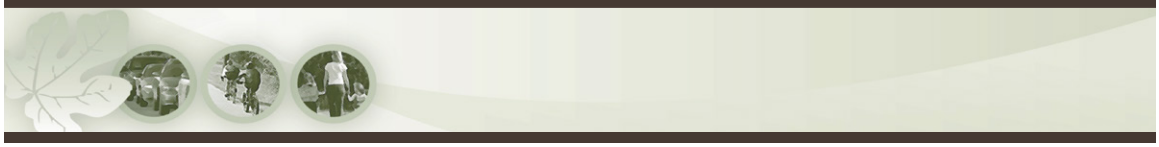


Figure 2.1: Public workshop #1 postcard invitation

¡Esta Invitado!

La Ciudad y el Condado de Fresno y LA ASOCIACION de PROPIETARIOS de OLD FIG GARDEN le invitan a asistir el primero Taller Público con respecto al Transporte y Estudio de Utilización de la propiedad de OLD FIG GARDEN. El propósito de la reunión pública es de proveer un resumen sobre el Estudio, la revisión condiciones urbanas de diseño que encontraron en el Área de Estudio, resumir el proceso/horario del Estudio, y la Reacción pública acerca de lo que usted quiere acerca del área, su opinión acerca de tráfico y urbano, también sóbelo el diseño y asuntos relacionó, también así como cómo se mueve acerca del área en su coche, como un peatón, o como un ciclista.

Que: ESTUDIO SOBRE LA TRANSPORTACION Y EL USO DE LA PROPRIEDAD OLD FIG GARDEN

Cuando: JUEVES, 23 de febrero, 2012 5:30pm – 7:30pm

Donde: Powers-Ginsburg Elementary School, 110 E. Swift Ave., Fresno, CA

Si le es posible, por favor RESPONDA A (559) 269-6703 o gvivian@vrpatechnologies.com. Para mas información sobre este Estudio visítenos a nuestra página electrónica: www.fresno.gov/oldfig o http://cofinterstage/departmentpage.aspx?id=6030

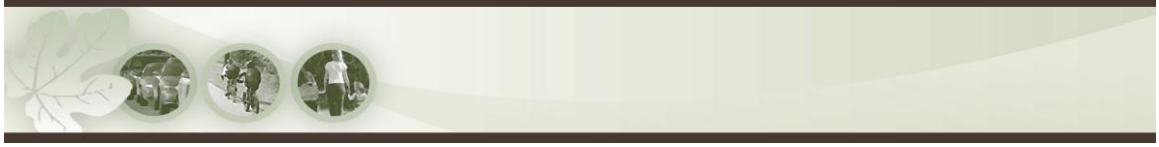


Figure 2.2: Public workshop #1 postcard invitation (spanish)

2.2.2.1 Workshop #1

The first public workshop was held at Powers-Ginsburg Elementary School on Thursday, February 23, 2012 from 5:30pm until 7:30pm. This workshop was conducted for the purpose of providing the public with an overview of the Study, a review of existing transportation and urban design conditions in the study area, and an outline of the Study process and schedule.

During the breakout session for this workshop, attendees were asked to share what they liked most about the Fig Garden area, how they felt about traffic and urban design-related issues, and on what routes they travel about the area in their car, as a pedestrian, or as a bicyclist (see Figures 2.3, 2.4 and 2.5).

Attendees were also asked to provide feedback about a draft vision statement for the project and a set of draft guiding principles developed by the Project Team and Steering Committee. This feedback was solicited through the use of polling equipment or "clickers" that were distributed to all participants. The clickers were used by each individual to indicate agreement or disagreement with a stated guiding principle by selecting one of five buttons: "strongly support"; "support"; "neutral"; "oppose"; and, "strongly oppose". The polling results provided the Project Team with valuable insight into the public's sentiments with respect to a range of project goals and issue areas where potential tradeoffs between competing goals may be easily achieved or more difficult to accomplish (see Section 4 – *Vision Statement and Guiding Principles*).

A Spanish translator was available, refreshments were served and a raffle was held at the end of the workshop to encourage attendees to stay for the duration. In addition, comment cards were provided and contact information was collected for all attendees in order to ensure that they receive future workshop invites and Study materials.

2.2.2.2 Special Outreach Event

Following the first public workshop, the Steering Committee held a meeting to discuss various Study topics, including results from the first workshop. During this meeting, the demographics of the workshop attendees were discussed and it was concluded that they were out of sync with the overall demographics of the study area. It was agreed that additional efforts would be made to increase participation of a broader spectrum of study area residents. To accomplish this, the Project Team conducted a special outreach event at The Parks Apartments on Fruit Avenue on Friday, May 4th, 2012 from 5:30pm until 6:30pm.

Figure 2.3: Study Area Travel Routes - Auto

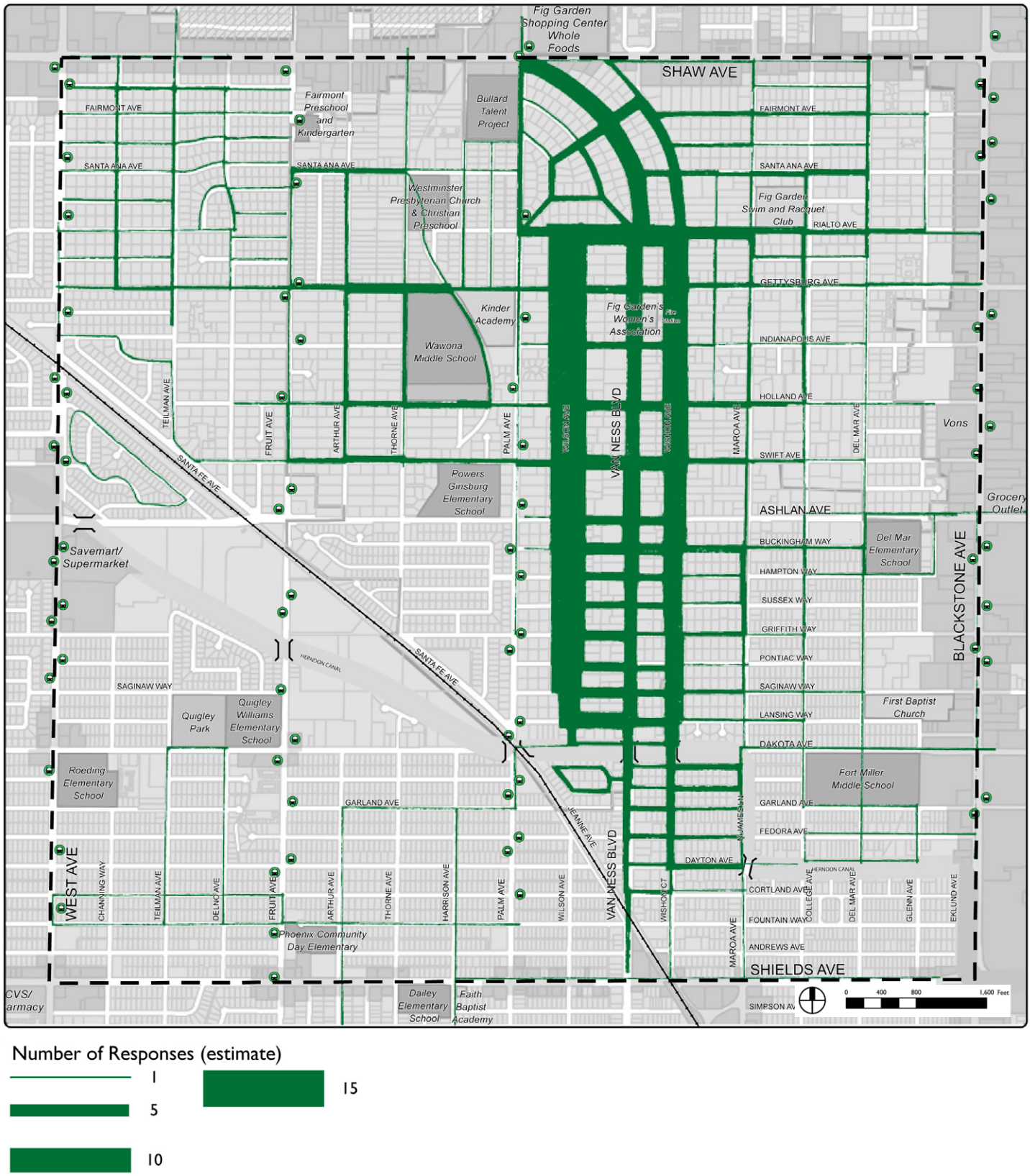


Figure 2.4: Study Area Travel Routes - Pedestrian

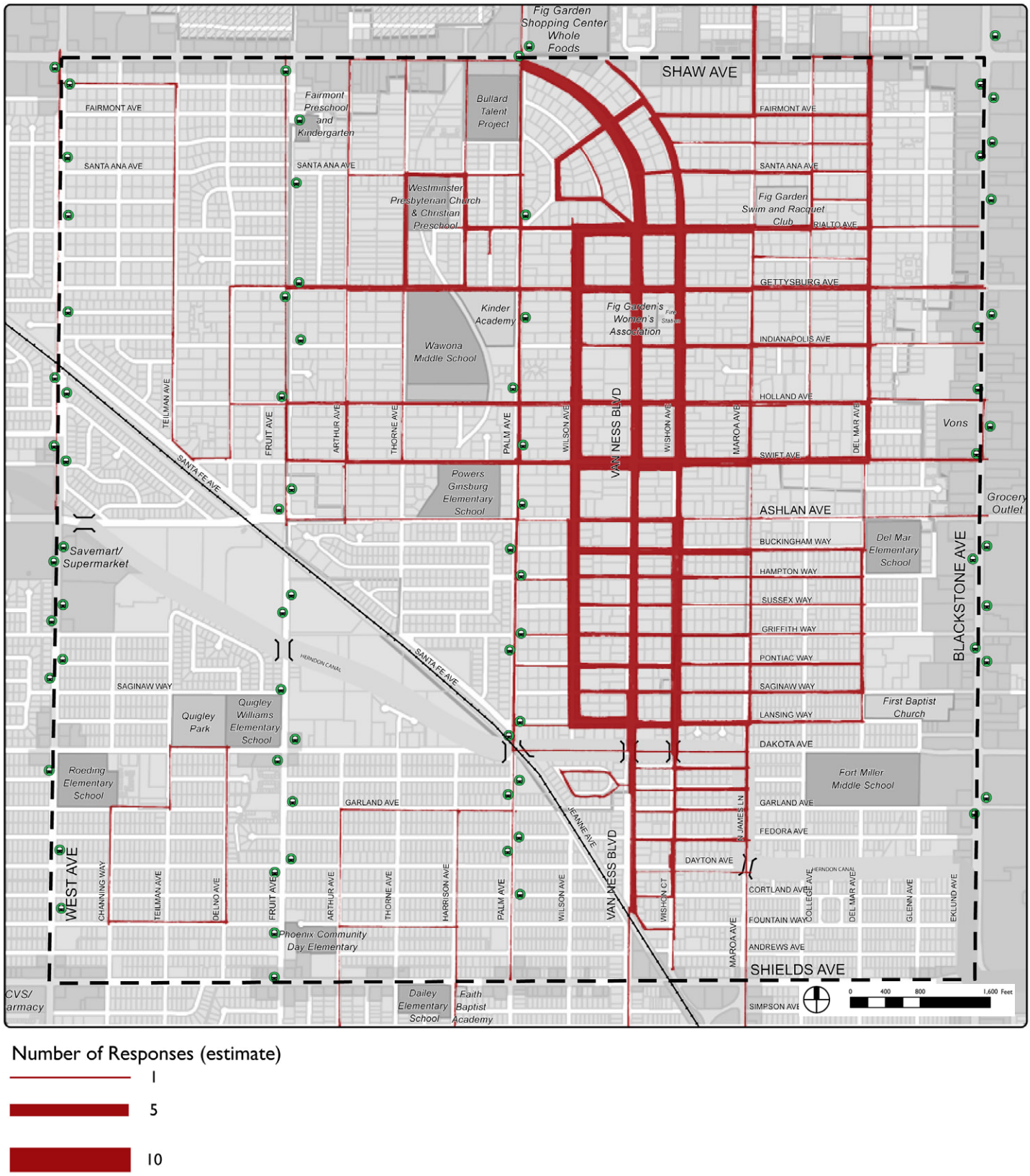
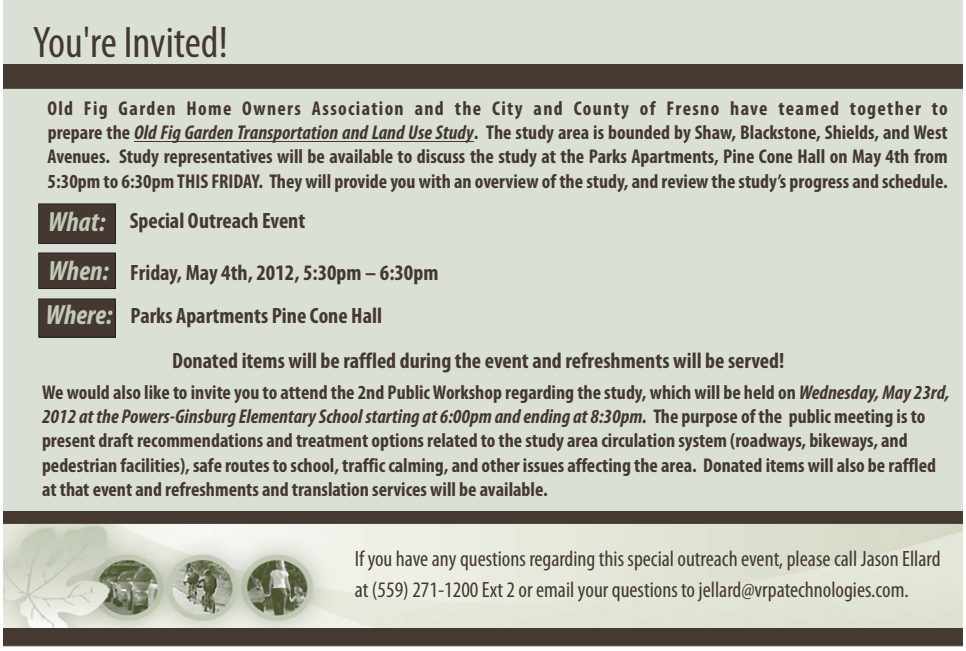


Figure 2.5: Study Area Travel Routes - Bicycle

Prior to this special outreach event, the Project Team distributed flyers (see Figure 2.6) to all residents of The Parks Apartment complex notifying them of the date, time, and event purpose. During the event, Study representatives displayed storyboards and provided Study materials in both English and Spanish. A Spanish translator and refreshments were available, and a raffle was advertised to encourage residents to participate. Although significant efforts were made to engage residents in this special outreach event, attendance was low. A second special outreach event was also scheduled at the Casa Velasco Apartments, however, no one from the complex attended.

Due to the low turnout at the two special events little specific knowledge was gained about the needs of the residents in the two apartment complexes. However, the Project Team continued to provide workshop invitations to the apartment managers in order to encourage future attendance of workshops by apartment residents.



You're Invited!

Old Fig Garden Home Owners Association and the City and County of Fresno have teamed together to prepare the *Old Fig Garden Transportation and Land Use Study*. The study area is bounded by Shaw, Blackstone, Shields, and West Avenues. Study representatives will be available to discuss the study at the Parks Apartments, Pine Cone Hall on May 4th from 5:30pm to 6:30pm THIS FRIDAY. They will provide you with an overview of the study, and review the study's progress and schedule.

What: Special Outreach Event

When: Friday, May 4th, 2012, 5:30pm – 6:30pm

Where: Parks Apartments Pine Cone Hall

Donated items will be raffled during the event and refreshments will be served!

We would also like to invite you to attend the 2nd Public Workshop regarding the study, which will be held on *Wednesday, May 23rd, 2012 at the Powers-Ginsburg Elementary School starting at 6:00pm and ending at 8:30pm*. The purpose of the public meeting is to present draft recommendations and treatment options related to the study area circulation system (roadways, bikeways, and pedestrian facilities), safe routes to school, traffic calming, and other issues affecting the area. Donated items will also be raffled at that event and refreshments and translation services will be available.

If you have any questions regarding this special outreach event, please call Jason Ellard at (559) 271-1200 Ext 2 or email your questions to jellard@vrpatechnologies.com.

Figure 2.6: Special outreach event flyer

2.2.2.3 Workshop #2

The second public workshop was held at Powers-Ginsburg Elementary School on Wednesday, May 23, 2012 from 6:00pm until 8:30pm. This workshop was conducted for the purpose of presenting the public with draft recommendations and treatment options related to the study area circulation system (roadways, bikeways, and pedestrian facilities), safe routes to school, traffic calming, and other issues affecting the area.

During the workshop, attendees were asked to provide specific feedback about design concept alternatives presented by the Project team for City and County segments of Ashlan Avenue, Fruit Avenue, and Palm Avenue. This feedback was again solicited through the use of "clicker" equipment distributed to all workshop participants. The clickers were used by each individual to indicate agreement or disagreement with a presented design concept by selecting one of five buttons: "strongly support"; "support"; "neutral"; "oppose"; and, "strongly oppose". The polling results provided the Project Team with clear information about the preference of those who attended the workshop.

During the breakout session for this workshop, attendees were asked to review the draft multi-modal framework map and indicate agreement or disagreement with which streets were identified as pedestrian and or bicycle priority streets or as streets with importance for all three modes (including automobiles). Participants were also asked to provide feedback on a range of potential traffic calming measures for Fig Garden neighborhood streets (see Section 2.2.4 – *Summary of Workshop and Steering Committee Input*).

A Spanish translator was available, refreshments were served and a raffle was held at the end of the workshop to encourage attendees to stay for the duration. In addition, comment cards were provided and contact information was collected for all attendees in order to ensure that they receive future workshop invites and Study materials.

2.2.2.4 Workshop #3

The third public workshop was held at Wawona Elementary School on Wednesday, September 26, 2012 from 6:00pm until 8:30pm. This workshop was conducted for the purpose of presenting the public with a comprehensive overview of the draft final recommendations, including the recommended multi-modal transportation framework, preferred design concepts for Ashlan, Fruit, and Palm Avenues, recommended treatment options for the accommodation of bicycles and pedestrians on pedestrian and bicycle priority streets, and recommended traffic calming measures for neighborhood streets. The Project Team presented recommendations for urban design transitions related to future development long Blackstone and Shields Avenues.

Finally, a portion of the workshop was dedicated to the discussion of next steps and funding sources for the recommended improvements as well as which parties need to be involved in this process.

Storyboards and a PowerPoint presentation were utilized during this workshop, which also included an "Open House" segment, during which workshop attendees were invited to peruse the storyboards and encouraged to provide comments on

provided flip charts or directly to Project Team members. Questions and comments about the presented material and the project in general were discussed during a question and answer session at the end of the presentation. Upon conclusion of the workshop, "stay tuned" cards were distributed to all attendees and they were encouraged to utilize the Study website or contact the Project Team for additional information about the Study.

2.2.3 Stakeholder Interviews

The Project Team worked with City staff and the Steering Committee to identify key stakeholders in the study area. All key stakeholders identified were contacted by phone by the Project Team in January 2012. In the initial contact, the Project Team provided each of the stakeholders with a summary of the Study and invited them to participate in a stakeholder interview session. Twenty-seven of these individuals graciously gave of their time and knowledge and agreed to participate. They were given the option to complete the interview session by phone or email, with all but one selecting the email option.

In these stakeholder interview sessions, each individual was asked to answer several questions in the Study Process, Public Outreach, and General categories of the questionnaire. Then, depending on which stakeholder category the individual represented, they were asked to answer additional questions related to the respective specific stakeholder group. These stakeholder groups consist of:

- Education Community
- Law Enforcement
- Fire Department
- Fresno County Emergency Services Agencies
- Christmas Tree Lane
- Fresno Irrigation District
- Fresno Metropolitan Flood Control District
- Business Community
- Residents
- Retailers in Fig Garden Village
- Transit Users
- Pedestrian/Bicycle/Trails
- Non-Profit Groups/Churches
- Environmental Justice Groups
- Elected Officials
- Senior Citizen Organizations
- Apartment Owners Association
- Post Office
- Utility Companies
- City & County Services
- Commuters

The Project Team was successful in conducting at least one interview for each of the above stakeholder groups, except for the Fire Department, Fresno County Emergency Services Agencies, Retailers in Fig Garden Village, Post Office, Utility Companies, and Commuters. Stakeholders identified and contacted for each of these groups were either unavailable or declined to participate.

2.2.4 Summary of Steering Committee Process and Workshop Input

2.2.4.1 Summary of Steering Committee Process

Steering Committee Kick-Off Meeting and Tour of the study area:

In their kick-off meeting for the project, the Steering Committee and members of the Project Team:

- Introduced one another
- Discussed the Study, its purpose and objectives
- Listened to a brief history of the study area and background regarding coordination of agency/community resources to make the Study a reality
- Reviewed the Study schedule
- Listened to each Steering Committee members' individual goals for the study
- Discussed site tour logistics and toured the study area
- Discussed the role and purpose of the Steering Committee
- Reviewed the proposed stakeholder and community outreach process
- Reviewed the Draft Guiding Principles for the Study
- Discussed the next steps.

During the bus tour of the study area, Steering Committee members identified key Study issue for the members of the Project Team. Discussed areas of concern included, traffic volumes and safety on Ashlan Avenue, safety at railroad crossings, desired bike-ped pathways along Herndon and Enterprise-Holland irrigation canals, scale of potential future land uses along Blackstone and Shaw, pedestrian safety issues on various neighborhood streets including Gettysburg and Maroa, poor bus stop access, safety issues at school crossings, and a range of other issues and concerns.

Steering Committee #2:

During its second meeting, the Steering Committee discussed the draft Steering Committee Guidelines and draft Outreach Strategy documents provided by the Project Team. Members also discussed the timing and other details of the stakeholder interview process, the Christmas Tree Lane survey as well as the first public workshop. Early consideration was given to the need to expand the Steering Committee membership in order to best represent the range of interests in the study area. The meeting also included a review of an initial draft of the project vision statement and guiding principles. Following the meeting, Committee members provided additional and detailed comments on the latter.

Steering Committee #3

During this meeting, the Steering Committee reflected on the results of the first workshop, such as transportation related issues and concerns raised by workshop attendees and the polling results with respect to the draft vision statement and guiding principles. The Committee also finalized the expansion of the Steering Committee's membership to ensure their participation in all following Committee activities. Following an initial suggestion by Caltrans representatives, the Committee directed the Project Team to conduct two additional outreach meetings specifically geared toward residents of two large apartment complexes located in the project area.

Steering Committee #4:

During this meeting, the Project Team presented the Steering Committee with a broad range of draft design concepts for street improvements and traffic calming measures in the study area. In particular, the Project Team provided alternative cross sections for different segments of Ashlan Avenue, Fruit Avenue, and Palm Avenue as well as alternatives for the accommodation of pedestrians and bicycles on currently curbless streets in the County area.

Committee members discussed and weighed the advantages and disadvantages of each from their respective points of view and interests. A number of concerns were expressed over some of the presented design options and their potential impacts on property owners and existing landscaping, particularly along the segment of Ashlan Avenue between Palm and Maroa. At the end of the meeting, members expressed the need for additional time to fully appreciate the different pros and cons of each option and it was decided to conduct a follow up Committee meeting,

Steering Committee #5

In a follow-up to the fourth meeting, the Steering Committee continued its discussion of concerns and support for previously presented and new design options for Ashlan Avenue, Fruit Avenue, and Palm Avenue. The new options were created by the Project Team to illustrate how some of the initial concerns could be potentially addressed. The meeting resulted in the selection of specific design options and concepts as "preferred" by a majority of Steering Committee members. It was agreed that the Project Team would present all discussed options to the general public at Workshop #2, while also informing the public of which ones were identified by the Steering Committee as preferred.

Steering Committee #6 – Review of Draft Study Report

During this meeting, the Steering Committee provided the Project Team with feedback on the Draft Study Report for incorporation into the Final Study Report.

2.2.4.2 Summary of Workshop Results

The three workshops provided invaluable feedback that was instrumental in the process of developing the recommendations for this Study. The following are summaries of the results from the workshop exercises. The full summaries are available in Appendix B.

Workshop 1

Workshop 1 gave an introduction into existing conditions and provided a draft vision statement for the project. From this vision statement, workshop participants created a series of guiding principles from which design options would emerge. The guiding principles are outlined in Section 4 - *Overall Vision and Guiding Principles*. Polling results for all workshops are located in the Appendix. An additional exercise gave insight into priority streets within the study area. This exercise involved participants creating maps that identified priority pedestrian, bike, and vehicular routes (as shown in Figures 2.3, 2.4, and 2.5). These maps identified key streets possibly in need of infrastructure improvement.

Workshop 2

Based on the comments from the first workshop, sixteen conceptual improvement options for key streets were presented at Workshop 2 and voted upon. Real-time polling on each of these design options was conducted, which allowed for the immediate display of preferred design options for each key street. These results and street-specific improvements are located in Appendix D and Section 5.1.3 respectively. Many of the designs receiving the most positive results did not necessarily follow all of the guiding principles developed in the previous workshop. An example being Ashlan Avenue where dedicated bike lanes were desired for all but the segment between Palm and Maroa Avenues, where constricted space prompted participants to vote against bike infrastructure. A second exercise occurred within breakout sessions where a toolkit of traffic-calming strategies was provided and used by the workshop participants to identify streets, intersections, or other areas that were perceived as needing improvements with regards to slowing traffic. The preferred locations were integrated into the Traffic Calming Treatments – Feature Locations map in Figure 5.19.

Workshop 3

Workshop 3 resulted in feedback on a set of compiled recommendations based on information taken from the polling results of the conceptual improvement options completed in the second workshop

2.2.4.3 Summary of Input from Stakeholder Interviews

- Twenty-seven stakeholders were interviewed on a series of questions about the study area. The interview questions were organized in various categories. All interviewees were asked questions included in the Study Process, Public Outreach, and General categories. The interviewees were also asked a second set of questions which depended on the interviewees' stakeholder group identification. The stakeholder groups interviewed represented the Education community, Law Enforcement, community groups, regional utility districts, residents, businesses, and advocacy groups. The full report on the stakeholder interviews can be found in the Appendix C.
- The key concerns that resonated across the stakeholders were about pedestrian & bicycle safety, and traffic speeds on select streets. In particular the following concerns were collectively raised:
- Lack of safe pedestrian crossing across Ashlan Avenue.
- High volume of traffic on Ashlan Avenue.
- High speed of vehicular traffic on select streets.
- Lack of pedestrian and bicycling amenities on County Island streets.
- Lack of roadway width on county segments of streets.
- Inadequate street lighting on streets and at key intersections.
- Poor pedestrian access to transit stops.
- Desire to maintain mature landscape character of the Old Fig neighborhood.
- Reluctance to see extensive changes in land use within the study area.
- Pedestrian safety concerns around Canals and railway tracks/crossings.

These concerns have been systematically addressed with design concepts and strategies by this Study under the recommendations in Chapter Five.

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3 Existing Conditions Summary

The Fig Garden study area is bounded by major arterial roads, including Blackstone Avenue to the east, Shaw Avenue to the north, Shields Avenue to the south, and West Avenue to the west. The area covers approximately four square miles, nearly half of which is under the jurisdiction of the County of Fresno. The area includes the County "Island" of *Old Fig Garden,* one of the oldest neighborhoods in the Fresno area. The existing conditions are a result of the area's history as well as several factors within and outside the study area. The following sections outline the existing transportation, land use and urban design conditions within the study area.

3.1 A Brief History

In 1910, James Clayton Forkner obtained a one-year option to purchase 6,000 acres of "outlaw land," or "hog wallow" north of the city of Fresno, from the Bullard Company. By 1913, his holdings had increased to 12,000 acres that included most of present-day north Fresno. When Forkner learned that beneath the existing hard pan was soil ideal for growing fig trees, he used dynamite to blast through the hard pan to expose the rich soil below. He also created a system of canals and irrigation ditches, fed by the Kings River, to supply water to the fig gardens that would later give name to today's Old Fig Garden neighborhood and the larger Fig Garden community.

In 1919, Forkner and local farmer, Wylie M. Giffen subdivided a portion of the12,000-acre holdings into the Forkner Giffen Subdivisions No. 1 and 2. The parcels were initially one-acre "suburban" lots and planted with Kadota fig trees. That same year, Forkner, who envisioned a neighborhood with a verdant tree canopy, hired Horace Cotton, a landscape architect from San Francisco, to design the plantings that would line the streets of the Forkner Giffen Tract. Access from this subdivision to downtown Fresno was facilitated through the Fresno Traction Company streetcar line, which ran up the center of the tract and to the San Joaquin River. Today, this neighborhood includes grand homes built in the early 1920s as well as more modest cottages. Known as "Old Fig Garden", the Forkner Giffen Tract is part of a larger County Island which is completely surrounded by the City of Fresno.

The architectural landscape of the Fig Garden area is diverse, from architect-designed great houses on one-acre lots along Van Ness Boulevard to more modest homes clustered along side streets. Building styles range from the earliest Craftsman and Foursquare homes through the entire pallet of Period Revival styles to the modernism of the 1950s up through the most recent in-fill projects. Of additional interest are the numerous adobes throughout the study area, some architect-designed, others built by the homeowners themselves with help from itinerant crews.

This diversity of building stock is tied together by two important landscape features: the canals which wend their way through the study area as well as the mature landscaping. Old Fig Garden has recently been declared a Historic District by the County of Fresno. Please refer to the Historic Study, conducted by City of Fresno historic preservation staff, for additional information about the architectural history of the Old Fig Garden neighborhood.

The Fig Garden area is also historically influenced by the Santa Fe rail line that preceded the development of the residential neighborhoods. The rail line cuts diagonally through the study area, and acts as a distinct boundary between the older neighborhood in the County and the newer neighborhoods that were developed as part of the city.

3.2 Land Use and Urban Design

The Fig Garden study area is bounded by four major arterial roads, Blackstone Avenue to the east, West Avenue to the west, Shaw Avenue to the north, and Shields Avenue to the south. The study area covers approximately four square miles with roughly half of the area under the jurisdiction of the City of Fresno and the other half under that of Fresno County. Old Fig Garden is one of the oldest neighborhoods in the Fresno area. The following sections outline the existing conditions with respect to transportation, land use and urban design conditions in the study area.

3.2.1 Current Planning Framework

The City of Fresno is in the process of updating its General Plan. The Plan will likely intensify the land uses along the commercial corridors of Blackstone and Shaw Avenues, based on the introduction of enhanced transit options (likely Bus Rapid Transit) along these corridors. In the draft General Plan Update, the parcels within the study area along these corridors are classified as Regional or Corridor/Center Mixed Use. These designations will allow for a mix of residential and non-residential development. The Regional Mixed Use designation is limited to the parcels along Blackstone Avenue south of Ashlan Avenue. Parcels along Shaw Avenue, and on Blackstone Avenue, north of Ashlan Avenue, are designated as Corridor/Center Mixed Use. (See Figure 3.1)

For residential parcels in the neighborhoods beyond the corridors, the General Plan Update maintains the existing zoning classifications, indicating the assumption that city does not foresee any significant change in the uses within the study area. Similarly the County's planned land use map in its existing general plan document does not show any significant changes to existing uses within the County Island areas within the study boundary.

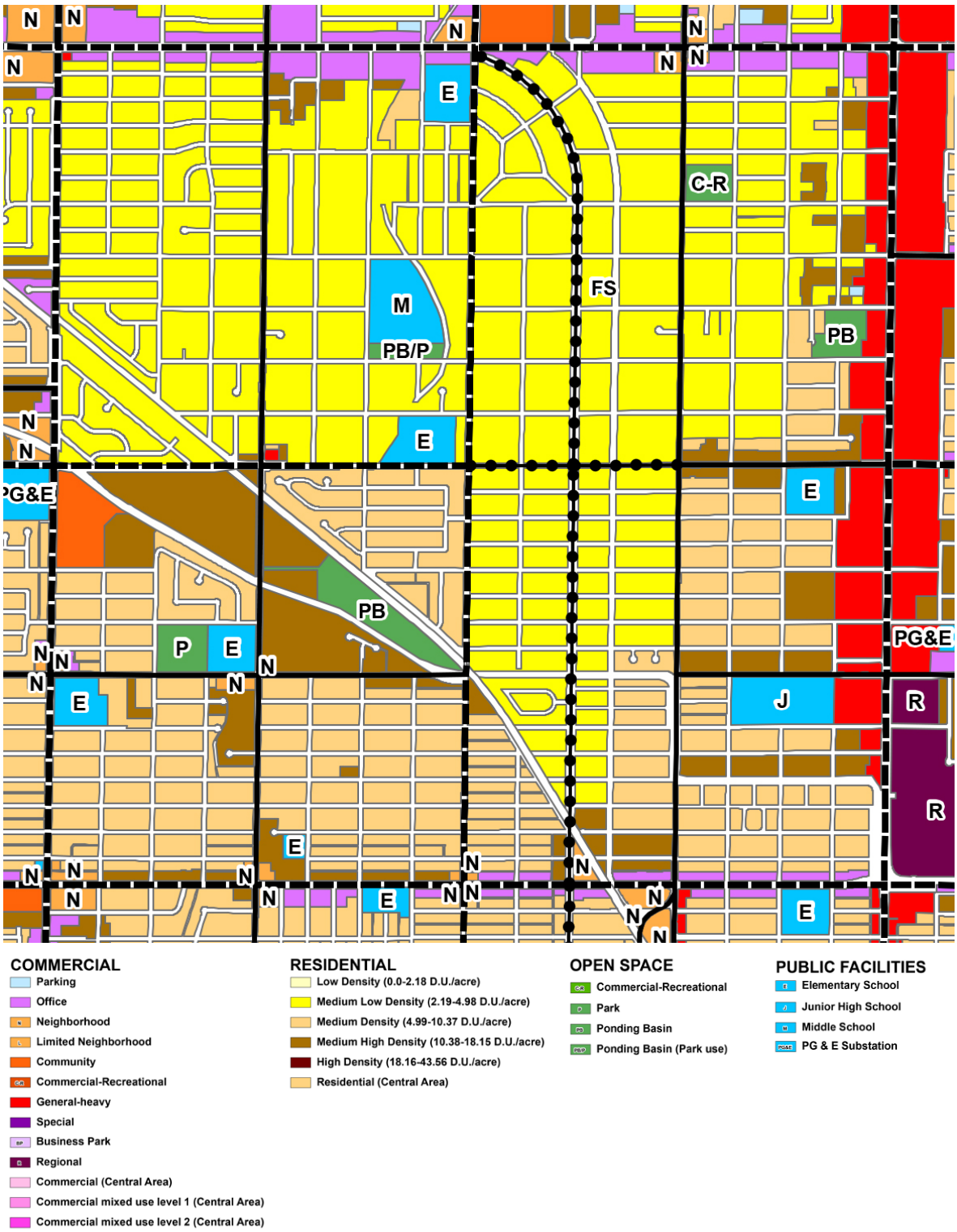


Figure 3.1: City of Fresno 2035 General Plan Update Map

The present General Plan update process has worked closely with residents to revise the community's vision through the year 2035. The update includes several policy and program tools that will guide new development within the City's Sphere of Influence. At the time of writing this report the plan's Environmental Impact Report is being prepared, and the update is schedule to be completed by fall 2013. The Old Fig Garden Transportation Study will help inform the ongoing update of the desire of the residents with regards to the categorization of their streets in the overall hierarchy of citywide street classifications. It will also be crucial in informing the development of zoning ordinances for the revitalization plans along the arterial corridors, making sure that transitions into the neighborhood are appropriately done, and help preserve the distinct character of the Old Fig neighborhood.

One of the critical steps in the project implementation process going forward will be to ensure that the roadway improvements concepts recommended in this study are consistent with the Circulation Elements of the General Plan for the City of Fresno and Fresno County and with the Fresno Council of Governments (Fresno COG) Regional Transportation Plan (RTP). This will be particularly important for Ashlan Avenue. One possible implementation strategy would be to propose some or all of the improvements recommended in the study, while at the same time proposing a revision of the City and County Circulation Elements. An alternative implementation strategy would be to first propose a revision of the Circulation Elements that is consistent with the recommendations of this study and then follow up with implementation of some or all of the individual components of the study recommendations. In either case, revision of the RTP would occur after updating the two Circulation Elements.

3.2.2 Urban Design and Community Structure

The study area's distinct identity is the distinctive foliage and rural character of the streets within the County Island. The historic tree plantings along streets, and the privately managed, landscaping within the public right-of-way (ROW) are highly cherished by residents and visitors. Many of the streets' historic planting of specific tree species have created unique identities for segments or entire streets (see Figure 3.2).

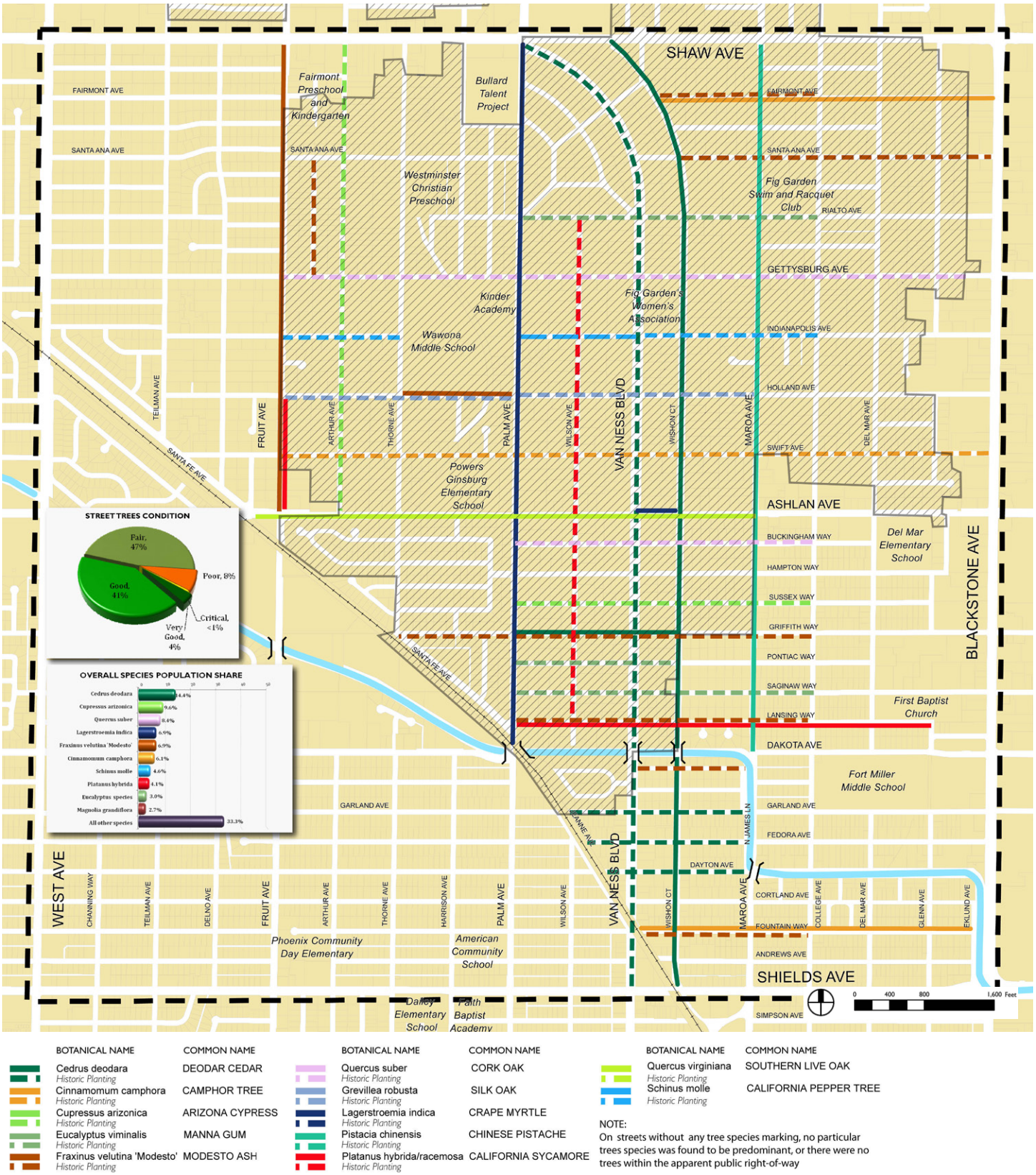


Figure 3.2: Predominant tree species

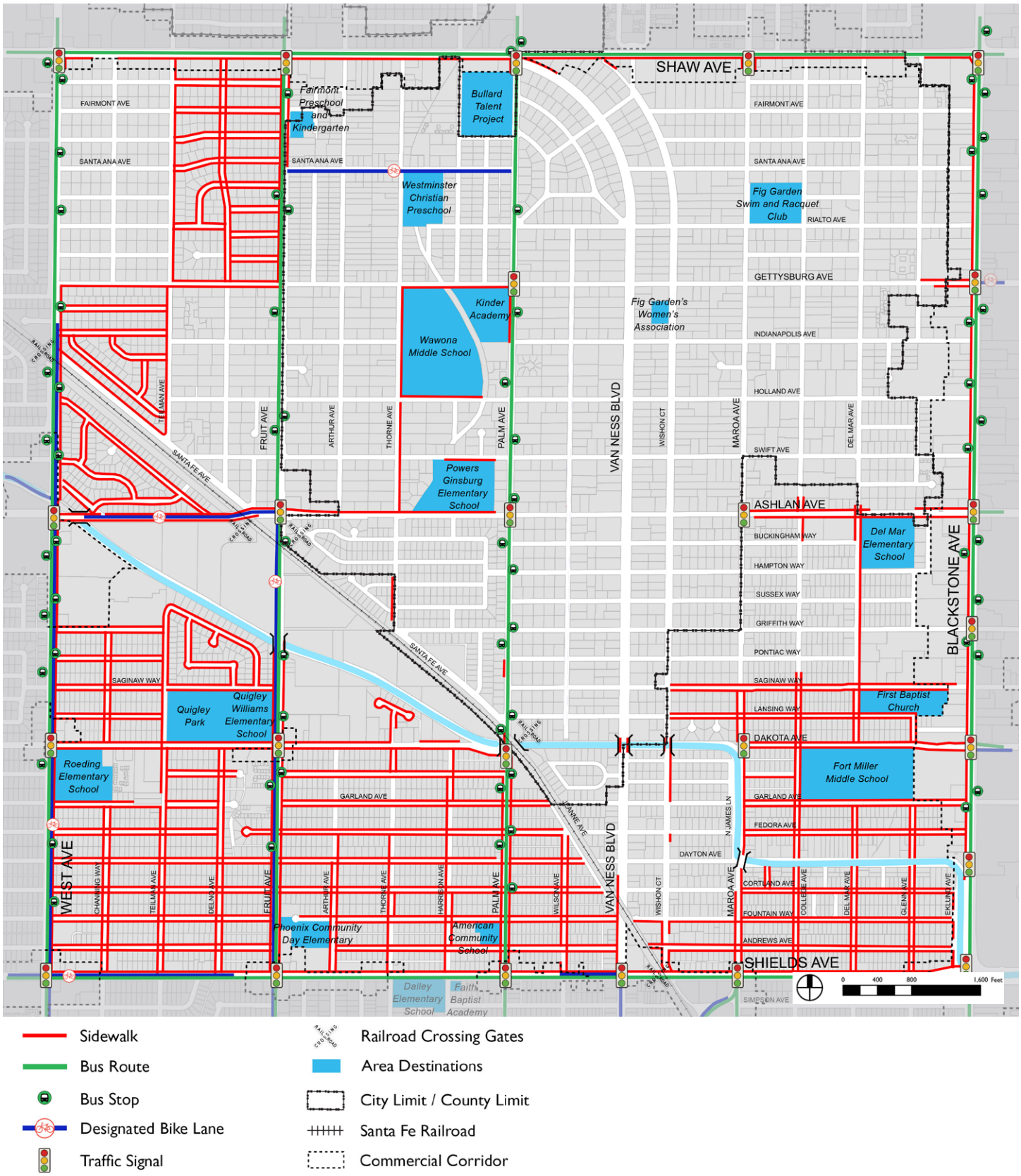


Figure 3.3: Existing Mobility

3.2.2.1 Existing Street Network

Like in adjacent areas, the existing street network in the study area is based on a grid of arterial streets, spaced approximately two miles apart, with collector streets filling in this grid at quarter-mile spacing. Ashlan, Gettysburg, and Dakota Avenues are the major east-west collector streets and Palm, Fruit and Maroa Avenues the major north-south collector streets (see Figure 3.3). Because they extend out to the edge of the city area and provide connectivity to other neighborhoods, Ashlan Avenue and Palm Avenue attract larger volumes of traffic. Ashlan Avenue's role in the street network is further elevated as it is the only major street in east-west direction that connects beyond the study area and the fact that it connects to SR 41 freeway just east of Blackstone Avenue. All of these unique conditions lead to an even greater concentration of traffic on Ashlan Avenue, making it a significant barrier for pedestrian and bicycle travel. The significant traffic volumes on Ashlan Avenue create impacts on Gettysburg Avenue, which is used as an alternate east-west route by many commuters who try to avoid the bottleneck on Ashlan Avenue.

The majority of local streets in the study area follow the grid established by the arterials and collectors discussed above. However, the Herndon Canal and the rail line bisect most of the grid-based local streets, which due to the lack of crossings, renders them inconvenient for travel across the full extent of the study area. Only Wishon Avenue and Van Ness Boulevard provide north-south connections that allow for travel on the same street across the entire study area other by travel on one of the north-south collector streets. These conditions keep vehicular volumes low on most of the discontinuous local streets, but also reduce the number of direct routes available for pedestrians and bicyclists.

3.2.2.2 Pattern of Blocks and Streets

Although the neighborhoods in the study area were built during different periods in the last century, the street and block pattern is almost entirely based on a grid. The blocks within the city boundary, primarily south of Dakota Avenue, are shallower than the blocks in the county, but maintain the same length of approximately 600 to 620 feet. Two of the exceptions to the grid pattern are Van Ness Boulevard and Wishon Avenue which curve at the north end, tracing the older alignment of Van Ness Boulevard, prior to the expansion of the city boundaries. The other area where the grid pattern is disrupted is on the west side, between the SantaFe rail tracks and Dakota Avenue. Due to the rail line and the Herndon Canal traversing the area diagonally to the grid, the platting of parcels within this area is irregular, and subsequently utilized to accommodate multi-family housing complexes.

3.2.2.3 Built Form

The County Island area, with older lots, includes several of the historic houses and buildings, from the time of the original subdivision, as well as the post-war era, that provide a historic character to much of the neighborhood. The houses are distinct not only in their architectural style, but also in their varied setbacks from the street. In addition, the unique visual character of Van Ness Boulevard with a distinctive coniferous canopy, and the established tradition of decorating the street during Christmas, lends to the unique identity of the neighborhood

Neighborhoods within the city jurisdiction are also primarily single-family, single-story homes, but were built in the decades after the County Island homes. As is evident by the fragmented street pattern, the city neighborhoods came about in segments, as parcels became available for residential development. The character of the streets within the city consequentially is fragmented with some streets without curbs, some with just curbs, and others with curbs and sidewalks. These streets also do not have any predominant street tree species or planned landscaping theme, as found in the County Island that create a cohesive character for particular streets or neighborhoods. The city area also includes several multi-family communities, specifically along Fruit Avenue, which transitions into a small activity center at the intersection of Dakota Avenue that includes some neighborhood retail, the Quigley William's Elementary School and Quigley Park.

The edges of the study area along the arterial streets are also fragmented in their transition from commercial use into the residential neighborhood. On Blackstone and Shaw Avenues, there is a consistent block of commercial uses along the streets, while the commercial uses are more clustered at major streets intersections on West and Shields Avenues. The transitions from Blackstone Avenue into the neighborhood are not consistent, wherein the commercial parcels have different heights of buildings adjacent to the residential parcels, or have surface parking and access along the side streets. The transitions into the neighborhood are also characterized by abrupt ending of sidewalks as the use changes from commercial to residential along

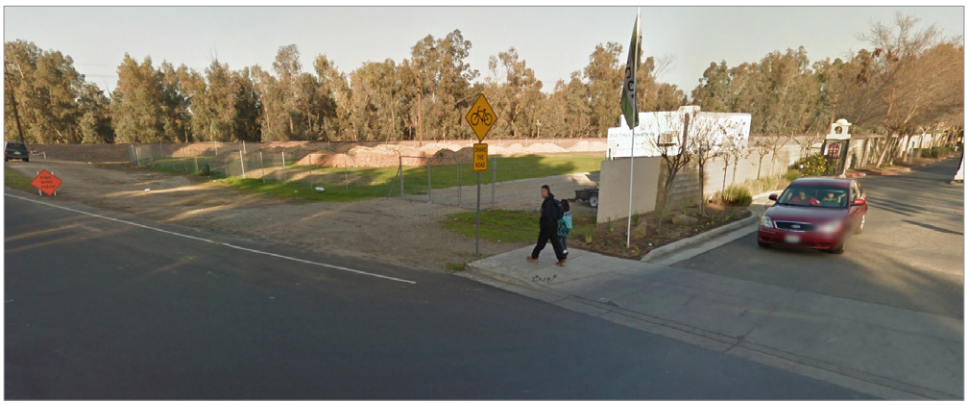


Figure 3.4: Example of an abrupt transition into the neighborhood (source: Google)

the side street (See Figure 3.4). In comparison, the transition into the neighborhood along Shaw is more consistent with surface parking in the rear of the parcels, and the extension of sidewalks till the end of the block on most side streets.

The historical street tree planting, the large lot older homes, the irrigation canals, narrow, rural profile roadways, and the extensive private landscaping are key unique urban form aspects that are further defined as a cohesive neighborhood, by the distinctively different character of the commercial corridors of Blackstone and Shaw Avenues.

3.2.2.4 Open Space

The study area's mature foliage, private landscaping within the right-of-ways, and large lots with significantly set back houses, provide dense green foliage take away from the fact that there are only two parks within the study area. This results in the major components of the open spaces being the county streets, the canal embankments, the school playgrounds and the two parks.

The key streets that provide consistent tree foliage, and that are used for recreational walking/jogging uses primarily are Van Ness, Wishon and Wilson Avenues. The first two provide a wider right-of-way, while the later is attractive due to the lower volumes of vehicular traffic. These streets, combined with several east-west street segments as well as the Herndon Canal embankment are utilized as a walk/jog circuit by residents as well as for other who visit the neighborhood for exercise activity. In addition to these streets, significant segments of Arthur, Thorne, Rialto, Holland, and Swift Avenues also are utilized of open space activity as they also have significant foliage of mature street trees. The fragment of the Enterprise-Holland Canal that is accessible between Holland and Santa Ana Avenues, is also utilized for recreational purposes, however, the quality of the embankment path makes it unappealing. The embankments along the Herndon Canal segment between Blackstone and Fruit Avenues are utilized by pedestrians and bicyclists, but these activities are actively discouraged by the Fresno Irrigation District and Law Enforcement due to crime and safety concerns.

Quigley Park is the larger of the two parks in the study area. It covers over eight acres and has programmed spaces including a baseball field and several tennis and basketball courts. The park, however, is the southwest section of the study area, making it difficult to access across the rail lines and canal. The second park is located adjacent to the Wawona Middle School, and is designed as a retention basin for storm water. The park is utilized as a dog park.

In addition to the parks, the area includes two middle schools and four elementary schools. The play fields within the school properties provide additional open space for sport and other social activities.

3.2.3 Land Use

The existing land use pattern of the study area can be described as cluster of residential neighborhoods that are bounded by commercial corridors. The residential uses within the study area are predominantly single family residential with variations in parcels sizes. The variations in parcel sizes are more predominant within the County Island, which range from quarter-acre lots to older one-acre lots. The large lots are mostly along Van Ness Boulevard, and around the Maroa and Holland intersection. The single family parcels in the city range from a little less than a fifth, and up to a third of an acre. The smaller lot single family parcels make up the majority, covering the area south of the canal and west of the railway tracks.

The study area also includes several multi-family housing complexes. These are clustered, for the most part, along Fruit Avenue, south of Ashlan Avenue. These are two story apartments with surface parking. Several multi-family buildings are also adjacent to the commercial parcels along Blackstone Avenue. These include single story apartments as well as three story buildings, and are in both City and County areas.

The edges of the study area are bound by arterial streets that support commercial uses along the travel corridors. The intensity of commercial activity varies on each corridor, with the most consistent being on Blackstone Avenue that includes the Manchester Center, several fast-food and eating establishments, auto related uses, hotels, and a major transit transfer center. The commercial activity along Shaw Avenue is less active, as most of the commercial parcels are shallow and are office spaces. However, the Fig Garden Shopping Center at Shaw & Palm is a major retail center that serves most of the shopping needs for the study area residents. The commercial activity is more fragmented on N. West and Shields Avenue with one community retail center on West and numerous small retail clusters at connector street intersections. The only neighborhood commercial cluster in the study area away from the major corridors is located at the intersection of Dakota and Fruit Avenues.

The area also encompasses several public, and a couple of private schools that include two middle and four elementary schools. The schools are mostly clustered along Dakota Avenue in the City, and just west of Palm Avenue in the County. While most of the schools are within residential neighborhoods, Quigley and Roeding Elementary, as well as Fort Miller Middle School are adjacent to commercial activity centers. The two parks with the study area are also adjacent to school playfields.

The area includes several parcels used for infrastructure related uses, such as two ponding basins, and two irrigation canals. While the Enterprise-Holland Canal is fragmented, and relatively narrow, the Herndon Canal segments the study area and is an impediment to connectivity between neighborhoods. The accessible

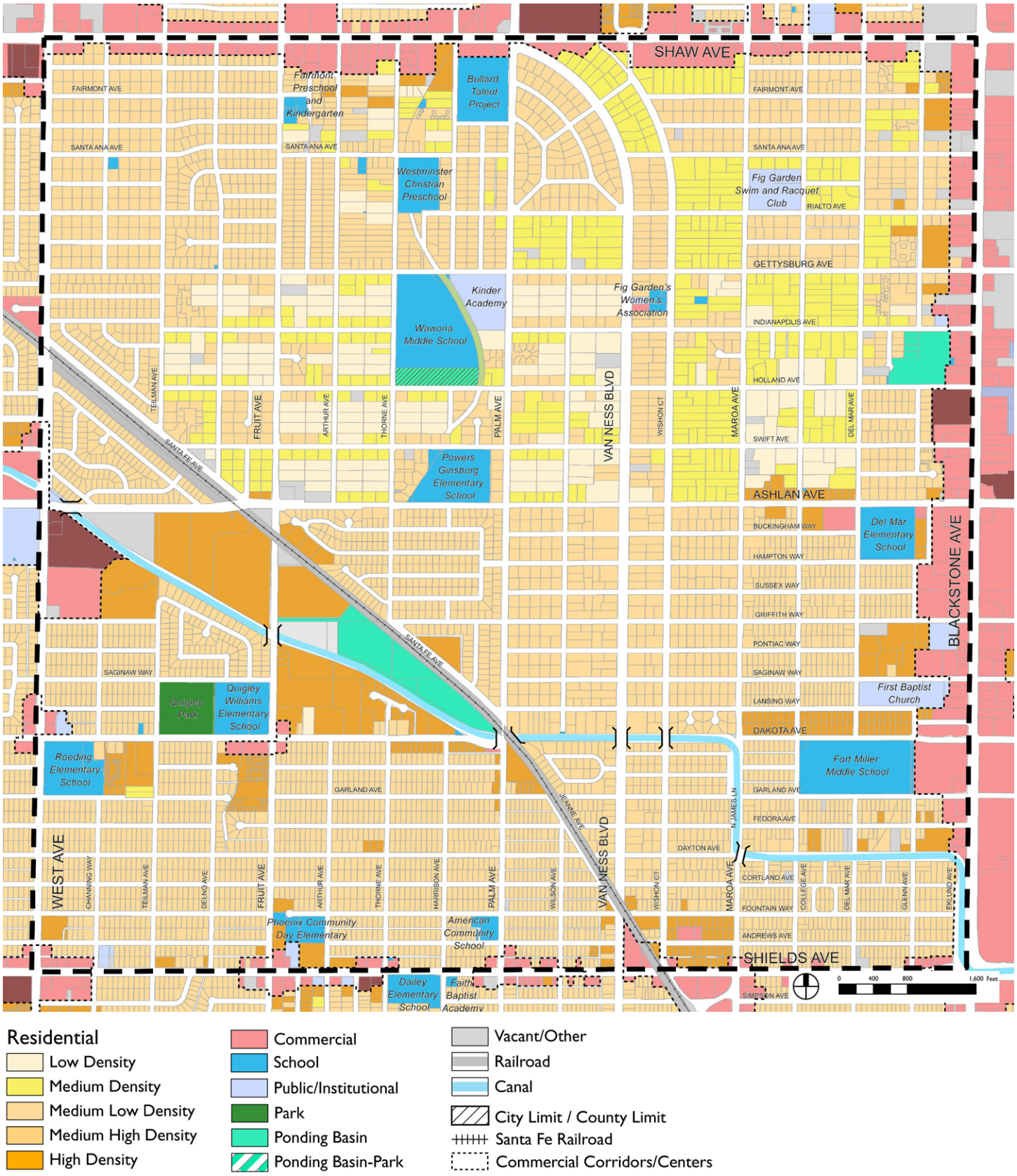


Figure 3.5: Existing Land Use

section of Enterprise-Holland Canal provides an informal pedestrian connection to several community uses, including the Wawona middle school, the dog park, and two private pre-schools. The study area is further segmented by the Santa Fe rail line that diagonally divides the study area, also impacting connectivity between neighborhoods (see Figure 3.5). There are very few vacant parcels within the study area, with the largest parcel at the west end of Ashlan Avenue, which is designated for higher density development.

3.2.4 Key Urban Design Issues

The assessment of the existing conditions and initial discussions with the city, county representatives, stakeholders, and from input of the first workshop participants, highlighted the following key land use and urban design issues within the study area.

- There are significant intensifications of commercial and residential activity planned along the arterial corridors. These changes are in response to the planned bus rapid transit (BRT) corridors on Blackstone and Shaw Avenues. The intensification would impact the adjacent residential properties, as well as, access to, and parking in the neighborhoods.
- The residents raised concerns about building heights, more traffic and noise, therefore intensifications along the arterials will also require some regulation to adequately transition the side-streets in the neighborhoods, providing strong visual cues to pedestrians and vehicles of the change.
- There is a lack of safe street crossings at intersections on Ashlan Avenue and its cross streets.
- The pedestrian connectivity to schools, community amenities, and bus stops is significantly fragmented, making it unclear for vehicular and non-vehicular users, which streets to use.
- Workshop participants identified the lack of street lighting, making it feel unsafe in certain locations.
- In the County Island, the street right-of-way is constrained by private landscape extensions, limiting space to separate different modes of travel.
- The Herndon Canal and the Santa Fe rail line are significant barriers within the area.
- While the Herndon Canal is informally used as a pedestrian and bicycle trail, concerns exist with regard to the lack of proper paving, safety lighting, and safety barriers or fencing. Similarly, the Enterprise-Holland Canal is used for recreational purposes, but does not have adequate paving. (See Figure 3.6).

- Van Ness Boulevard's transformation into Christmas Tree Lane during the festival season creates several traffic, parking, and pedestrian safety concerns.

These urban design concerns, along with those discussed in the Transportation section below, provided focus to the development of design concepts and strategies that address the raised issues. These concepts are discussed in Chapter Five – Recommendations of this Study.

Figure 3.6: Recreational uses along Enterprise-Holland canal are not given enough paved space

3.3 Transportation

This section summarizes existing transportation issues. Additional information specific to the traffic analysis is included in the Traffic Impact Analysis, which is included in the separate appendix to this report (Appendix H).

3.3.1 Current Policy Framework

The project study area is located partly within the City of Fresno and partly within the unincorporated area of Fresno County. Both agencies are members of the Fresno Council of Governments (Fresno COG), which is the regional agency responsible for transportation planning and programming federal, state, and local transportation funds to Fresno County jurisdictions.

In general, the City of Fresno and Fresno County have different standards for the design of transportation facilities, although there are general statewide and nationwide design principles that both agencies follow. The reason for the different standards between the City and the County is that the two agencies approach design standards from different perspectives given their respective goals and available funding for established priorities. Plans for future improvements to transportation facilities are guided by the Circulation Element of the General Plan for each agency. This Study took into consideration the Circulation Elements of the General Plan of the City and the County. However, in some cases, it was necessary to deviate from current plans in order to provide solutions that are tailored to the specific needs of the project study area. The intent was to create a set of recommendations that was appropriate for the study area and consistent with the Circulation Element documents at the boundaries of the study area. One of the intended outcomes of the Study is that the Circulation Elements of the City of Fresno and Fresno County would be revised (as needed) to follow and allow for the recommend concepts and improvements for transportation facilities within the Fig Garden study area. These revisions would occur at the next regular update of the Circulation Elements, or sooner if needed to conform to the planning process of either of these agencies.

3.3.2 Existing and Forecast Vehicular Traffic

The transportation analysis took into consideration existing traffic counts and future traffic forecasts for key study area roadways. Existing (2012) Average Daily Traffic Counts are shown in Figure 3.7. These counts were obtained from the Fresno Regional Traffic Monitoring Report posted on the Fresno Council of Governments (Fresno COG) website at the outset of the traffic analysis (November 2011). Some counts used in the study were from prior years and a growth factor of 2% per year was used to convert traffic counts to 2012 conditions. Also shown in Figure 3.7

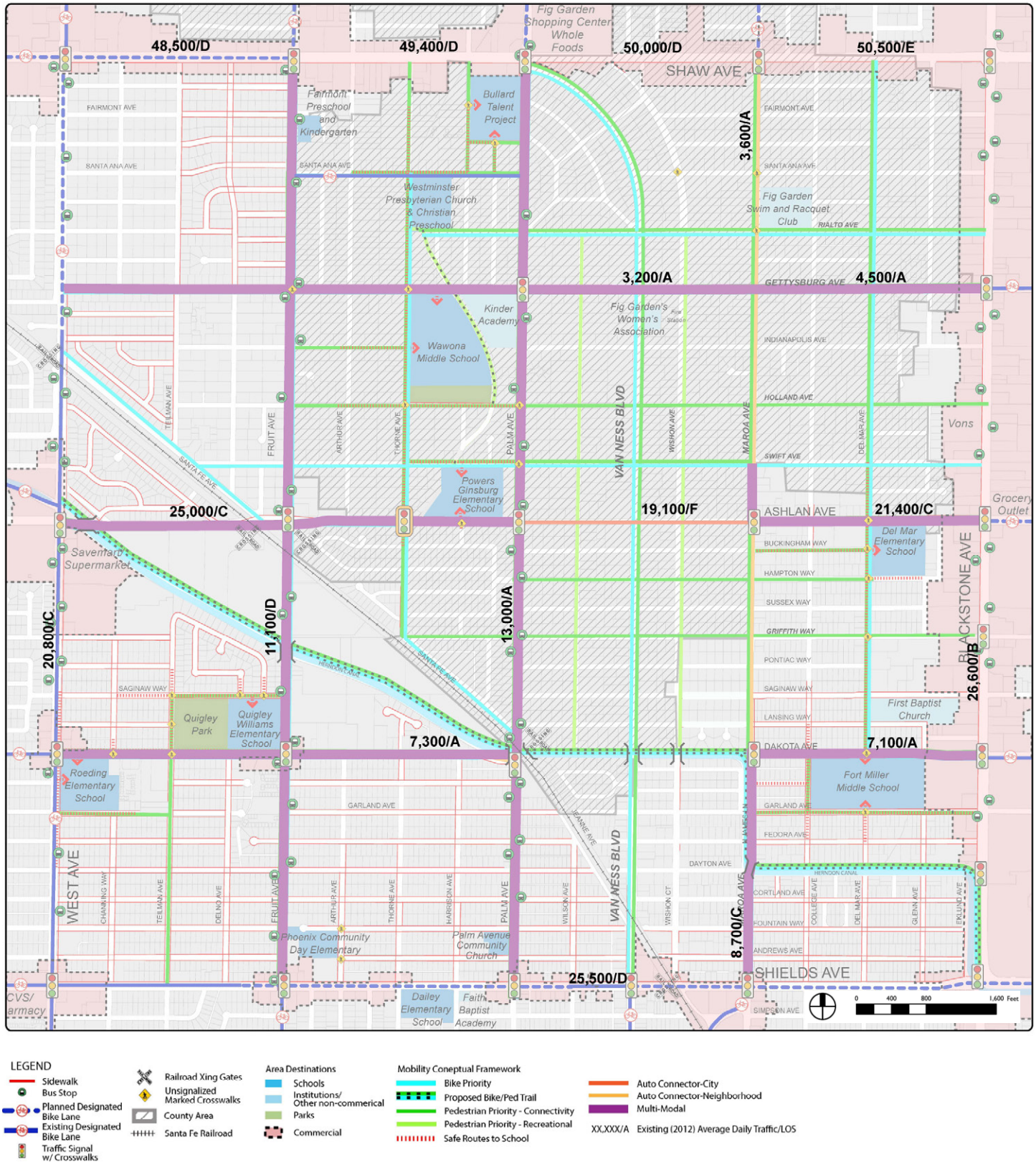


Figure 3.7: Existing Average Daily Traffic (ADT) counts and calculated level of service (2012)

are calculated levels of service for locations where traffic counts were available. In traffic engineering methodology, levels of service ranging from level of service A to level of service F are used to describe traffic operations. Level of service A represents relatively low traffic levels with minimal delays. Level of service F represents high levels of traffic with substantial traffic congestion and delays. Level of service D is typically used as the design standard for peak hour conditions in urban and suburban areas and this level of service is applicable in the study area. It should be noted that Fresno County allows level of service D in areas under the City of Fresno sphere of influence (including the project study area), but the preferred level of service standard throughout the County is level of service C.

Future Average Daily Traffic forecasts for 2030 conditions were obtained for study area roadways from the regional transportation model prepared by the Fresno COG. Traffic forecasts used in this study were from the current regional travel model at the initiation of the traffic analysis in November 2011. Figure 3.8 shows these forecasts as well as calculated levels of service for 2030 conditions. This figure shows traffic forecasts and levels of service assuming no changes are made to the transportation system and with the improvements recommended in this Study, which are described later in this report.

Although the traffic analysis used traffic counts and traffic forecasts that were current at the outset of the study, various traffic counts and traffic forecasts became available later on in the study process. These traffic counts and traffic forecasts were reviewed to take note of any major discrepancies. However, none of the subsequent traffic counts or traffic forecasts were considered to trigger any need for changes in the recommendations or conclusions of the study. During the detailed implementation of project improvements, supplemental traffic analysis may be required, depending on the nature of the proposed improvement and the requirements of the agency with jurisdiction over the roadway in question (either the City of Fresno or Fresno County). When supplemental traffic analysis is necessary, the gathering of new traffic counts and/or traffic forecasts would be recommended, as appropriate.

3.3.3 Pedestrian Travel

A review of facilities for pedestrian travel in the Fig Garden area shows a broad array of conditions in which pedestrians are accommodated. These range from no sidewalks to sidewalks on one side of the street to streets with sidewalks on both sides of the street. These sidewalk conditions are indicative of the piecemeal development of subdivisions in the area over several decades and the fact that City and County have different standards for the accommodation of pedestrians. Most neighborhoods within the City boundary have sidewalks or at least curbs, while most of the neighborhoods in the County Island do not have curbs or any pedestrian amenity within the public right-of-way. The exceptions to these are schools and parks within the County Island which have sidewalks as well as crosswalks at the

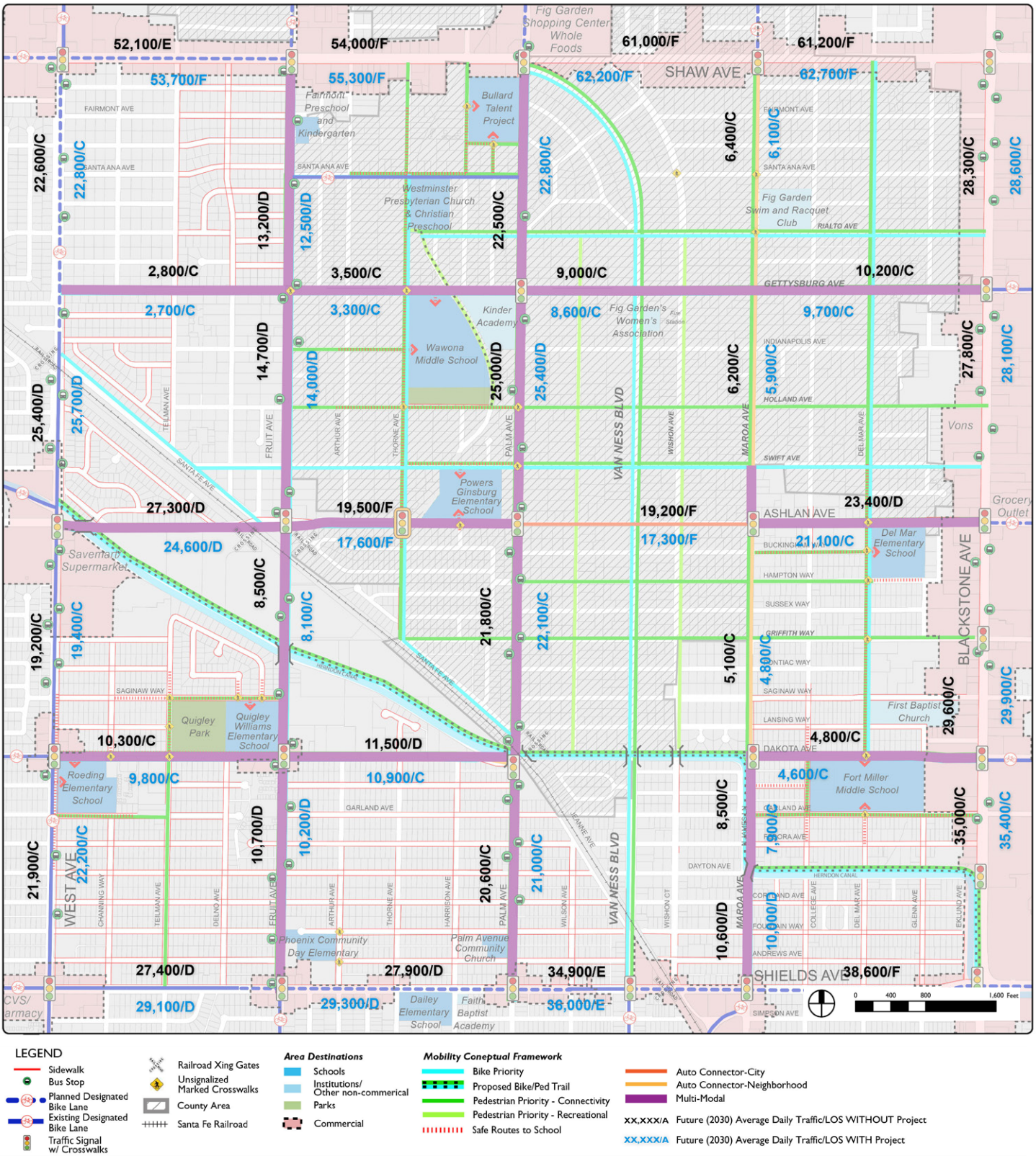


Figure 3.8: Projected Average Daily Traffic counts and calculated level of service (2030)

nearest intersections to allow for students to safely walk to school. Transit stops on Palm and Fruit Avenues within the County Island also do not have any pedestrian access available. Most of the streets within the study area do not have street lighting. Safety lights are provided only at major intersections, which make it unsafe for pedestrians, particularly within the County Island where there aren't any designated pedestrian paths. The neighborhoods to the south of the Santa Fe rail tracks have the most complete sidewalk infrastructure including crosswalks across major streets. They provide access to community retail centers along the arterial streets, schools, parks and transit stops within the area south of the tracks.

While the lack of pedestrian amenities would be a deterrence to walk to nearby destinations, the extensive tree cover and green foliage is a major attraction for residents and recreational users to walk and jog within the County Island area. In addition to the County Island streets, residents also utilize the Herndon and the Enterprise-Holland Canal embankments to walk, however the irrigation district does not encourage public usage of the embankments. The Santa Fe rail right-of-way is also utilized to walk along and across to get to destinations. This has led to accidents and fatalities along the rail tracks. Both the tracks and the Herndon Canal act as significant barriers for pedestrians with only limited locations to cross them. Figure 3.9a identifies all existing pedestrian amenities, including sidewalks, crosswalks and railroad crossings.

3.3.4 Bicycle Travel

Fresno County and the City of Fresno have developed Bicycle Master Plans that provide the planning context for the long-term implementation of bicycle facilities within their respective portions of the project study area. These Master Plans promote the establishment of a shared use roadway system, but encourage that newly developing areas include bicycle facilities along major roadways and off-road systems as part of their open space and recreation amenities.

The Caltrans Highway Design Manual, which governs bicycle facility design in California, distinguishes three different types of bicycle facilities. Class I (Off-street) bikeways are two-way facilities located in a completely separate right of way, to be used by bicycles, pedestrians, and other non-motorized forms of travel. Class II bikeways are one-way facilities that are located within paved street areas and are identified by striping. Class III bikeways are on-street facilities that are designated by signs or permanent markings. This type of facility is shared with motorists and provides continuity to the bikeway system.

Figures 3.9a and 3.9b show the existing bicycle facilities located within the Fig Garden study area. Class II bikeways are located along West Avenue between Shields Avenue and Gettysburg Avenue, along Dakota Avenue between West Avenue and Palm Avenue, along Fruit Avenue between Shields Avenue and Ashlan Avenue, along

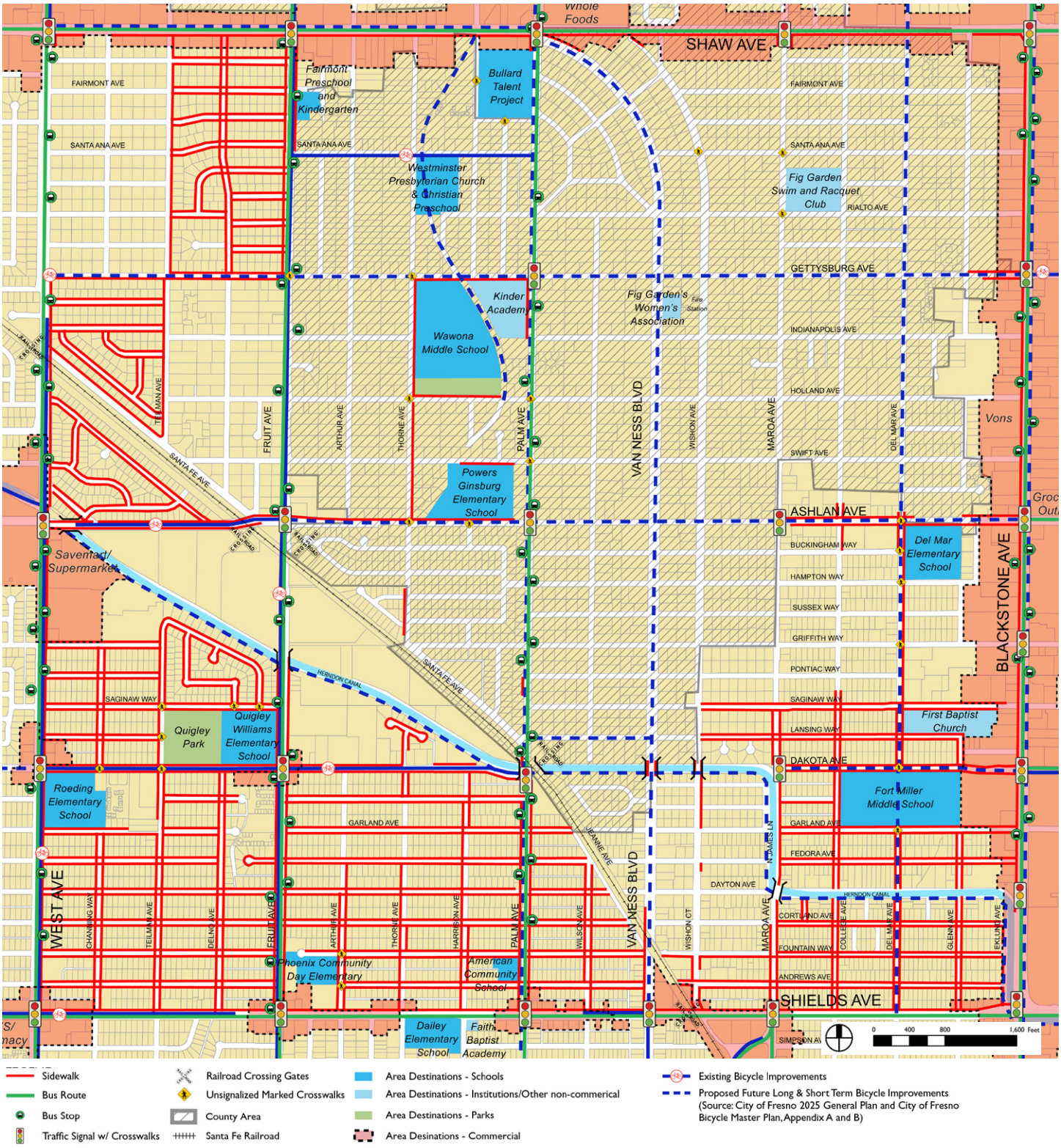


Figure 3.9a: Existing Pedestrian, Bicycle, and Transit Facilities

Figure 3.9b: Existing Pedestrian, Bicycle, and Transit Facilities - Study Area Existing Conditions

Ashlan Avenue between Fruit Avenue and West Avenue, and along Shields Avenue between Fruit Avenue and West Avenue. Within the County Island area a Class II bikeway is located on Santa Ana Avenue Fruit Avenue, and Palm Avenue.

The City and County Bicycle Master Plans indicate future Class I bikeways along the Burlington Northern Santa Fe railroad right-of-way throughout the study area and along local canals between Shaw Avenue and Holland Avenue and from the West/Ashlan intersection area to the Dakota/Palm intersection area. The Bicycle Master Plans also indicate Class II or Class III bicycle routes for most of the major streets in the study area.

3.3.5 Transit

The major provider of public transportation within the Fresno metropolitan area is the Fresno Area Express (FAX). FAX is the largest mass public transportation provider in the San Joaquin Valley and provided more than 18 million fixed-route and 234,000 demand-response passenger trips in FY 2009. With two primary services, fixed route bus service and "Handy Ride" demand-response service for people with disabilities, FAX provides inexpensive personal mobility and options for people from all walks of life. The majority of fixed routes operate on 30-minute headways on weekdays. Weekend headways vary from 30 to 60 minutes depending upon the route.

Currently, the Fig Garden area can be accessed by several routes in the FAX bus system.

Bus route #45 runs through the Project area along Fruit Avenue from Shields Avenue to Shaw Avenue.

Bus route #26 runs through the Project area along Palm Avenue from Shields Avenue to Shaw Avenue. Bus route #22 runs adjacent to the western border of the Project area along West Avenue from Shields Avenue to Shaw Avenue.

Bus route #9 runs adjacent to the northern border of the Project area along Shaw Avenue from West Avenue to Blackstone Avenue.

Bus route #30 runs adjacent to the eastern border of the Project area along Blackstone Avenue from Shields Avenue to Shaw Avenue.

Bus route #41 runs adjacent to the southern border of the Project area along Shields Avenue from West Avenue to Blackstone Avenue. Some existing ridership information was collected from FAX during the course of the Study. Route 26 running along Palm Avenue typically carries about 45 passengers per hour during the day on weekdays. The bus stops in the study area typically serve 20 to 100 passengers per day (total of passengers exiting and entering buses at each stop).

In addition to local bus routes, the study area is served by the Manchester Transit Center located near the intersection of Blackstone Avenue and Shields Avenue. It serves as a bus transfer location that also provides amenities, sales of bus tokens and passes, and information.

One of the challenges in the existing transit system is the lack of accessibility of bus stops along Palm Avenue and Fruit Avenue through the study area. Many stops are inaccessible for disabled passengers and many do not have safe waiting areas that are separated from the roadway.

Future plans for transit in the area include the implementation of Bus Rapid Transit (BRT) service. This service provides buses with fewer stops and priority treatment at intersections designed to provide faster service. BRT service is under design for Blackstone Avenue and in the planning stages along Shaw Avenue.

3.3.6 Key Transportation Issues

Based on discussions with stakeholders, field reviews of the study area, and the information presented earlier in this chapter, several key auto transportation issues were identified, including the following:

- Various issues related to pedestrian and auto travel along Ashlan Avenue and its cross streets. These issues include the desire to provide for the needs of both through traffic and local access, the need to provide for easier and safer crossings of Ashlan Avenue by pedestrians, and the difficulty in accessing Ashlan Avenue from local driveways.
- Potential conflicts between auto traffic, bicyclists, and pedestrians on many study area roadways, particularly County streets with no sidewalks or bicycle facilities and the lack of supportive control of movements to accommodate pedestrians and bicycles.
- Provision of adequate roadway capacity to handle existing and future traffic levels on key through roadways in the study area including Shaw Avenue, Shields Avenue, Blackstone Avenue, West Avenue, and Palm Avenue. (See figures 3.10a and 3.10b for existing right of way widths).
- Seasonal use of Van Ness Boulevard for the Christmas Tree Lane event, including traffic congestion related to drive nights and available parking facilities and associated activity related to walk nights.
- Based on discussions with stakeholders, field reviews of the study area, and the information presented earlier in this chapter, several key bicycle transportation issues were identified, including the following:
    - The Fig Garden Village's Premier Shopping Center, which is located at the northeast quadrant of the intersection of Shaw Avenue and Palm Avenue, houses over eighty retail shops, however no existing bicycle facilities connect

the Fig Garden Project area with the Fig Garden Village. This promotes motorized travel over non-motorized amongst residents in the Fig Garden area even though the Fig Garden area is adjacent to the Fig Garden Village shopping center. Similar lack of connectivity for non-motorized access to the retail shops and services located along Blackstone Avenue, compels residents to dive to these destinations.

- All of the bicycle facilities that currently exist within the Fig Garden Project area are located within the southwest quadrant of the study area with the exception of the designated Class II bikeway along Santa Ana Avenue. The lack of bicycle facility continuity in the Fig Garden area limits the value of the existing facilities and the desire to use non-motorized travel.
- An additional challenge for bicycling in the study area is that on-street bike lanes can create significant vehicular/bicycle conflicts. However, the cost of retrofitting the existing urban area for bicycle lanes can be cost prohibitive, especially along older streets that will see increased motor vehicle traffic.

These concerns have been systematically addressed with design concepts and strategies by this Study under the recommendations in Chapter Five – Recommendations of this Study.

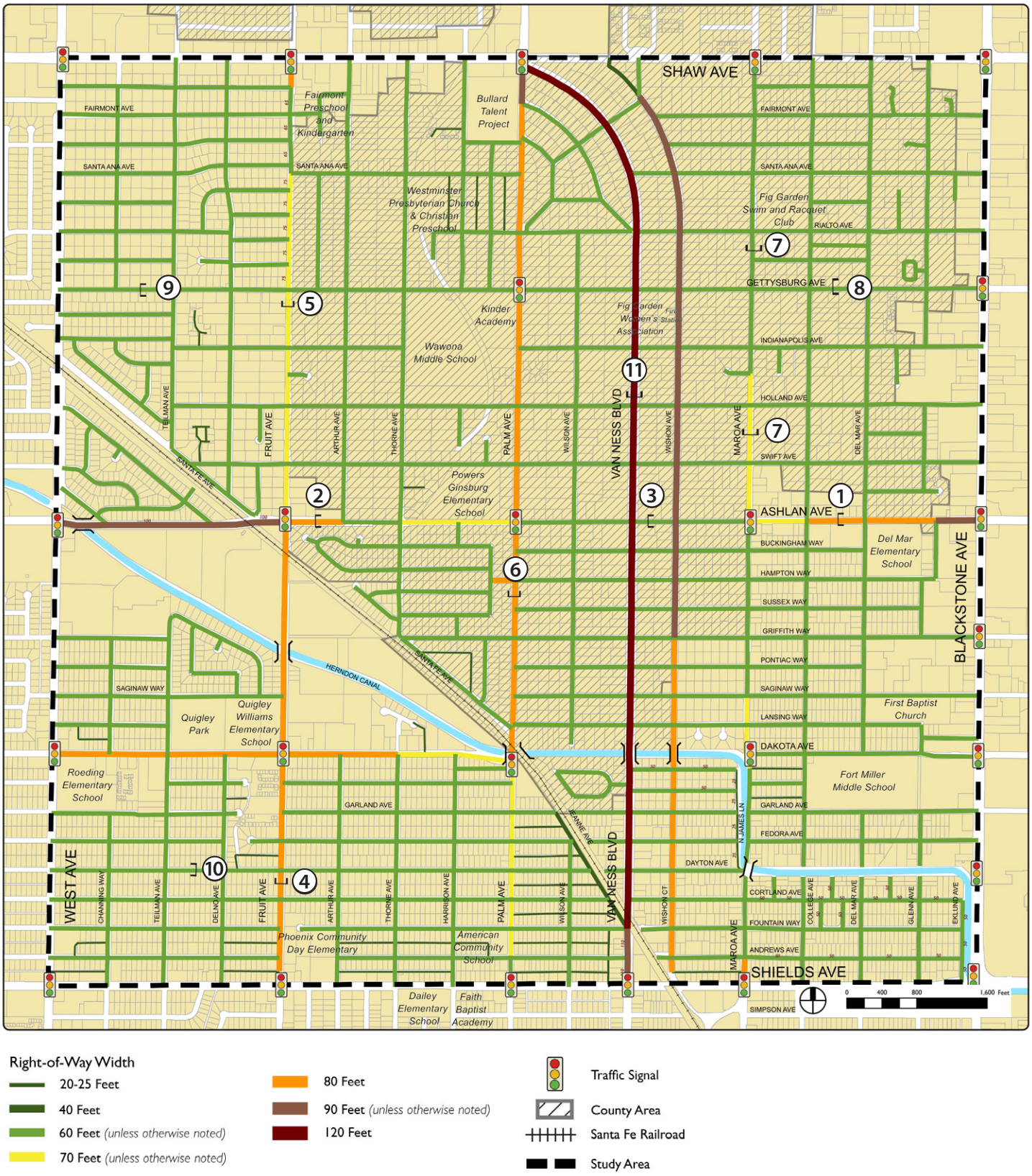
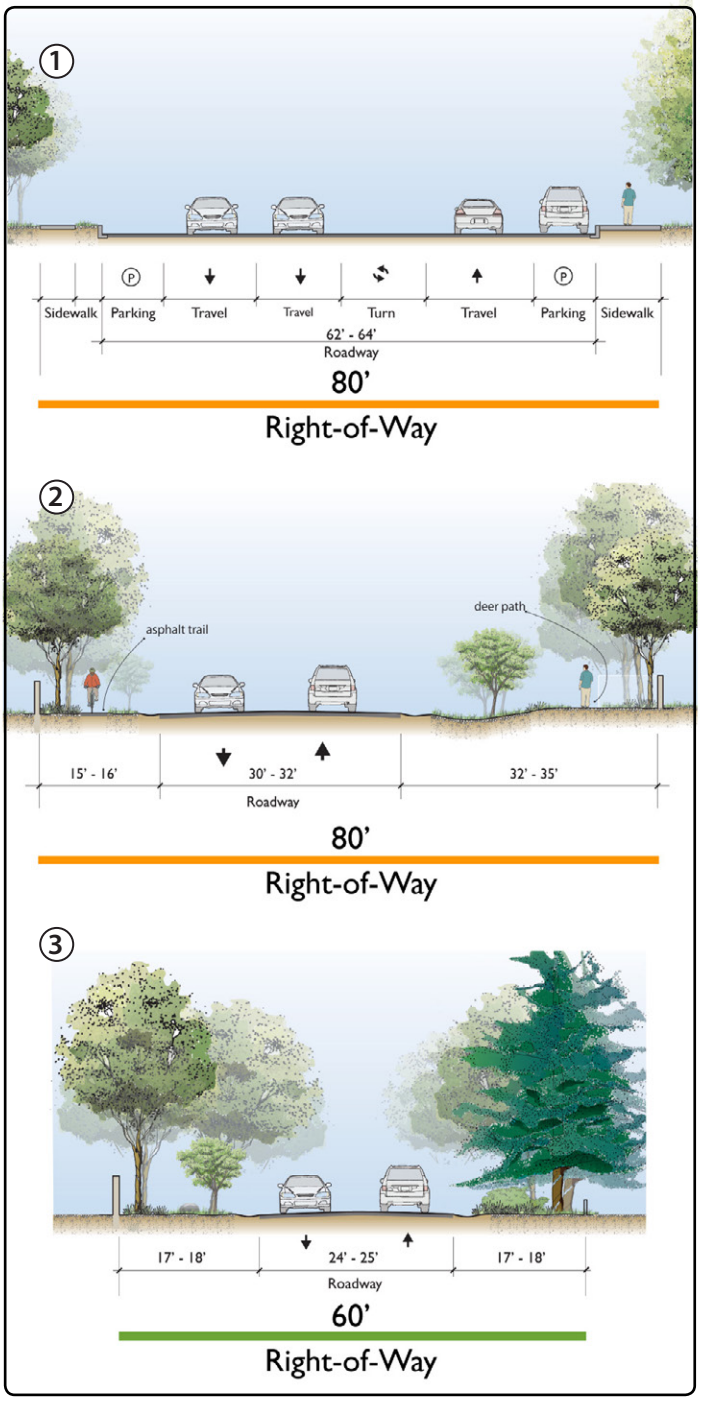


Figure 3.10a: Existing Right of Way Widths

Ashlan Ave.



Fruit Ave.

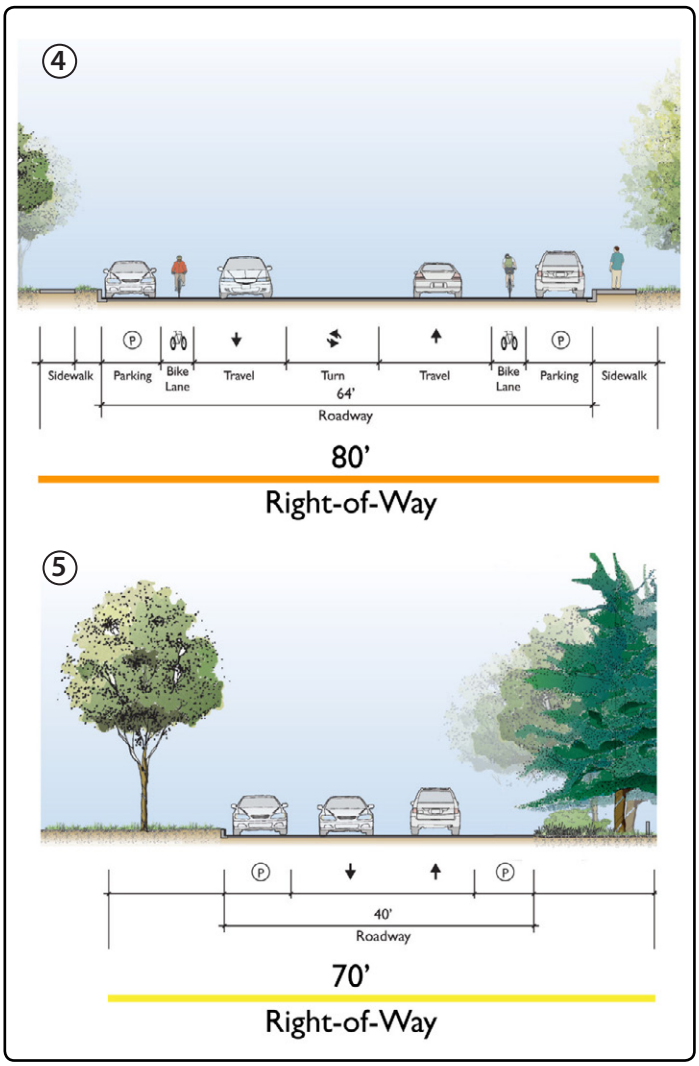
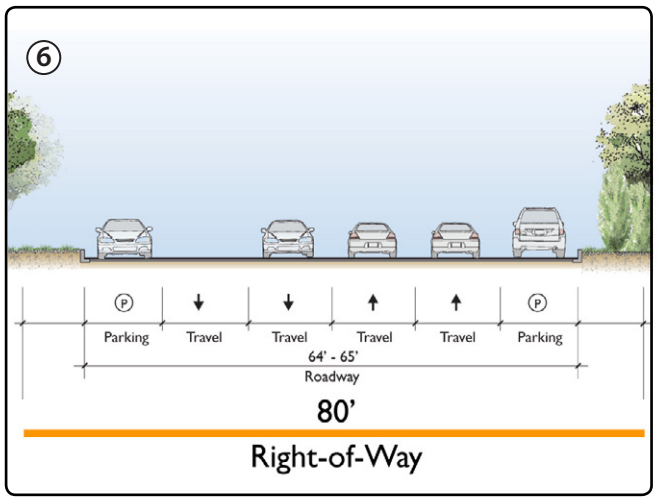
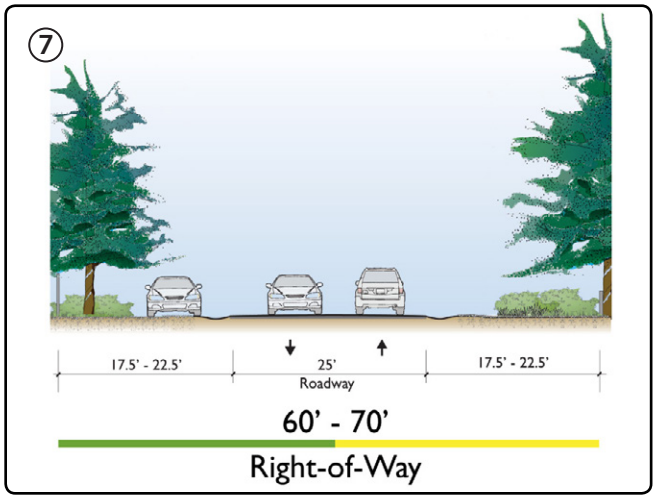


Figure 3.10b: Existing Right of Way Widths

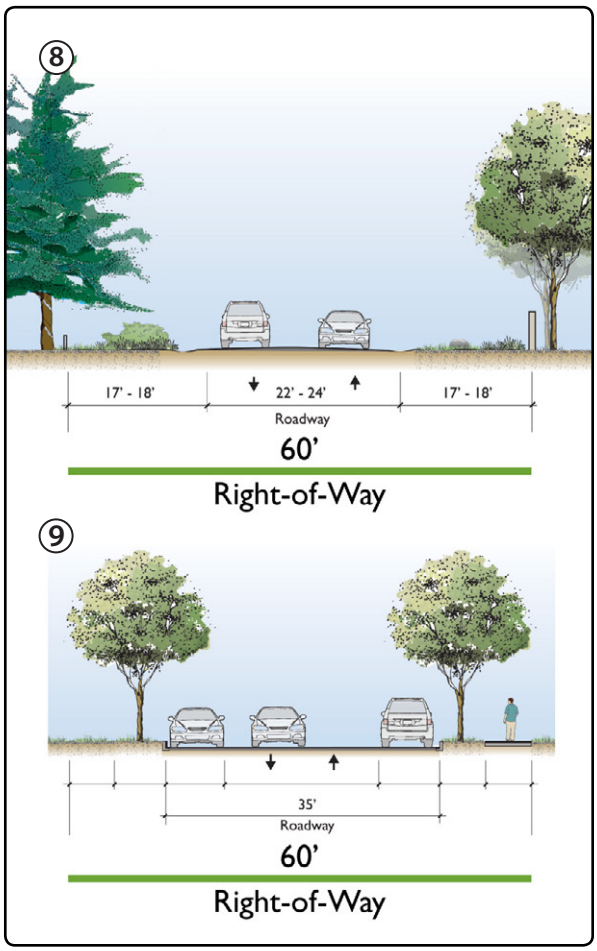
Palm Ave.



Maroa Ave.



Gettysburg Ave.



Typical city of Fresno Residential Street

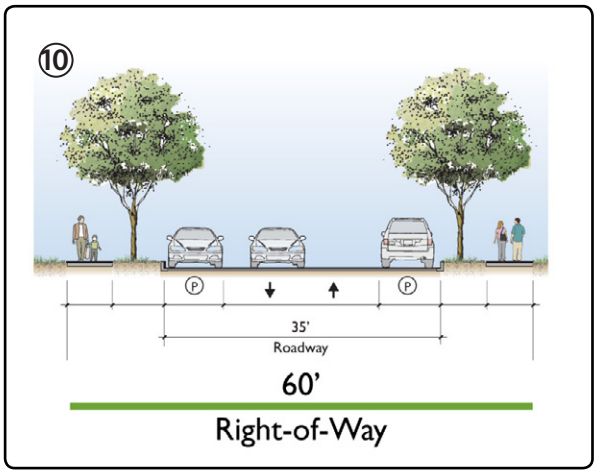


Figure 3.10b: Existing Right of Way Widths

Van Ness Blvd.

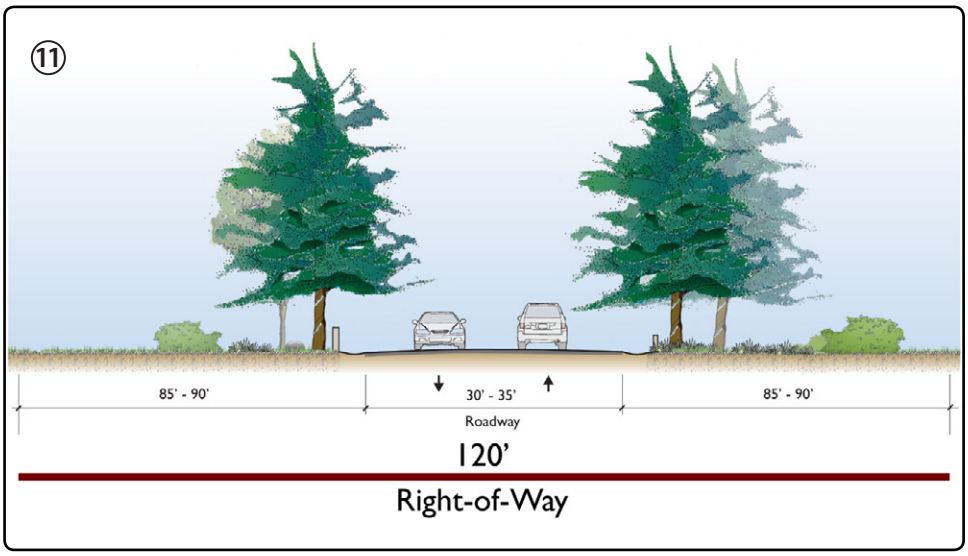


Figure 3.10b: Existing Right of Way Widths

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4 Overall Vision and Guiding Principles

Expanding on the initial draft of the vision statement included in the request for proposals for this project, the Steering Committee, with assistance from the Project Team and confirmation (through polling at Workshop #1) by the general public developed the following overall vision for the Community Transportation Study:

"The Fig Garden community, bounded by Blackstone, Shaw, Shields, and West Avenues, will have harmonious connections and transitions between the residential buildings and streets in its historic neighborhoods and future development along the growing corridors on its boundaries. Fig Garden residents envision safe and secure movement and access for pedestrians and bicyclists within their neighborhoods, to schools, and to nearby commercial areas. The recommendations for transportation and urban design improvements included in the Fig Garden Study will respect and enhance the community's architectural and landscape heritage."

Guiding principles are goal-like statements developed early in the planning process. They can serve as effective reminders of what stakeholders initially set out to achieve at a time later in the planning process when tradeoffs between potentially competing principles and other factors need to be made. The following set of guiding principles was developed by the Steering Committee with assistance from the Project Team. They were then presented to the larger community during Workshop #1, where attendees indicated their level of support for each guiding principle in a polling exercise. Following is a list of those principles that received a positive level of support (defined as the combination of "strongly support" and "support" outweighing responses indicating "strongly disagree" and "disagree"). A full overview of all guiding principles and polling results is included in Appendix A. The principles were subsequently used during the development of design options for transportation improvements and urban design recommendations.

4.1 Community-Supported Guiding Principles

Following is a summary of those guiding principles that received support or strong support at Workshop #1. The principles are presented here in the same words and organization as they were presented to the public.

"The Fig Garden community is interested in improving conditions for bicyclists and pedestrians in the area while maintaining the semi-rural character of many of its streets. The Fig Garden Study therefore should:

Pedestrian and Bicycle Travel

- Balance the transportation needs of those traveling with automobiles with the needs of those traveling on foot, by bicycle, and by transit, as well as those with disabilities
- Balance the transportation needs of those traveling locally with those passing through the area by:
  - Directing drivers to designated routes;
  - Encouraging drivers to drive at safe speeds;
  - Accommodating safe pedestrian travel along the entire length of streets used for through-travel.
- Identify a network of safe routes and facilities for pedestrians and bicyclists that connect Fig Garden's residential neighborhoods.
- Identify a network of safe routes and facilities for pedestrians and bicyclists that connect to schools and cultural and retail/service destinations.
- Explore the feasibility of creating sections of safe bank-side trails along the Herndon irrigation canal for inclusion in the pedestrian/bicycle route network.
- Improve safety and convenience of access to transit stops in the area.
- Consider traffic calming measures on streets where vehicle speeds endanger pedestrians and bicyclists.
- Consider traffic calming measures, in locations where they can address concerns over cut-through traffic.
- Consider design treatments, along public streets that increase personal safety and discourage crime.

- Design recommended street improvements to utilize existing public rights-of-way.
- Recognize that design recommendations for potential street improvements can vary between different locations in the Fig Garden area.

Safe Routes to School

- Provide safe routes to school for school children, parents, and teachers by:
  - Identifying safe pedestrian and bicycle routes and roadway crossings to schools in the study area.
  - Making public streets around schools a safe place to be.

Wayfinding

- Use wayfinding signs to direct traffic to designated routes in order to avoid unnecessary motorized traffic on streets prioritized for local traffic, pedestrians, and bicyclists.

Christmas Tree Lane

- Address issues associated with the Christmas Tree Lane event, by:
  - Balancing the transportation needs of those traveling with automobiles with the needs of those travelling on foot, by bicycle, and by transit, as well as those with disabilities.
  - Balancing personal safety needs of those traveling on Van Ness Boulevard with the privacy needs of those living in residences along the street.
  - Limiting the exposure of visitors and Fig Garden residents to automobile exhaust and noise.
  - Balancing the need for access and movement across and through impacted areas with those related to personal safety and cultural enjoyment.

Transportation

The Fig Garden study area is bounded on three sides by commercial corridors – Blackstone, Shields, and Shaw Avenues – that are proposed to accommodate future growth within the City of Fresno. While these growth corridors and activity centers will help to slow sprawl and the consumption of agricultural land in the larger Fresno area, it is important to recognize the potential effects of proposed land use intensity changes on residential properties and neighborhoods adjacent to these corridors and centers.

Fig Garden residents therefore desire the development of recommendations for site and building design guidelines that apply to properties located in growth corridors or activity centers bordering Fig Garden properties. These guidelines should:

- Create harmonious transitions between Fig Garden neighborhoods and development along growth corridors/activity centers with respect to land use (intensity and location), building scale (height and bulk), and architectural and landscape character.
- Address visual, solar access, noise, and odor concerns potentially associated with future development along growth corridors/activity centers.
- Be submitted to the City of Fresno for inclusion in the ongoing process of preparing standards for development in growth corridors/activity centers.

Urban Forest

- Develop maintenance recommendations for Fig Garden's urban forest to ensure that it can be enjoyed by future generations.
- Reduce the use of tree species poorly suited to Fresno's local and urban climate.

History and Architecture

The architectural landscape of the Fig Garden area is diverse, from architect-designed houses on one-acre lots along Van Ness Boulevard to more modest homes clustered along side streets. Building styles range from the earliest Craftsman and Foursquare homes through the entire pallet of Period Revival styles to the modernism of the 1950s up through the most recent in-fill projects. Of additional interest are the numerous adobes throughout the study area. Two main features – the area's canals and mature landscaping, tie this diversity of building stock together.

In light of Fig Garden's history and architectural heritage, that part of the Study (prepared as a separate document) will:

- Prepare a historic context for the area, which includes an overview of building typologies and styles. Use this information for future design guidelines for the Fig Garden community."

Note: It should be noted that the community rejected the following draft Guiding Principle:

Pedestrian and Bicycle Travel

Consider the acquisition of additional right-of-way only where additional space is needed to accomplish an improvement specifically desired by the Fig Garden community.

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5 Recommendations

5.1 Transportation

5.1.1 How Recommendations Were Developed

The Project Team developed its transportation-related recommendations based on findings from the review of existing conditions, input from the Steering Committee, and stakeholder input received throughout the public outreach process (see Appendix C in the separate appendix document). In particular, the three public workshops and the feedback from the Steering Committee provided the Project Team with important suggestions and input for the development of preliminary recommendations for improvements.

The recommendations documented in this section of the Study Report were developed in order to address the major issues and needs raised during the early stages of the project, including:

- Increased pedestrian safety and comfort on Fig Garden neighborhood streets (including Gettysburg, Maroa, Wishon, and other local streets).
- Increased bicycle safety and comfort on Fig Garden neighborhood streets.
- Safe access to transit stops along Fruit and Palm Avenues.
- Safe access to schools in the study area.
- Reduction of automobile speeds on Fig Garden neighborhood streets.
- Moderation of the attractiveness of Ashlan Avenue as a major thoroughfare for automobiles.
- Reduction of automobile speeds on Ashlan Avenue.

Rather than recommending spot-improvements in a few locations, the Project Team recommended that the identified transportation issues be solved through a planning and design approach that comprehensively addresses the safety and comfort needs for all modes of transportation in the study area. The concept of network-based, multi-modal transportation improvements is such a comprehensive approach and often also referred to as “complete streets”. Under this approach, the safety, comfort, and mobility needs of all travelers, whether they travel on foot, by bicycle, transit, or automobile, are balanced and improvements that create this balance are considered

accordingly. For this approach to be meaningful, it requires that the network of streets and paths within the study area be considered in the context of the streets and bicycle connections beyond the immediate study area.

Overall, the development of concepts and recommendations for improvements that address the transportation issues raised by the Fig Garden community followed the following three major steps:

1. Develop a multi-modal transportation framework that provides better pedestrian and pedestrian and bicycle connectivity throughout the Fig Garden Community and identifies pedestrian and bicycle priority streets, streets with importance to transit, and streets with importance for automobile access to local destinations and travel through the area.
2. Identify, through conceptual designs, how pedestrians and bicyclists – or both – can be safely accommodated on streets designated in the framework as pedestrian priority streets or multi-modal streets (streets that accommodate pedestrian, bicycle, and automobile).
3. Address how travel behavior of drivers on pedestrian and/or bicycle priority streets or multi-modal streets can be modified through traffic calming measures to balance the safety and comfort needs of all users of the street.

The following paragraphs provide a brief overview of each of the three steps. This is followed by more discussions of specific recommendations and design concepts in the sections 5.1.2 – Multi-modal Transportation Framework, 5.1.3 – Street-specific Improvements and Alternative Public Improvement (API) Standards, and 5.1.4 – Traffic Calming and Speed Management.

Fig Garden Multi-modal Transportation Framework:

Using current and forecast traffic volumes for the area, information about routes used by Fig Garden residents when they travel as pedestrians, bicyclists, or drivers, and the review of existing City and County bicycle plans, the Project Team developed an initial draft of a Fig Garden multi-modal framework. This framework is a composite of three individual layers – one each for pedestrian, bicycle, and automobile travel. It also includes information about the location of transit stops, so that they can be considered as part of the pedestrian network. A critical source of information in gaining a better understanding of the ways in which residents use the streets in the study area was the mapping exercise of travel routes by mode conducted during the first workshop and the detailed review of the draft framework by attendees of Workshop #2.

An overlay of all routes identified (See Figure 5.1) as important for each individual mode (pedestrian, bicycle and automobiles) allows the identification of those routes that are of high importance for all three modes (Multi-modal) versus those that may be of high importance for only one or two modes (pedestrian or bicycle priority streets) . Not surprisingly streets that connect across the railroad tracks or irrigation canals are important and, are frequently used routes for connections to the four bounding arterials and travel beyond the study area.

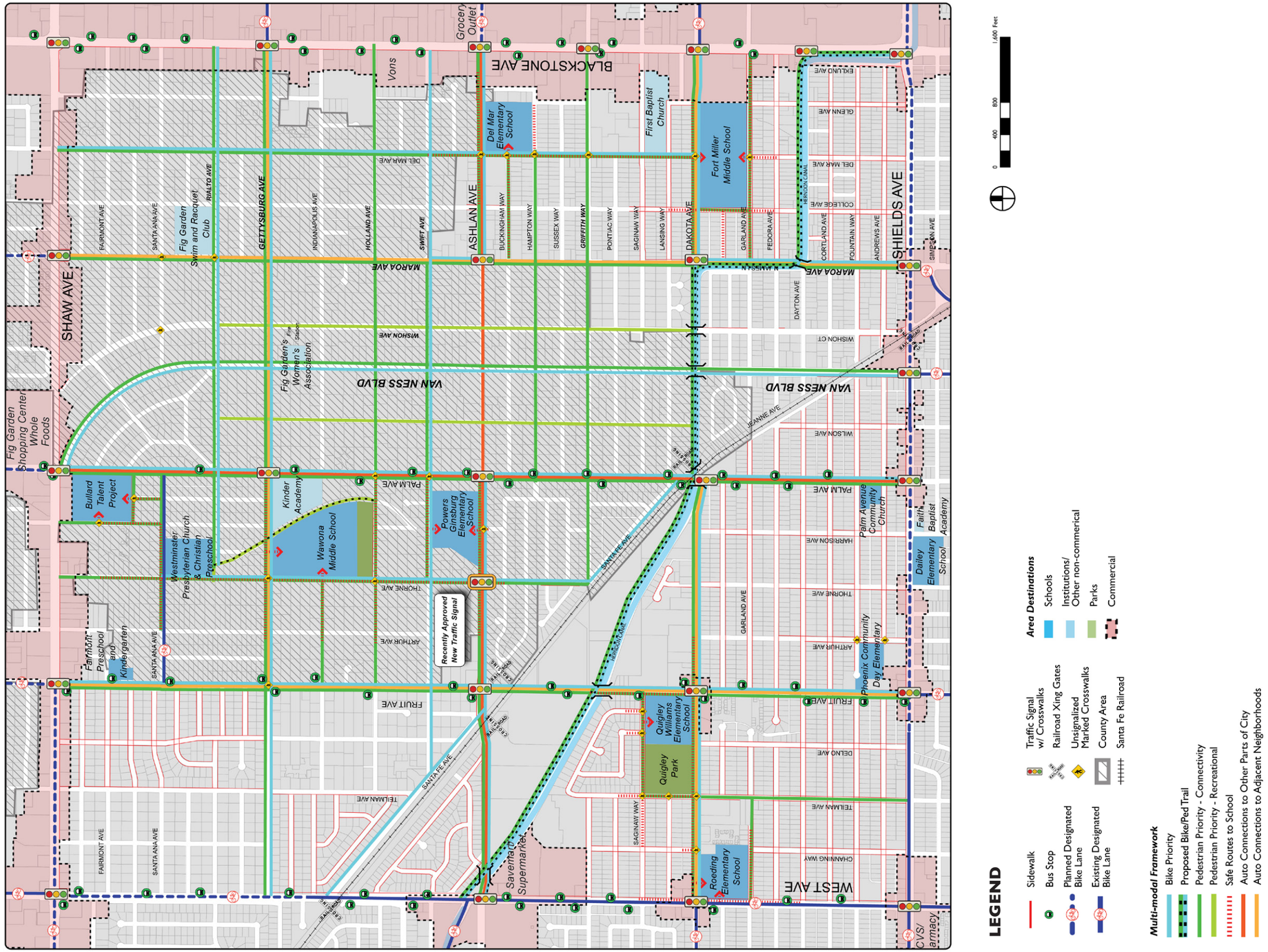

Figure 5.1: Preferred Conceptual Multi-modal Transportation Framework

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The following criteria were used in identifying a street as a pedestrian or bicycle priority street:

Bicycle Priority Streets:

1. Street or street segment has an existing bicycle facility (Class I, II, or III bike ways);
2. Street, street segment, or right-of-way is listed in City Bicycle master Plan (covers City and County) as planned bicycle facility;
3. Streets or segment provides connection to continuing Class I, II, or III bikeway at the edge of the study area;
4. Street or segment provides direct or convenient route through Fig Garden area or to destinations along the bounding corridors;
5. Street or segment facilitates safe bicycle travel to schools in the study area; or
6. Street or segment serves as alternate route to bicycle facility along street with high traffic volumes (i.e. Swift Avenue alternate to Ashlan Avenue).

Pedestrian Priority Streets:

7. Street or segment provides direct or convenient route to open spaces and recreational facilities in Fig Garden area;
8. Street or segment provides direct route through Fig Garden area or to commercial destinations along the bounding corridors;
9. Street or segment facilitates safe pedestrian travel to schools in the study area;
10. Street or segment has been reported as popular for recreational walking and jogging;
11. Street has high traffic volumes and currently does not provide for safe pedestrian travel;
12. Street includes transit service and currently does not provide for safe pedestrian access to transit stops (Fruit and Palm Avenues); or
13. Street or segment serves as alternate route to gap in pedestrian facility along street with constrained right-of-way (Swift Avenue alternate to Ashlan Avenue).

It should be noted that streets not identified in the framework, as priority streets for any of the modes are considered as currently meeting pedestrian, bicycle, and automobile needs.

Conceptual Designs for Pedestrian and Bicycle Accommodation:

After establishing the framework of pedestrian and bicycle priority streets as well as (multi-modal) streets slated to balance the accommodation of all three modes, the Project Team developed design concepts for how to improve and accommodate safe and comfortable pedestrian and bicycle travel along multi-modal streets with higher volumes of traffic, such as Ashlan Avenue, Fruit Avenue, Palm Avenue, and Dakota

Avenue as well as for neighborhood streets with bicycle/pedestrian priority street status. Design concepts were also developed for enhanced pedestrian and bicycle safety at crosswalks. (See Section 5.1.3 for details.)

Traffic Calming Measures:

The identification of a street as pedestrian priority street and appropriate spatial accommodation of pedestrians and bicycles are not enough to ensure the desired level of safety and comfort if automobiles are still traveling above the speed limit. Affecting a change in the travel behavior of drivers on pedestrian and/or bicycle priority streets as well as multi-modal streets, such as Ashlan Avenue and Gettysburg Avenue is therefore an important part of the recommended strategy to provide adequate safety and comfort to all users of Fig Garden streets. The Project Team therefore developed a range of traffic calming measures specifically tailored to the Fig Garden Area. While specific locations were identified for some of the recommended measures, others can be applied over time in order to flexibly address speeding (and to some degree traffic volume) issues as they arise or are further identified by Fig Garden residents (see Section 5.1.4 for details).

It should be noted that traffic signal timing improvements have been discussed as a potential traffic calming measure along Ashlan Avenue. This possibility was investigated during the course of the Study and it was found that signal timing changes alone would be insufficient to bring about the level of traffic calming that is expected with the project improvements. However, signal timing changes should be considered to complement the traffic calming features that are part of the project and optimized signal timing would be encouraged during implementation of the recommended improvements.

5.1.2 Multi-modal Transportation Framework

The preferred version of the multi-modal transportation framework presented below is the result of further refinements of this initial draft based on input and suggestions received from the Steering Committee, agency reviews, and the public.

The intent of the multi-modal transportation framework is to clearly outline the separate network layers for pedestrians, bicyclists and automobiles in order to identify key streets that need to be improved in order to achieve the desired multi-modal connectivity and accessibility as well as identified safety and comfort needs for pedestrians and bicyclists in the study area.

The Multimodal Framework map (Figure 5.1) highlights streets important for pedestrian, bicycle and vehicular connectivity. The pedestrian network has the highest density of connectivity because walking distances typically have short ranges

from a quarter to about a mile of walking distances. Furthermore, of the three modes, it is also the most informal, hence utilizes the shortest distances between two destinations. It also primarily is going to be utilized by residents of the area.

The streets identified as priority streets for bicycle travel tie into and expand the city-wide connectivity of bicycle routes already developed under the Bicycle Master Plan. It attempts to strike a balance between both local, casual bicycle riding and regular commuter bicycling. The route network therefore provides access to community destinations on local streets as well as streets that connect adjacent neighborhoods and other parts of the city. Where there are right-of-way constraints, parallel routes on adjacent streets were identified for safety. For example, the segment of Ashlan Avenue is severely constrained between Maroa and Palm Avenues. Therefore bicycle facilities are recommended to be provided on to Maroa from Ashlan Avenue up to Swift Avenue, providing bicyclists a safer option to travel east-west. Similarly, pedestrian amenities are recommended on Swift between Maroa and Thorne Avenues, as an alternative to walking along Ashlan Avenue.

The Framework map highlights Ashlan, Gettysburg and Dakota Avenues as key east-west vehicular connectors, and Fruit, Palm and Maroa Avenues as north-south vehicular connectors. These streets are evenly spaced about a half-mile apart from each other. Of these streets Ashlan and Palm Avenues have the largest volumes of traffic, and are significant citywide connectors. The other vehicular priority streets are important local connectors, utilized by local residents to get to schools, parks and transit, hence they are also identified as pedestrian and bike priority streets. Streets with all three priorities are designated as multi-modal streets where all three modes will require facilities for safe travel.

5.1.2.1 Vehicular Travel

Figure 5.2 distinguishes local streets (not highlighted) and streets that play an important role in vehicular connectivity to, around, and through the study area (highlighted). The latter include streets that connect the study area to adjacent or nearby other neighborhoods (Neighborhood Connectors) and those that connect to other areas of or across the city (City Connectors). Most of these streets are also used by study area residents and visitors to navigate local streets that give access to destinations within the study area. The identified Connector streets also carry traffic volumes greater than 3500 ADT. The lower average daily trips on the western most segment of Gettysburg Avenue, as well as its discontinuity beyond N. West Avenue limited it's classification as a connector street up to Palm Avenue.

Together, these streets are largely consistent with the existing collectors or arterials streets identified in the respective Circulation Elements of the City's and County's General Plans. The improvement for some of these streets take the role

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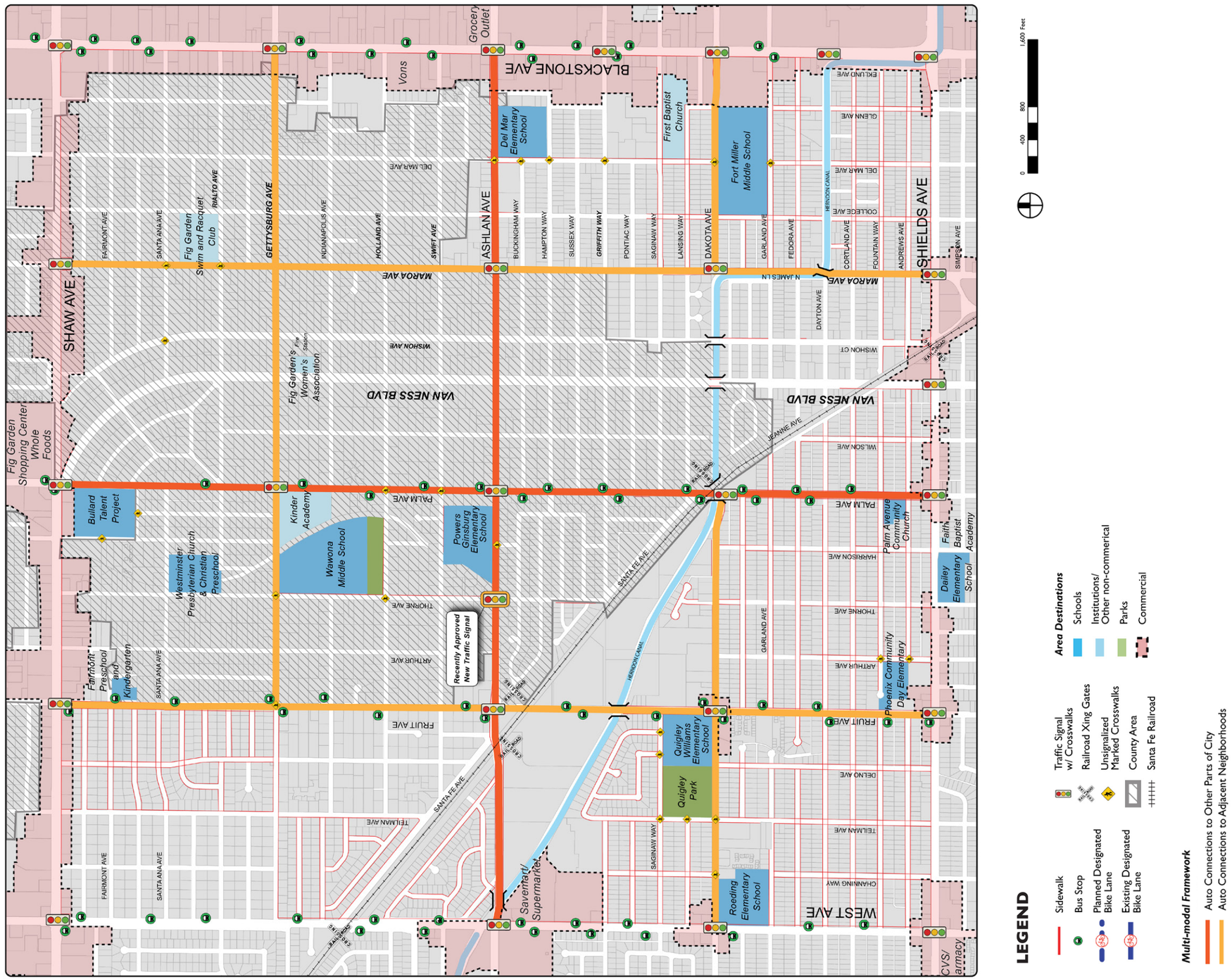

Figure 5.2: Preferred Conceptual Multi-modal Transportation Framework - Automobiles

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that these streets play for vehicular access and mobility into consideration. This is balanced with the identified need for a better accommodation of pedestrian and bicycle amenities along these streets. The specific conceptual designs for individual streets are provided and discussed in Section 5.1.3.

In order to discourage commercial truck traffic on the streets within the study area, the City may elect to post notifications pursuant to the California Vehicle Code sec. 35701, and Fresno Municipal Code Section 10-1303. The County lacks the ability to post similar signage along streets under its jurisdiction.

5.1.2.2 Pedestrian Travel

As indicated in the existing conditions section of the report, there is a significant level of pedestrian activity on many County Island streets, often despite the lack of sidewalk amenities (see Figure 5.3). In addition to accommodating the needs of the many recreational walkers in the Old Fig Garden area, the network of pedestrian streets identified in the framework addresses the potential that current and future residents in the study area may choose walking as a way to reach nearby destinations, such as schools, parks, community amenities, and retail centers, as part of a healthy lifestyle. Figure 5.3 also identifies those streets – and segment of streets – with importance as Safe Routes to School. This identification allows improvements along these segments to occur under funding designated for the improvement of Safe Routes to School.

Several study area roadways or segments of roadways, are recommended for multi-modal improvements, including the provision of pedestrian facilities, while others streets have been identified for specifically providing pedestrian and/or bicycle facilities. The multi-modal recommendations vary in approach with respect to several existing conditions, including significant differences in the available public right-of-way on different segments of individual streets. The improvements have been recommended along Gettysburg Avenue, Ashlan Avenue, Dakota Avenue, Palm Avenue, and Maroa Avenue. Pedestrian facilities have also been recommended along streets that provide connectivity to schools and other local destinations, as well as streets typically utilized for recreational walks – Van Ness, Wishon, and Wilson Avenues. In addition, a bicycle/pedestrian trail has been proposed along the Herndon and Enterprise-Holland Canals through the study area. Specific conceptual designs for individual streets are recommended under Section 5.1.3.

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Figure 5.3: Preferred Conceptual Multi-modal Transportation Framework - Pedestrian Priority

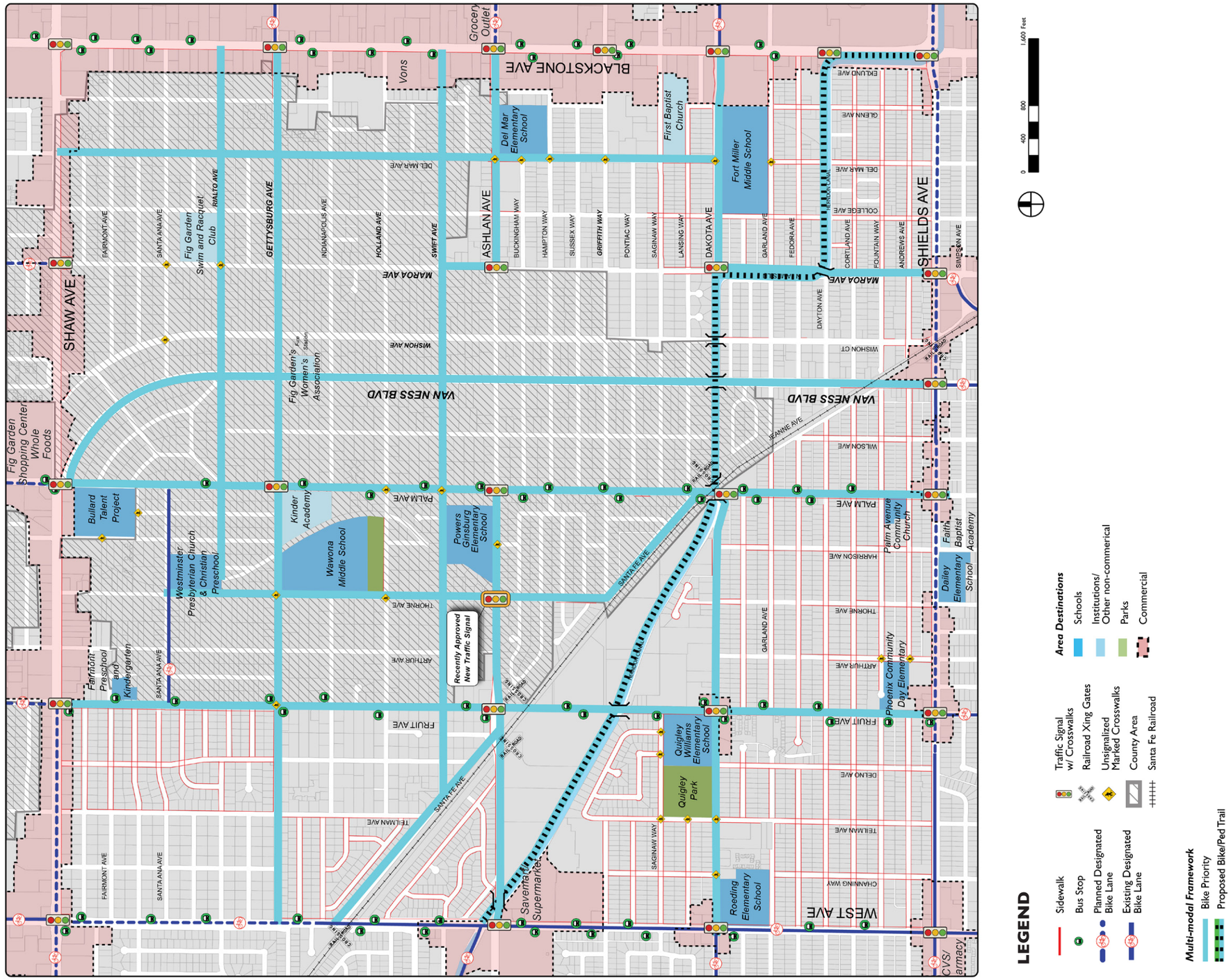


Figure 5.4: Preferred Conceptual Multi-modal Transportation Framework - Bike Priority

5.1.2.3 Bicycle Travel

The City of Fresno's Bicycle Master Plan, indicates several opportunities and desired connections to and through the study area. These were taken into consideration during the development of the bicycle priority network and facility concepts for this Study, along with limiting factors and conditions such as traffic volumes, available right-of-way, existing landscaping along roadway edges, community support, and bicycle safety. Figure 5.4 shows streets and paths identified as bicycle priority routes. Several study area streets are recommended for multi-modal improvements, including the designation as a bicycle route and installation of "sharrows", while bicycle lanes have been recommended for others. Multi-modal improvements that include the accommodation of bicyclists have been recommended along Gettysburg Avenue, Ashlan Avenue, Dakota Avenue, Palm Avenue, and Maroa Avenue. In addition, bicycle facilities have been recommended along Santa Ana Avenue, Rialto Avenue, Swift Avenue, Thorne Avenue, Santa Fe Avenue, Van Ness Boulevard, and Del Mar Avenue. In addition, a bicycle/pedestrian trail has been proposed along the Herndon Canal through the study area. Specific conceptual designs for individual streets are provided and discussed in Section 5.1.3.

5.1.2.4 Transit Access

Transit services in the study area are available on Palm and Fruit Avenues, and on the arterial streets bounding the study area. While the arterial streets have sidewalks and bus shelters, the facilities to access most bus stops on Palm and Fruit Avenues are either nonexistent or are not compliant with Federal and State accessibility standards.

Recommendations to address these transit access issues include the implementation of five-foot wide (min.) sidewalk and pathway improvements along Fruit and Palm Avenues illustrated in Figures 5.10 and 5.11. In addition, the Study has also identified several local streets that connect Fig Garden residential areas to the surrounding arterials as pedestrian priority streets. This is intended to provide access to the citywide transit services that operate on these arterials. Figure 5.1 indicates the locations of existing bus stops in relation to the recommended pedestrian and bicycle priority network and crosswalk improvements.

5.1.2.5 Safe Routes to School

Many of the sidewalk, path, crosswalk and traffic calming improvements described in this chapter of the report will provide safety benefits to routes that give access to the many schools in the Fig Garden study area. The improvements will not only increase access and safety for students and parents already traveling to school on foot or by bicycle, but hopefully also encourage increased use of these modes because of the increased safety and convenience that results from the implementation of the recommended multi-modal improvements in the study area. In addition to the general increase in safe pedestrian and bicycle routes throughout the study area, the following sidewalk and crosswalk and signal improvements have been specifically identified for the purpose of facilitating safe conditions on segments identified as safe routes to school on Figure 5.3:

- Provision of sidewalks located near school areas;
- Provision of marked crosswalks located near school areas; and,
- Installation of a traffic signal at the intersection of Ashlan Avenue and Thorne Avenue (near Powers Ginsburg Elementary School) and the provision of sidewalks and curb ramps along Ashlan Avenue between Thorne Avenue. Note: these improvements will be provided in the near future and are funded through a grant recently approved by Caltrans.

Individual studies of several of the schools were conducted during the course of the study and a summary of these studies follows.

- Bullard Talent School: Nearly all of the students at this school were observed to be dropped off rather than walking on their own. Some students were dropped off on the opposite side of Harrison Avenue from the school and an adult crossing guard was available to help these students cross the street. Although no specific problems were observed, the pedestrian priority treatments recommended in the area are expected to provide an improved travel experience for current and future students who walk to this school.
    - Del Mar Elementary School: Most of those who walked to this school approached from the south. A few students were observed to cross Del Mar Avenue on their way to school in crossings without crossing guards. The use of crossing guards does not appear to be consistent at this school. Crossing guards could be considered in the future if justified by higher levels of auto traffic or students. A few students were observed crossing Ashlan Avenue midblock between Blackstone Avenue and Del Mar Avenue. While this is an undesirable situation, education/enforcement rather than traffic control features are a potential remedy. The primary drop off area was directly in front of the school on Del Mar Avenue.
    - Fort Miller Middle School: Most students who walk to this school were observed to approach from the north or west. Those who came from the north cross Del Mar Avenue at Dakota Avenue, where an adult crossing guard is present. Students approaching the school from the east and west

generally used sidewalks on Dakota Avenue. A few students were observed to approach from the south through the four-way stop controlled intersection at Garland Avenue and Del Mar Avenue. Drop offs occurred on both sides of Del Mar Avenue and those who needed to cross the street were able to do so with the help of the crossing guard at Del Mar Avenue and Dakota Avenue. No major problems were observed at this school and general pedestrian improvements in the area were the only recommendation that was made.

- Powers-Ginsburg Elementary School: Students who walk to this school and approach from the south need to cross Ashlan Avenue and most cross at either Harrison Avenue or Thorne Avenue. At Harrison Avenue, there is an adult crossing guard, but the crossing at Thorne Avenue was observed to be unguarded. This undesirable situation is expected to be remedied in the near future through the installation of a traffic signal at Ashlan Avenue and Thorne Avenue that has been funded through a Caltrans grant. In addition to this improvement, access to this school from the north would be facilitated by the recommended bicycle pedestrian trail that is proposed to be located north of the school between Palm Avenue and Thorne Avenue. Drop off activity was observed to occur along Ashlan Avenue and Swift Avenue with no major problems observed.
- Roeding Elementary School: Students were observed to approach this school from the north, south, east, and west. The only street crossing of any concern was the intersection of Dakota Avenue and Channing Avenue where students from the north were observed to cross Dakota Avenue. This location could be considered for a crossing guard in the future if justified by increases of student or auto traffic. Most of the drop off activity at this school occurred in the drop off area accessed by West Avenue, with some drop off activity occurring along Dakota Avenue.
- Wawona Middle School: Some students attending this school were observed to use the unguarded crosswalk at Ashlan Avenue and Thorne Avenue mentioned above in the discussion of the Powers-Ginsburg Elementary School. These students will stand to benefit from the traffic signal proposed at this location. Some students were observed to approach this school from the west along Indianapolis Avenue. There are currently no sidewalks and these students would benefit from the pedestrian treatment that is recommended along Indianapolis Avenue. Students approaching this school from the north and south would be expected to benefit by the recommended bicycle pedestrian trail that is proposed to be located north and south of the school between Palm Avenue and Thorne Avenue. Drop off activity for this school occurs along Thorne Avenue and Gettysburg Avenue with no major problems observed.
- Quigley Williams Elementary School: Students were observed to walk to this school from the east using the intersection of Fruit Avenue and Saginaw Way, where there is both a traffic signal and an adult crossing guard present. Students also walked to the school from other directions without

the aid of a crossing guard and with no major problems observed. Students approaching this school from the northwest would be expected to benefit by the recommended bicycle pedestrian trail that is proposed to be located along the canal to the north of the school. Most of the drop off activity for this school occurred in the drop off area accessed through Saginaw Way. During peak times, a queue of vehicles would form to the east of this driveway extending east to Fruit Avenue. This is an indication that the drop off area is at capacity and improvements should be considered prior to any increase in activity. Some drop off activity also occurred along Saginaw Way.

5.1.3 Street-specific Improvements and Alternative Public Improvement (API) Standards

The specific recommendations outlined below are concepts designed to improve safety and traffic concerns; quality of life, and access through and within the Fig Garden study area. Through three community workshops and a thorough analysis of existing land use, urban design and transportation conditions, street improvement recommendations were presented to the community at the workshops. The participatory polling and work sessions process conducted during the workshops resulted in the development of preferred street improvement options. The full polling results are provided in Appendix D of this report. The following is a summary of those design concept alternatives that have been identified as "preferred" by the Steering Committee and the public process. In case of the street-specific improvements, location-specific challenges were taken into account where right-of-way width and roadside conditions significantly varies along the length of a street (i.e. along Ashlan Avenue, between Blackstone Avenue and West Street).

It should be noted that all concept designs presented in this study require further design development tailored to each street or street segment targeted for improvements. This includes the incorporation of applicable code requirements into the increasingly detailed design plans.[2]

5.1.3.1 Ashlan Avenue

There are five distinct segments of Ashlan Avenue within the study area. Preferred design options for each segment seek to capitalize on existing roadway infrastructure, provide for additional pedestrian and bicycle infrastructure, and maintain the

[2] *This includes the consideration of applicable City and County street design standards and details, the State of California Department of Transportation Highway Design Manual, California Manual for Uniform Traffic Control Devices (CA MUTCD), Fire Code, and Federal ADA and California Title 24 Standards to name just a few.*

neighborhood character, particularly the tree foliage. The five segments and their specific preferred design alternatives are outlined below, have been developed with consideration to the following strategies to improve the safety and traffic volumes:

- Within the most constrained area of Ashlan Avenue, between Palm Avenue and Maroa Avenue, short median islands with pedestrian refuges are recommended (see Figure 5.8). These short median islands will be located only at intersections and will provide a refuge area for pedestrians and bicyclists crossing Ashlan Avenue, allowing them to cross each direction of traffic separately, greatly reducing the difficulty in crossing this roadway. The median islands will also have the effect of slowing down traffic speeds along Ashlan Avenue and discouraging the use of this roadway by through autos. Full-length medians are not recommended as they would limit access to residential driveways, and take away greater amounts of existing landscaping within the public right-of-way.
- Due to the current classification of Ashlan Avenue as an arterial street in the city area, the existing western segment of the street in the study area, between West Avenue and Palm Avenue, is designed with four lanes separated by a planted median. In the on-going development of the city's General Plan, the city is considering to re-classify Ashlan Avenue within the study area as a Scenic Collector. Therefore, it is recommended that Ashlan Avenue be reduced to one lane of traffic in each direction of travel in order to make this roadway segment more consistent with the constrained segment in the middle of the study area.
- Similarly, on the east side of the study area between Maroa Avenue and Blackstone Avenue, it is recommended that Ashlan Avenue be reduced to one lane of traffic in each direction of travel.
- At the entrances to the study area (eastbound at West Avenue and westbound at Blackstone Avenue) it is recommended that the intersection lane geometry be modified so that only one lane of traffic leads into the study area, in order to be consistent with the recommendations and to discourage through traffic.

As mentioned above, the recommended improvements for Ashlan Avenue presented here are representative of those selected as "preferred" design options by the Fig Garden community. In this context, it should be noted that the Project Team suggested that at least a minimum level of pedestrian accommodation (Option 4 on page 33 in Appendix D) be included in the cross section of Ashlan between Maroa and Palm Avenues. However, a majority of Steering Committee members and the general public strongly favored that this particular segment of the street remain largely unchanged because of the impacts that such pedestrian improvements could have on landscaping and front yard walls that exist within the public right-of-way.

It should also be noted that the County's Public Works Department reserves the right to make improvements within the public right-of-way that may impact landscaping, walls and other private amenities if such impacts are unavoidable in order to maintain proper safety with respect to sight distance, decision making distance, clear zones of recovery or other design based safety standards and operational needs for pedestrians and all vehicle types.

Between Fruit and West Avenue

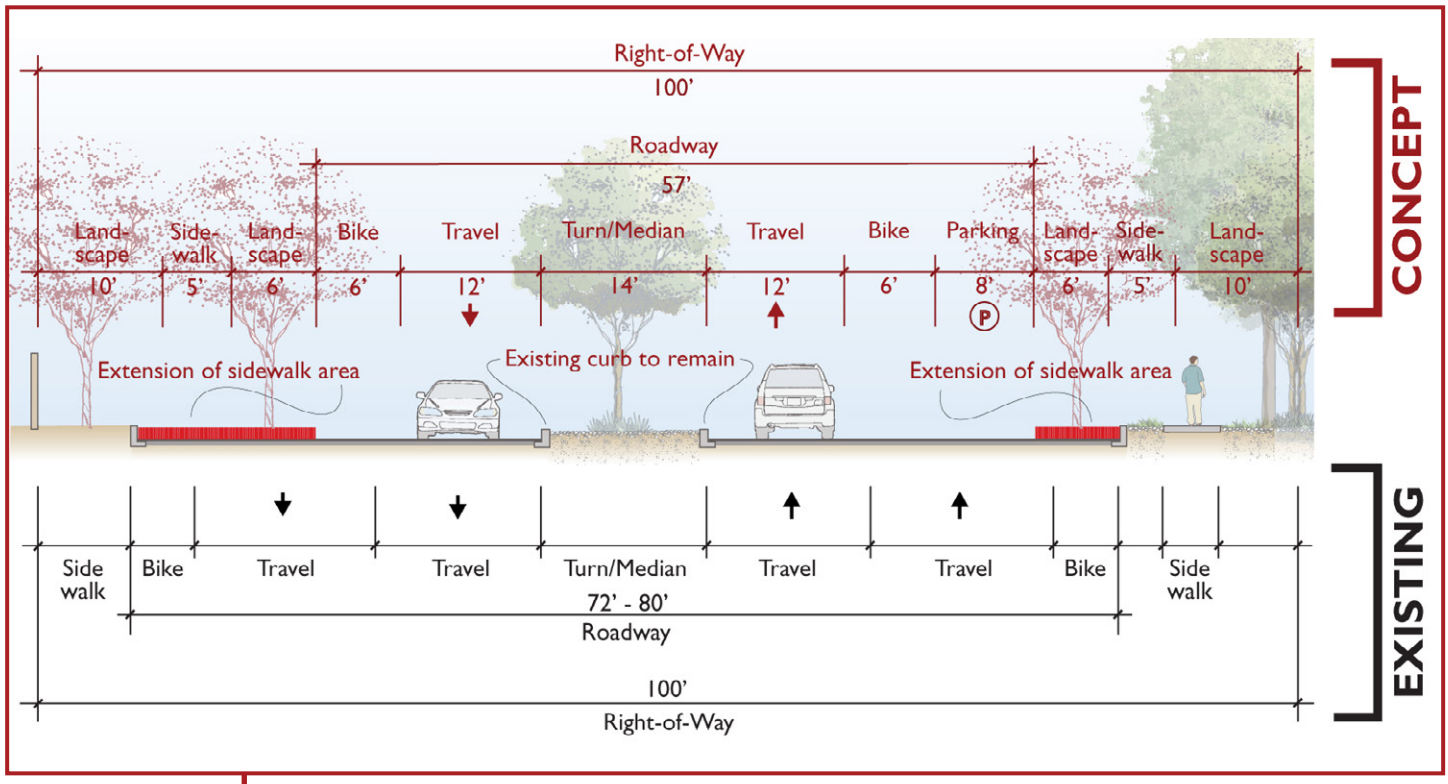
Within the study area, the western segment of Ashlan Avenue plays an important role of providing access to single-family residential, multifamily residential and open space opportunities. It provides a key link to West Avenue across the railway tracks and Herndon Canal and is poised to be a neighborhood gateway that slows drivers and provides an inviting pedestrian realm. Existing infrastructure such as the center, landscaped median is set to remain in place. The preferred alternative calls for the following improvements as shown in Figure 5.5.

- Move the curbs on both sides of the street to provide expanded five-foot wide sidewalk and a dedicated six-foot planting strip adjacent to the roadway.
- Maintain the curbed center median/center turn lane and existing landscape.
- Reduce the total roadway width to 57 feet and the amount of asphalt by:
  - removing one travel lane in each direction, and
  - reducing travel lane width to 12 feet per lane.
- Incorporate demand for parking and bicycle infrastructure via:
  - two six-foot striped bike lanes, and
  - A south side parking lane of eight-foot width located between bike path and sidewalk.

Between Fruit and Thorne Avenue

Single-family residences, curb-less streets, and relatively wide right-of-way that include separated informal paths on either side of the roadway characterize this segment of Ashlan Avenue. The segment serves as a transition from the busier curb-and-median western segment to the school-oriented segment to the east. Due to the desire to maintain the existing landscape character within the right-of-way, and the desire to maintain the curb-less character of the street, the preferred alternative recommends minimal interventions that will allow for separate bicycle and pedestrian paths without overtly significant change in the character of the neighborhood. See Figure 5.6.

- Extend the roadway pavement on either side of the street by one or two feet to allow for the addition of bike lanes and to facilitate shoulder drainage.
- Allow two, six-foot striped bike paths to take advantage of the expanded pavement area.
- Reduce travel lane widths from 15-16 feet to 11 feet.
- Provide a detached, meandering five-foot pedestrian pathway. The pathway will avoid any established trees or any existing specimen landscaping and will provide an organic, natural feel consistent with existing neighborhood character.
- Increase intersection safety by installing short medians with refuges, thereby reducing crossing distance and allowing for additional landscaping.



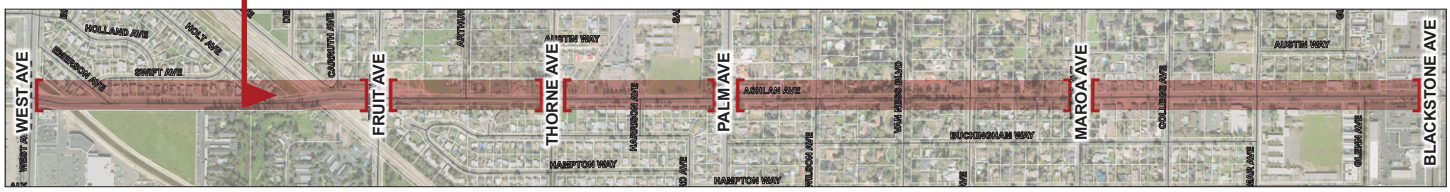


Figure 5.5: Ashlan Avenue Between Fruit and West Ave. - Looking East

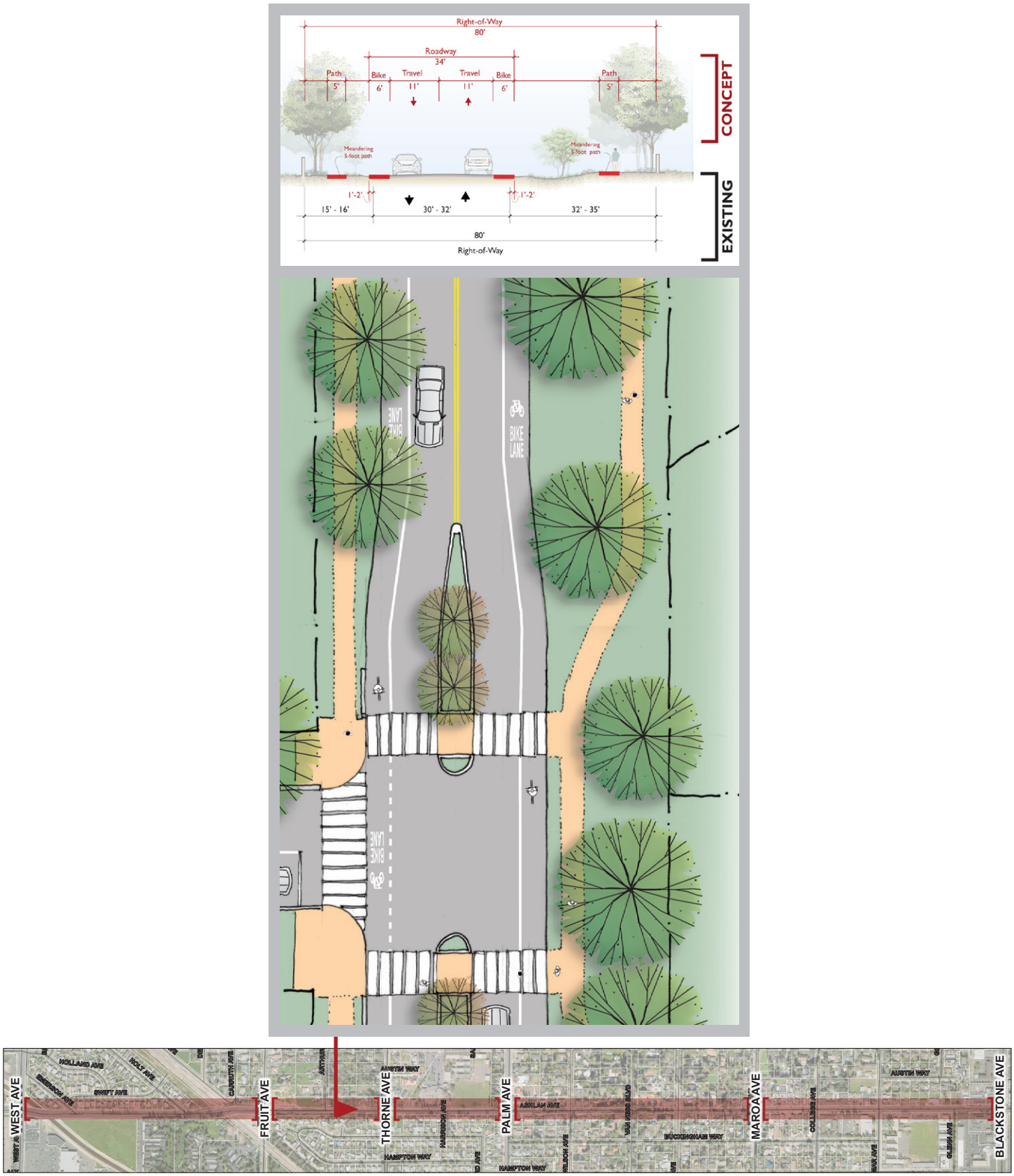


Figure 5.6: Ashlan Avenue Between Fruit and Thorne Ave. - Looking East (See enlarged section on facing page.)

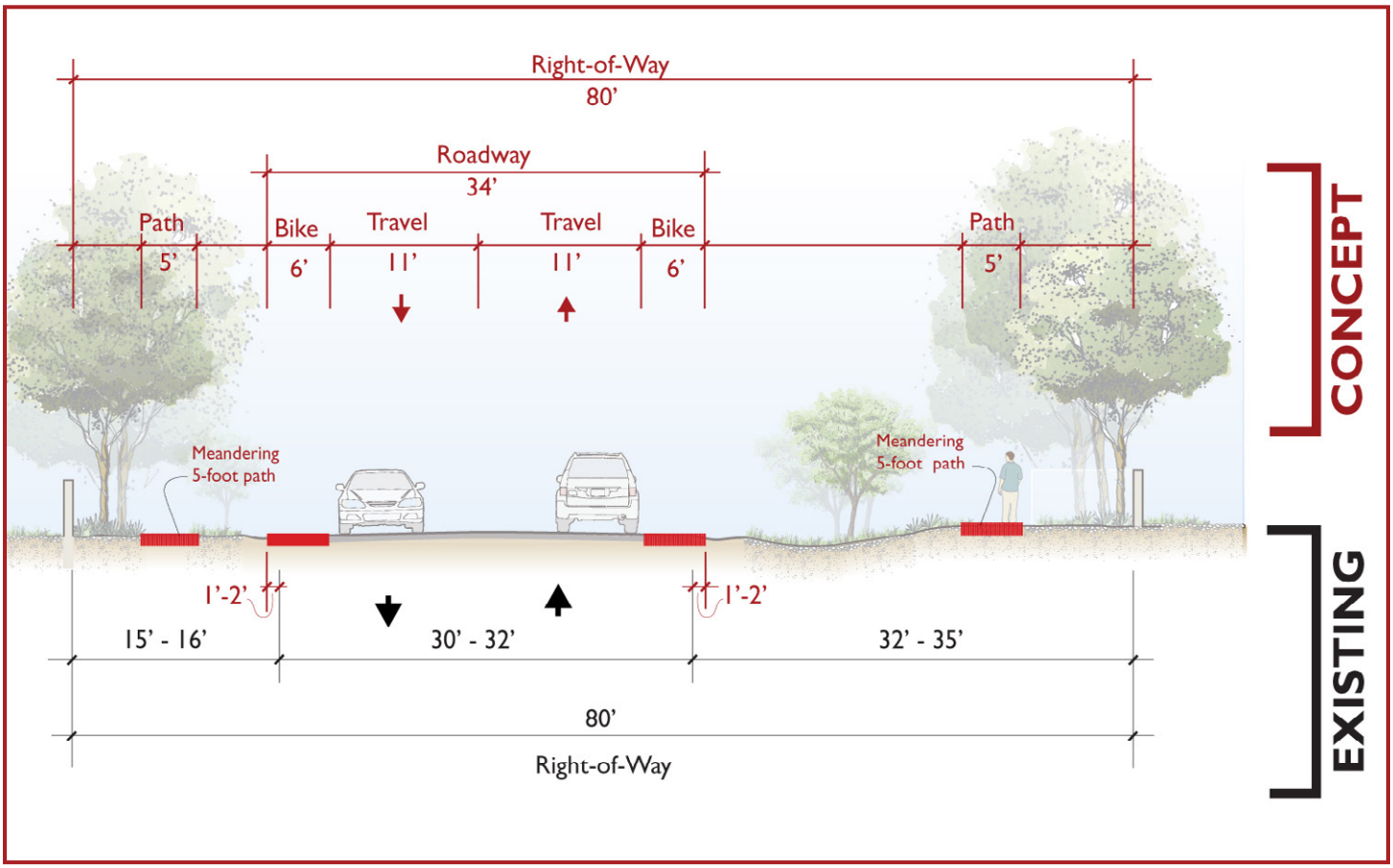


Figure 5.6: Ashlan Avenue Between Fruit and Thorne Ave. - Looking East (Enlarged section)

Between Thorne and Palm Avenue

This segment of Ashlan is identified as being a Safe Route to School, with Powers Ginsburg Elementary School being located at the center of the segment. Due to the proximity of the school, pedestrian safety, adequate student drop-off areas, and safe crossings have driven the recommendations. See Figure 5.7.

- Maintain the existing roadway width, and complete existing curbs to the ends of the segment.
- Install five-foot square tree wells along north side sidewalks to increase the shaded area within the pedestrian realm and to improve the streetscape aesthetics.
- Provide a detached five-foot sidewalk on the south side of the street where there is currently no pathway. This configuration allows a planting strip to be located between the sidewalk and back of curb.
- Reduce travel lane widths to 11-feet per lane.
- While maintaining existing on-street parking, incorporate bicycle infrastructure via:
    - two six-foot striped bike lanes, and
    - two eight-foot parking lanes that transition to drop-off lanes wherever possible.
- Improve intersection safety by installing short medians with refuges, as well as a short (mid-block) median to reduce crossing distance and to allow for additional landscaping.

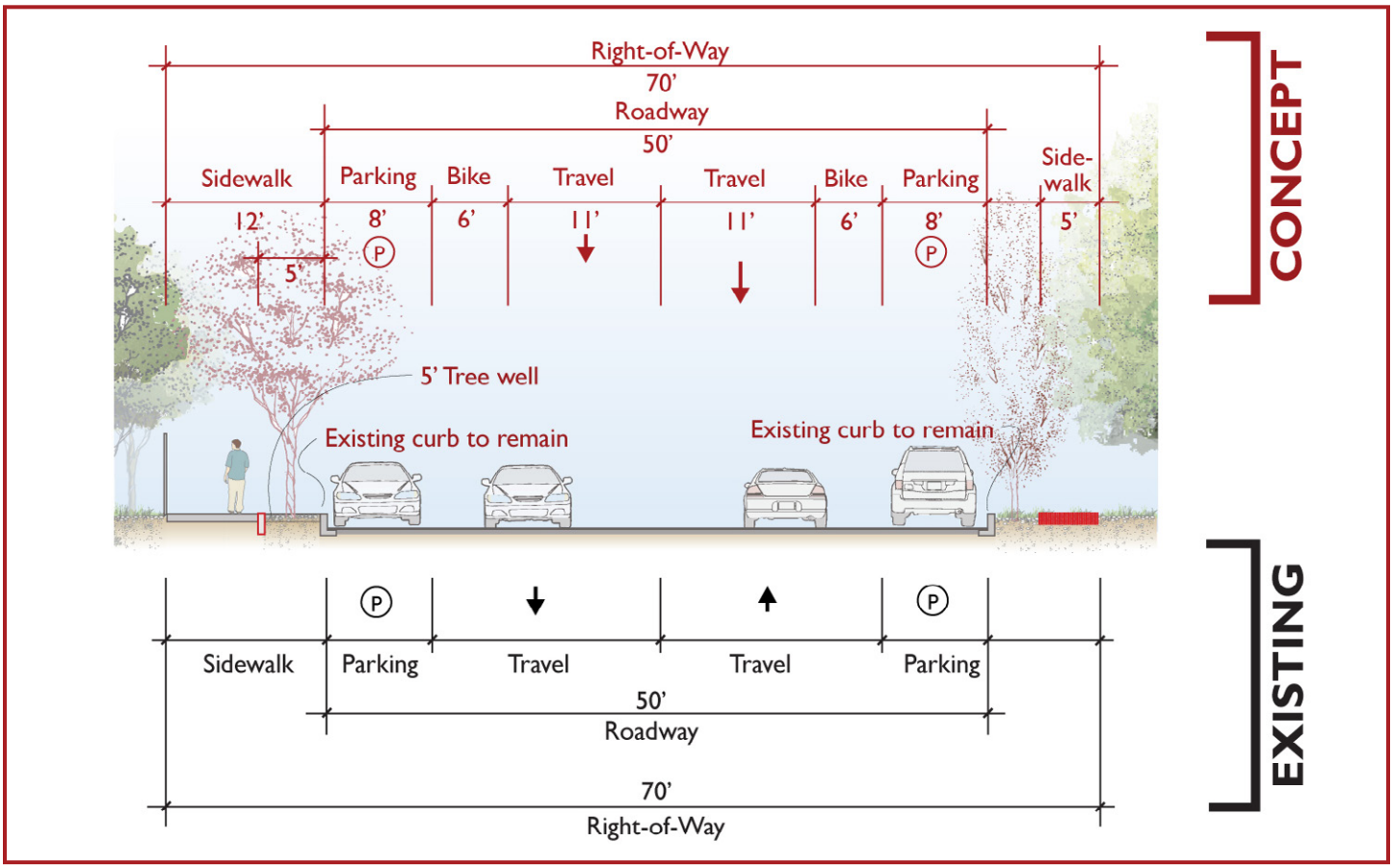
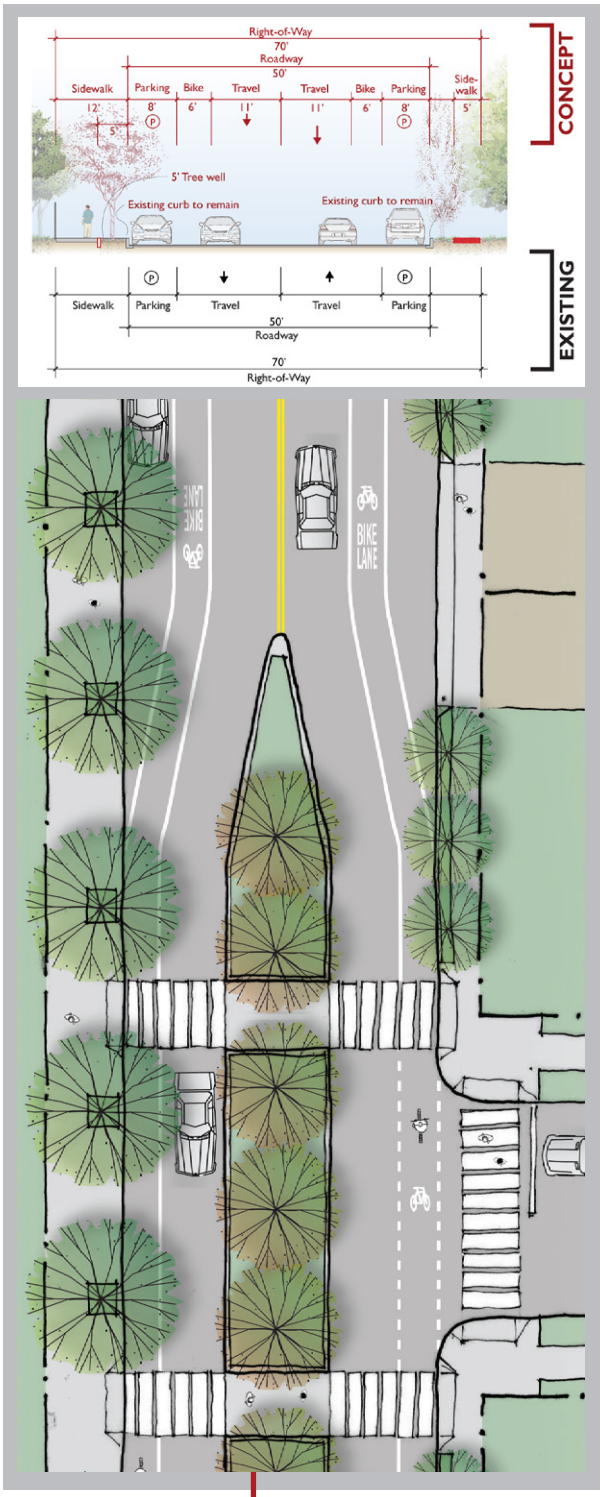


Figure 5.7: Ashlan Avenue Between Thorne and Palm Ave. - Looking East (Enlarged section)



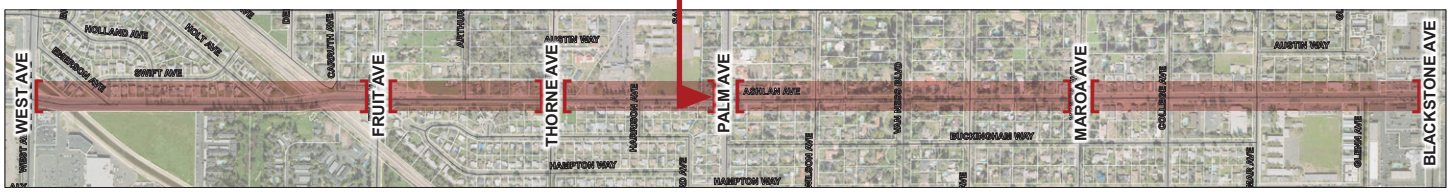


Figure 5.7: Ashlan Avenue Between Thorne and Palm Ave. - Looking East (See enlarged section on previous page.)

Between Palm and Maroa Avenue

This segment is characterized by single-family residences, curb-less streets, and established private landscape within the right-of-way and is decidedly the most 'rural' feeling of the five segments. Great attention has been given to maintain the character of the neighborhood while also providing improved traffic calming. This alternative offsets pedestrian and bicycle amenities on adjacent parallel Swift Avenue street segment. See Figure 5.8 for an illustration of the improvements listed below.

- Maintain the existing total roadway width.
- Maintain the landscaping between the edge of pavement and the property line.
- Reduce travel lane widths from roughly 12.5 feet per lane to 11 feet in to support a reduction of actual vehicle speeds to posted residential speed limits.
- Increase intersection safety by installing short medians with refuges to decrease crossing distance and to allow for replacing landscaping lost at the edges of the roadway, in the median.
- Encourage property owners with driveways that require backing out onto Ashlan Avenue to consider the safety benefits of a reconfiguration of their driveways – to the extent feasible – to a circular or hammerhead configuration, which would eliminate the safety risk associated with backing out into traffic on Ashlan Avenue.

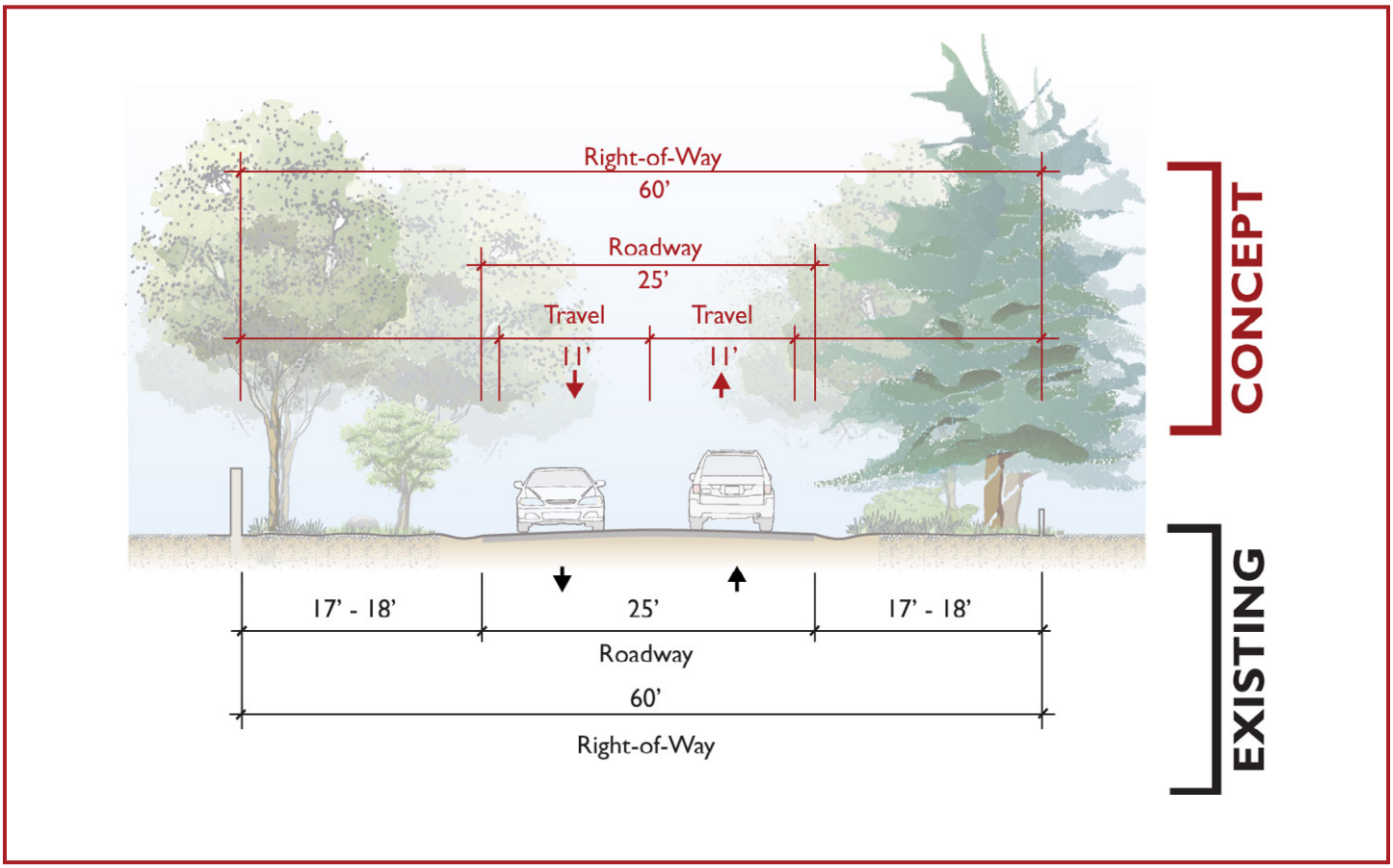
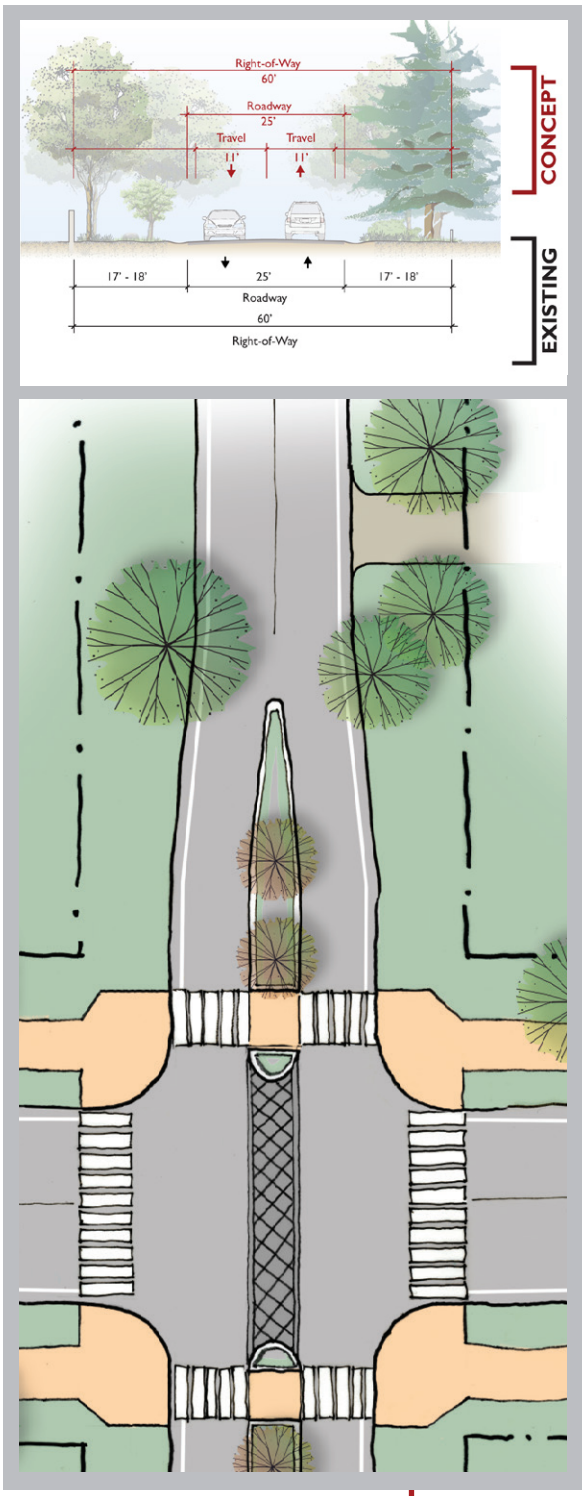


Figure 5.8: Ashlan Avenue Between Palm and Maroa Ave. - Looking East (Enlarged section)



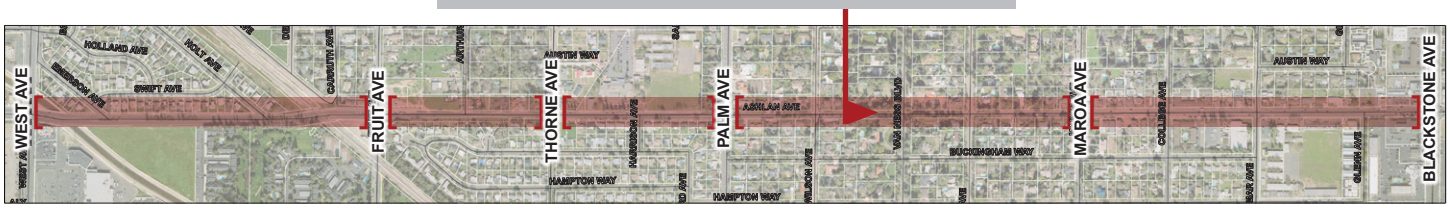


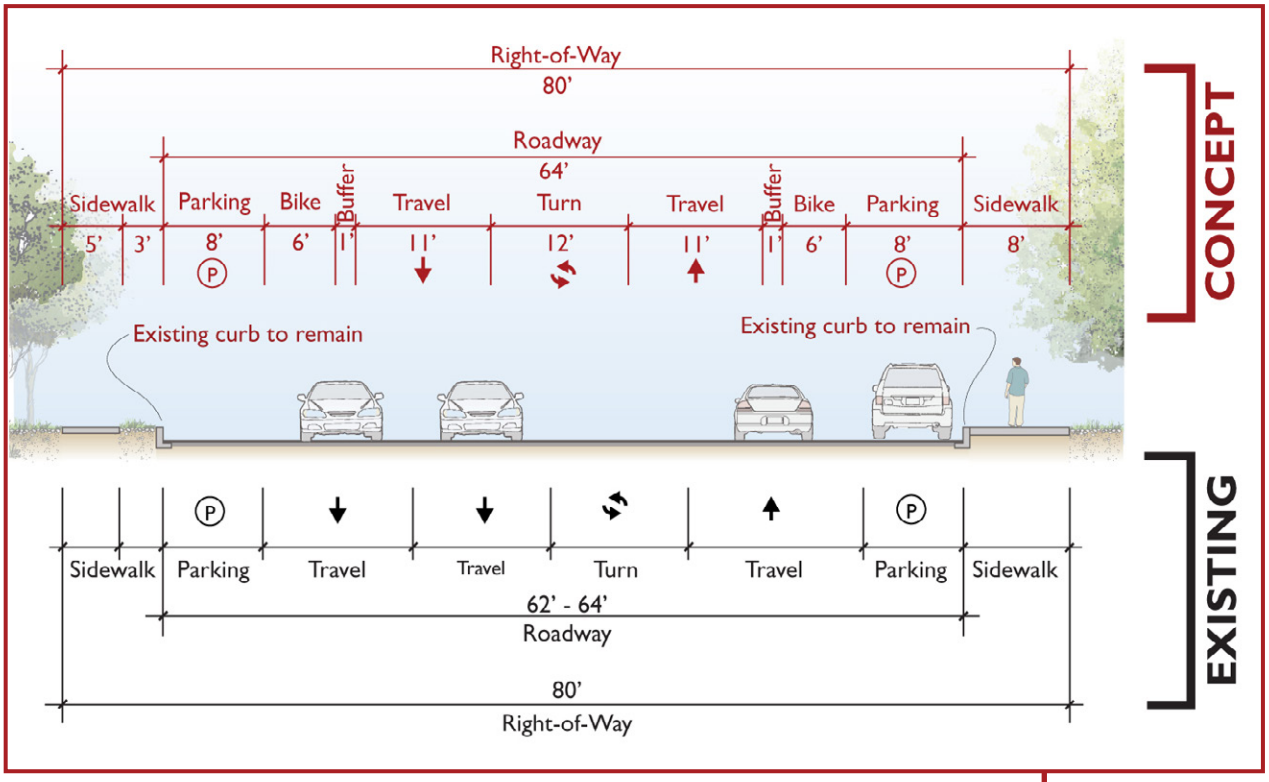
Figure 5.8: Ashlan Avenue Between Palm and Maroa Ave. - Looking East (See enlarged section on facing page.)

Between Maroa and Blackstone Avenue

Like the western segment of Ashlan, the eastern Maroa-Blackstone segment acts as a gateway to the neighborhood, carries a higher volume of vehicular traffic, and offers a greater opportunity for bicycle and pedestrian infrastructure. Figure 5.9 outlines recommended improvements for this preferred alternative.

- Maintain all existing curbs, sidewalks, and a roadway width of 64 feet.
- Maintain the existing parking lanes and center turn lane.
- Reduce the number of through lanes to one in each direction.
- Reduce travel lane widths to 11 feet.
- Install two six-foot striped bike lanes, including a one-foot buffer adjacent to each traffic lane[3].

[3] *The two one-foot wide striped buffers are not technically necessary to provide a safe bicycle accommodation but result from the difference between the existing curb-to-curb dimension and that required for the recommended cross section. The width of the bicycle lanes should not exceed six feet in order to discourage automobiles from using the bicycle lane for vehicular travel.*



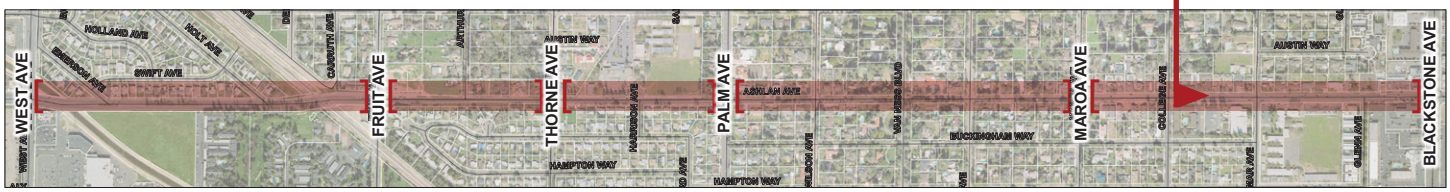


Figure 5.9: Ashlan Avenue Between Maroa and Blackstone Ave. - Looking East

5.1.3.2 Palm Avenue

Palm Avenue provides important north-south connections to other parts of the city. Much of the street in the study area is located within the County Island, where (primarily on the east side of the street) the presence of large shrubs, walls, and custom made mail boxes in the area between the curb and the property line create a discontinuous and obstructed pedestrian environment that does not meet ADA standards. The preferred design concept for Palm Avenue therefore addresses this need for improved pedestrian infrastructure by proposing the construction of a five foot wide pedestrian sidewalk from Shields Avenue north to Shaw Avenue. Input gathered from the community indicated that most desired minimal intervention on Palm Avenue with the exception of improved sidewalk consistency and improved access to transit stops. Figure 5.10 outlines the recommended improvements listed below.

- Maintain the existing curbs and paved roadway width of 64 feet.
- Maintain the existing lane configuration and striping.
- Install attached five-foot wide sidewalks where none currently exist.
- Extend existing attached sidewalks to a width of five feet.
- Install curb extensions at intersection to allow safer pedestrian crossings across Palm Avenue.

It should be noted that the Fresno Bike Master Plan recommends a Class II bike lane for this segment of Palm Avenue. Based upon that recommendation, an alternative that included this recommendation (See Appendix D, page 35) was presented for consideration at the second community workshop. This alternative, however, was eliminated from consideration for the time being. This was due to concerns that the reduction in the number of lanes from four to three (road diet), necessary to accommodate bicycle lanes, was not acceptable as long as existing and projected traffic volumes are above 20,000 average daily trips (ADT)[4]. This is consistent with the existing City of Fresno Department of Public Works' policy of considering road dieting[5] only for streets below 20,000 ADT. Should the policy change or the daily vehicular trips get reduced below 20,000 ADT, the addition of bike lanes within the existing roadway should be considered.

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[4] *See Figure 3.8*

[5] *Road Dieting is the re-design of an existing roadway by reducing the number of travel lanes to provide for additional bike and pedestrian facilities within the existing public right-of-way.*

In the short term, consideration could be given to striping bicycle lanes on Palm Avenue between Shields Avenue and Dakota Avenue only. This could be accomplished by eliminating on-street parking on one side of the street and the restriping of slightly narrower travel lanes in order to gain the space needed to accommodate two bicycle lanes. This short-term implementation concept is based on the observation that along this segment, residential buildings and their entries front onto cross streets rather than directly onto Palm Avenue, making it more likely that residents and visitors will park on the cross streets rather than Palm Avenue. Prior to advancing this concept, a thorough on-street parking utilization study and outreach to property owners would need to be conducted in order to confirm that not all of the existing on-street parking spaces are actually needed.

SHAW AVE
SHAW AVE
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SIERRA MADRE AVE
FAIRMONT AVE
WAGNER AVE
ALANOS AVE
SANTA ANA AVE
SANTA ANA AVE
ACACIA AVE
SAN GABRIEL AVE
RIALTO AVE
RIALTO AVE
WAGNER AVE
PICO AVE
PICO AVE
GETTYSBURG AVE
PRIVATE DR
INDIANAPOLIS AVE
ARTHUR AVE
ASHCROFT AVE
HOLLAND AVE
DELNO AVE
CARRUTH AVE
PRIVATE DR
SWIFT AVE
SANTA FE AVE
CARRUTH AVE
HOLT AVE
ASHLAN AVE
ASHLAN AVE
HAMPTON WAY
SANTA FE AVE
THORNE AVE
SUSSEX WAY
PACIFIC AVE
PONTIAC WAY
CARRUTH AVE
SAGINAW WAY
DAKOTA AVE
ROBINSON AVE
PRIVATE DR
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ALY
GARLAND AVE
PRIVATE DR
GARLAND AVE
FEDORA AVE
FEDORA AVE
ALY
THORNE AVE
DELNO AVE
DAYTON AVE
CORTLAND AVE
ARTHUR AVE
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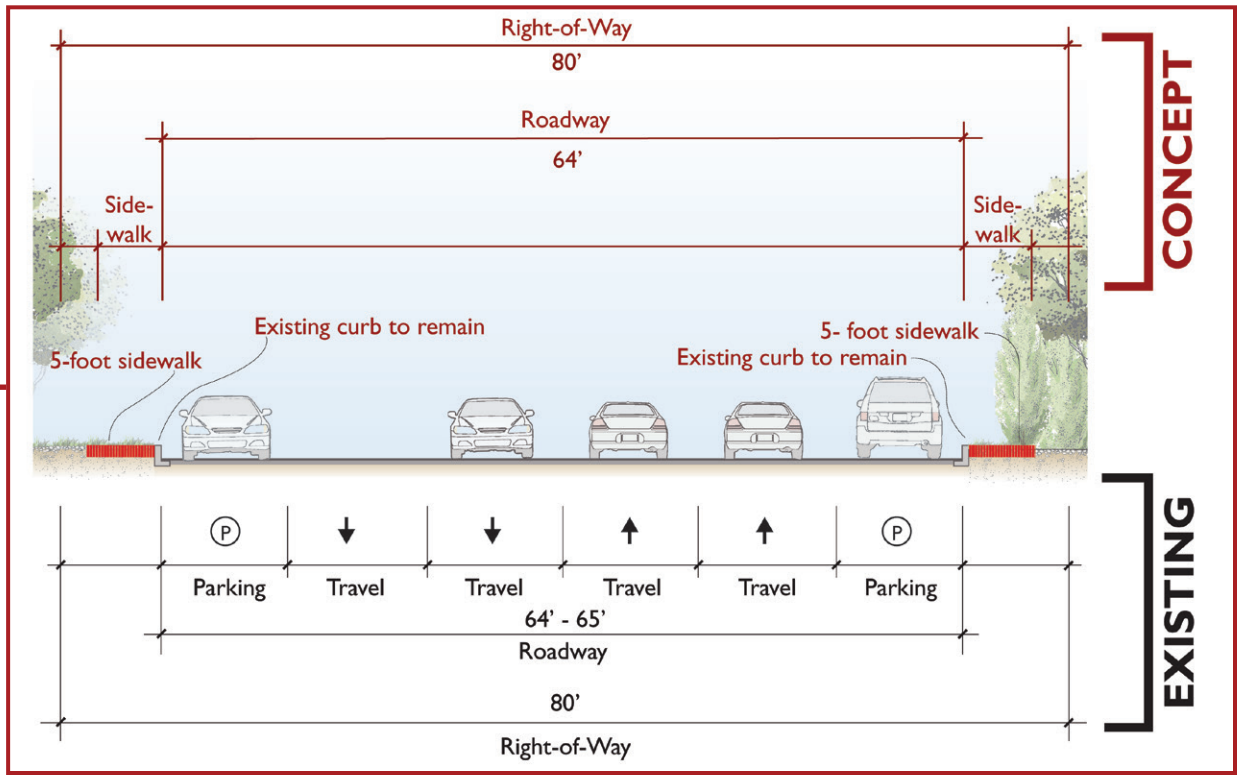


Figure 5.10: Palm Avenue Between Shields and Shaw Ave. - Looking North

5.1.3.3 Fruit Avenue

Fruit Avenue provides important connections to adjacent neighborhoods. The Fig Garden transportation framework identifies the street as a combined bike and pedestrian priority street. As such, design recommendations seek to incorporate bikes and pedestrians into the overall street design. The preferred recommended design concepts for Fruit Avenue address the following two segments.

Between Ashlan and Shaw Avenue

This northern segment of Fruit Avenue is the boundary between the City of Fresno and the County. It has a narrower public right-of-way width as compared to its southern counterpart, located in the City of Fresno. The west side of the street, located in the city, has a consistent combination of curb and sidewalk from Shaw Avenue to Gettysburg Avenue. Conditions along the eastern edge are similar to the conditions along Palm Avenue. Landscaping and other private amenities placed in the area between the pavement edge (there are no curbs) and the property line create a discontinuous and obstructed pedestrian environment that does not meet ADA standards. The improvements recommended for this street are listed below and in Figure 5.11a.

- Maintain the paved roadway width of 42 feet.
- Maintain the existing curbs (where applicable).
- Restripe the roadway to reduce the width of travel lanes to 12 feet.
- Install an attached five-foot sidewalk where there are curbs present.
- Install an eight-foot wide multi use path on the eastern (County) side of the roadway that avoids, through slight meandering, mature trees or other major landscape within the right of way without reducing the safety of pedestrians and bicyclist.
- Allow for a six-foot striped bike lane on the roadway's west (City) side, along with a two-foot buffer adjacent to the southbound travel lane.[6]
- Maintain the eight-foot parking lane on the east side is the street.
- Install curb extensions at intersections to create safer pedestrian crossings across Fruit Avenue.

[6] *The striped buffers are not technically necessary to provide a safe bicycle accommodation but result from the difference between the existing curb-to-curb dimension and that required for the recommended cross section. The width of the bicycle lanes should not exceed six feet in order to discourage automobiles from using the bicycle lane for vehicular travel.*

It should be noted that the multi-use path on the east side of Fruit Avenue will likely be ignored by expert (commuter) cyclists and possibly other bicycle riders due to the paths slightly meandering geometry and the high number of driveway crossings. In this context, it should be emphasized that the illustrated concept is the result of a compromise based on the community's desire to maintain existing landscaping in the public right-of-way, (resulting in the meander), and the county's reluctance to support the elimination of on-street parking at this time. Should a removal of on-street parking become a possibility in the future the concept alternative presented in Appendix D (Option 3 on page 46.), could be considered. This alternative includes two buffered bicycle lanes.

Between Shields and Ashlan

The southern segment of Fruit is wider in width and serves a broader range of residential types and uses. Based on input from the community, minor improvements are recommended for this segment as it already incorporates multiple modes and is efficient in handling existing and projected traffic volumes. Figure 5.11b outlines the improvements listed below.

- Maintain the paved roadway width of 64 feet.
- Maintain the existing curbs.
- Restripe the roadway to incorporate 11-foot through lanes and a 12-foot center turn lane.
- Allow for two, six-foot bike lanes with inboard one-foot buffers adjacent to their respective travel lanes.[6]
- Install curb extensions at intersection to create safer pedestrian crossings across Fruit Avenue.

SHAW AVE
SHAW AVE
SIERRA MADRE AVE
SIERRA MADRE AVE
FAIRMONT AVE
WASHINGTON AVE
ALANOS AVE
SANTA ANA AVE
SANTA ANA AVE
ACACIA AVE
SAN GABRIEL AVE
RIALTO AVE
RIALTO AVE
WALNUT AVE
PICO AVE
PICO AVE
GETTYSBURG AVE
PRIVATE DR
INDIANAPOLIS AVE
ARTHUR AVE
ASHCROFT AVE
HOLLAND AVE
DELNO AVE
CARRUTH AVE
PRIVATE DR
SWIFT AVE
SANTA FE AVE
CARRUTH AVE
HOLT AVE
ASHLAN AVE
ASHLAN AVE
HAMPTON WAY
SANTA FE AVE
THORNE AVE
SUSSEX WAY
PACIFIC AVE
PONTIAC WAY
CARRUTH AVE
SAGINAW WAY
DAKOTA AVE
ROBINSON AVE
PRIVATE DR
ROBINSON AVE
ALY
GARLAND AVE
PRIVATE DR
GARLAND AVE
FEDORA AVE
FEDORA AVE
ALY
THORNE AVE
DELNO AVE
DAYTON AVE
CORTLAND AVE
ARTHUR AVE
FOUNTAIN WAY
FOUNTAIN WAY
DELNO/FRUIT ALY
ANDREWS AVE
ANDREWS AVE
ANDREWS/SHIELDS ALY
SHIELDS AVE
SHIELDS AVE

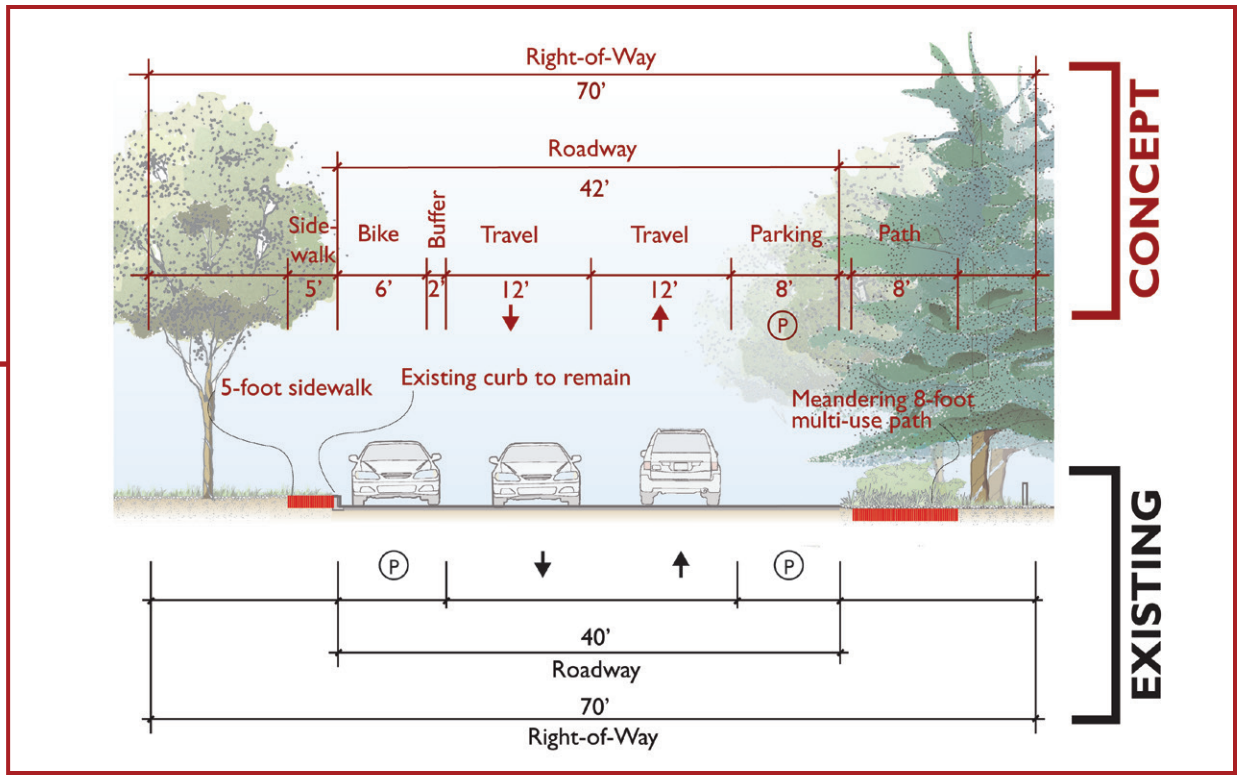


Figure 5.11a: Fruit Avenue Between Ashlan and Shaw Ave. - Looking North

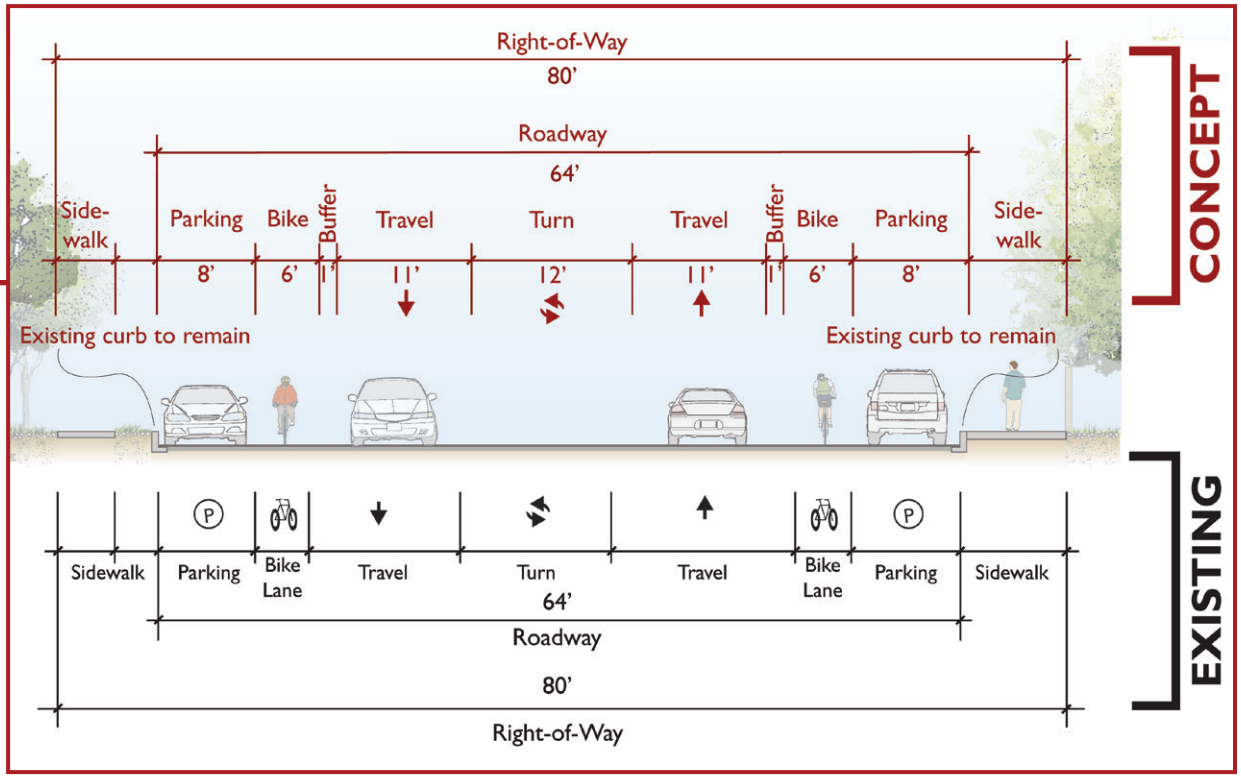


Figure 5.11b: Fruit Avenue Between Shields and Ashlan Ave. - Looking North

5.1.3.4 Gettysburg Avenue

Gettysburg Avenue runs east-west through the study area and serves as a neighborhood connector and combined bike and pedestrian priority street. Gettysburg experiences a wide range of vehicular traffic volumes with different design recommendations addressing this. A threshold of 3,500 average daily traffic (ADT) is considered when looking at how the street is shared among modes. Two segments were identified according to ADT volumes; those that are equal to or above 3,500 trips, and those that are below 3,500 trips.

Between West and Fruit Avenue

The western segment of Gettysburg terminates at N. West Avenue and lies within the City limits. It carries less than 3,500 ADT. On streets with an ADT of less than 3,500, bicycle travel can be accommodated through striping travel lanes as shared between automobiles and bicycles. The symbol that is applied to the pavement at regular intervals is called a "sharrow", which is short for "share arrow" (see Figure 5.12). The intention of these symbols is to clearly indicate for drivers that the travel lane has to be shared with bicyclists. Improvements for this segment of Gettysburg with an ADT of less than 3,500 are outlined below.

Figure 5.12: A 'sharrow' symbol used to indicate a shared travel lane (image: Flickr user - drdul)

- Maintain the existing paved roadway width.
- Maintain the existing curbs (where applicable).
- Complete sidewalks adjacent to curbed areas that do not have an existing sidewalk to improve local sidewalk connectivity.
- Restripe traffic lanes to a width of 10 feet in each direction.
- Implement bicycle accommodation by applying "sharrows" to each of the two travel lanes.

Between Fruit and Blackstone Avenue

The majority of this segment of Gettysburg lies within the County Island and does not have sidewalks or curbs. It carries a volume of traffic greater than 3,500 ADT, necessitating greater mode separation and attention to traffic calming. Established private landscape occurs between the roadway edge and the property line. In an effort to retain as much of this landscaping as possible and to provide pedestrian circulation, a separated pedestrian pathway is being proposed to maintain walking pathway continuity of the western segment of Gettysburg. Areas of the shoulder deemed suitable for parking are proposed to include a gravel parking lane similar to the informal shoulder parking that occurs today. Preferred improvements for this category of street are outlined below.

- Maintain the existing paved roadway width.
- Maintain existing landscaping between the edge of pavement and the property line wherever possible.
- Restripe roadway to include two, six-foot striped bike lanes and two ten-foot traffic lanes.
- Install a four-foot pedestrian pathway on one side or on both sides of the street that meanders around established landscape as feasible.[7]
- Allow gravel parking areas on shoulder wherever applicable and ensure that meandering pathway is positioned outside of parking areas.

5.1.3.5 Maroa Avenue

Maroa Avenue is a north-south street with average daily traffic (ADT) of over 3,500 trips that is often used as a parallel route to Blackstone Avenue. Residents of the street emphasized concerns over pedestrian safety and the desire for traffic calming solutions. The width of Maroa Avenue is consistent from Shaw Avenue to Ashlan Avenue, where the street has no curbs and private landscaping regularly encroaches onto the public right-of-way. South of Pontiac Avenue, with the street has curbs and sidewalks on both sides. The transportation framework shows the street as a pedestrian priority street for its entire length and as a bicycle priority street for the segments between Ashlan and Swift Avenue and Shields and Dakota Avenues. The preferred improvements are outlined below and in Figure 5.17.

- Maintain the existing paved roadway width along most of the street in the study area, except between Ashlan and Swift Avenues where bicycle lanes need to be accommodated.
- Maintain existing landscaping between the edge of pavement and the property line wherever possible.
- Restripe traffic lanes to a width of 10 feet in each direction.
- Install a five-foot pedestrian pathway on one side or on both sides of the street that meanders around established landscape as feasible.
- Allow gravel parking areas on shoulder wherever applicable and ensure that meandering pathway is positioned outside of parking areas.
- Between Ashlan and Swift Avenues: widen roadway by three feet on either side to include two six-foot wide bike lanes.
- Complete the network of existing sidewalks and add bike lanes on segments of the street within the city.

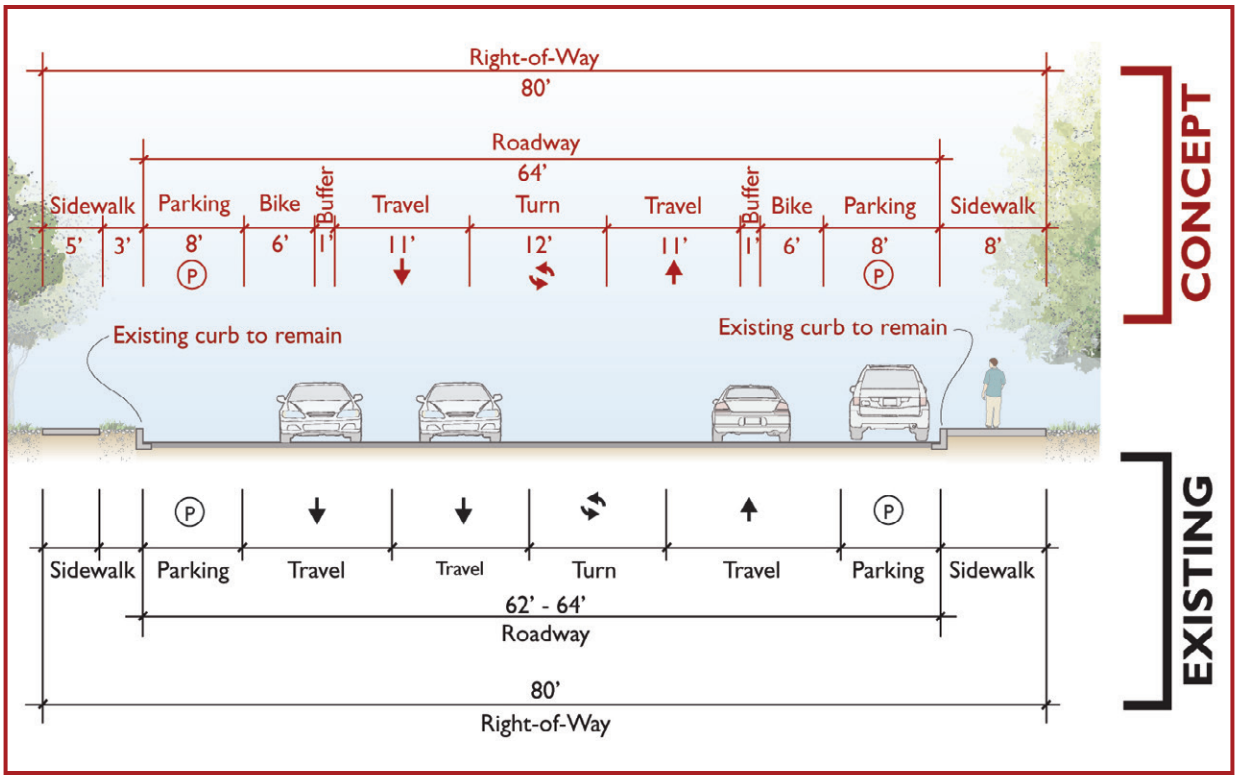
[7] *Note that four-foot wide paths require a five-foot wide wheelchair passing space every 200 feet as per ADA standards.*

5.1.3.6 Dakota Avenue

Dakota Avenue should be a half-mile neighborhood connector street, but due to the Herndon Canal it is disjointed and impedes an additional east-west connection that could otherwise be made across the study area. The two segments are also different in right-of-way widths where the western segment being 80 feet wide with bike lanes; and the eastern segment 60 feet wide without bike lanes. It also carries traffic higher than 3500 ADT on both segments; therefore the preferred improvements include completion of sidewalks and incorporation of bike lanes along the heavy traffic segments. The recommendations are listed below and in Figure 5.13.

- Maintain the existing paved roadway width and existing curbs.
- Reduce the width of travel lanes to 11 feet in each direction, and the center turn lane to 12 feet.
- Restripe the bike lane to six feet wide and provide a one foot wide buffer stripe between the bike lane and the travel lanes.[8]
- Maintain the eight-foot wide parking lanes on either side.
- Widen the detached sidewalk on the south side to five feet.
- Maintain an eight-foot wide sidewalk on the northern side along the park and school.
- Provide a multi-use path along the Herndon Canal segment connecting the two segments of Dakota Avenue, completing the pedestrian and bike connectivity along the street (also see discussion under Section 5.1.6).
- Install curb extensions at intersection to create safer pedestrian crossings near schools and parks.
- Install a safe pedestrian crossing across the Palm Avenue rail crossing, to connect the pedestrian and bicycle routes on the street to the proposed multi-use path along Herndon Canal.
- Future detailed studies are required to determine the best way accommodate the bicycle lanes envisioned by the Fresno Bicycle Master Plan through the narrow (60-foot) segment of Dakota between Maroa and Blackstone Avenues. Here, bicycle lanes can only be achieved by eliminating parking on one side of the street. The application of "sharrows" is not an option due to the ADT of more than 3,500 vehicles, which includes busy traffic during school drop-off and pick-up times at the Fort Miller Middle School.

[8] *The striped buffers are not technically necessary to provide a safe bicycle accommodation but result from the difference between the existing curb-to-curb dimension and that required for the recommended cross section. The width of the bicycle lanes should not exceed six feet in order to discourage automobiles from using the bicycle lane for vehicular travel.*



Dakota Between West & Palm - Looking East

Dakota Between Palm and Maroa Ave. - Example of Ped/Bike Trail Along Canal

Figure 5.13: Dakota Avenue between West and Palm, Palm and Maroa

5.1.3.7 Van Ness

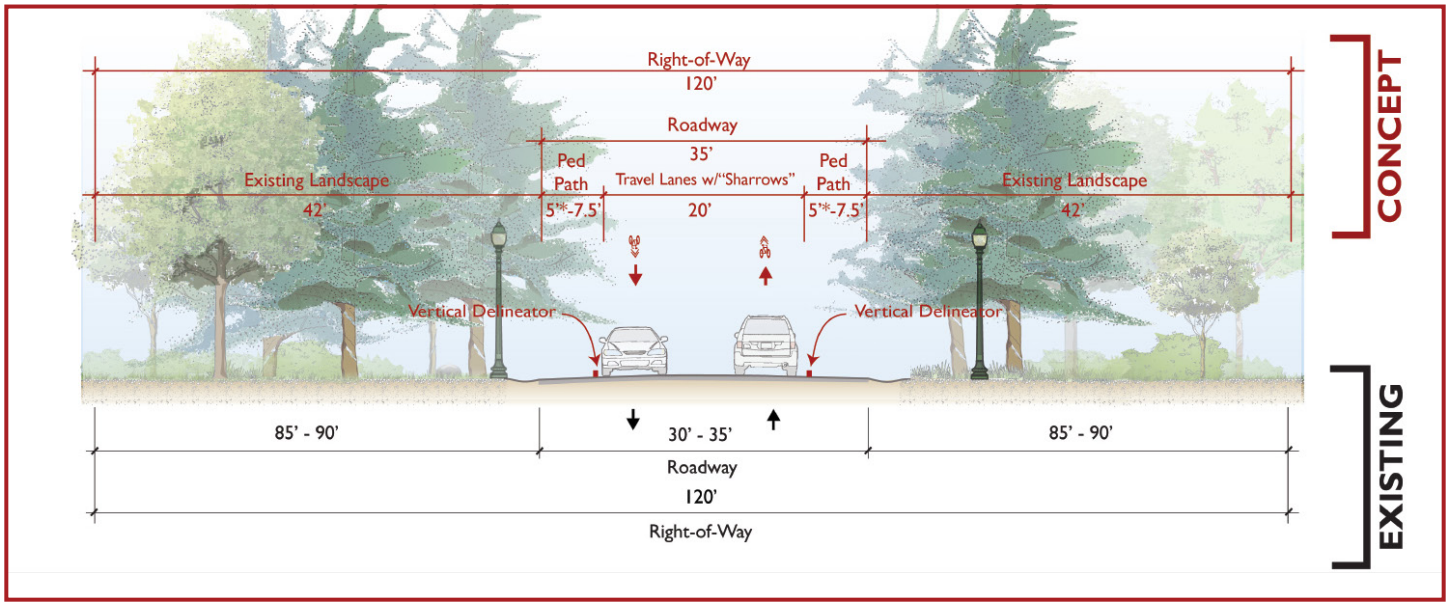
Van Ness Boulevard has special significance to residents of Old Fig Garden. This is due to its central location within Old Fig Garden neighborhood, its stately residences and historic plantings of large cedar trees that provide a substantial canopy over the roadway, making it an ideal street to stroll along. The space for trees and other landscaping between the edge of the pavement and adjacent property lines along Van Ness Boulevard is wider than on other streets because of its 120-foot wide right-of-way. However, the full width is not available to be used for improvements due to the presence of mature trees and other long-standing landscaping as well as fencing, rock features, and other amenities all of which are considered as defining the character of this flagship street or the Old Fig Garden neighborhood and the Christmas Tree Lane event. The annual event on Van Ness Boulevard attracts countless pedestrians and automobiles to the street during the Christmas holiday season. Due to the strong association of the street with the identity of the Old Fig Garden neighborhood, the community expressed concern about the possibility that improvements could significantly interfere with the character of the street and the setup of decorations during the Christmas Tree Lane event.

In consideration of the community's concerns, the recommended pedestrian and bicycle improvements on this street popular with pedestrians and bicyclists do not include the option of a pedestrian path through the landscaped area with the public right-of-way.

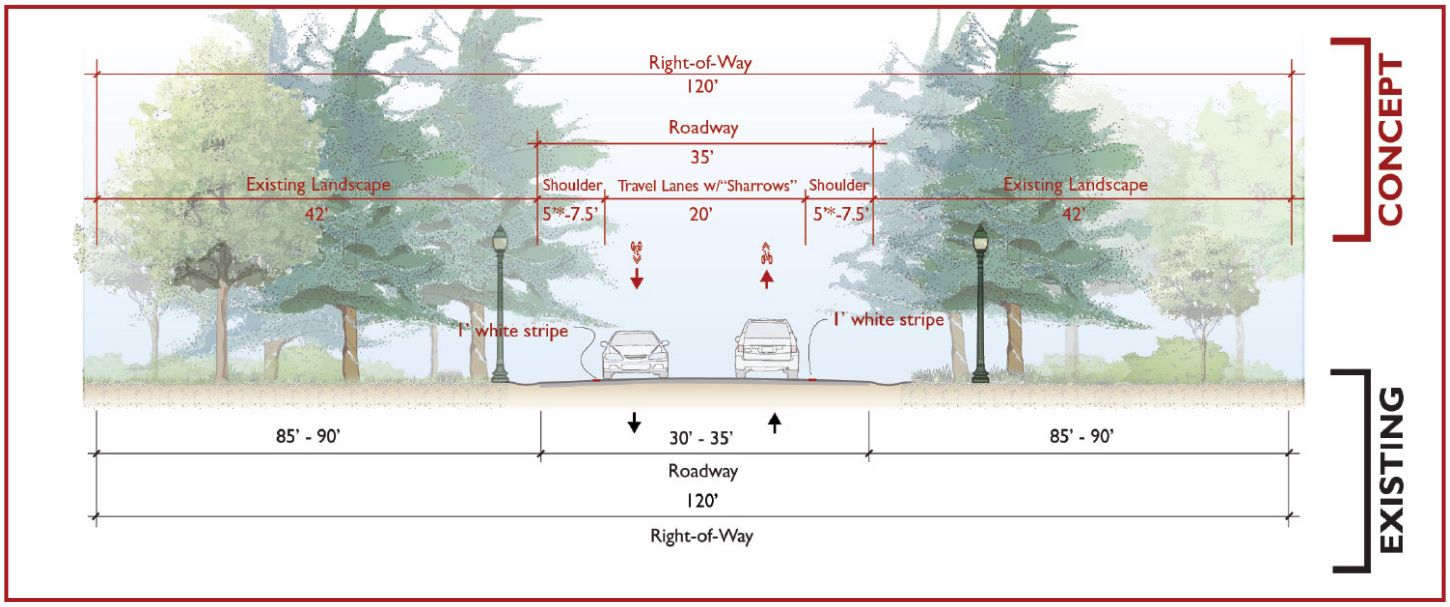
The recommended improvements are illustrated in Figure 5.14a and b, and in summary include the following:

- Maintain the existing roadway width of 35 feet and retain existing private landscape within right-of-way.
- Prepare detailed, block-by-block design concepts that preserve the existing landscaping and other features to the largest extent possible.
- Along the existing, short segments with a 30-foot wide roadway, widen the paved roadway to 35 feet to accommodate bicycling as along the remainder of the street.
- Restripe the roadway to include two, seven and a half-foot wide painted pedestrian paths (five feet where existing roadway narrows to thirty feet,) and reduce the travel lanes to twenty feet, without a painted median strip.
- Install vertical delineators, such as a series of six-inch high concrete wheel stops or strips of asphalt, along the one-foot painted stripe of the pedestrian path to provide a buffer against the adjacent traffic lane (see Figure 5.15).
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.

Two painted 8-foot ped pathways on widened roadway w/"Sharrows"

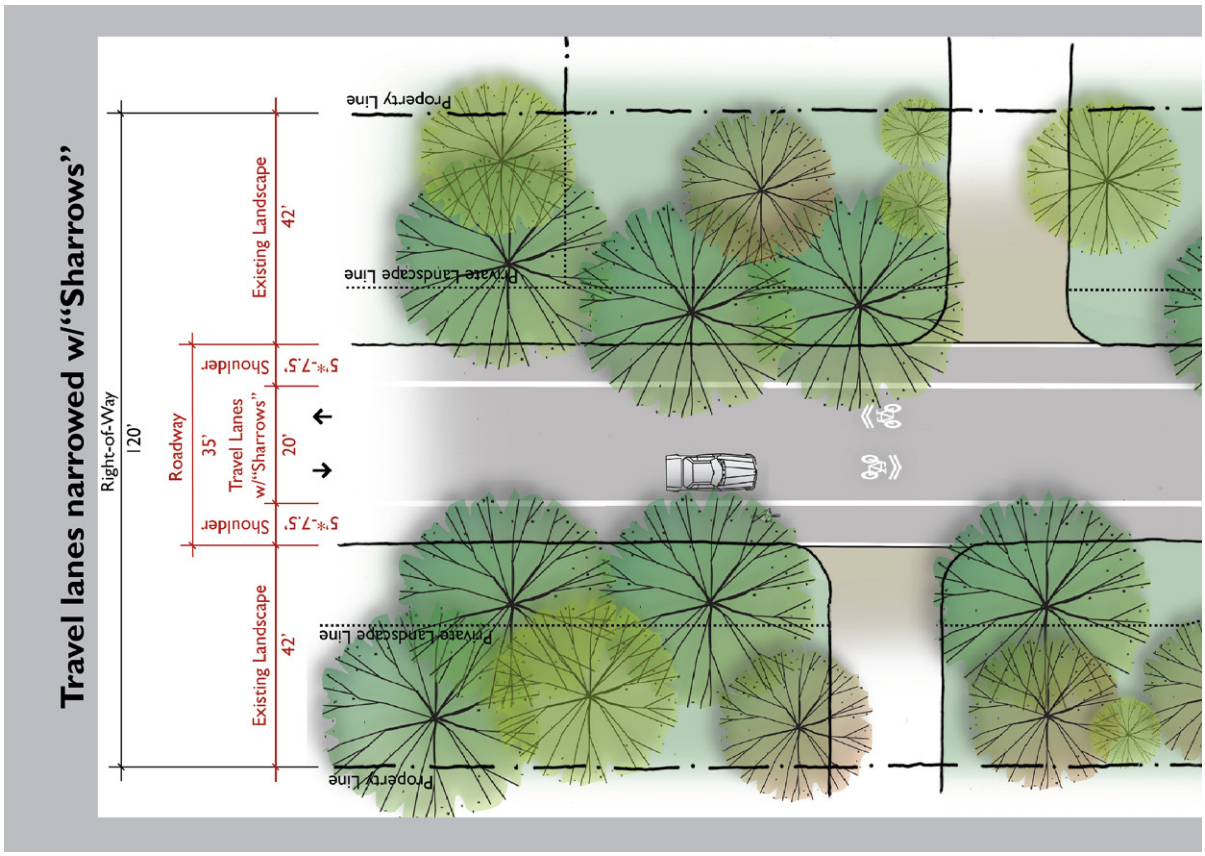


Travel lanes narrowed w/"Sharrows"



*** where existing roadway narrows to 30 feet**

Figure 5.14a (top) and 5.14b (bottom): Van Ness Boulevard - Design Options (Plans on following page)



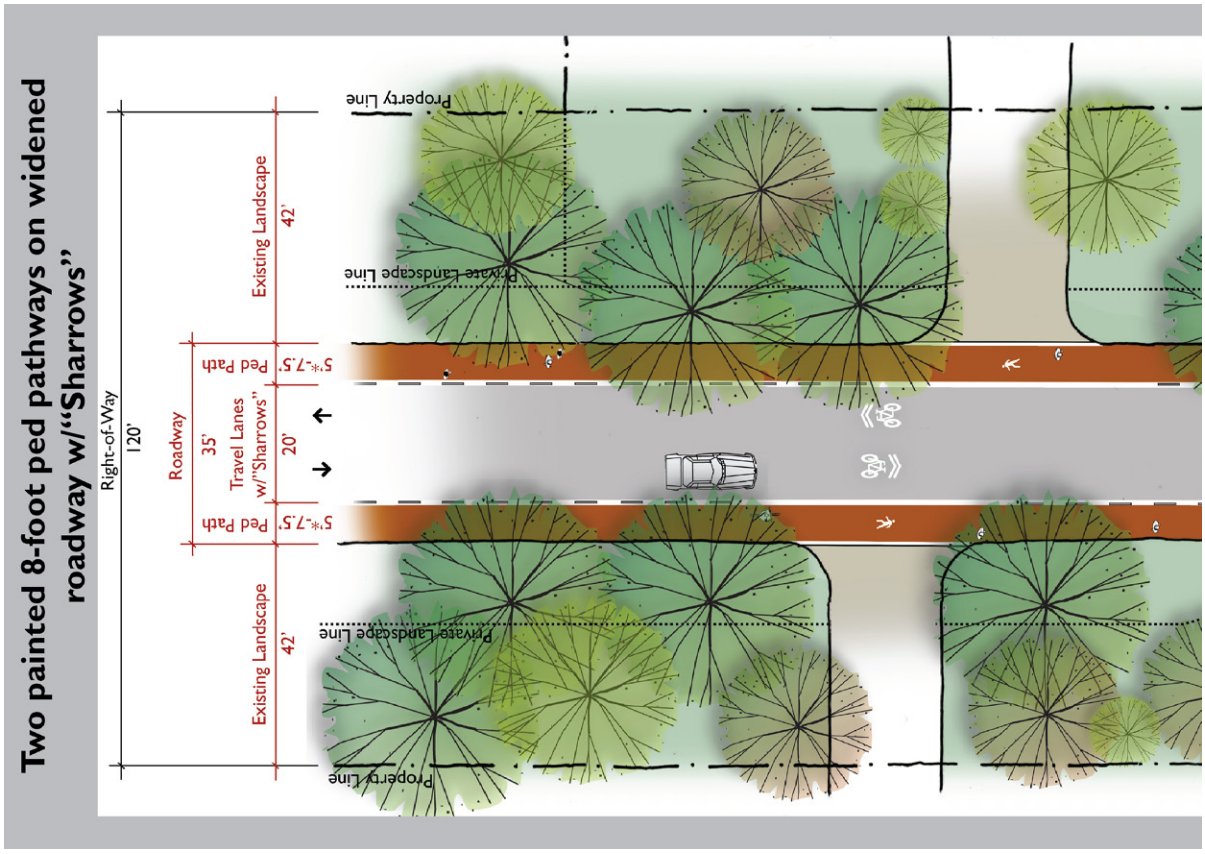
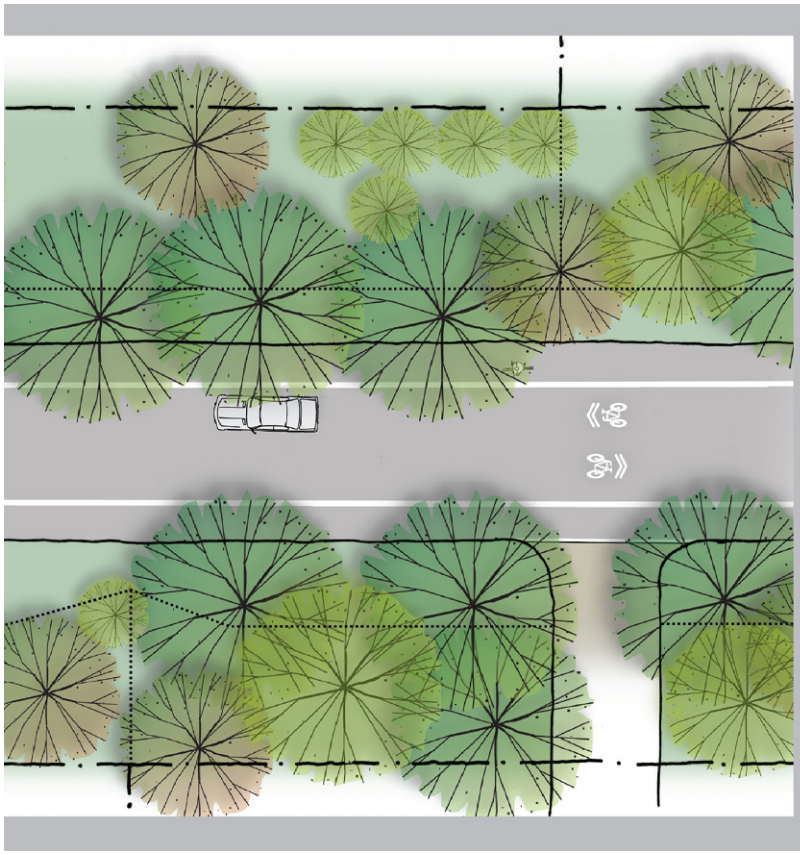


Figure 5.14a (top) and 5.14b (bottom): Van Ness Boulevard - Design Options (Enlarged sections on preceding page)


CONCEPT
EXISTING
Right-of-Way
120'
Roadway
35'
Travel Lanes w/ Sharrows
20'
Shoulder
5*-7.5'
Existing Landscape
42'
White stripe
85' - 90'
30' - 35'
Roadway
120'
Right-of-Way
* where existing roadway narrows to 30 feet

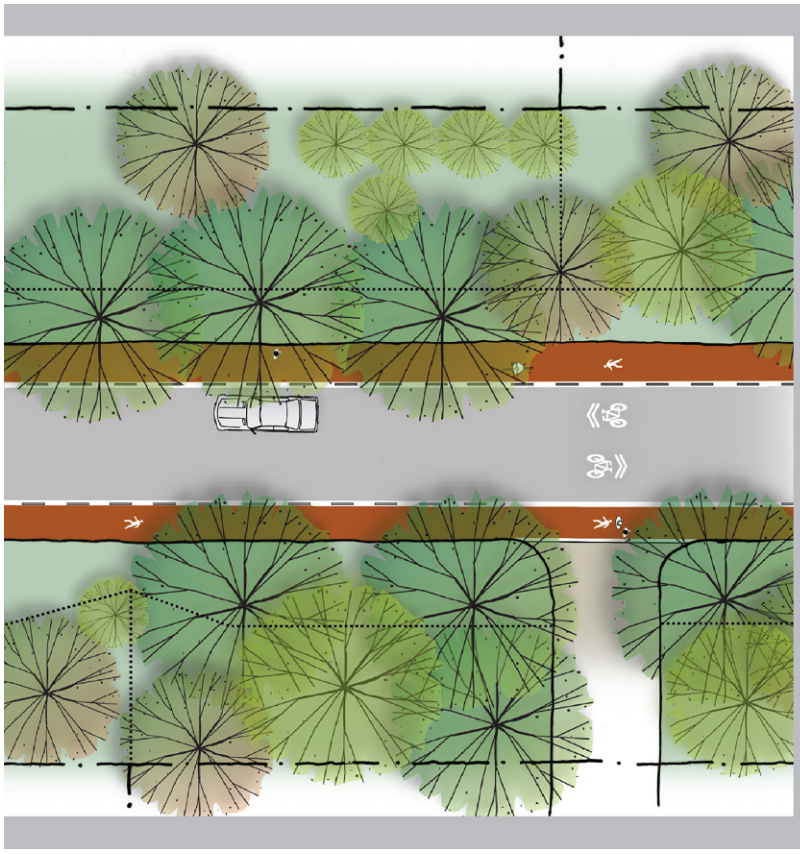

CONCEPT
EXISTING
Right-of-Way
120'
Roadway
35'
Travel Lanes w/ Sharrows
20'
Ped Path
5*-7.5'
Existing Landscape
42'
Vertical Delineator
85' - 90'
30' - 35'
Roadway
120'
Right-of-Way

Figure 5.15: Vertical delineators provide a buffer to the adjacent traffic lane (image: Northern Green Technologies, LLC)

- Allow gravel parking areas along the roadway shoulder wherever applicable. Vertical delineators are discontinued for the length of the parking area and where driveways enter the roadway.
- Consider the installation of adequately spaced (35 to 40 feet on-center) decorative, pedestrian-scaled light fixtures of a historic style (to be selected by Van Ness Boulevard residents). Lights should provide adequate lighting for pedestrian safety, but not create glare for residents of adjacent homes[9].

The design approach establishes the level of pedestrian safety desired by the community and meets the ADA requirement for a tactile edge definition for visually impaired pedestrians. However, input from area residents at the public workshops indicated that the introduction of a curb-like element would require continued efforts to build support among residents for the implementation of this pedestrian safety improvement.

Under these circumstances, community and approving agencies could give consideration to the following "**initial implementation option**", which would provide for some level of traffic calming and an improved accommodation of bicycle travel. Under this option, the following measures would be employed:

- Restripe the roadway with two six-inch wide painted edge stripes to reduce the paved area designated for automobile travel to twenty feet in width (without a painted median stripe) in order to create two, seven-foot wide shoulders that can be used by pedestrians.
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.

It should be noted that this approach has been used on rural roads but may not be acceptable to the approving agency as a long-term improvement in an urban context.

[9] *Note that the costs of installing a hardwired system and PG&E meter would trigger the need for a Proposition 218 vote and assessment district. This could be avoided by using solar panels to power the lights. The aesthetic and technical impacts of this decision need to be considered during light fixture selection.*

5.1.3.8 Alternative Improvement Standards for Pedestrian and Bicycle Priority Streets

The pedestrian and bicycle priority streets identified under the multi-modal transportation framework (section 5.1.2) include streets beyond the specific streets already discussed in the previous sections. Within the County Island[10], streets are typically local neighborhood streets without sidewalks, a low average daily traffic (ADT) volume, and a right-of-way of 60 feet. The pavement width of the existing roadway averages around 24 to 25 feet. This Study recommends that – based on local preference – one of the design alternatives described below is applied to those 60-foot rights-of-way without sidewalks that have been identified as a pedestrian priority street, a bicycle priority street, or both. The described design options establish a range of Alternative Improvement Standards that can be applied to any street with similar base conditions. Slight variations in the provided dimensions may be necessary to address location-specific conditions. The improvement standards seek to balance the needs of all users while maintaining the neighborhood character and existing landscaping of Old Fig Garden streets to the greatest extent possible.

The recommended improvements address the project goals of increased pedestrian and bicycle safety while also meeting the requirements of the Americans with Disabilities Act (ADA). These require that a vertical edge be provided as delineation between areas of the roadway used by cars and those safe to use for blind or visually impaired pedestrians. The vertical edge is intended to allow for the detection of the edge of the safe pedestrian area with a cane. A vertical delineation is not required along landscaped areas. For this reason, the recommended design alternatives or standards described below include two principal alternatives for the accommodation of pedestrians along curbless streets:

1. Designation of a pedestrian area on a portion of the existing or widened roadway through use of paint and a vertical curb (such as a series of wheel stops installed in a line and with breaks to allow for drainage).
2. Construction of one or two, four to five-foot wide pedestrian paths through the existing landscaped setbacks within the public right-of-way.

Both design approaches establish the level of pedestrian safety desired by the community and meet the ADA requirements discussed above. However, input from area residents at the public workshops indicated that both the introduction of a curb-like element or the loss of existing landscaping would require continued efforts to build support among residents for the implementation of either alternative.

[10] *Unincorporated portions of the County within the City limits and under its sphere of influence known as County Island areas.*

Under these circumstances, community and approving agencies could give consideration to the following "**initial implementation option**", which would provide for some level of traffic calming and an improved accommodation of bicycle travel. Under this option, the following measures would be employed:

- Restripe the roadway with two, six-inch wide painted edge stripes to reduce the paved area designated for automobile travel to twenty feet in width (without a painted median stripe) in order to create a five-foot wide shoulder on one side of the road that can be used by pedestrians.
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.
- This type of approach has been used on rural roads but may not be acceptable to the approving agency as a long-term improvement in an urban context. For this reason, it has not been identified as a preferred recommendation and Alternative Public Improvement (API) standard.
- The following sections describe the preferred recommendations for Alternative Improvement Standards in the Fig Garden area.

Bike Priority streets

Two design alternatives are recommended for streets designated as having a bike priority. The recommendations provide bicycle amenities without any additional pedestrian infrastructure than what currently exists. See Figure 5.16 for the alternatives outlined below.

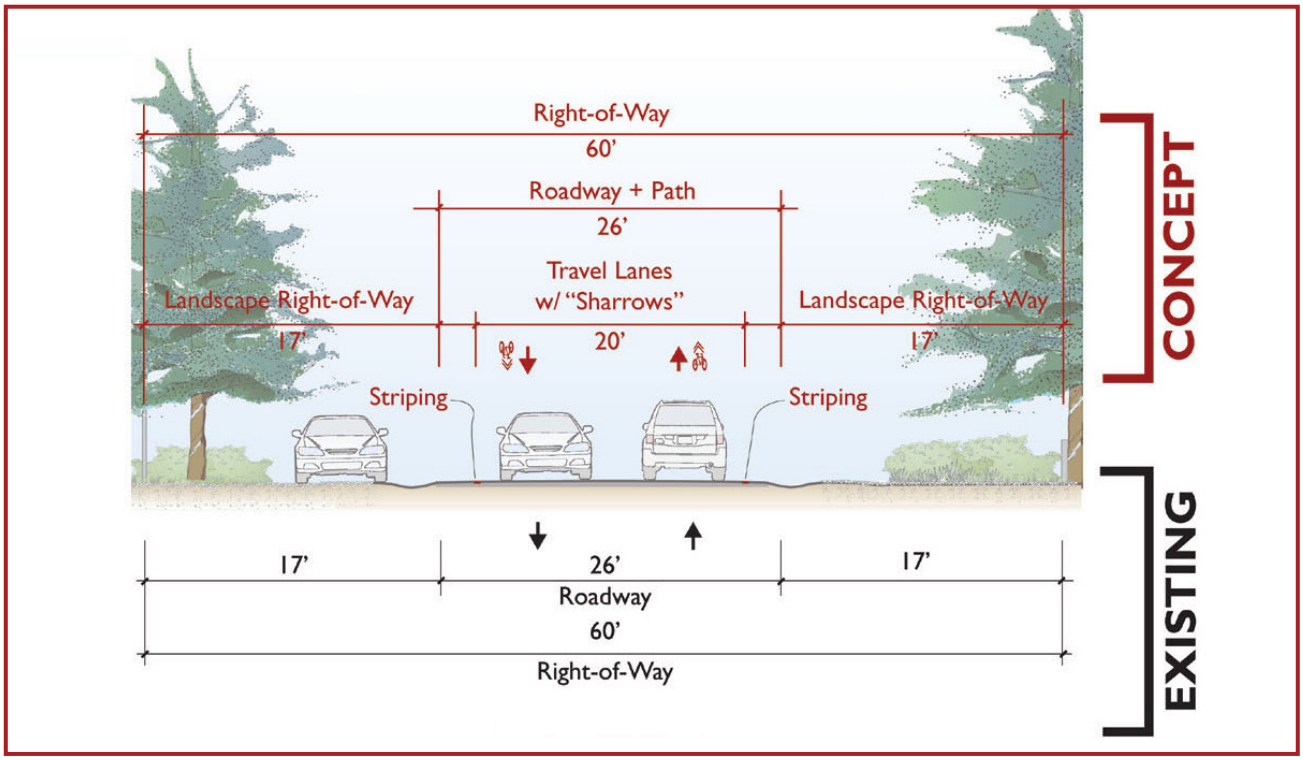
"Sharrows" on Pavement (See Figure 5.16)

- This improvement is recommended where ADTs are equal to or below 3,500 in the future.
- Maintain the existing pavement width.
- Allow existing private landscaping to remain between the edge of pavement and the property line.
- Restripe the roadway to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.

Bicycle Lanes on widened roadway (See Figure 5.16)

- This improvement is recommended where ADTs are currently 3,500 or may exceed this volume in the future.
- Widen the existing pavement by an additional three feet on either side from 26 feet to 32 feet.
- Maintain the existing private landscaping beyond the new paved area.
- Restripe the widened roadway to include two six-foot striped bike lanes and reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.

"Sharrows" on pavement



Bicycle lanes on widened roadway

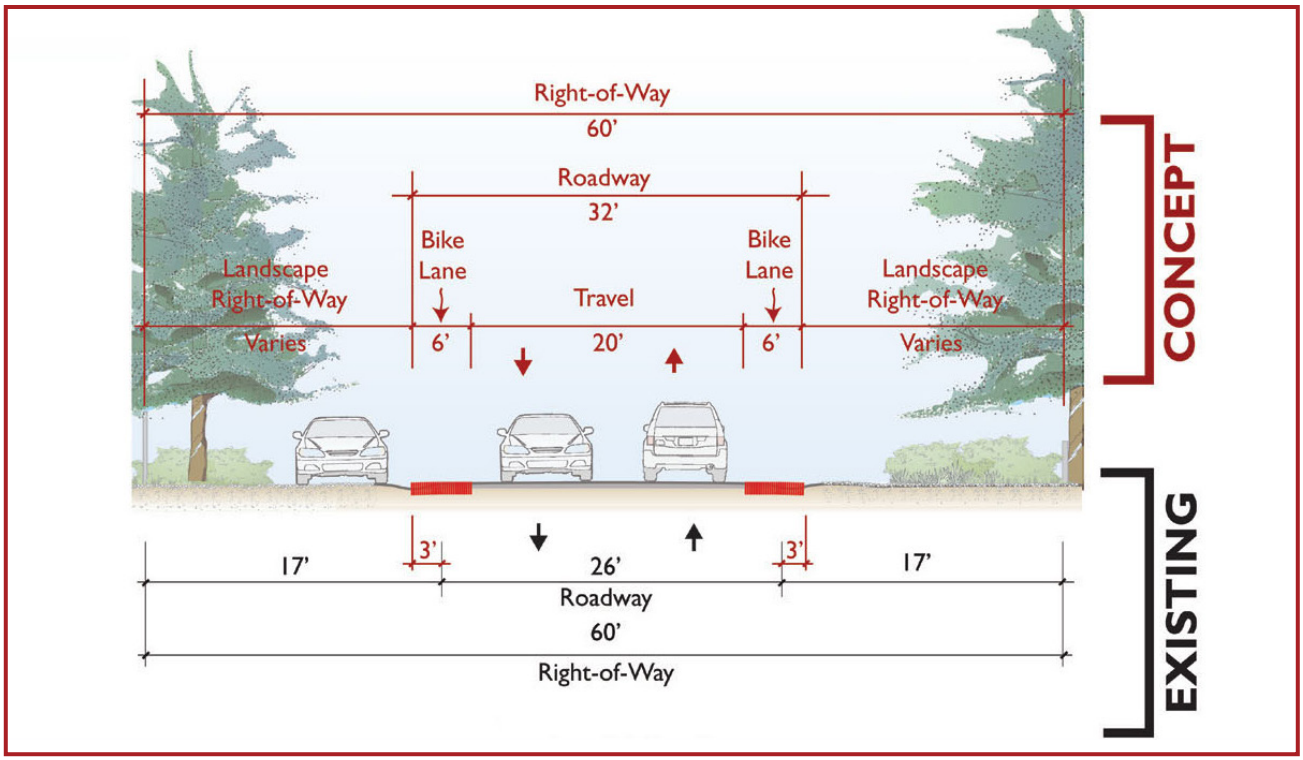
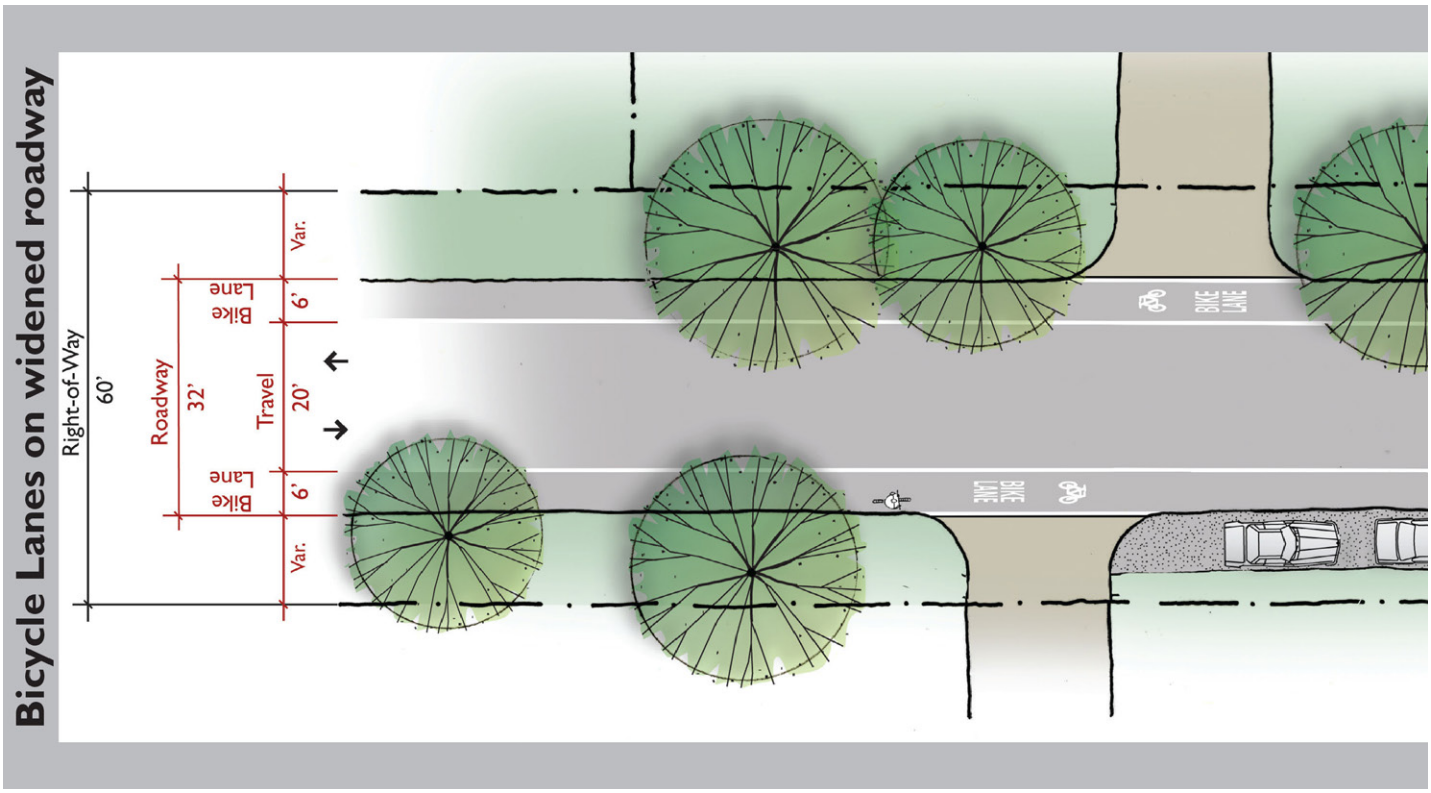


Figure 5.16: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Bike Priority Streets (Separate bike lanes recommended for streets projected to have greater than 3,500 ADT, combined bike lanes recommended for streets projected to have less than 3,500 ADT) (Plans on following page)



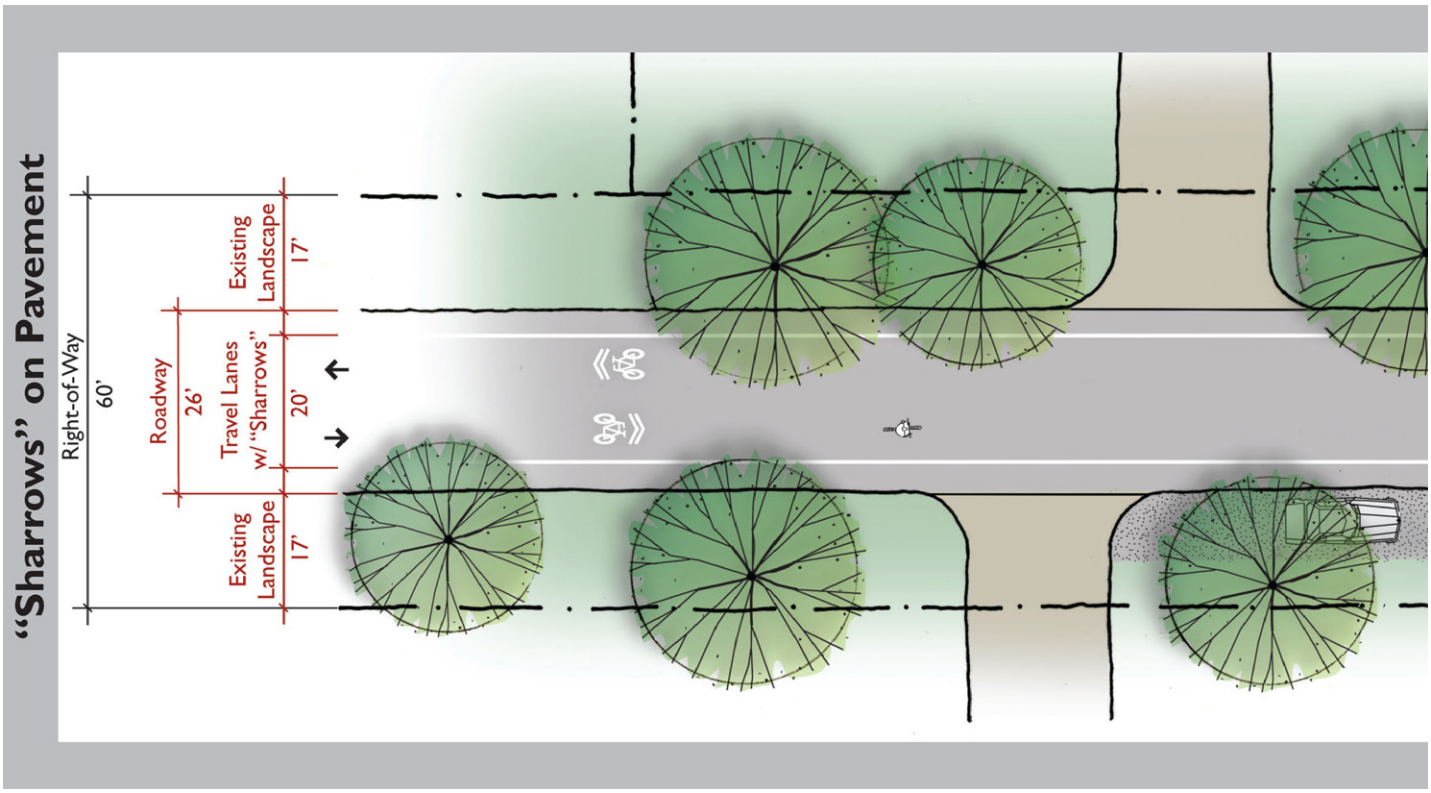
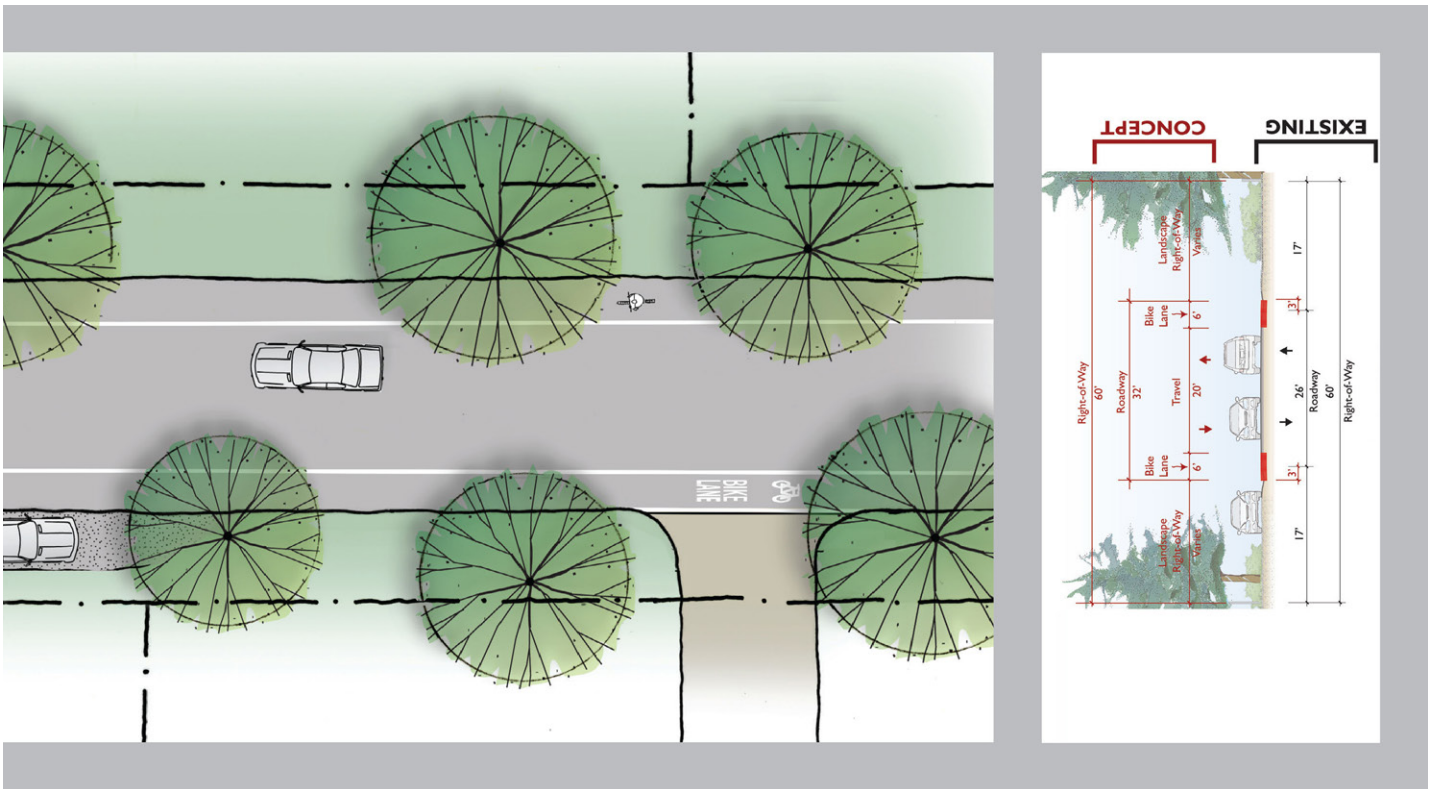
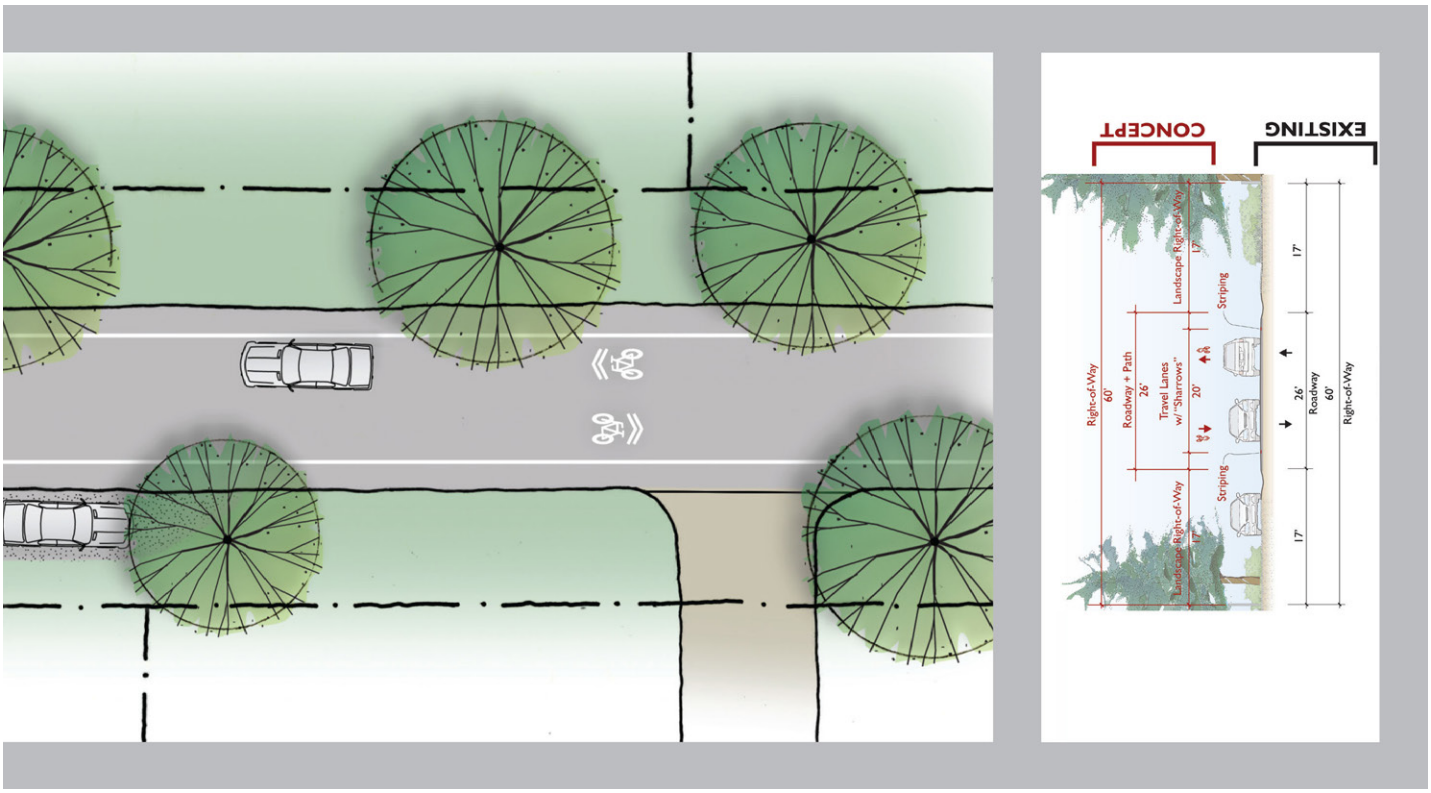


Figure 5.16: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Bike Priority Streets (Separate bike lanes recommended for streets projected to have greater than 3,500 ADT, combined bike lanes recommended for streets projected to have less than 3,500 ADT) (Enlarged sections on preceding page)


BIKE LANE
EXISTING
CONCEPT
Right-of-Way
60'
Roadway
32'
Bike Lane
6'
Travel
20'
Bike Lane
6'
Landscape Right-of-Way
Varies
3'
17'
26'
Roadway
60'
Right-of-Way


EXISTING
CONCEPT
Right-of-Way
60'
Roadway + Path
26'
Travel Lanes
w/ "Sharrows"
20'
Striping
Landscape Right-of-Way
Varies
17'
26'
Roadway
60'
Right-of-Way

Pedestrian Priority Streets

Four design alternatives are recommended for streets designated as having a pedestrian priority. The recommendations provide pedestrian amenities without any additional bicycle infrastructure. See Figures 5.17 and 5.18 for the alternatives outlined below.

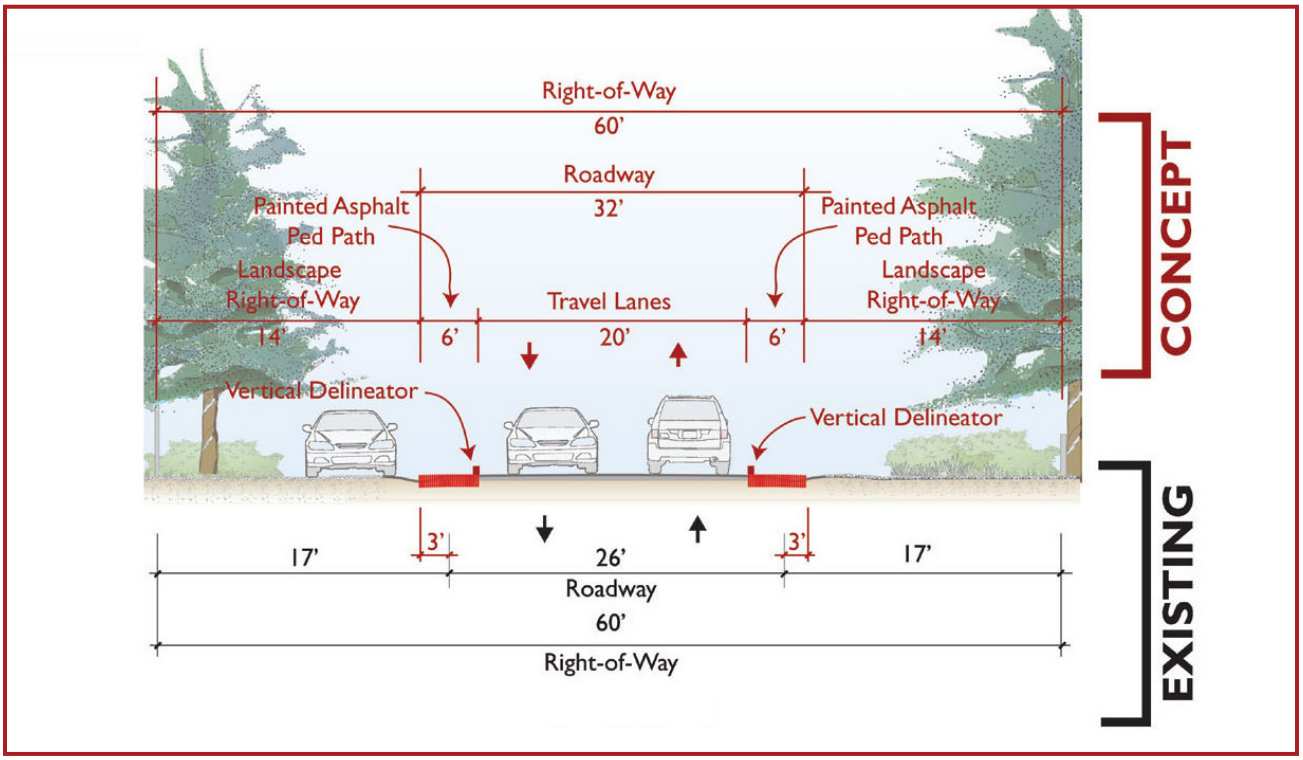
Two painted 6-foot wide paths on widened roadway (See Figure 5.17a)

- Widen the existing pavement by an additional three feet on either side from 26 feet to 32 feet.
- Maintain the existing private landscaping beyond the new paved area.
- Restripe the widened roadway to include two six-foot painted pedestrian paths and reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install vertical delineators, such as a series of six-inch high concrete wheel stops or strips of asphalt, along the one-foot painted stripe of the pedestrian path to provide a buffer against the adjacent traffic lane (see Figure 5.15).
- Allow gravel parking areas on shoulder wherever applicable and ensure that pedestrian pathway vertical delineators do not block vehicular path-of-travel near parking areas.

Single painted 5-foot wide path on existing roadway (See Figure 5.17a)

- Maintain the existing pavement width.
- Maintain the existing private landscaping between the edge of pavement and the property line.
- Restripe the roadway to include one, five-foot painted pedestrian path and reduce the combined width of the two travel lanes to twenty feet, without a painted median strip. Install vertical delineators along the one-foot painted stripe of the pedestrian path to provide a buffer against the adjacent traffic lane.
- Allow gravel parking areas on shoulder wherever applicable and ensure that pedestrian pathway vertical delineators do not block vehicular path-of-travel near parking areas.

Two painted 6-foot paths on widened roadway



Single painted 5-foot path on existing roadway

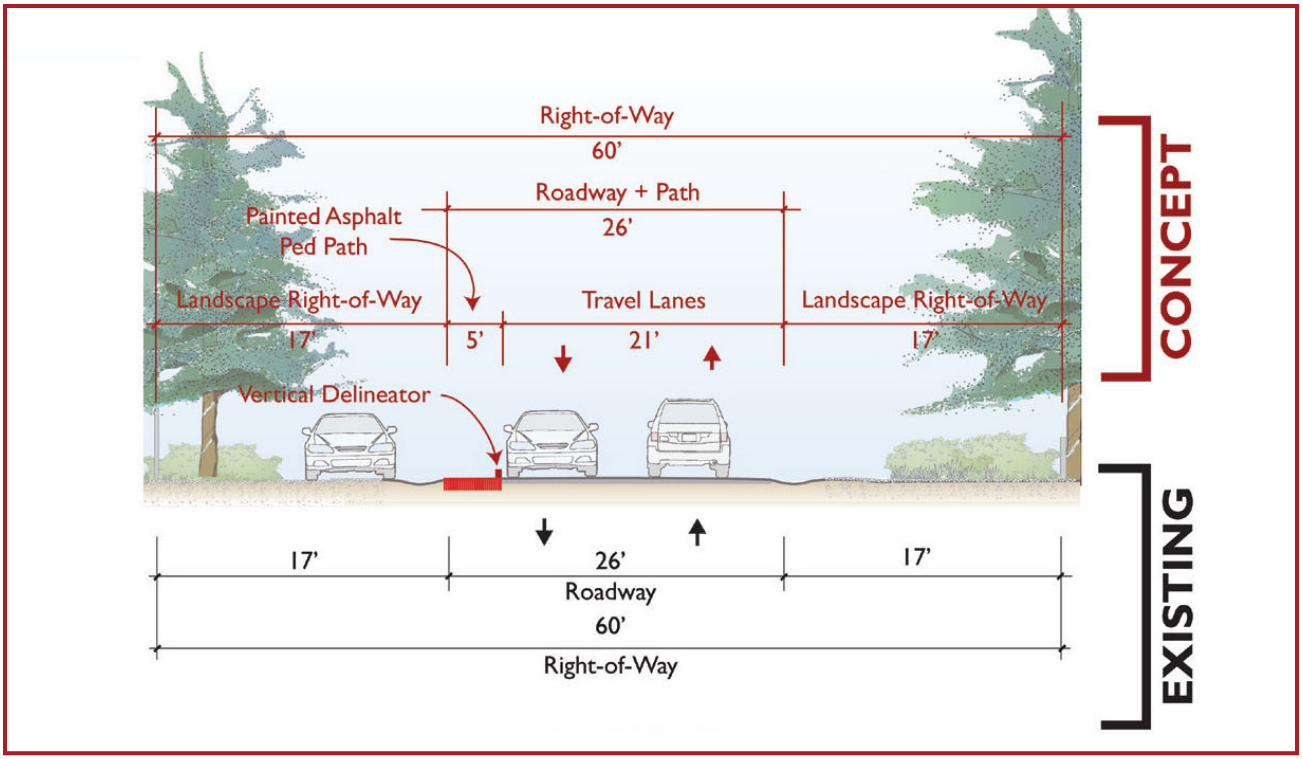


Figure 5.17a: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Pedestrian Priority Streets (Plans on following page)

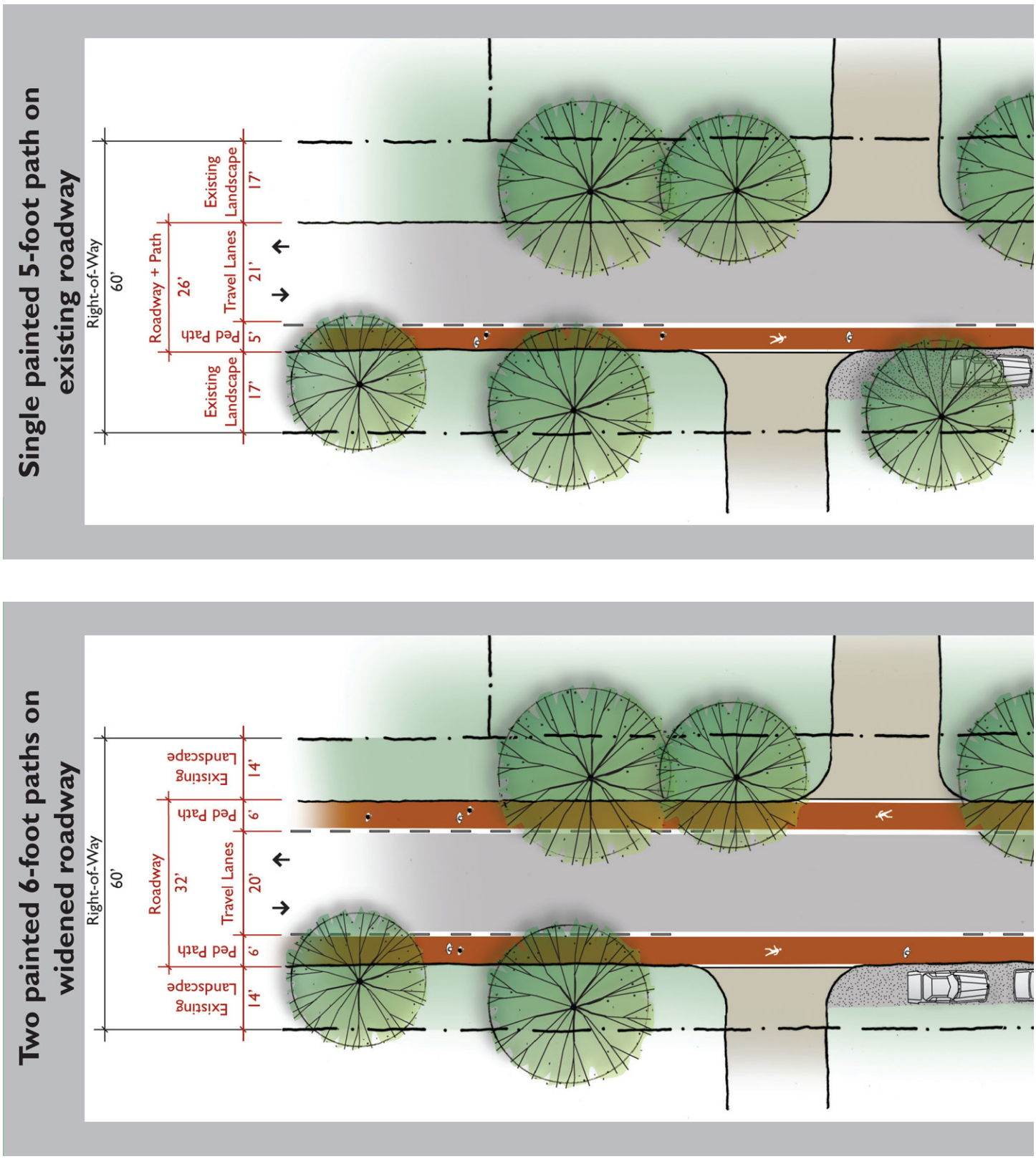
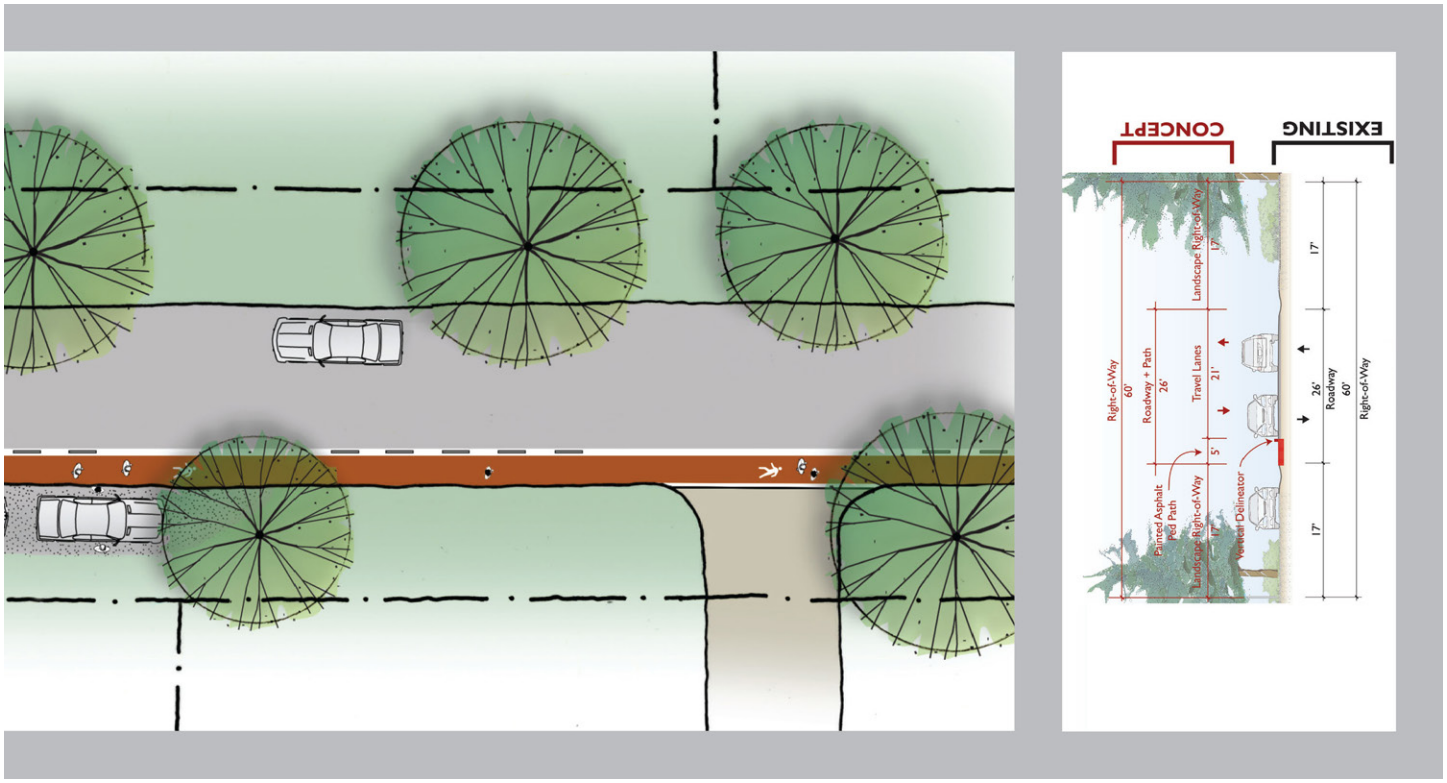
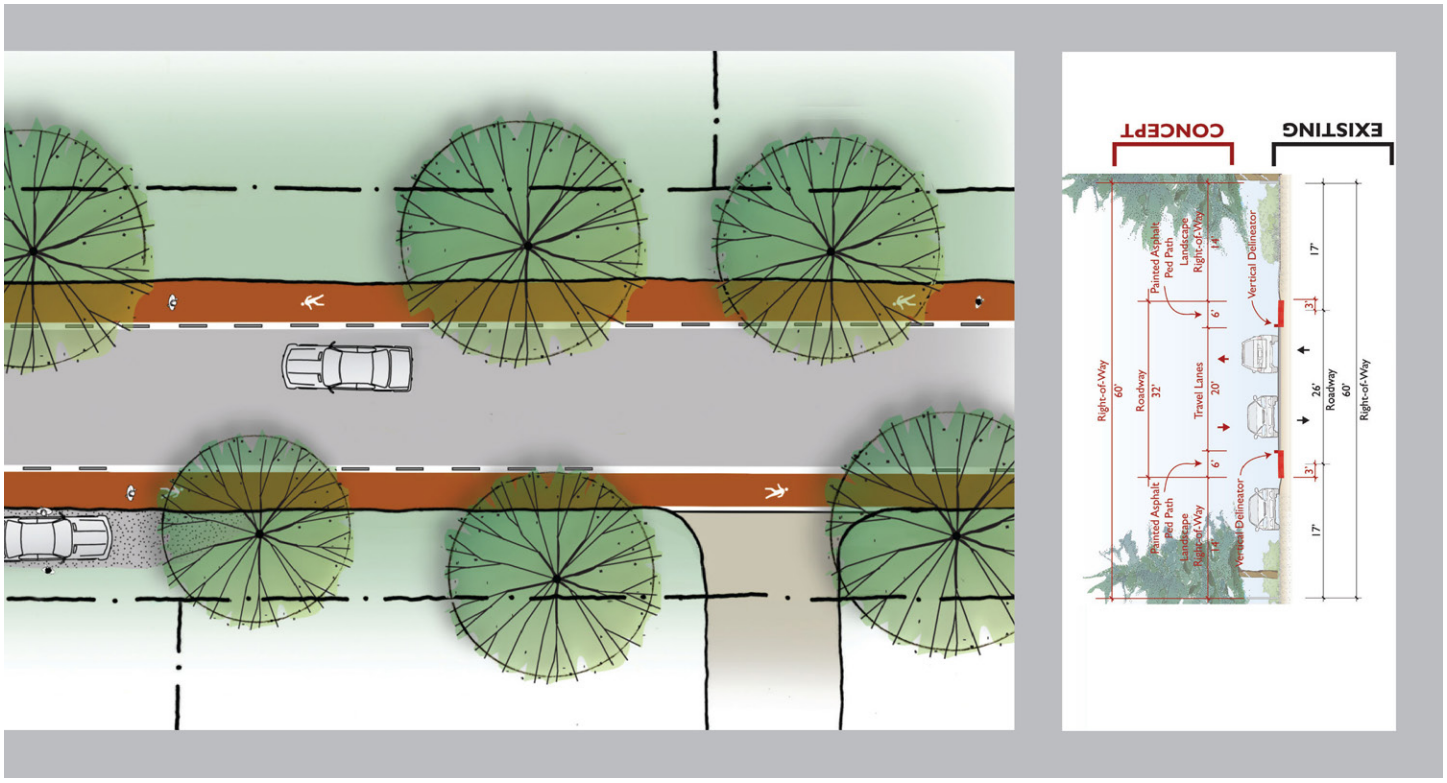


Figure 5.17a: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Pedestrian Priority Streets (Enlarged sections on preceding page)


EXISTING
CONCEPT
Right-of-Way
60'
Roadway + Path
26'
Travel Lanes
21'
Landscape Right-of-Way
17'
Painted Asphalt
Ped Path
Landscape Right-of-Way
17'
5'
Vertical Delineator
17'
26'
Roadway
60'
Right-of-Way


EXISTING
CONCEPT
Right-of-Way
60'
Roadway
32'
Travel Lanes
20'
Landscape Right-of-Way
14'
Painted Asphalt
Ped Path
Landscape Right-of-Way
14'
6'
Vertical Delineator
17'
3'
26'
Roadway
60'
Right-of-Way
Vertical Delineator
6'
3'
17'

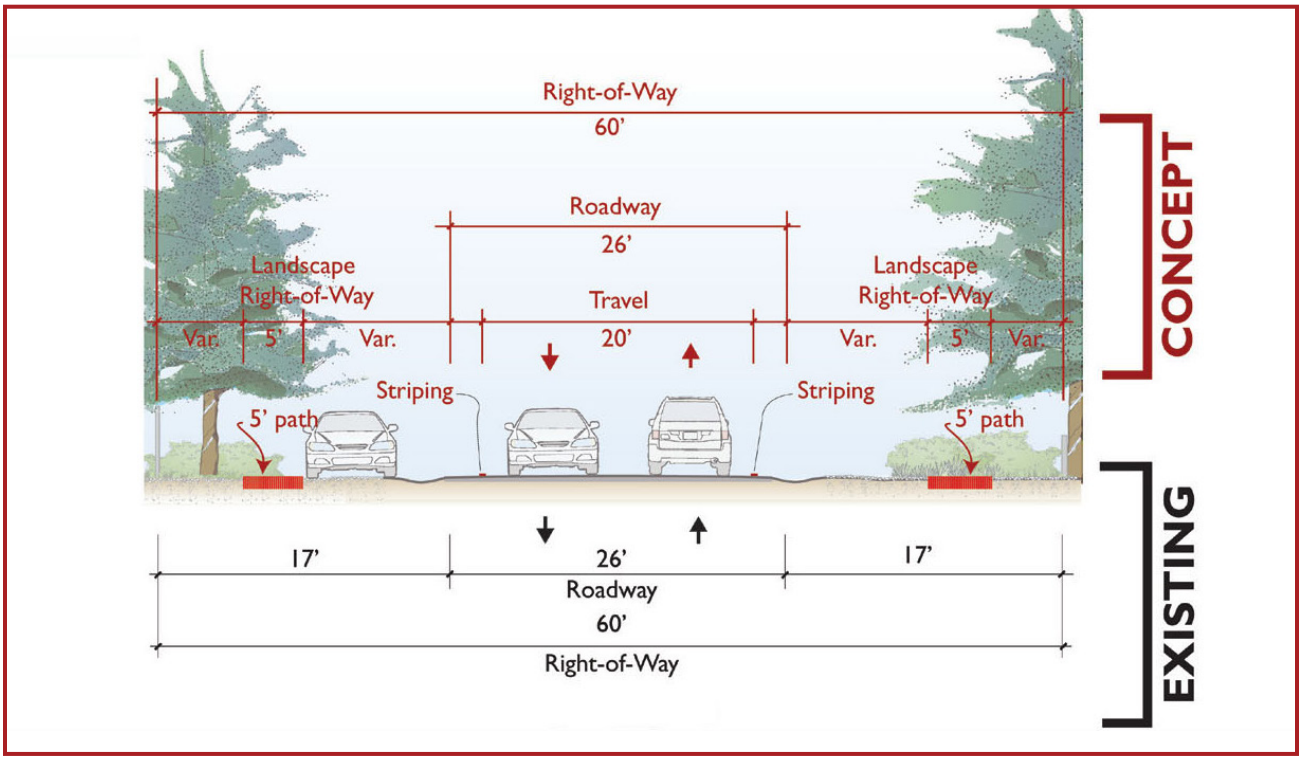
Two separated 5-foot wide paths (See Figure 5.17b)

- Maintain the existing pavement width.
- Maintain the existing landscape between the edge of pavement and the property line to the extent feasible.
- Restripe the roadway to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install five-foot wide pedestrian pathways on both sides of the street that meander around established landscape as feasible.
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Single separated 5-foot wide path (See Figure 5.17b)

- Maintain the existing pavement width.
- Maintain existing landscaping between the edge of pavement and the property as best as feasible.
- Restripe the roadway to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install a five-foot wide pedestrian pathway on one side of the street that meanders around established landscape as feasible.
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Two separated 5-foot paths



Single separated 5-foot path

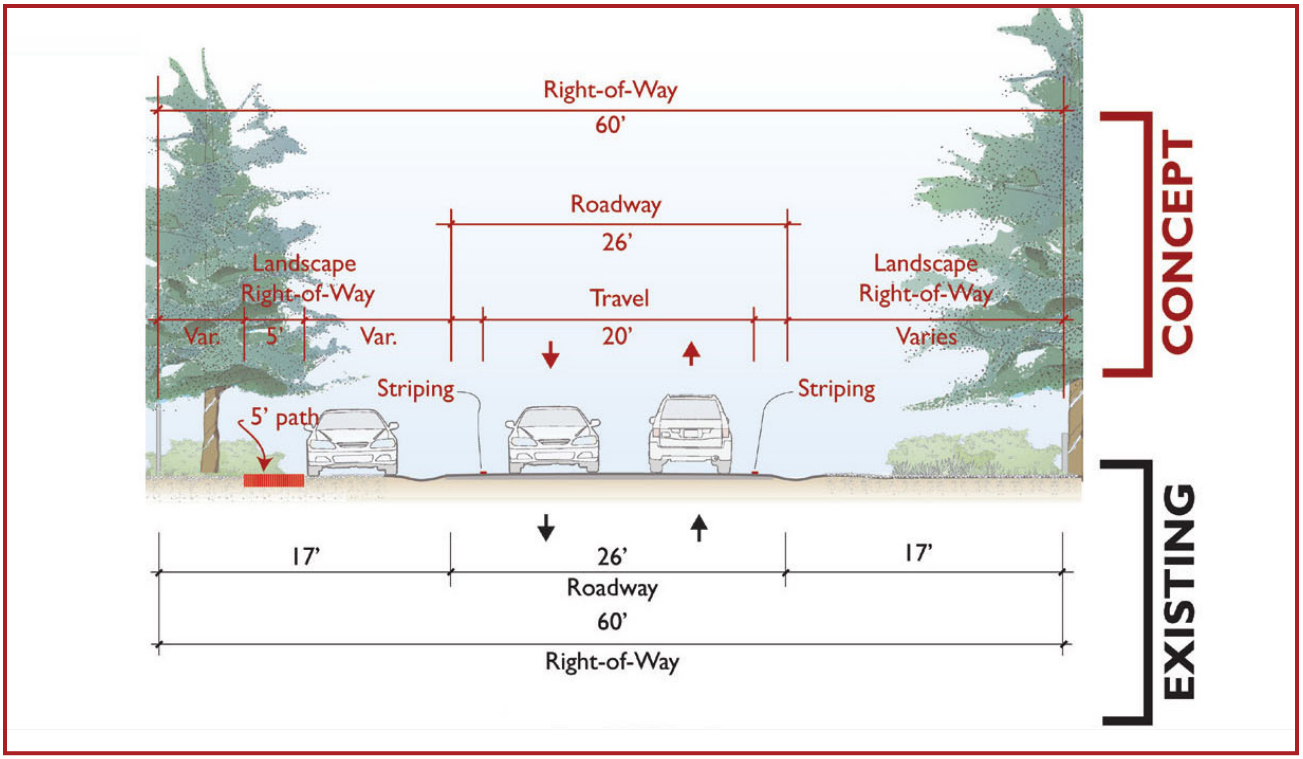
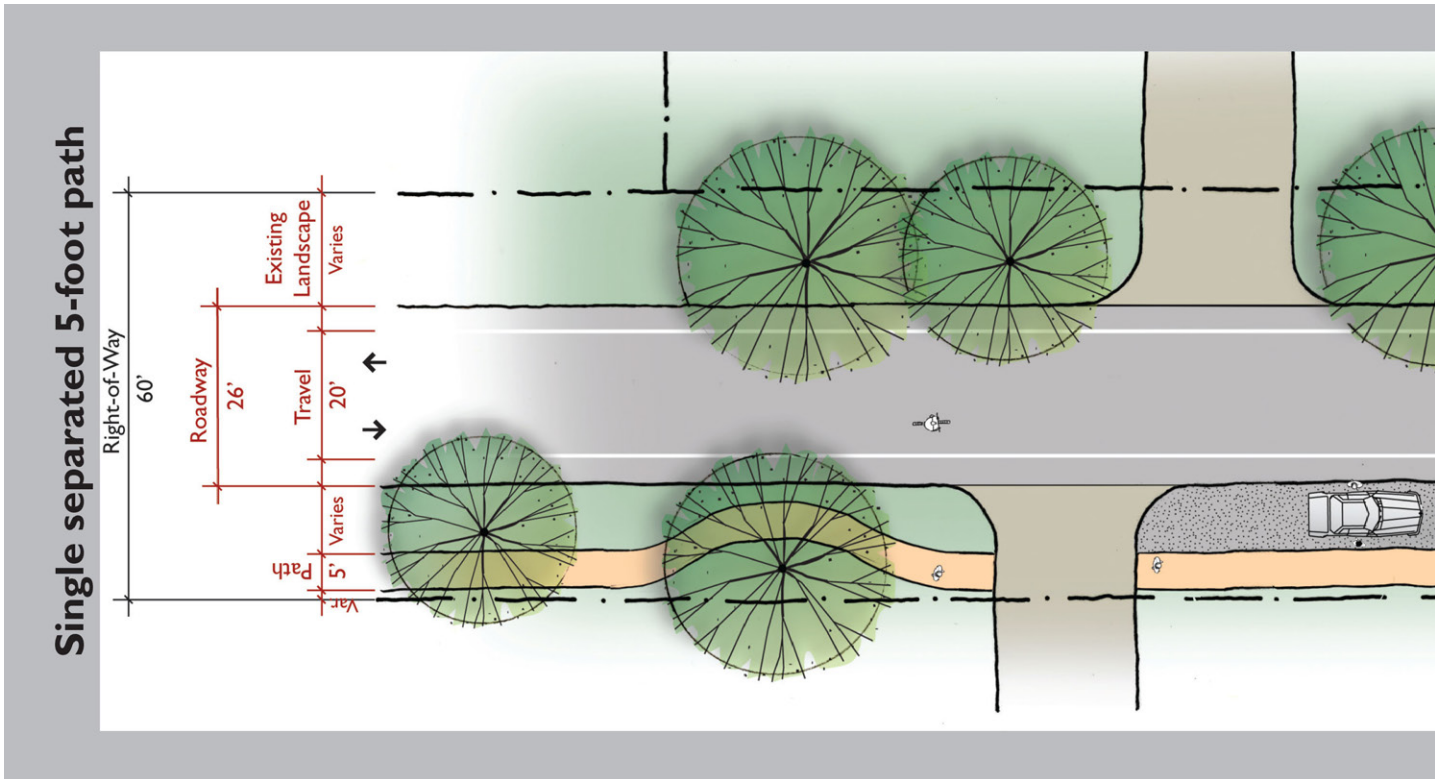


Figure 5.17b: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Pedestrian Priority Streets (Preferred for Maroa due to higher ADT) (Plans on following page)



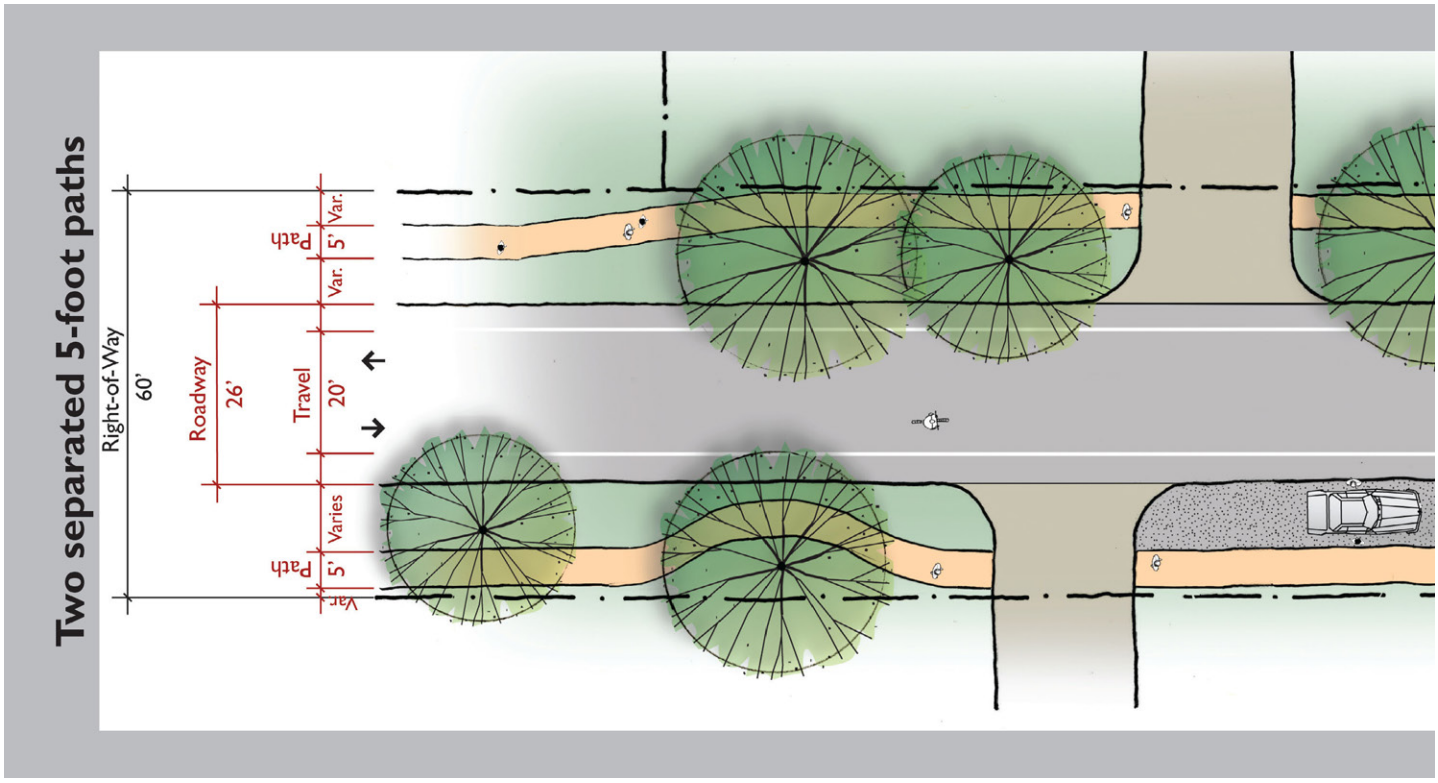
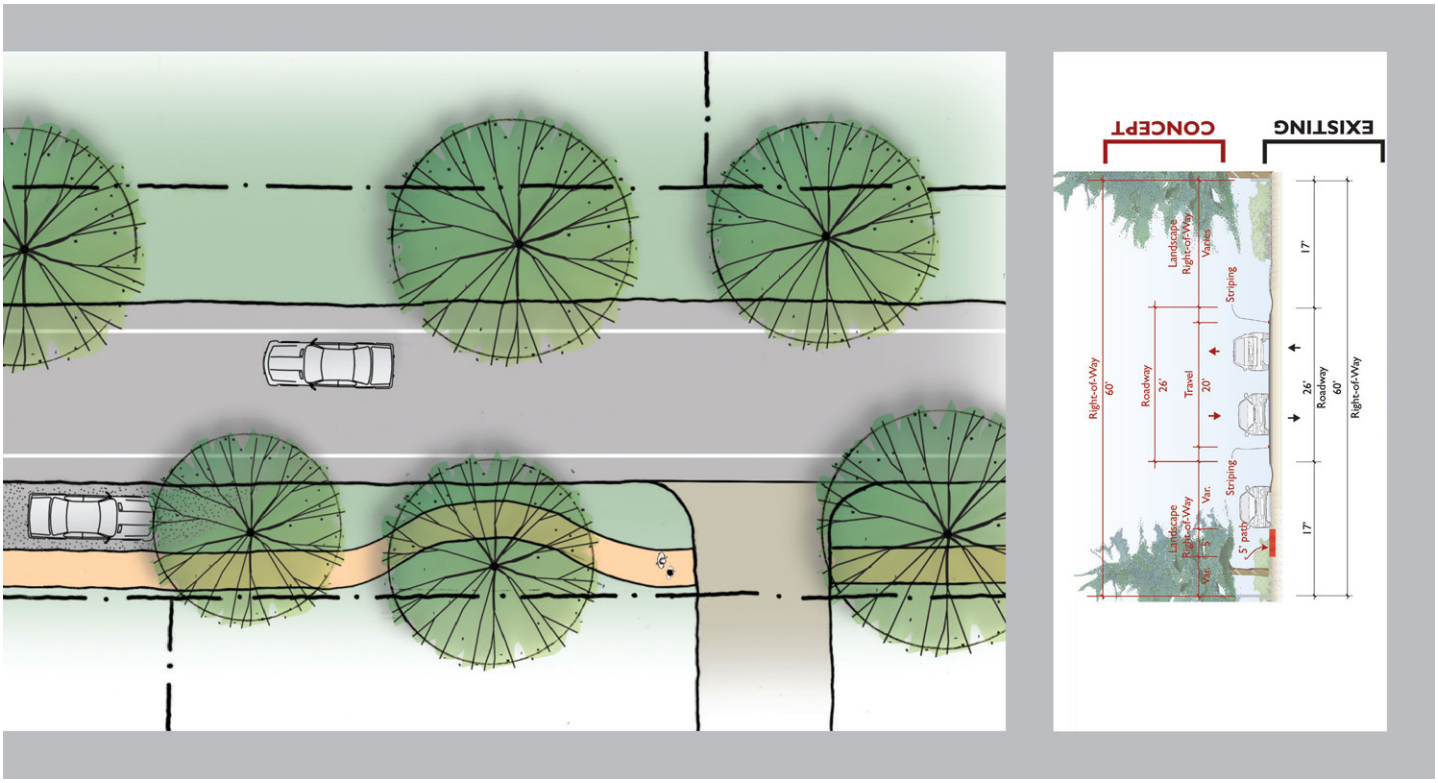
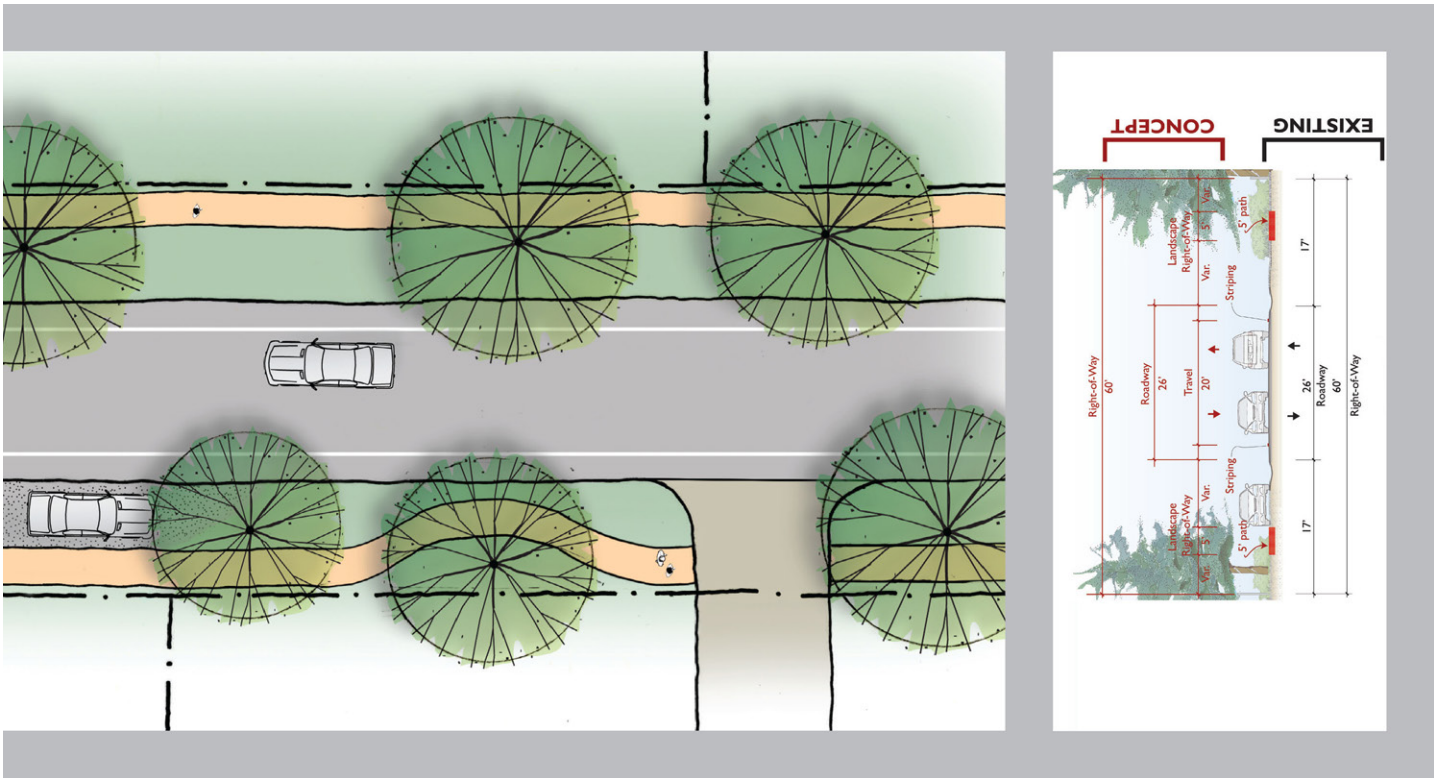


Figure 5.17b: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Pedestrian Priority Streets (Preferred for Maroa due to higher ADT) (Enlarged sections on preceding page)


EXISTING
CONCEPT
Right-of-Way
60'
Roadway
26'
Travel
20'
Landscape
Right-of-Way
Var.
5'
Var.
Striping
5' path
Striping
Landscape
Right-of-Way
Varies
17'
26'
Roadway
60'
Right-of-Way
17'


EXISTING
CONCEPT
Right-of-Way
60'
Roadway
26'
Travel
20'
Landscape
Right-of-Way
Var.
5'
Var.
Striping
5' path
Striping
Landscape
Right-of-Way
Var.
5'
Var.
5' path
17'
26'
Roadway
60'
Right-of-Way
17'

Combined bike and pedestrian priority streets

Six design alternatives are recommended for streets designated as having a combined bike and pedestrian priority. The recommendations provide varied alternates according to street traffic volume and desired configurations. Specifically, streets with greater than 3,500 average daily traffic (ADT) are subject to different design alternatives to better address the additional vehicle volume. Figures 5.18a, b, and c outline the improvements listed below.

Recommended for Streets of ADT equal to, or greater than 3,500:

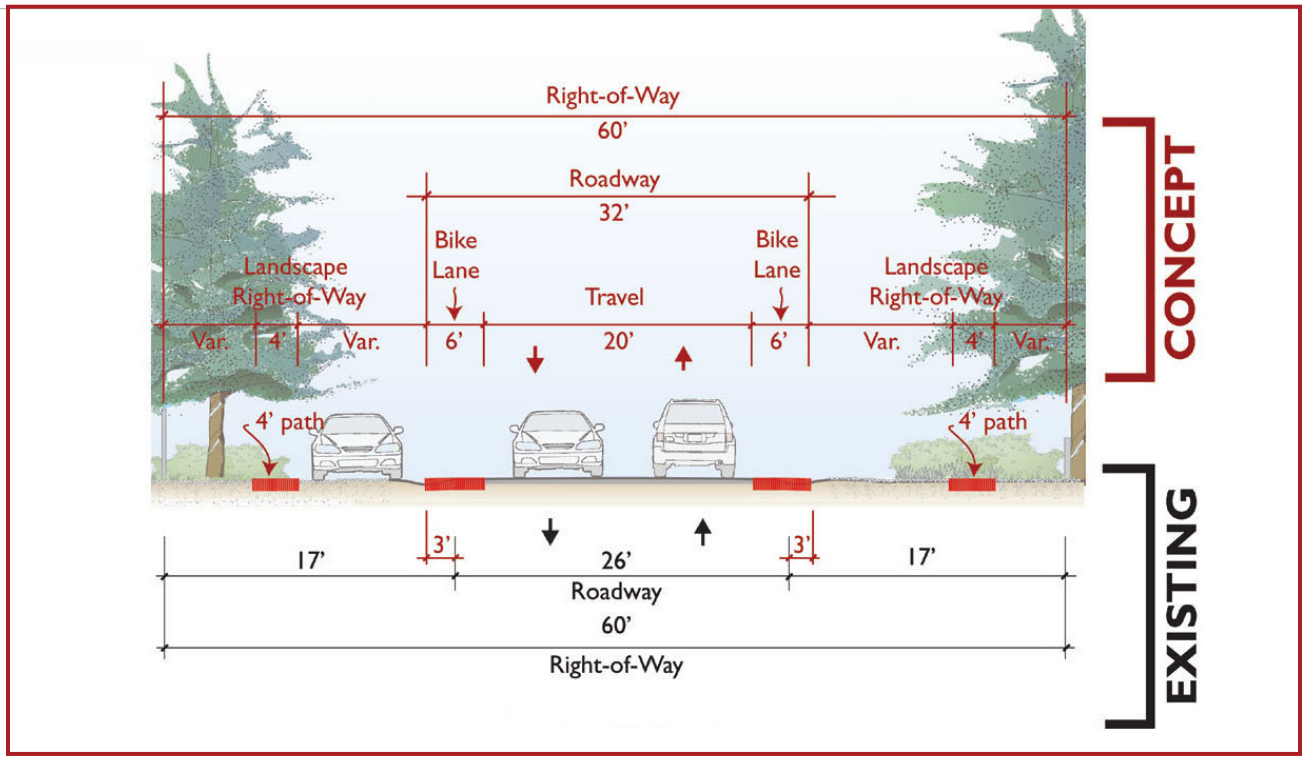
Two separated 4-foot wide pedestrian paths and bike lane on widened roadway (See Figure 5.18a)

- Widen the existing pavement by an additional three feet on either side from 26 feet to 32 feet.
- Maintain the existing private landscaping beyond the new paved area as best as feasible.
- Restripe roadway to include two, six-foot striped bike lanes and reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install four-foot wide pedestrian pathways on both sides of the street that meander around established landscape as feasible. Include five-foot wide wheelchair passing locations every 200 feet (as per ADA standards).
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Single separated 4-foot wide pedestrian path and bike lane on widened roadway (See Figure 5.18a)

- Widen the existing pavement by an additional three feet on either side from 26 to 32 feet.
- Maintain the existing private landscaping beyond the new paved area as best as feasible.
- Restripe roadway to include two, six-foot striped bike lanes and reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install a four-foot wide pedestrian pathway on one side of the street that meanders around established landscape as feasible. Include five-foot wide wheelchair passing locations every 200 feet (as per ADA standards).
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Two separated 4-foot pedestrian paths and bike lane on widened roadway



Single separated 4-foot pedestrian path and bike lane on widened roadway

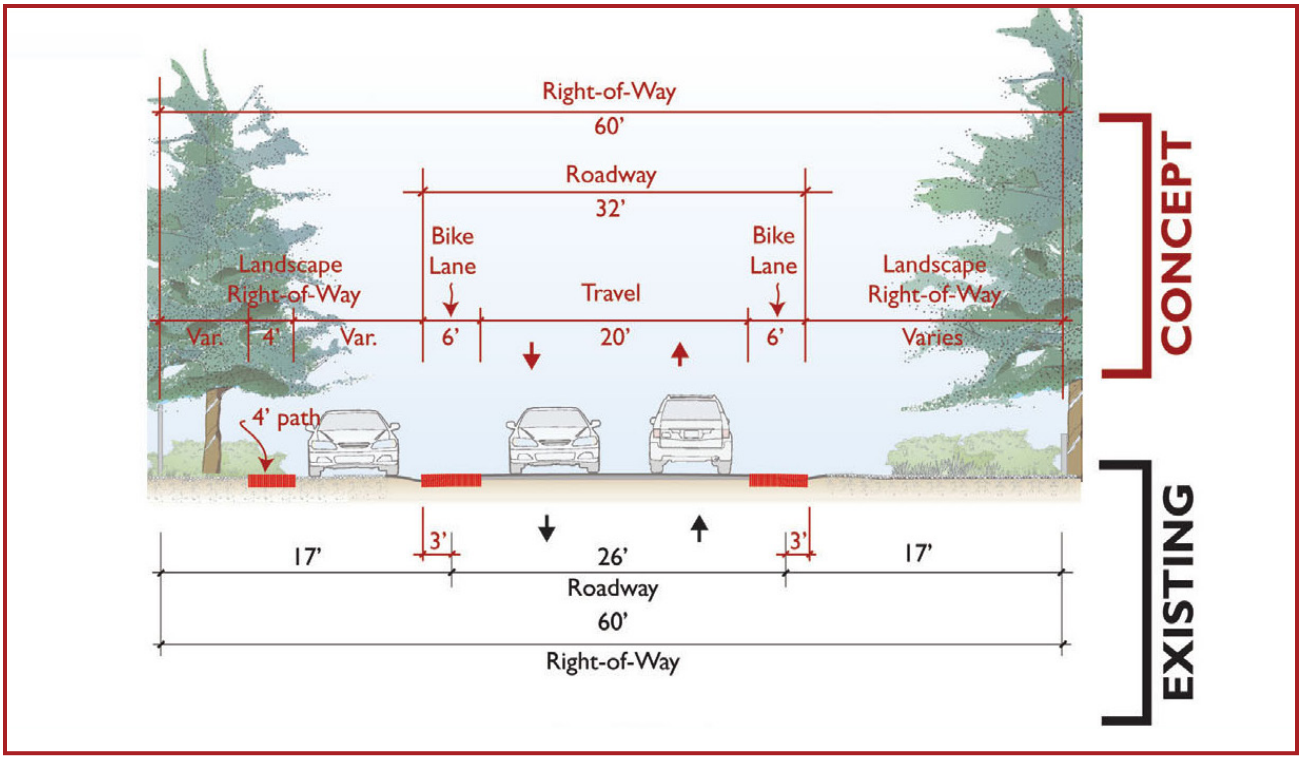
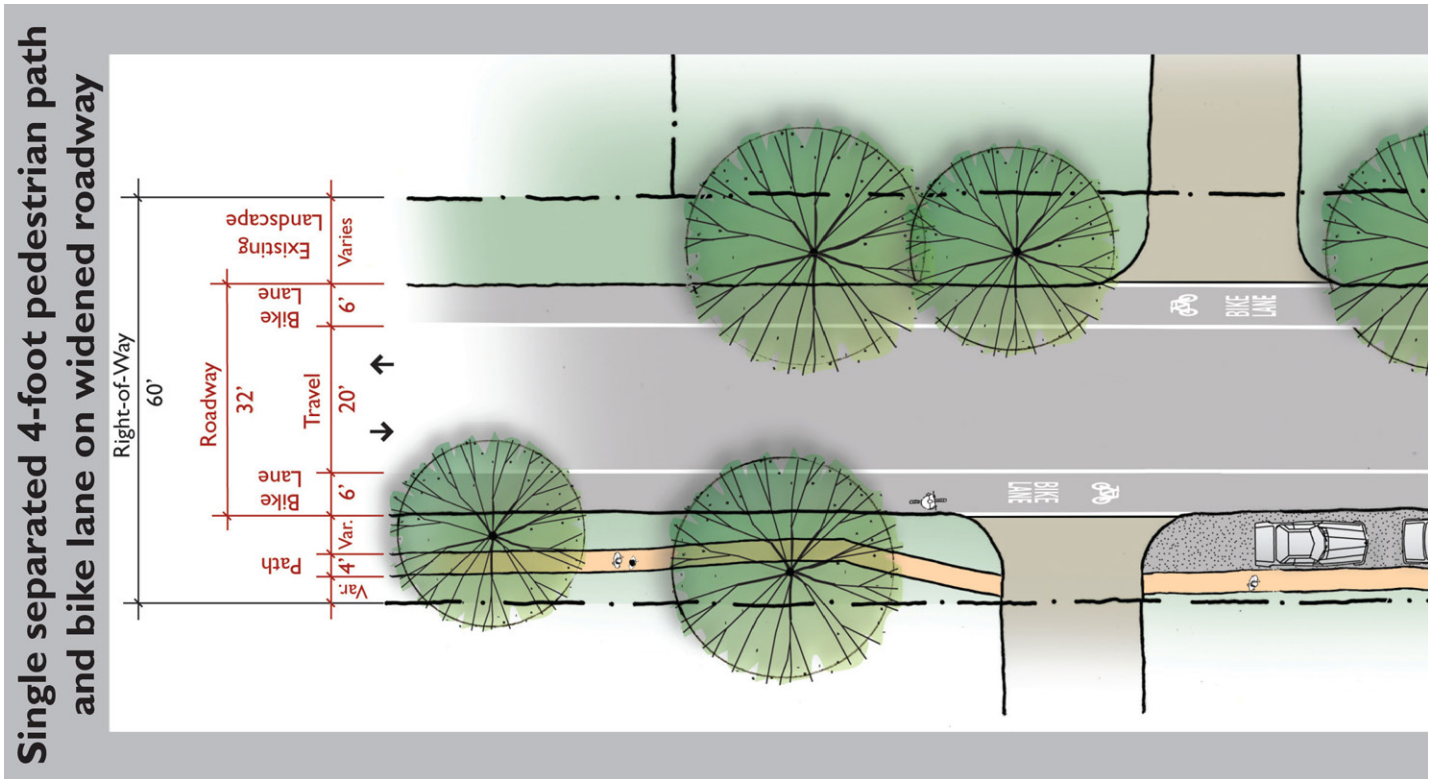


Figure 5.18a: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets (Separate bike lanes recommended for streets projected to have greater than 3,500 ADT) (Plans on following page)



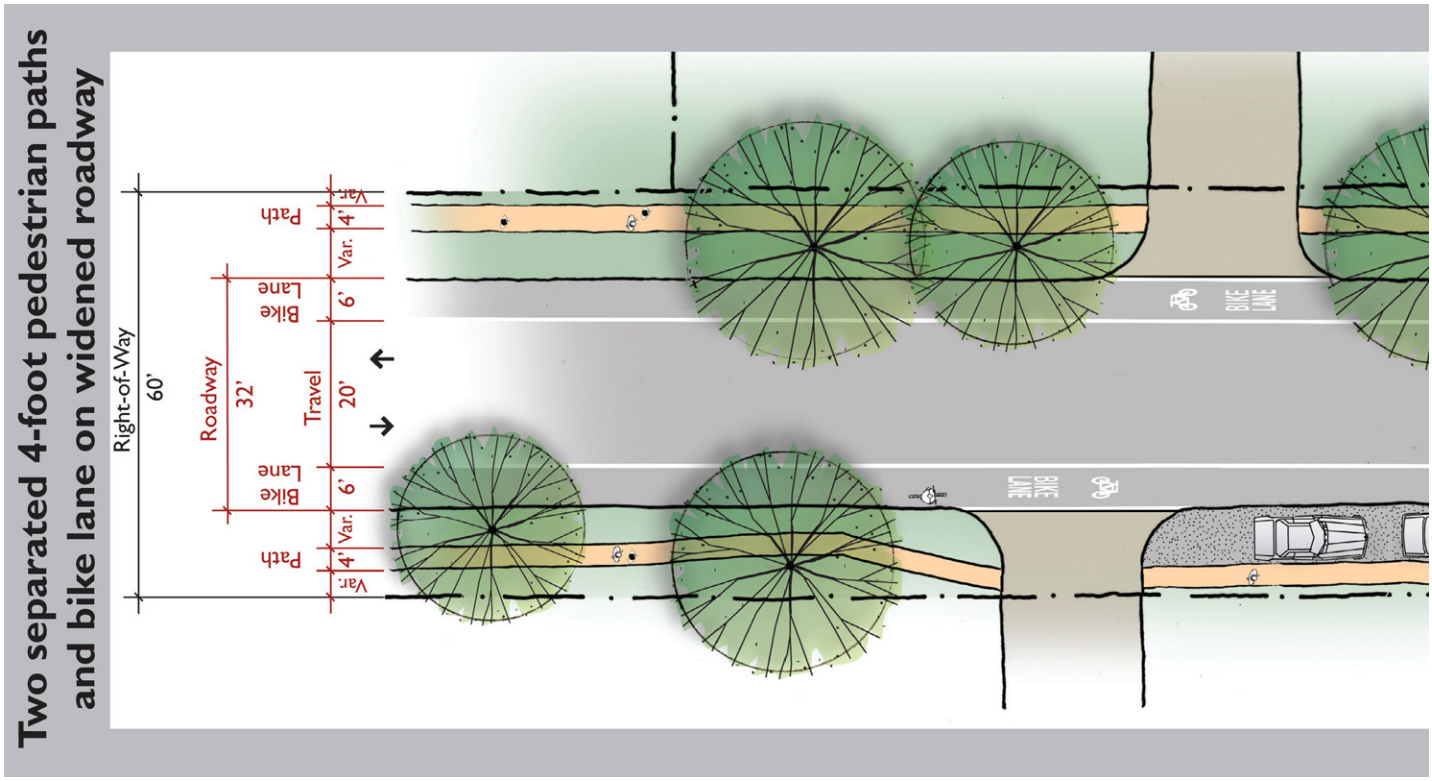
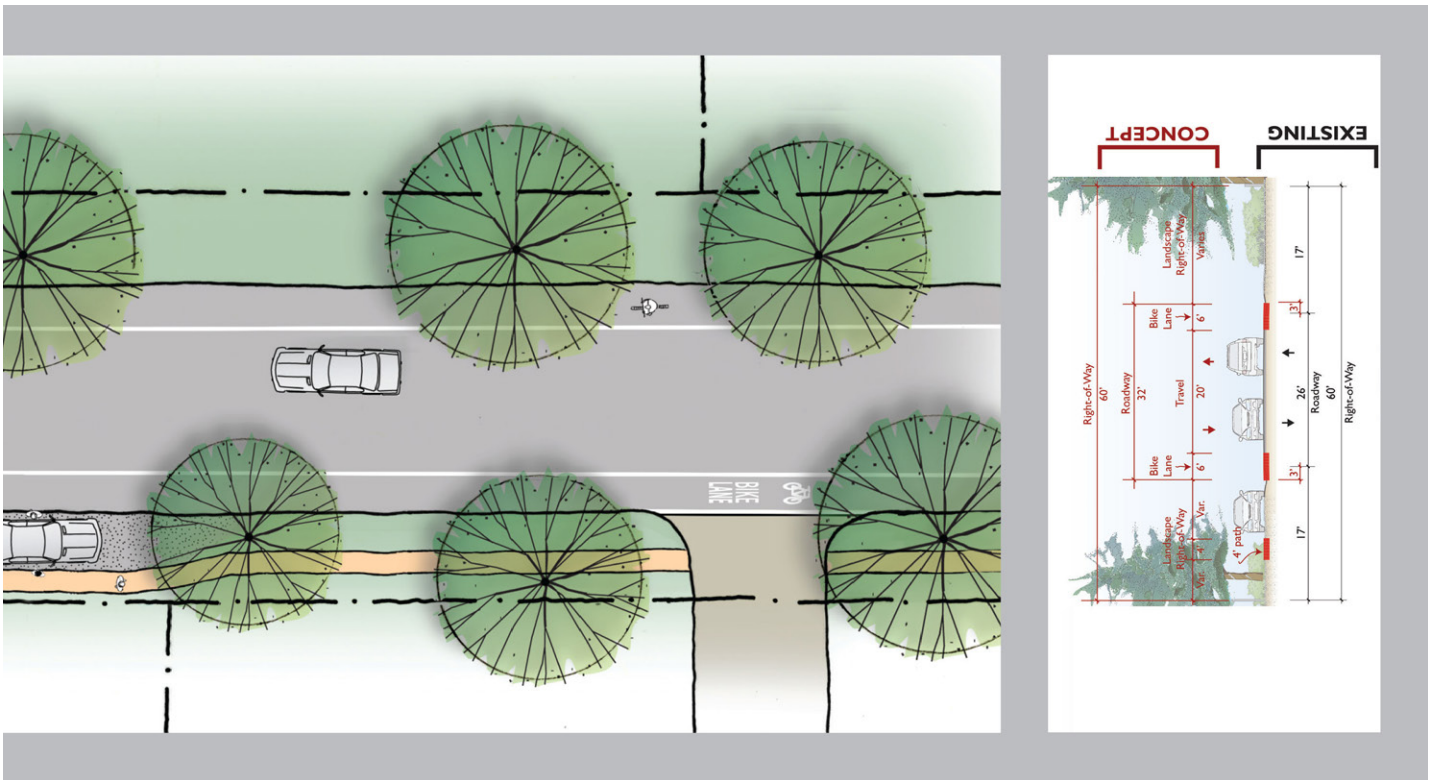
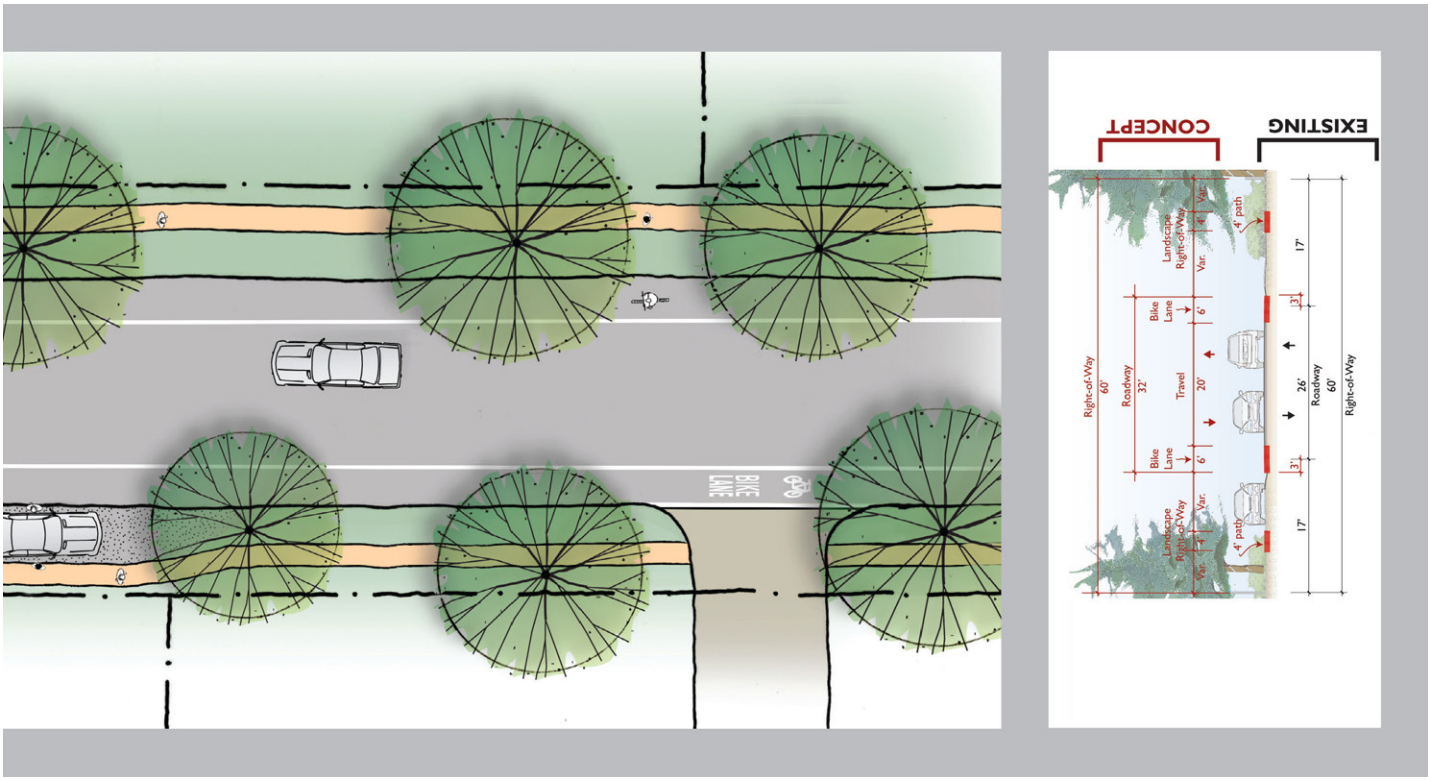


Figure 5.18a: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets (Separate bike lanes recommended for streets projected to have greater than 3,500 ADT) (Enlarged sections on preceding page)


BIKE LANE
CONCEPT
EXISTING
Right-of-Way 60'
Roadway 32'
Bike Lane 6'
Travel 20'
Bike Lane 6'
Landscape Right-of-Way Var.
Var.
4' path
17'
3'
26' Roadway
3'
17'
60' Right-of-Way
Landscape Right-of-Way Varies


BIKE LANE
CONCEPT
EXISTING
Right-of-Way 60'
Roadway 32'
Bike Lane 6'
Travel 20'
Bike Lane 6'
Landscape Right-of-Way Var.
Var.
4' path
17'
3'
26' Roadway
3'
17'
60' Right-of-Way
Landscape Right-of-Way Var.
Var.
4' path

Recommended for Streets of ADT less than 3,500:

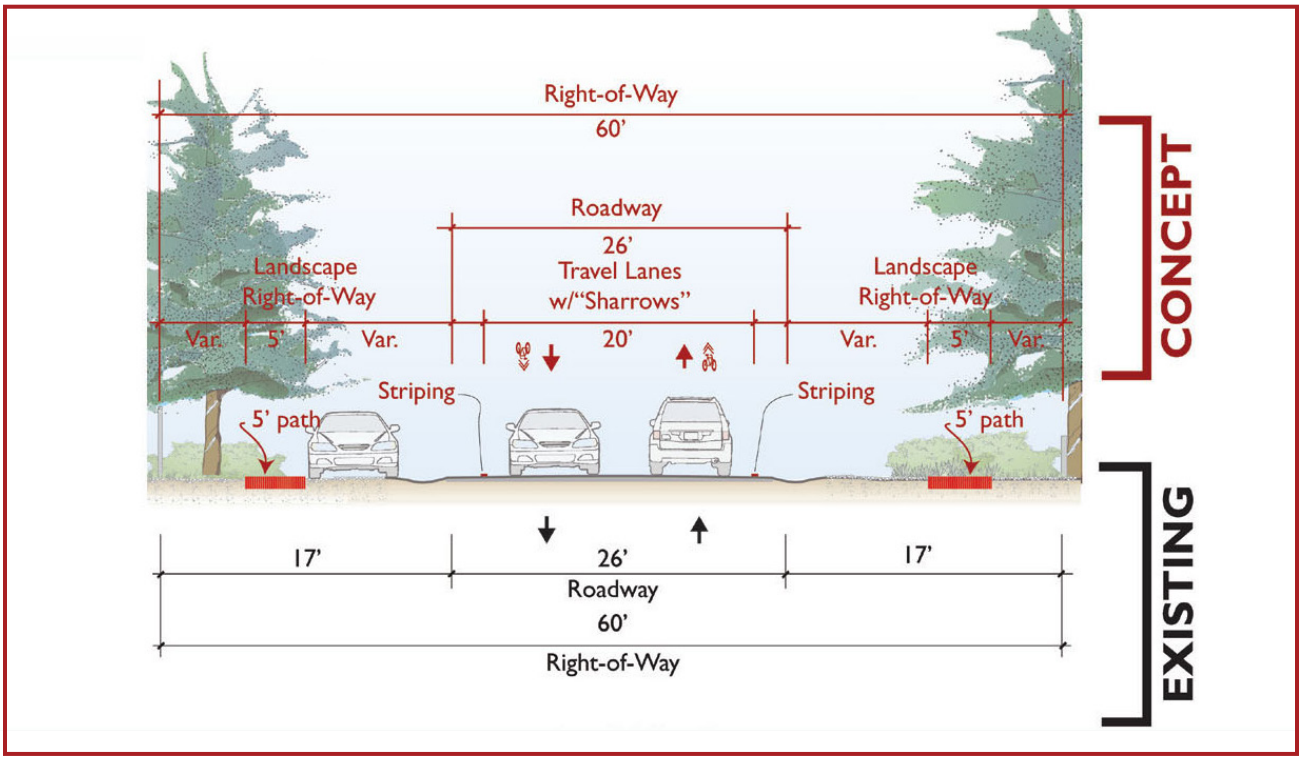
Two separated 5-foot wide paths and roadway w/"Sharrows" (See Figure 5.18b)

- Maintain the existing paved roadway width.
- Maintain existing landscaping between the edge of pavement and the property as best as feasible.
- Restripe roadway to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.
- Install five-foot wide pedestrian pathways on both sides of the street that meander around established landscape as feasible.
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Single separated 5-foot wide path and roadway w/"Sharrows" (See Figure 5.18b)

- Maintain the existing paved roadway width.
- Maintain existing landscaping between the edge of pavement and the property as best as feasible.
- Restripe roadway to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Establish travel lanes that are shared by automobiles and bicycles by painting "sharrow" markings on roadway surface.
- Install a five-foot wide pedestrian pathway on one side of the street that meanders around established landscape as feasible.
- Allow gravel parking areas on shoulder wherever applicable and ensure that the meandering pathway is positioned outside of parking areas.

Two separated 5-foot paths and roadway w/"Sharrows"



Single separated 5-foot path and roadway w/"Sharrows"

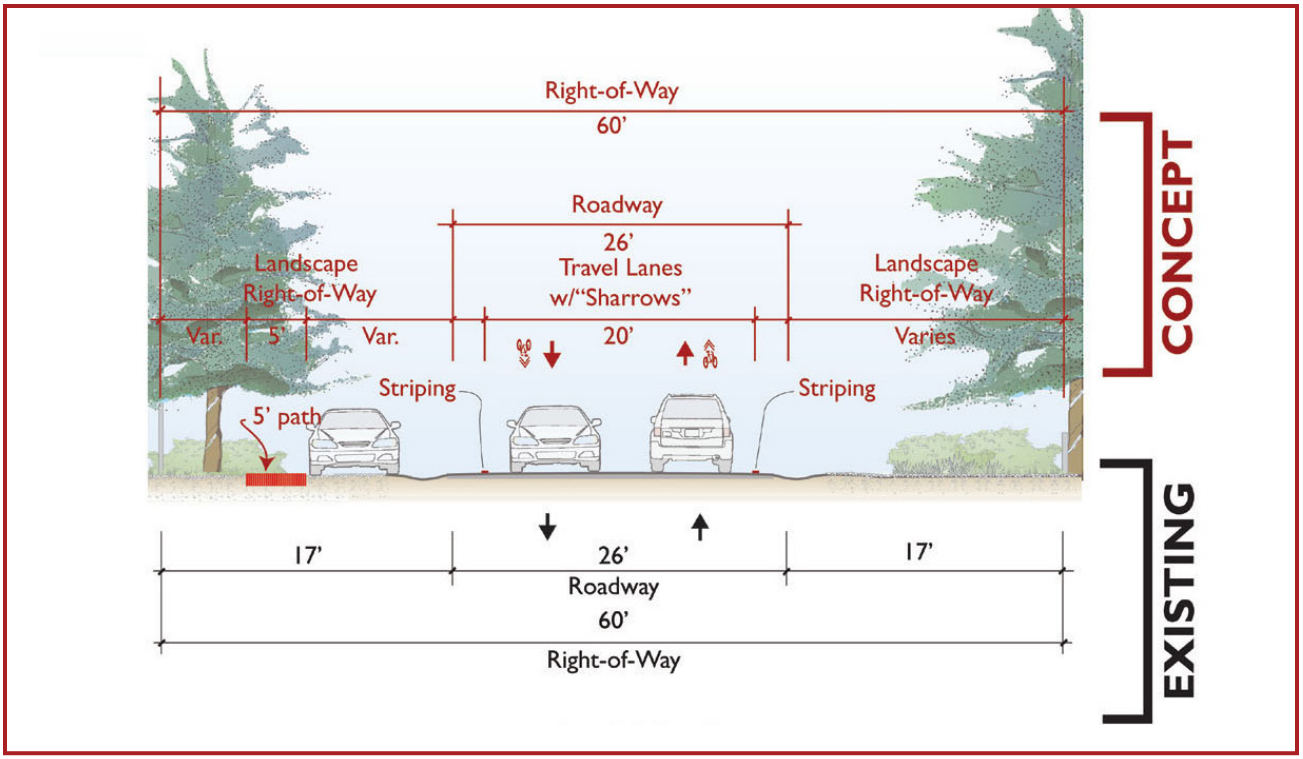
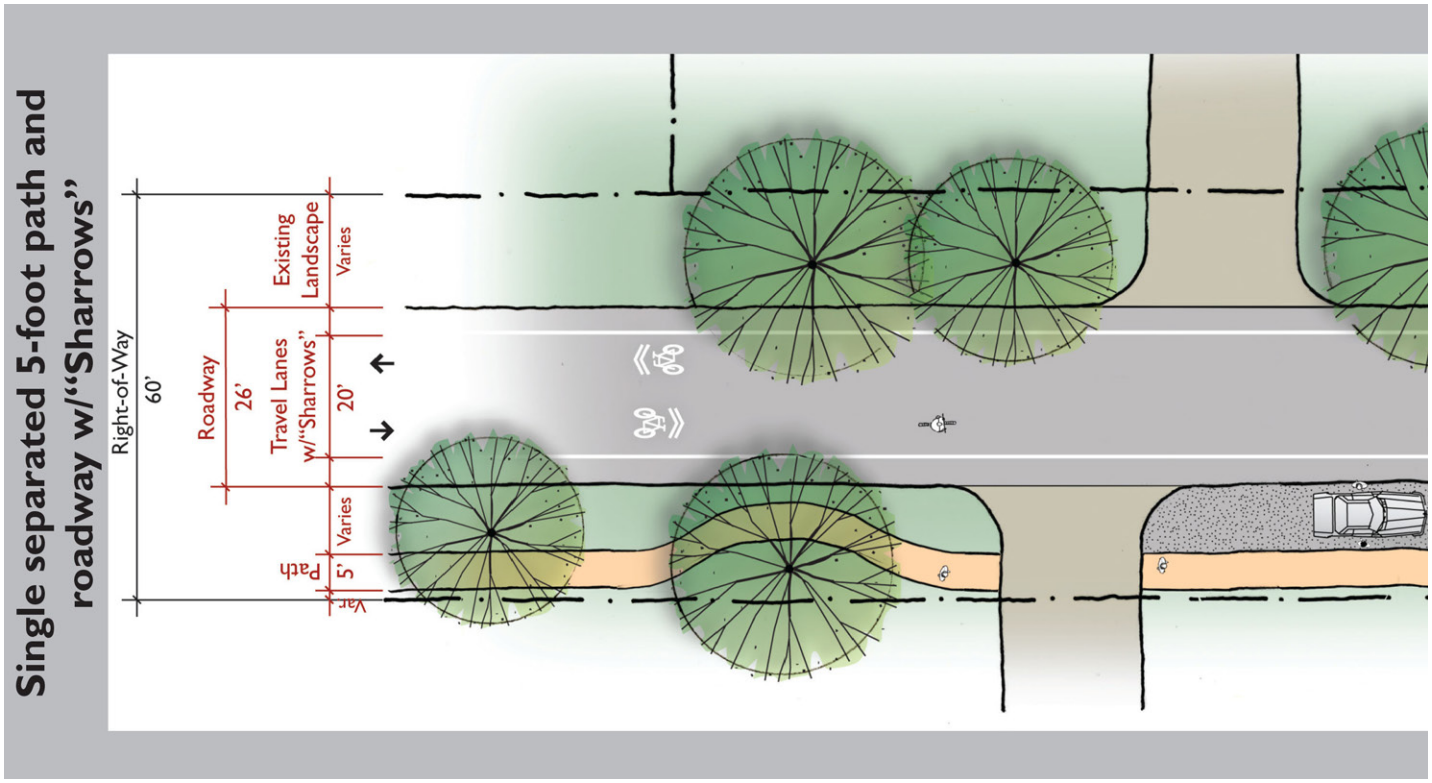


Figure 5.18b: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets(Combined lanes recommended for streets projected to have less than 3,500 ADT) (Plans on following page)



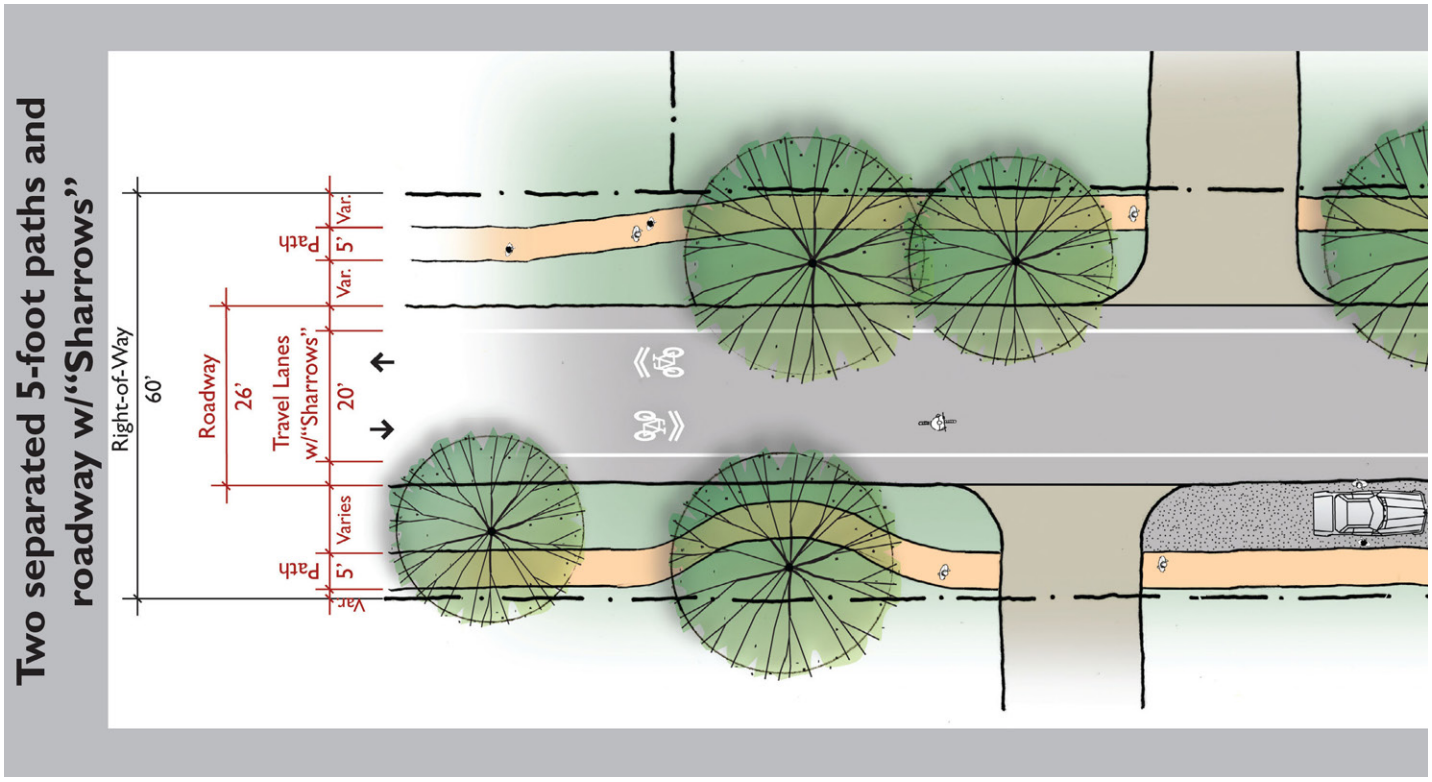
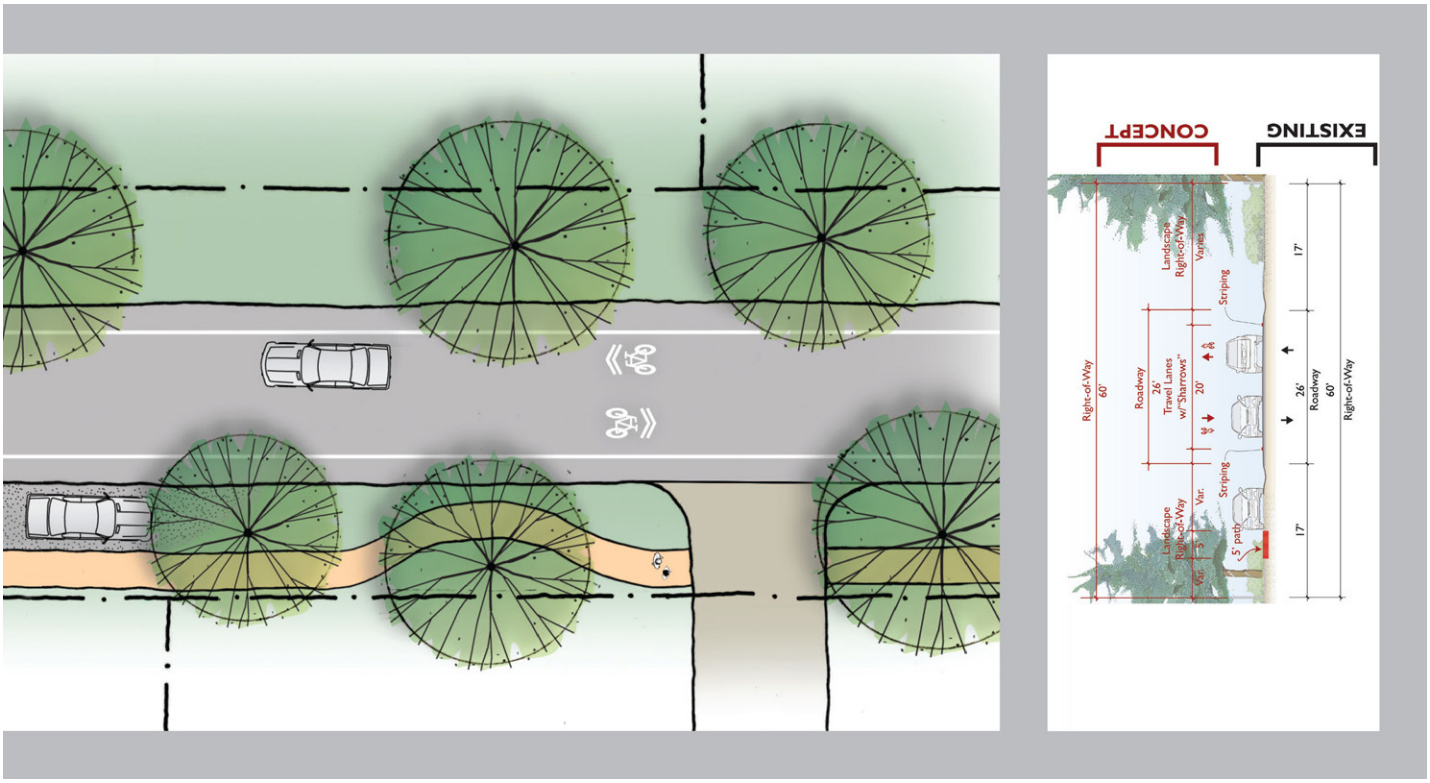
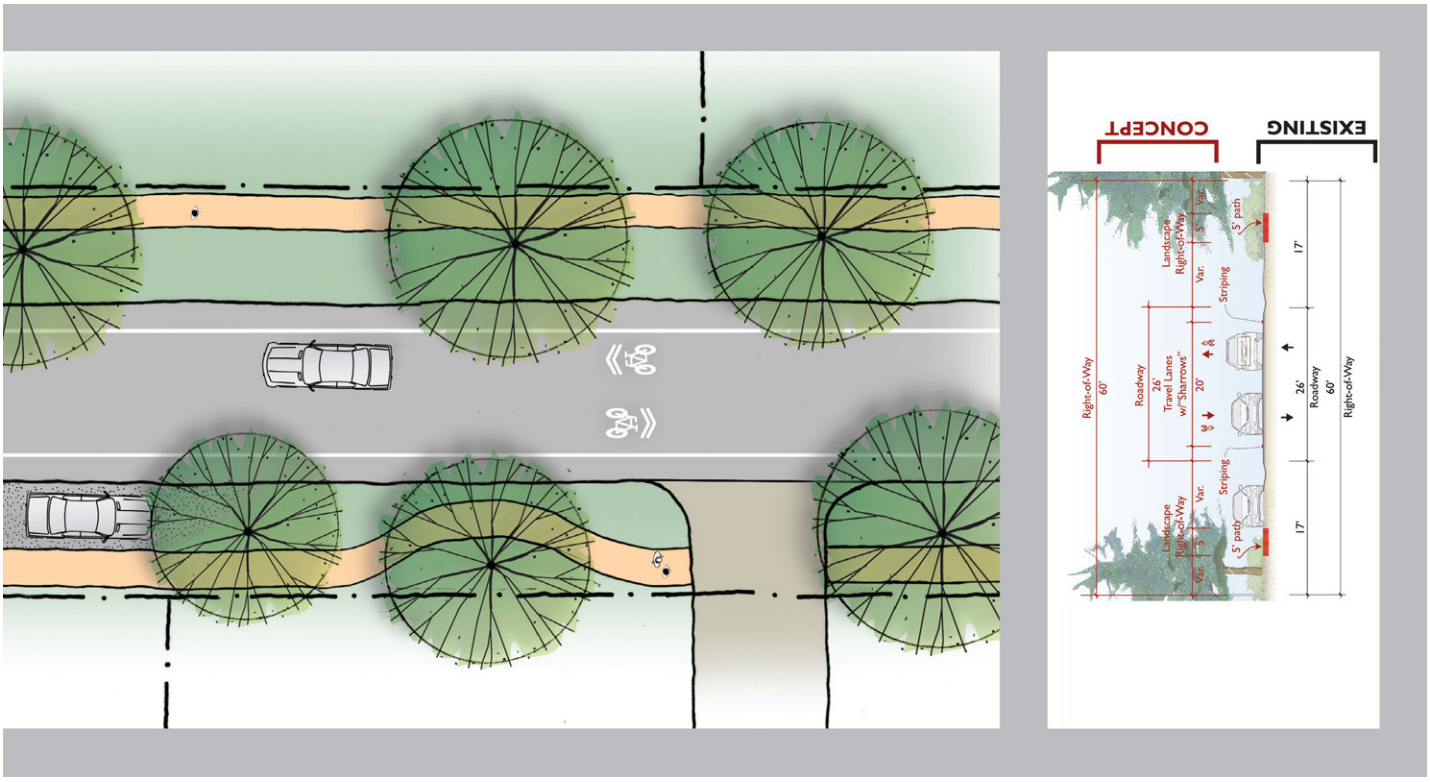


Figure 5.18b: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets(Combined lanes recommended for streets projected to have less than 3,500 ADT) (Enlarged sections on preceding page)


CONCEPT
EXISTING
Right-of-Way
60'
Roadway
26'
Travel Lanes
w/"Sharrows"
Landscape
Right-of-Way
Var.
5'
Var.
20'
Var.
Striping
5' path
Varies
17'
26'
Roadway
60'
Right-of-Way
17'


CONCEPT
EXISTING
Right-of-Way
60'
Roadway
26'
Travel Lanes
w/"Sharrows"
Landscape
Right-of-Way
Var.
5'
Var.
20'
Var.
Striping
5' path
17'
26'
Roadway
60'
Right-of-Way
17'

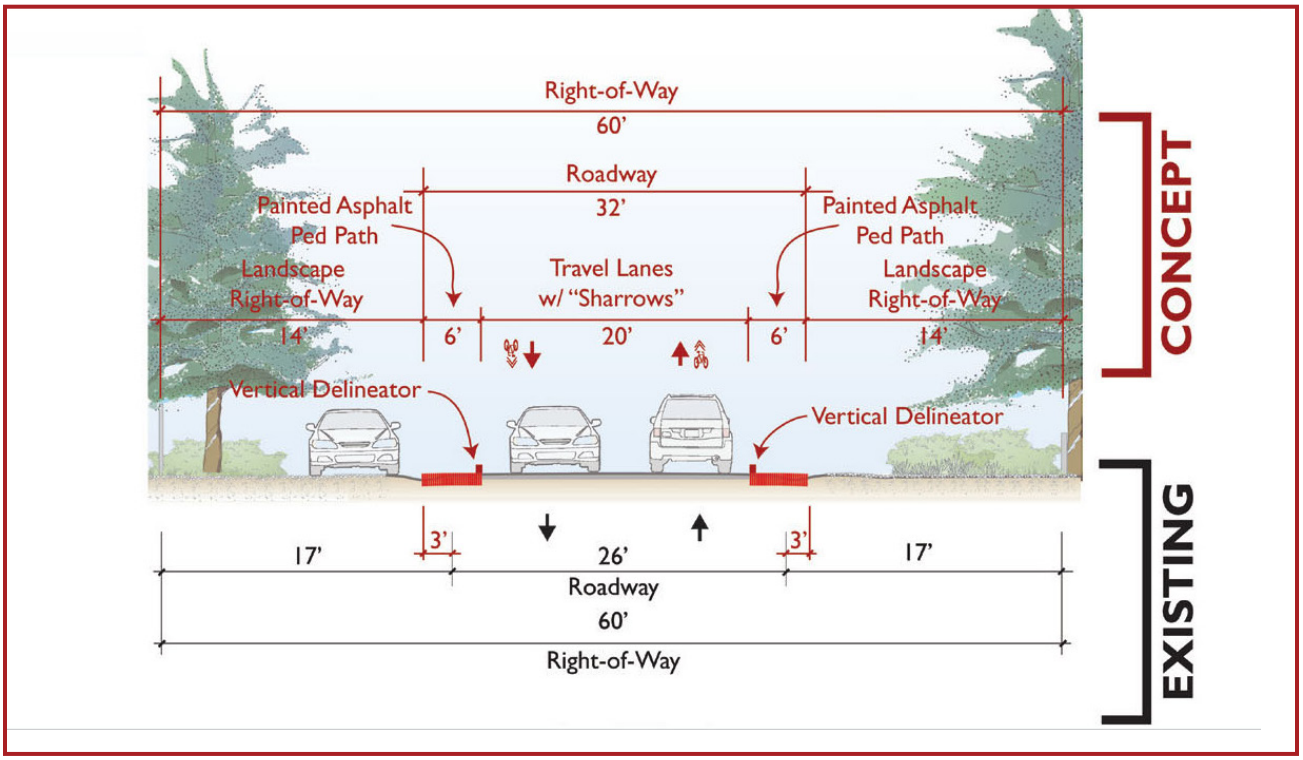
Two painted 6-foot wide paths on widened roadway w/"Sharrows" (See Figure 5.18c)

- Widen the existing paved roadway by an additional three feet on either side from 26 feet to 32 feet.
- Maintain the existing private landscaping beyond the new paved area as best as feasible.
- Restripe widened roadway to include two, six-foot painted pedestrian pathways and to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install vertical delineators along the one-foot painted stripe of the pedestrian pathways to provide a buffer against the adjacent traffic lanes.
- Allow gravel parking areas on shoulder wherever applicable and ensure that pedestrian pathway vertical delineators do not block vehicular path-of-travel near parking areas.

Single painted 5-foot wide path on existing roadway w/"Sharrows" (See Figure 5.18c)

- Maintain the existing paved roadway width.
- Maintain the existing private landscape between the edge of pavement and the property line.
- Restripe widened roadway to include one, five-foot painted pedestrian pathway and to reduce the combined width of the two travel lanes to twenty feet, without a painted median strip.
- Install vertical delineators along the one-foot painted stripe of the pedestrian pathway to provide a buffer against the adjacent traffic lane.
- Allow gravel parking areas on shoulder wherever applicable and ensure that pedestrian pathway vertical delineators do not block vehicular path-of-travel near parking areas.

Two painted 6-foot paths on widened roadway w/"Sharrows"



Single painted 5-foot path on existing roadway w/"Sharrows"

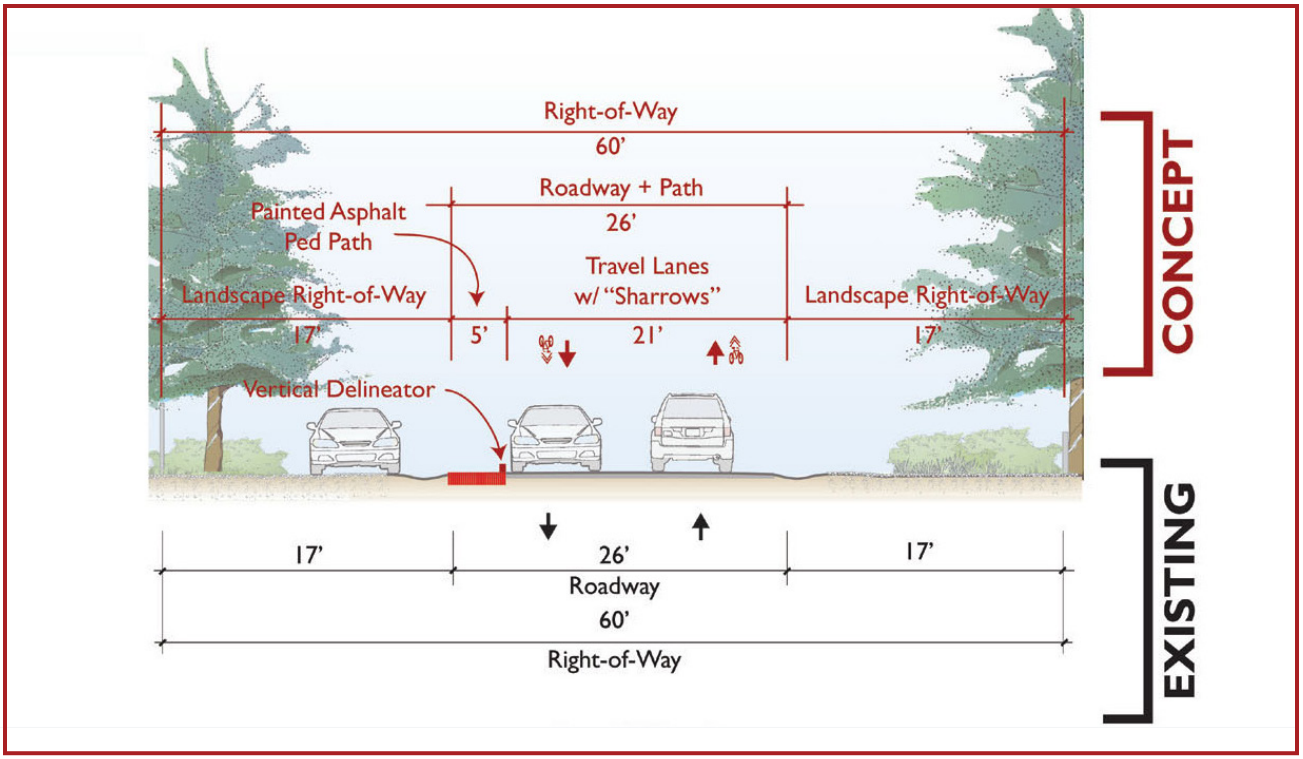
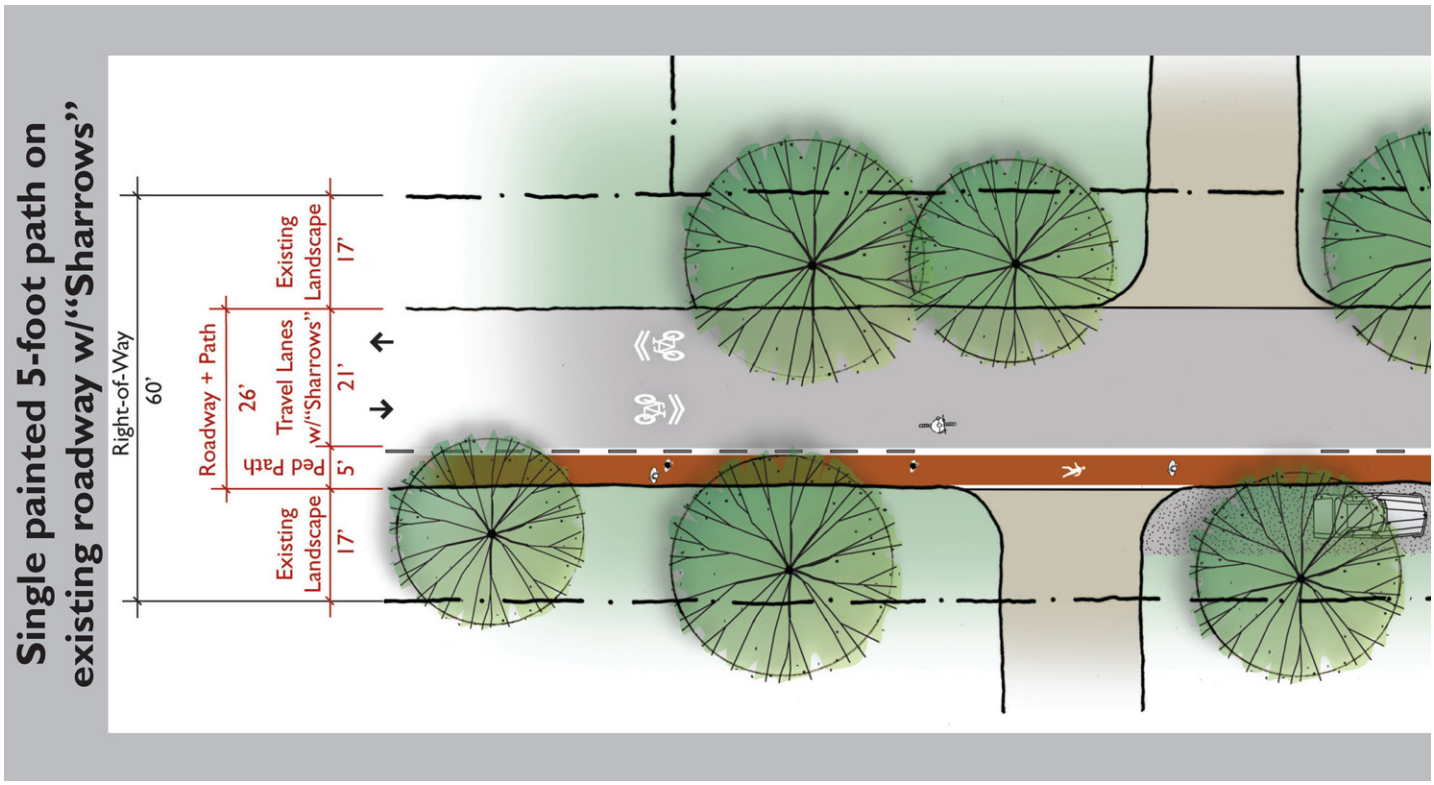


Figure 5.18c: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets (Combined lanes recommended for streets projected to have less than 3,500 ADT) (Plans on following page)



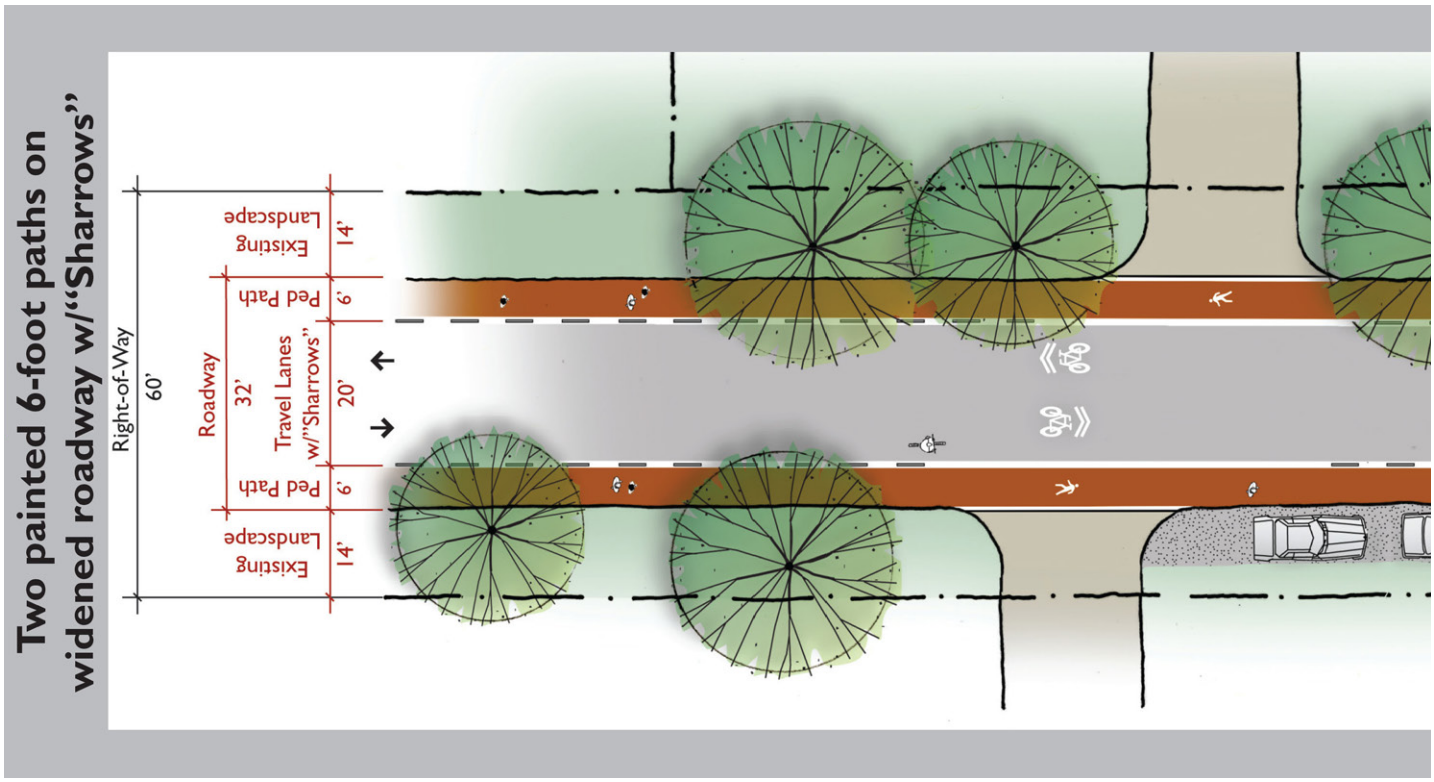
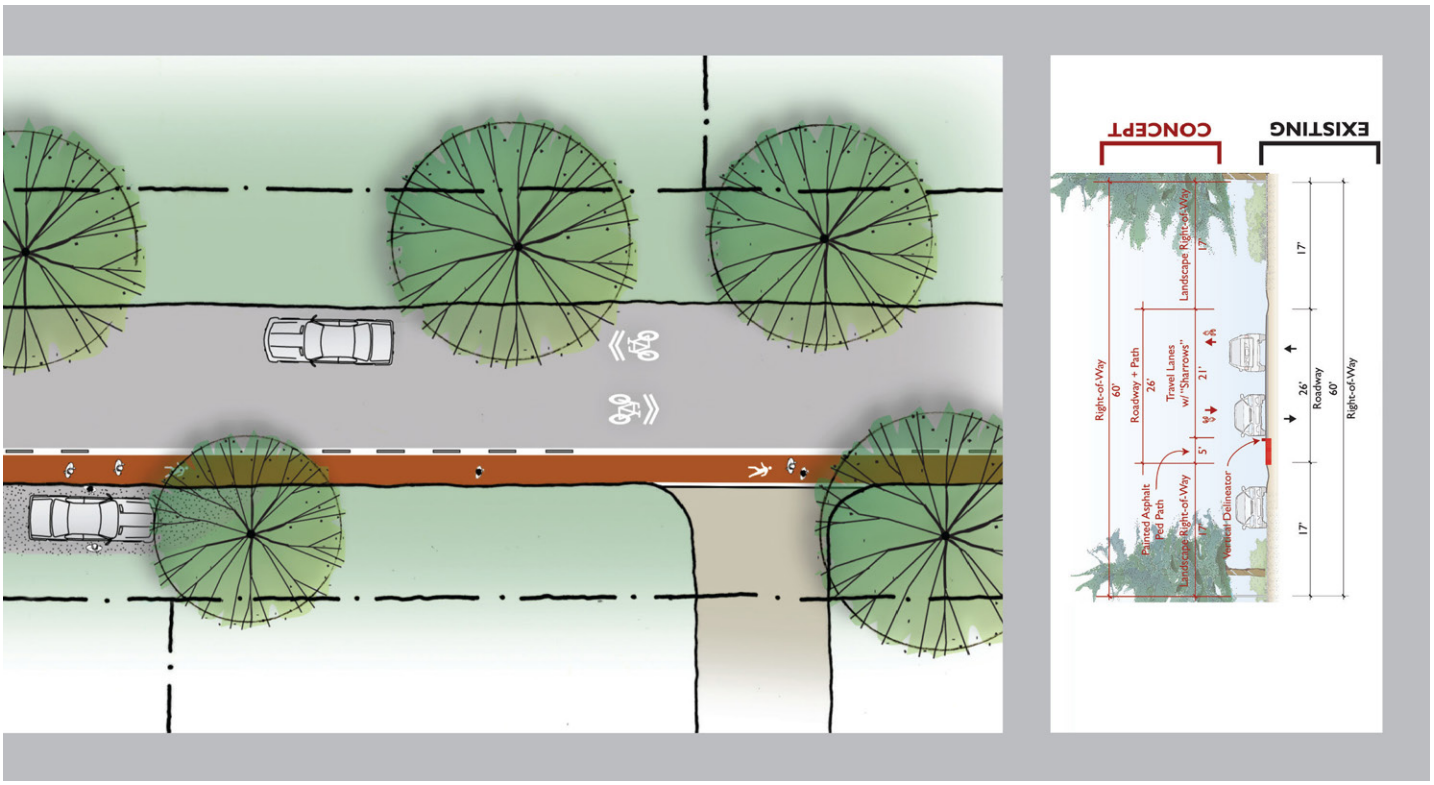
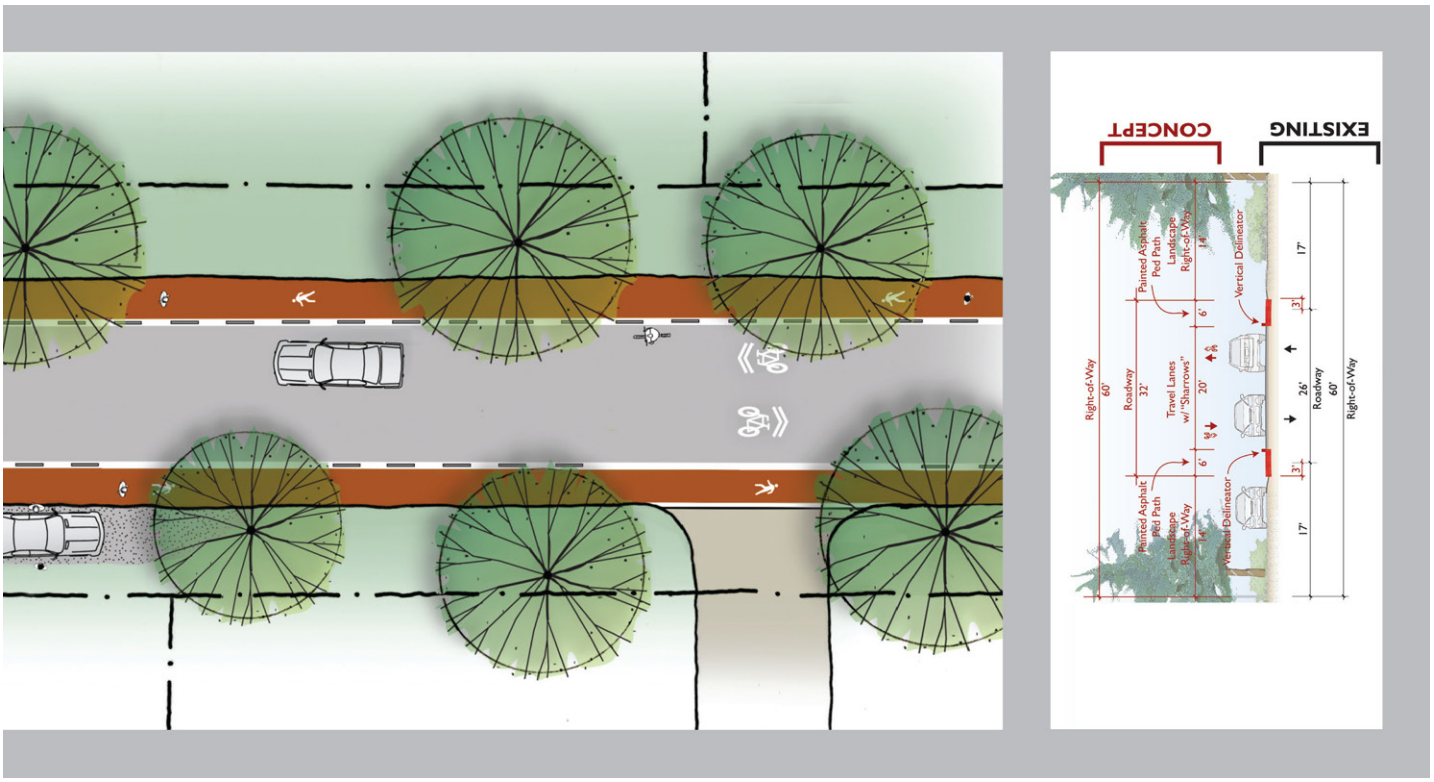


Figure 5.18c: County Island Street Design Options for 60-foot wide rights-of-way without sidewalks - Combined Bike and Pedestrian Priority Streets (Combined lanes recommended for streets projected to have less than 3,500 ADT) (Enlarged sections on preceding page)


EXISTING
CONCEPT
Right-of-Way
60'
Roadway + Path
26'
Travel Lanes
w/ "Sharrows"
21'
5'
Painted Asphalt
Ped Path
Landscape Right-of-Way
1'
Vertical Delineator
Landscape Right-of-Way
17'
17'
26'
Roadway
60'
Right-of-Way


EXISTING
CONCEPT
Right-of-Way
60'
Roadway
32'
Travel Lanes
w/ "Sharrows"
20'
6'
Painted Asphalt
Ped Path
Landscape
Right-of-Way
14'
Vertical Delineator
Vertical Delineator
Landscape
Right-of-Way
1'
6'
3'
3'
17'
17'
26'
Roadway
60'
Right-of-Way

5.1.4 Traffic Calming and Speed Management

Traffic calming is a term used to describe roadway improvements that are designed to reduce vehicle speeds and promote safety along roadways where residents, pedestrians, and bicyclists are adversely affected by the amount and speed of automobile traffic. As emphasized in the discussion of the multi-modal framework, together with considerations for the spatial accommodation of bicyclists and pedestrians, traffic calming measures are the essential second tool for creating conditions that facilitate safe and comfortable pedestrian and bicycle travel in the study area. There are, however, a number of issues related to traffic calming measures that need to be addressed prior to the implementation of any of the available measures. Within the study area, the following are key concerns related to traffic calming:

- With the recommendation of roadway improvements along Ashlan Avenue to discourage through traffic, there is a corresponding need to discourage traffic from using parallel neighborhood streets.
- Some neighborhood streets in the study area are already experiencing undesirable vehicle speeds even without the provision of additional improvements along Ashlan Avenue.
- Many of the roadways in the County portion of the study area lack the right-of-way necessary to provide a degree of separation between vehicular traffic and pedestrians and bicyclists. Reduction of vehicle speeds will tend to reduce the effects of any potential conflicts.

Several strategies are recommended to calm traffic and reduce vehicle speeds on local street in the County Island area. Based upon the local conditions and community desire to maintain the overall visual character of the affected streets, a select number of strategies are recommended for implementation in the study area, including:

- **Striping narrower lanes.** This strategy reduces the paved area designated for automobile travel to 20 feet, without a centerline stripe. This is accomplished by striping the outside edge of this 20-foot area with a four-inch painted white stripe (one foot wide for temporary striping on pedestrian priority streets). Narrower "lanes" and the lack of a centerline stripe encourage driving at reduced vehicle speeds without physically narrowing the existing paved area.
- **Textured crosswalks at neighborhood entries.** This option provides indication to the driver that he or she is entering a pedestrian-oriented space and provides a 'gateway' type experience into and out of the neighborhood. The final design of this calming measure needs to be closely coordinated and approved by affected emergency responders, including the Fresno City and County Fire Departments in order to ensure that fire engines can safely pass across the narrowed portion of the roadway.

- **Short median (mid-block)**. Slows traffic in mid-block locations by diverting travel lanes around a short median. The median also provides opportunities for landscaping.
- **Short median with refuge**. Similar to the mid-block short median, this strategy provides refuge to pedestrians and bicyclists where they can focus on crossing one lane at a time.
- **Stop markings**. This includes adding standard thermoplastic stop line stripes and painting 'STOP' markings on the pavement in addition to the posted stop sign. This provides additional visual clues for drivers to ensure that the stop is not ignored or overlooked.
- **Mini traffic circle**. This strategy slows traffic down to 15 – 18 mph and will not slow down traffic mid block. It also provides an opportunity for additional landscaping within the right-of-way (also see more detailed description below). Further benefits include the elimination of a need for other more conventional traffic controls, i.e. stop signs and signals, plus a significant improvement to air quality.
- **Curb Extensions with high visibility crosswalks**. Located along key crossing locations, this strategy will reduce total crossing distance and increase the visibility of pedestrians waiting to cross.

These are identified and explained in Figures 5.19 and 5.20. The Potential Traffic Calming Treatments/Features table in Figure 5.20 provides guidance to City staff should future decisions be made regarding traffic calming strategies and implementation. Of these there are segmental solutions that could be applied to segments or the entire length of the street. There are others that could be applied between intersections to calm traffic between intersections. The traffic calming strategies at intersections have the most significant impacts, as they can impact drive times, cause queuing, and need to negotiate several modes of cross traffic. Therefore improvements to intersections, particularly in the county where there are no curbs or sidewalks are explained in detail below.

5.1.4.1 Intersection Treatment Concepts for ped/bike priority routes

Each design alternative for priority streets with a 60-foot typical right-of-way can include one of two intersection alternatives to be determined by intersection location and what recommended traffic calming measure is chosen. See Figure 5.21 illustrating the two intersection types below.

5.1.4.1.1 Mini Traffic Circle

The mini traffic circle is a traffic-calming device used at intersections where traffic speed is a concern. The mini traffic circle design has the potential to reduce intersection vehicle speed to 15-18 miles per hour without affecting mid block traffic speeds. The example illustrated shows a combined priority street intersecting a non-priority street, the elements of which are outlined below.

- Install landscaped or non-landscaped traffic circle at intersection with a center island diameter of 20 feet and an apron of 32 feet in diameter. This allows for an 18-foot lane circumnavigating the center island.
- Extend painted pedestrian pathways to corners and along non-priority streets for 20 feet beyond the edge of the crosswalks.
- Install asphalt berms (curbs) at corners and along all streets for a distance beyond crossings to provide a buffer for pedestrians from vehicle lanes.
- Widen the existing roadway at the intersection that receives the mini traffic circle to accommodate the geometry of the improvements based on vehicular movements and space needed for bicycle and pedestrian movements[11].
- Mark pedestrian crossings with high-visibility crosswalk striping consistent with California MUTCD standards.

5.1.4.1.2 Intersection of ped/bike priority street with non priority street

This intersection incorporates a four-way stop with enhanced stop markings and is found within the area within the study area. The stop provides additional visual cues for drivers and makes the stop less easy to ignore or overlook. It's a cost effective way to calm traffic and allow for a safer crossing. The specific design improvements are outlined below.

---

[11] *The geometry of the mini traffic circle shown in Figure 5.21 is based on the City of Fresno's standard layout for mini traffic circles (Exhibit G, Residential Traffic Circle, February 5, 2007.) Further design development and reviews by the approving County agency in the future are critical.*

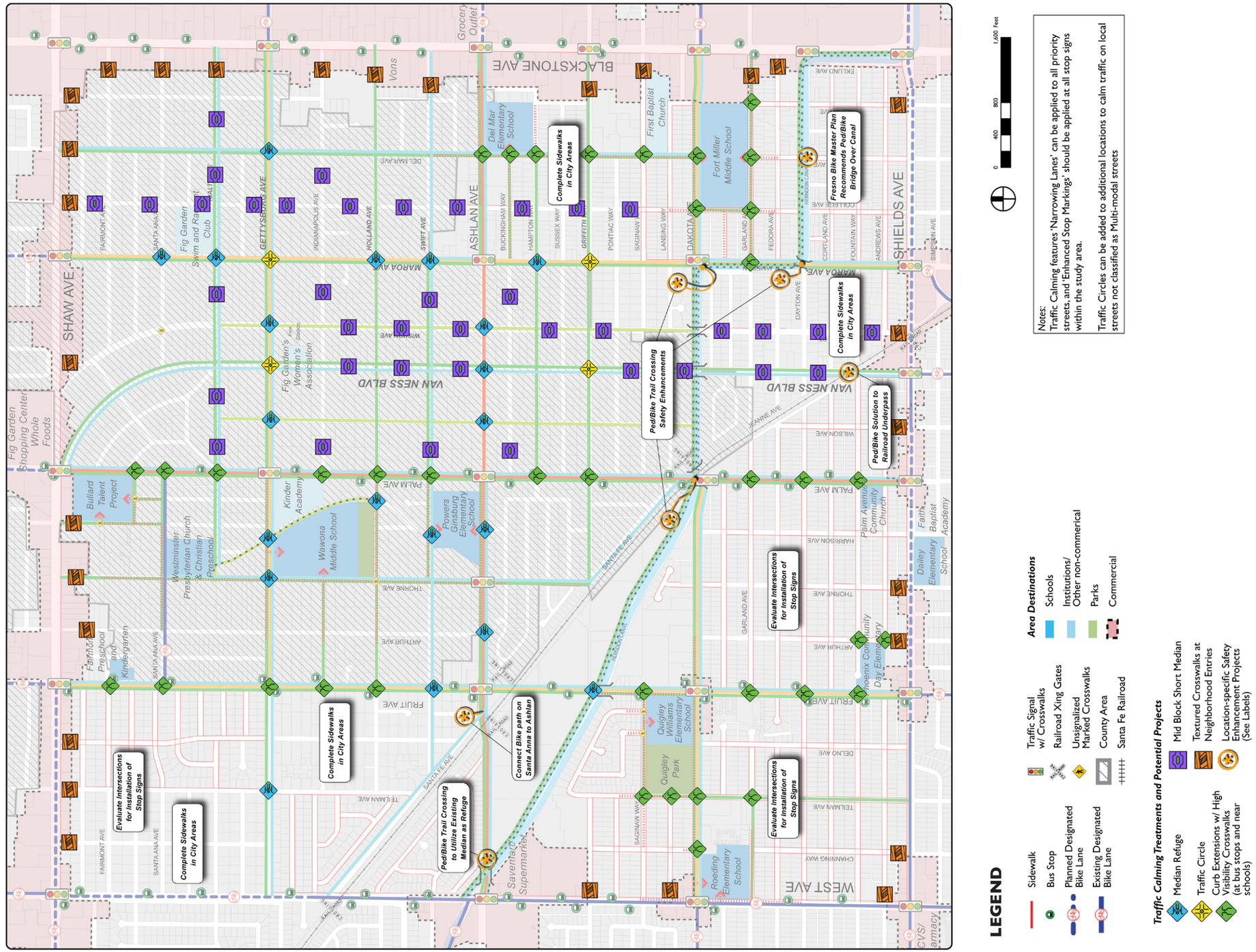
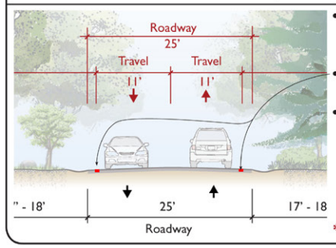


Figure 5.19: Traffic Calming Treatments - Feature Locations

NARROWING LANES THROUGH EDGE STRIPING

All curbless streets in County Island



- Clearly delineates edge of area for cars
- 4" wide white stripe
- $

* Not shown on Map

MINI TRAFFIC CIRCLE - Landscaped

In appropriate locations along county island streets where traffic calming is desired

- Slows traffic (to 15-18 mph) at intersection
- Does not slow traffic mid-block
- Can be landscaped
- $$$$

MINI TRAFFIC CIRCLE - No Landscape

In appropriate locations along county island streets where traffic calming is desired

- Slows traffic (to 15-18 mph) at intersection
- Does not slow traffic mid-block
- No landscape
- $$$

ENHANCED STOP MARKINGS

All existing stop locations in project area

- Provide additional visual clues for drivers (stop line and "STOP" pavement legend)
- Make stop less easy to ignore or overlook
- $

* Not shown on Map

SHORT MEDIAN (MID-BLOCK)

In appropriate locations along county island streets where traffic calming is desired

- Slows traffic in mid-block locations
- Can be landscaped
- $$

SHORT MEDIAN WITH REFUGE

In appropriate locations along county island streets where traffic calming is desired

- Provides refuge to pedestrians/bicyclists at center of street
- Pedestrians/bicyclists can focus on crossing one lane at a time
- Provides opportunities for additional landscaping
- $$$

CURB EXTENSIONS W/ HIGH VISIBILITY CROSSWALKS

Key crossing locations along curbed streets (near schools & along ped or bike priority routes)

- Shorten crossing distance
- Increase visibility of Pedestrians waiting to cross
- Use only on streets with curbs
- $$$

TEXTURED CROSSWALKS AT NEIGHBORHOOD ENTRIES

In locations where neighborhood streets meet commercial development along arterials

- Slows traffic
- Can be combined with neighborhood entry features
- Signals to drivers a change in environment (transition from commercial corridor to residential neighborhood)
- $$$

POTENTIAL TRAFFIC CALMING TREATMENTS/FEATURES

	Ashlan Avenue (County)	Ashlan Avenue (City)	Palm Avenue	Fruit Avenue	Maroa Avenue	Gettysburg Avenue	Other Residential Streets with Speeding Issues
Narrowing Lanes							
Mini Traffic Circle							
Short Median w/ Refuge							
Short Median (Mid-Block)							
Textured Crosswalks at Neighborhood Entries							
Curb Extensions					*	*	*
Enhanced Stop Markings							

Treatment/Feature Appropriate Treatment/Feature Not Appropriate

* Applies only to street sections with existing curbs

EXAMPLES OF TRAFFIC CALMING TEST PROJECTS

Figure 5.20: Traffic Calming Treatments - Strategies

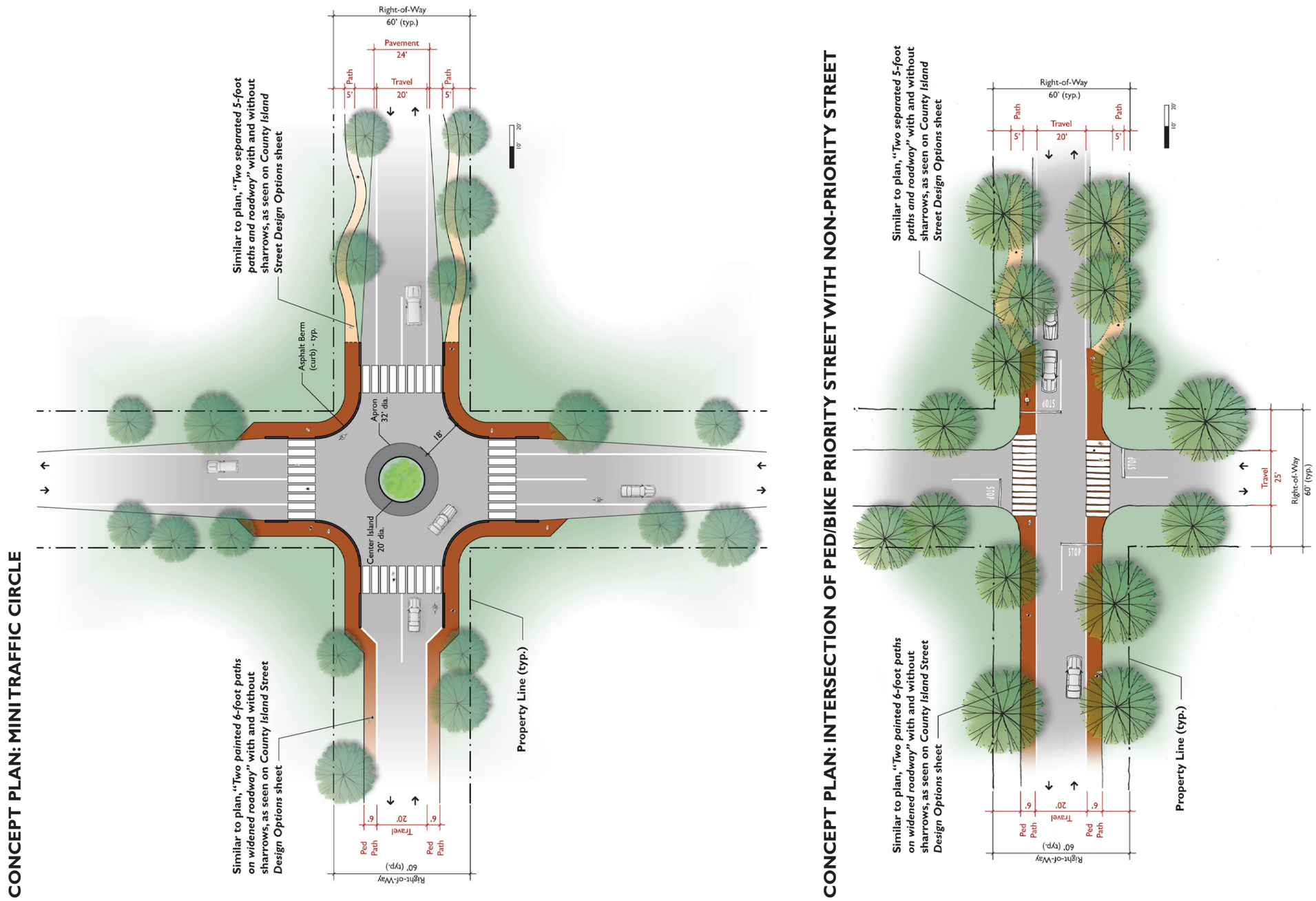


Figure 5.21: Intersection treatment concepts for ped/bike priority routes

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- Include a stop sign and stop line at each of the intersection approaches to increase the visibility of the intersection.
- Widen the pavement at the intersection as necessary to accommodate the cross section of pedestrian and/or bicycle priority streets (as described above) or local streets without a priority designation .
- Mark pedestrian crossings across non-priority streets with high-visibility crosswalk striping consistent with California MUTCD standards.

Because some of the recommended improvements are expensive to construct, it is prudent to conduct tests of a given feature, such as curb extensions or mini traffic circles, with temporary means, such as the installation of temporary striping or removable curbs (see Figure 5.20). This allows all parties involved to "get a feel" for how the proposed improvement will perform once constructed. .

The locations of recommended traffic calming and speed management features are shown in Figure 5.19. Includes are locations of mini-traffic circles, short medians with pedestrian refuges, and short (mid-block) medians as well as other features.

5.1.5 Supporting Streetscape Improvements

In addition to the pedestrian and bicycle facilities on the streets within the Old Fig Garden study area, several other streetscape elements facilitate additional safety and ease for residents and visitors in navigating efficiently through the neighborhoods. Pedestrian-scale lighting; wayfinding signage; and continuous and complete street landscaping not only provide additional safety and act as traffic calming measures, but also are crucial to develop or enhance a neighborhood's identity. The following sections provide recommendations for these supporting streetscape improvements.

5.1.5.1 Pedestrian-scale Lighting

A key part of safe multi-modal streets is adequate visibility, particularly at night. This was confirmed by numerous comments by workshop attendees about not feeling safe at night as pedestrians or bicyclists on streets in the study area. This is of particular importance for the County Island part of the study area, where streets typically do not have curbs and sidewalks to separate pedestrians from vehicular traffic, making poor visibility an even bigger concern. Furthermore, if the Herndon and Enterprise-Holland canals are to be upgraded with multi-use or pedestrian paths, it will be imperative to provide adequate lighting for residents and path users alike to feel safe living adjacent to or using this amenity.

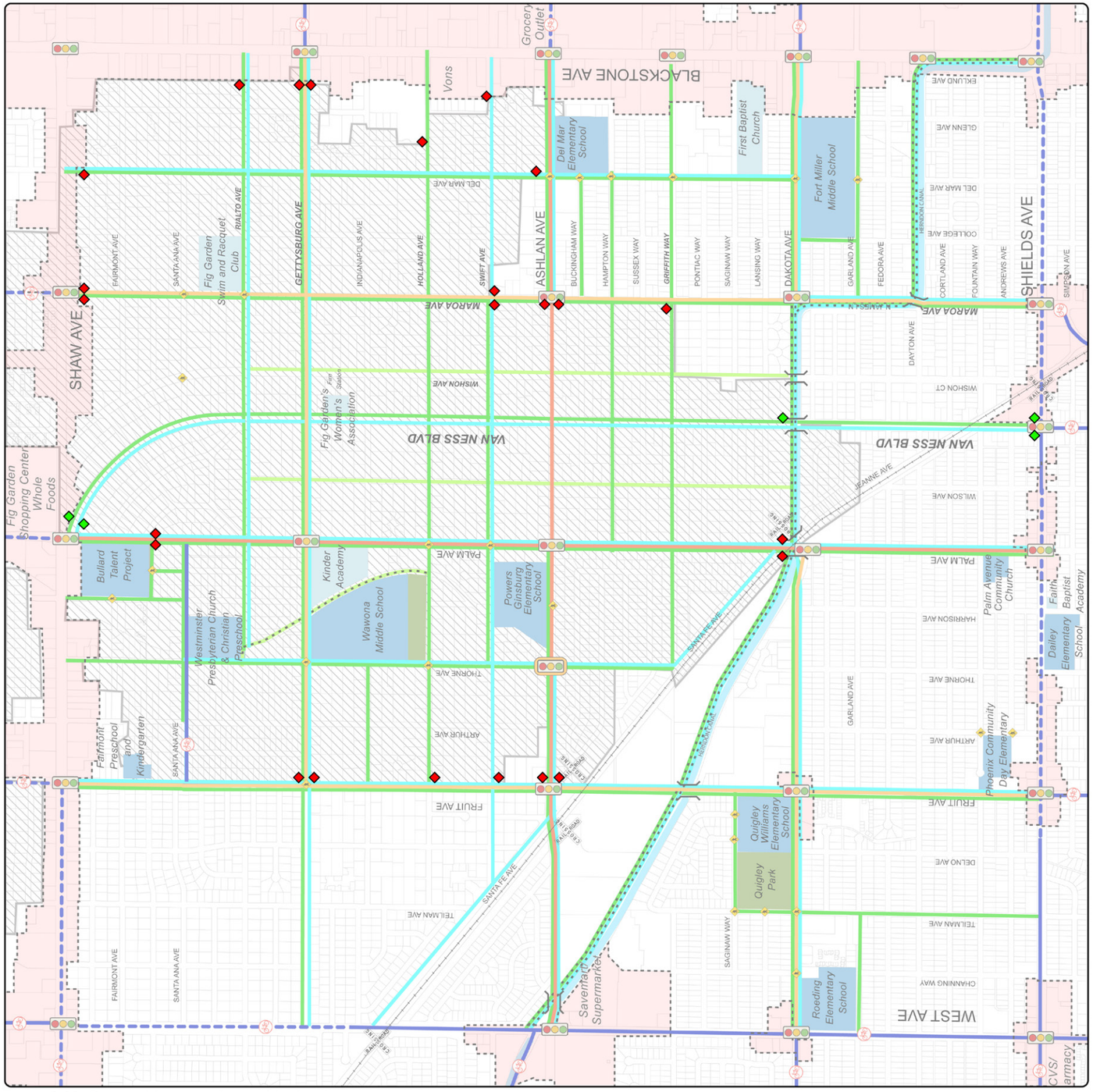
While important for pedestrian and bicycle safety, it is also critical that the introduction of pedestrian-scale light fixtures does not change the much-cherished rural character of the roads through the Old Fig Garden area. Therefore, pedestrian-scale lighting should be of a decorative style and scale that it complements the rural and historic character of the areas. From comments received during the outreach process for this Study, it is clear that only a fixture that meets these requirements will be acceptable to the Old Fig Garden community.

The introduction of lighting should be focused on pedestrian and bicycle priority streets identified in the transportation framework map (Figure 5.21). Any existing lighting (lighting level) standards for the county should be reviewed with area residents and the Fig Garden Homeowners Association in order to inform the fixture selection process at an early date. The selected fixtures should not create excessive glare or dispersion of light into private yards and homes. Pedestrian-scale light fixture along Van Ness Boulevard need to be particularly carefully spaced and placed in order to meet the unique lighting and spatial requirements for this street with respect to the Christmas Tree Lane event.

Note: The installation of a hard wired system with a meter will trigger the need for a Proposition 218 vote and the establishment of an assessment district.

Figure 5.22 highlights the streets for which the introduction of pedestrian-scale lighting should be considered. The selection was based on community input and the priority status of a given street as indicated on the Fig Garden multi-modal transportation framework.

Figure 5.22: Streets recommended for pedestrian-scale lighting



LEGEND

- Sidewalk
- Bus Stop
- Planned Designated Bike Lane
- Existing Designated Bike Lane
- Traffic Signal w/ Crosswalks
- Railroad Xing Gates
- Unsignalized Marked Crosswalks
- County Area
- Santa Fe Railroad

Area Destinations

- Schools
- Institutions/ Other non-commerical
- Parks
- Commercial

Mobility Conceptual Framework

- Bike Priority
- Proposed Bike/Ped Trail
- Pedestrian Priority - Connectivity
- Pedestrian Priority - Recreational
- Auto Connector-City
- Auto Connector-Neighborhood

Wayfinding and Signage

- Major Neighborhood Entry Signage for Auto Connector Streets
- Major Neighborhood Entry Signage
- Van Ness/Christmas Tree Lane Neighborhood Entry Signage

Figure 5.23: Potential locations for neighborhood entry signage

5.1.5.2 Wayfinding Signage

Wayfinding signage that specifically identifies preferred automobile routes to destinations, such as schools, student drop off points, or the Fig Garden Swim & Racquet Club, can help to discourage unnecessary driving on residential streets. In addition, placing neighborhood entry signs (see examples in Figure 5.23) along Blackstone and Shaw Avenues could also help to clearly distinguish commercial areas from the existing residential neighborhoods.

In addition to wayfinding signage, it is recommended that the Old Fig Garden community commission the design of an attractive sign or small monument that can be located at all key entry points into the neighborhood and identify Old Fig Garden as a Historic District, a designation bestowed on the area by the County of Fresno.

The following recommendations are intended to assist in developing a signage strategy and implementation plan for the Fig Garden area:

- For vehicular and bicyclist travel, develop a destination signage strategy that will guide visitors to their destination (such as schools, parks, and clubs) utilizing the vehicular and bicycle priority streets, rather than local residential streets.
- Include destinations beyond the study area, such as the Fig Garden Shopping Center or the Manchester Transit Center in the wayfinding signage, to help all modes of travelers get to them without utilizing local streets.
- Provide wayfinding signage on pedestrian priority routes that are compliant with accessibility standards to transit stops.
- For bicyclists and pedestrians, develop a signage system that indicates alternative routes, particularly on Ashlan Avenue, which would be safer and away from high volumes of traffic.
- Install neighborhood gateway signage on collector streets that clearly notify drivers that they are entering a residential neighborhood. This can be in the form of the Historic District sign or monument mentioned above.
- Identify other local street that connect to Blackstone and Shaw Avenues and install similar neighborhood entry signs, particularly in areas that may develop as commercial/retail centers.
- For Christmas Tree Lane preparations, develop a temporary signage plan that can work with the overall wayfinding plan that can be put in place during the holiday season.
- The design of the wayfinding signage should be complementary to the character of the neighborhood streets and any potential future traditional looking pedestrian-scale lighting.

Figure 5.23 identifies potential locations for neighborhood entry and other signage locations[12] and provides some visual examples of wayfinding signage that would be suitable for the Old Fig Garden Area.

5.1.5.3 Street Trees

The existing trees along streets in the Fig Garden area and – in particular – in the Old Fig Garden portion of the study area are a dominant feature of the physical environment and represent the foundation of the community's identity. Maintaining a healthy urban forest is therefore an important task for perpetuating the verdant image of the Fig Garden area. Aside from an assessment of the existing street trees in Old Fig Garden and several key streets (Ashlan Avenue, Fruit Avenue, Gettysburg Avenue, Maroa Avenue, Palm Avenue, Swift Avenue, Van Ness Boulevard, Wishon Avenue), the Fig Garden Tree Survey includes a series of recommendations that outline how to maintain and perpetuate the health and enduring appearance of Old Fig Garden's urban forest. These recommendations include:

- **Species Diversity:** Maintaining a diverse population within an urban forest is important and avoids problems that can develop from the dominance of a single species.
- **Age Distribution:** A desirable distribution has a high proportion of young trees to offset establishment and age-related mortality as the percentage of older trees declines over time.
- **Trees under Utilities:** Planting smaller trees under utility lines promotes safety, reduces maintenance costs, and minimizes the risk of power outages caused by trees.
- **Planting Guidelines:** Where new trees are installed, this should occur according to best management practices.
- **Pruning Standards:** All tree pruning performed should be supervised, or performed, by an International Society of Arboriculture (ISA) Certified Arborist or Certified Tree Worker.
- **Pruning Cycles:** Appropriate and timely pruning is critical to tree health in order to realize maximum benefits, increase service life, and to promote public safety.
- **Regular Inspections:** Trees should be regularly inspected, especially following major storms or high winds, in order to identify maintenance needs before they reach a critical stage.

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[12] *Publicly funded signs placed in the right of way will require compliance with the Manual on Uniform Traffic Control Devices (MUTCD) and ADA requirements for installation and to facilitate funding. Custom signs with non-compliant attributes will need to be placed outside public rights of way.*

- The tree survey also identified trees that are recommended for removal. Trees designated for removal have defects that cannot be cost-effectively or practically treated. Most trees that fall into this category have a large percentage of dead crowns and therefore pose an elevated risk of failure. Any trees that pose a hazard that could be seen as potential dangers to persons or property and seen as potential liabilities are listed under this category, including large dead or dying trees that are high liability risks. These trees are the first trees that should be removed. The following scale was used in identifying trees for removal:
- Priority 1 Removal: Trees designated for Priority 1 removal should be removed within 12 months. Among the surveyed trees there were an estimated 24 Priority 1 removals.
- Priority 2 or 3 Removal: Trees designated for Priority 2 or Priority 3 removal should be removed as quickly as possible following the removal of any trees designated Priority 1. Among the surveyed trees there were an estimated 89 Priority 2 or 3 removals.

Note: It is recommended that County and City review the list of surveyed trees recommended for removal in order to address any potential hazardous conditions.

See Appendix F and the provided GIS database for additional information.

- This Study has also identified opportunities for enhancing Old Fig Garden's urban forest and making it an even stronger and legible part of the neighborhood environment. These recommendations include:
- Extend existing rows of trees to the edge of the neighborhood-bounding arterials.
- Incorporate trees in traffic calming features like planted median islands.
- Add trees to Ashlan Avenue and other streets, where there are gaps in tree plantings along these streets.

5.1.6 Trails along Irrigation Canals

As part of the City of Fresno's Bicycle, Pedestrian and Trails Masterplan (BMP), both the Herndon and Enterprise-Holland Canals are identified as planned Class I bike paths. The plan identifies these canals for further detailed study, and recognizes that significant work would need to be done to make them safe for pedestrians and bicyclists to use. The BMP refers to a secondary study done on the inclusion of Fresno Irrigation District Canals into the BMP. The study highlights some of the challenges and opportunities in converting canal embankments into trails. Some of the challenges identified are:

- The need for adequate right-of-way on the embankment for installing a multi-use path;

- The need for barriers to protect users from accidentally falling into the canal; and
- The need to upgrade existing bank walls with safety facilities, such as steps or ladders, at regular intervals along the canal.
- The need for a long term funding mechanism for maintenance of the trail and amenities such as street furniture, fencing, safety lighting.

While the cost of developing the entire length of the Herndon Canal as a Class I bike path may be prohibitive, the Dakota Avenue segment between Palm and Maroa Avenues would be a particularly viable segment for a pilot improvement project as it would fill the gap in bicycle and pedestrian connectivity along Dakota Avenue. This canal segment has wide embankments on either side and is already frequently used by pedestrians and bicyclists (see Figure 5.24). It would also help connect the existing pedestrian and bicycle connections along Dakota Avenue, and help complete an important mobility framework connection. The development of this segment could help the City, County and the Irrigation district test out designs and safety barriers that could be later utilized to extend the trail system and on other canals such as the Enterprise-Holland Canal.

Figure 5.24: Embankments on either side of canal provide ample space for pedestrians and bicyclists

5.1.7 Christmas Tree Lane Recommendations

Christmas Tree Lane is an important holiday event that occurs in Old Fig Garden every December, and has been celebrated for the past 90 years. Christmas Tree Lane is located on Van Ness Boulevard between Shields Avenue and Shaw Avenue (two-mile stretch), and includes a spectacular display of lights and holiday decorations on 140 homes and 300 trees. Over 100,000 people visit Christmas Tree Lane each year and access the area by vehicle, bicycle, bus, and as pedestrians. The event is free and is sponsored by the Fig Garden Homeowners Association (HOA). Attendees typically walk or drive down the lane to view the holiday displays, however, there are designated "walk nights" each year in which the Lane is closed to vehicular traffic. Although Christmas Tree Lane impacts the study area for only one (1) month per year, due to its local significance and impacts to the study area, it was imperative to consider the event during the Transportation Study.

In order to gather information and feedback related to the Christmas Tree Lane activities and potential issues, The Project Team, developed a short survey (total of eight questions) that was distributed to the Lane attendees in December 2011. A total of 128 people responded to the survey questions. Results of this process are discussed below.

General Consensus (Over 90%)

None of the survey responses resulted in a consensus of over 90%.

Majority (51%-90%)

- Most of the survey respondents (66%) visited Christmas Tree Lane on the second "walk night" on Tuesday, December 13th, 2011.
- Most of the survey respondents (60%) would be willing to walk or bike down Christmas Tree Lane on a "drive night" if there was an improved trail along the side of the Lane.
- Minority (Less Than 50%)
- Survey respondents were fairly split (44% YES versus 47% NO) on whether additional directional signage would help improve walk and drive access to the Lane.
- Of those survey respondents that drove to Christmas Tree Lane and then walked the Lane, most parked at the Fig Garden Shopping Center and walked to the Lane (32%), or parked along other side streets along the Lane (30%).
- Of those survey respondents that drove to Christmas Tree Lane, most of them accessed the Lane from the south entrance on Shields Avenue (50%).

- Survey respondents were fairly split on the most important improvement that could make the "walk night" experience more safe and convenient with the highest responses being for portable toilets (34%) and lighting at intersections (21%).
- Survey respondents were fairly split on the most important improvement that could make driving the Lane more safe and convenient with the highest responses being for more CHP/Fresno Police traffic control and presence (37%) and traffic barriers at Gettysburg Avenue restricting east-west traffic (37%).
- A significant segment of the survey respondents (42%) lived in Fresno but outside of the Fig Garden area.
- A traffic engineering and parking review of Christmas Tree Lane was conducted during the December 2011 event. The following observations were made:
- During walk nights, parking was observed to occur mostly at the Fig Garden Shopping Center and in the neighborhoods near Christmas Tree Lane.
- While Van Ness Boulevard is extremely busy during walk nights, pedestrians are still able to move about in the space available and the width of roadway available is not considered to be a capacity constraint.
- On drive nights, Van Ness Boulevard operates as a two-lane, one-way northbound street between Shields Avenue and Shaw Avenue. During this time, traffic on Ashlan Avenue is required to stop at Van Ness Boulevard as four-way stop control is in place at this intersection. Special intersection treatments are in place at Van Ness/Palm, Palm/Shaw, and Shields/Van Ness intersections in order to facilitate traffic movements. In addition, turn restrictions are put into place at the Shields/Maroa intersection to prevent vehicles on Maroa or eastbound Shields to cut into the queue of vehicles waiting on westbound Shields to enter Christmas Tree Lane.
- On typical drive nights, Van Ness Boulevard is filled to capacity with a queue of vehicles waiting on westbound Shields Avenue between Blackstone Avenue and Van Ness Boulevard waiting to turn into the Christmas Tree Lane area. The capacity of Van Ness Boulevard during a Christmas Tree Lane event is estimated to be 400 vehicles per hour per lane or 800 total vehicles per hour. The capacity appears to be constrained by cars slowing down to view Christmas lighting rather than any particular intersection or traffic control feature.

Based on the surveys and field reviews, the following conclusions and recommendations can be made:

- On walk nights, the alternatives to provide a different parking and walking experience are limited. Remote parking and shuttle service was discussed, but most patrons seem to be content to find their own solutions in making their way to the event. Furthermore, the cost of operation of such a system would have to be borne by the HOA unless additional funding could be acquired.
- On drive nights the alternatives are also limited, primarily by the roadway space available on Van Ness Boulevard and the desire of patrons to drive slowly through the viewing area. Queuing along Shields Avenue could potentially be limiting the number of visitors on a given drive night, but the only practical

way of achieving this result would seem to be charging entry fees or limiting entry through some sort of reservation system. Either of these potential remedies would seem to violate the spirit of the event.

- There is a need to provide all-weather pedestrian access. There are locations along Van Ness Boulevard where the existing storm drain facilities are undersized, inadequate, or inaccessible. Many areas do not contain the infrastructure to offer the opportunity to effectively remove storm runoff. While this is an issue throughout the rainy season, the problem is heightened by the lack of familiarity with drainage issues shown by visitors to the area. While rain would tend to discourage attendance on walk nights, flooding can persist long after the rain has ended. In addition, an unexpected rain event could leave walk night patrons without an obvious path through or out of the Christmas Tree Lane viewing area. Addressing these drainage issues is beyond the scope of this Study. It is recommended that the identification of solutions to the drainage issues be included in the design development of improvement concepts for Van Ness Boulevard suggested elsewhere in this study report.
- While major changes to the drive nights are not envisioned, attention to detail in setting up traffic control is considered to be important and recommended. At the Van Ness/Ashlan intersection, it is recommended that signs along Van Ness indicating that "Cross Traffic Does Not Stop" should be covered during drive nights. The turn restrictions at the Shields/Maroa intersection should potentially be replicated along additional intersections to the east on Shields Avenue to prevent vehicles from cutting into the queue of vehicles on westbound Shields waiting to turn onto Christmas Tree Lane.

5.2 Assessment of Traffic Impacts of Recommended Improvements

This section summarizes the traffic analysis conducted for the project. Additional information specific to the traffic analysis is included in the Traffic Impact Analysis, which is included in the appendix to this report (Appendix H).

The traffic impacts and benefits of the recommended improvements have been analyzed in terms of traffic increases or decreases on certain streets, safety benefits, and levels of service. It is important to note that the project improvements will not generate new trips, but will rather encourage trips to be made at slower speeds along alternative routes. Therefore, many of the aspects of a typical traffic impact analysis are not applicable to this project.

Figure 5.25 shows the expected impacts and benefits of recommended transportation improvements by indicating the relative changes expected on study area streets with respect to traffic levels, speeds, and levels of safety. In general the effects of the improvements include the following:

- Substantial benefits along Ashlan Avenue in terms of increased safety and reduced vehicle speeds, along with a moderate reduction in traffic levels;
- Increased level of safety and reduced speeds along neighborhood streets; Additional detail is provided in the Traffic Impact Analysis in Appendix H, but in general the project provides better separation of facilities for different modes of travel and improved information and guidance for all modes of travel. These types of improvements have been shown to increase safety in other locations where they have been implemented.
- Slightly increased traffic levels along major streets in the study area with no change in speeds or levels of safety. These streets include Shaw Avenue, Shields Avenue, West Avenue, and Blackstone Avenue. Based on the results of Figure 3.8, the increased traffic levels are expected to slightly worsen levels of service, but not to an extent that would be considered significant.

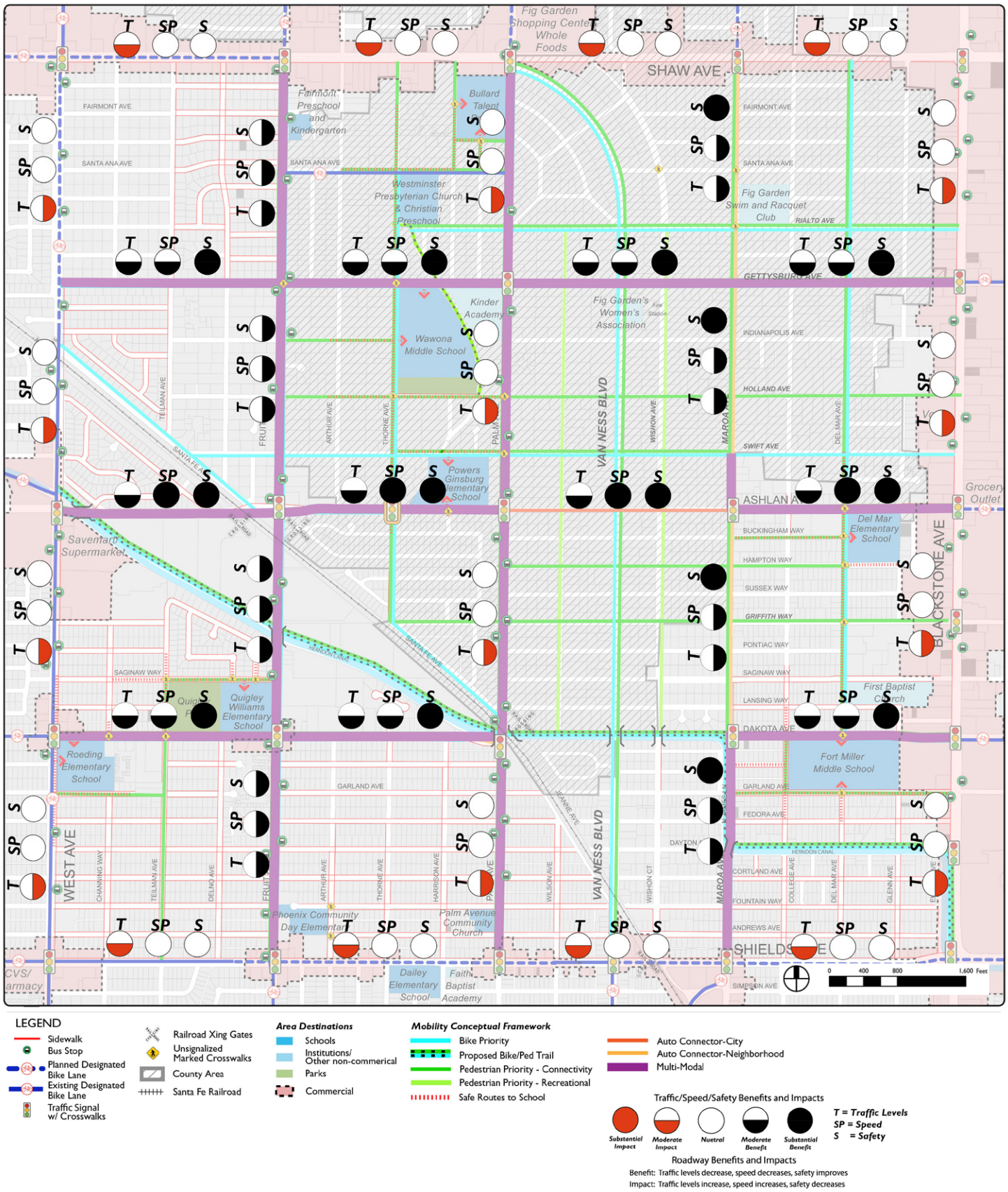


Figure 5.25: Expected impacts and benefits of recommended transportation improvements

5.3 Recommended Land Use and Urban Design Transitions

The current draft of the City of Fresno's 2035 General Plan Update includes plans for the intensification of the Blackstone and Shaw corridors that includes potential infill growth at nodes along Shields and West Avenues. The anticipated growth is associated with significant improvements of the transit service on Blackstone, which includes Bus Rapid Transit (BRT). New commercial development and transit improvements are anticipated to create new shopping and transit travel destinations along Blackstone and Shaw Avenues for residents within the study area and those traveling on the major corridors. In this context, Fig Garden stakeholders have raised concerns over the potential for cut-through traffic generated by this intensification as well as concerns related to the scale of future development relative to adjacent residential buildings, solar access, yard privacy, and others. The recommendations in this section address these potential issues, and provide a framework for building and development guidelines that would address these issues at a detailed level. This framework can be used to inform the further preparation of new, detailed zoning and design guidelines for development that will be part of the City's continuing work on these detailed aspects of the General Plan Update for these corridors and nodes.

The following recommendations are based on the issues and concerns discussed during the Steering Committee meetings and input provided during the public workshops. The recommended framework for land use and urban design transitions is based upon the Project Team's familiarity with these issues and potential solutions for transitioning land use and urban design characteristics between existing residential neighborhoods and adjacent commercial and mixed-use infill areas.

5.3.1 Land Use Transitions

The existing land use transitions along the arterial streets that frame the study area vary in their conditions. There are a number of multi-family buildings that already provide a scale transition from the commercial uses on Blackstone Avenue; however the transition between residential and commercial uses is more abrupt along Shaw, West and Shields Avenues where single-family parcels directly abut commercial uses or extend out to the building frontage along an arterial street. The City of Fresno considers the neighborhoods in the study area as "stable uses" and city planners do not foresee any likelihood of more intensive development within these neighborhoods. However, the City is looking to intensify uses on the arterial streets, particularly on Blackstone corridor where a bus rapid transit (BRT) system is being planned.

As part of this Study, the recommendations for the land use transition are to:

- Place residential or low traffic generating commercial uses such as private offices between commercial retail uses along BRT corridor and the existing residential zone where possible.
- For mixed use parcels with single family homes across neighborhood streets, retail frontages should be discouraged across the street from these homes.
- The design of loading and other service areas and hours of use for these areas should be controlled to avoid noise and light impacts during certain times of the day.

5.3.2 Urban Design Transitions

Designing proper scale and character transitions from the mixed-use corridors to the existing residential neighborhoods is crucial to addressing the concerns raised by the community during the public outreach for this Study. This relates not only to the scale and character of buildings but also to that of streets as they traverse through the commercial uses along the arterials toward the residential neighborhoods. The transition of both building scale and character and that of the street character should create an awareness on the part of the automobile driver that he/she is moving from a commercial into a residential environment and the need to adjust the travel behavior accordingly.

5.3.2.1 Mixed use Building Massing Controls

Many of the concerns raised by the community relate to the potential juxtaposition of one and two story single family homes with the larger and taller mixed use buildings that can be expected along the corridors. There are urban design and architectural design solutions to mediating and avoiding potential concerns with this juxtaposition. The control recommendations have been developed to provide suggestions for achieving the desired physical and visual character for transitions. They can help to inform the following controls by:

- Stepping down the height of buildings on the commercial parcels through the transition zone;
- Maintaining solar access to and privacy for back and side yards of the residences adjacent to the mixed use property;
- Setting back the frontage of mixed use buildings along the local neighborhood streets to match prevailing setbacks of residential buildings in the transition zone;
- Defining the setback of mixed use buildings from existing residential zone;

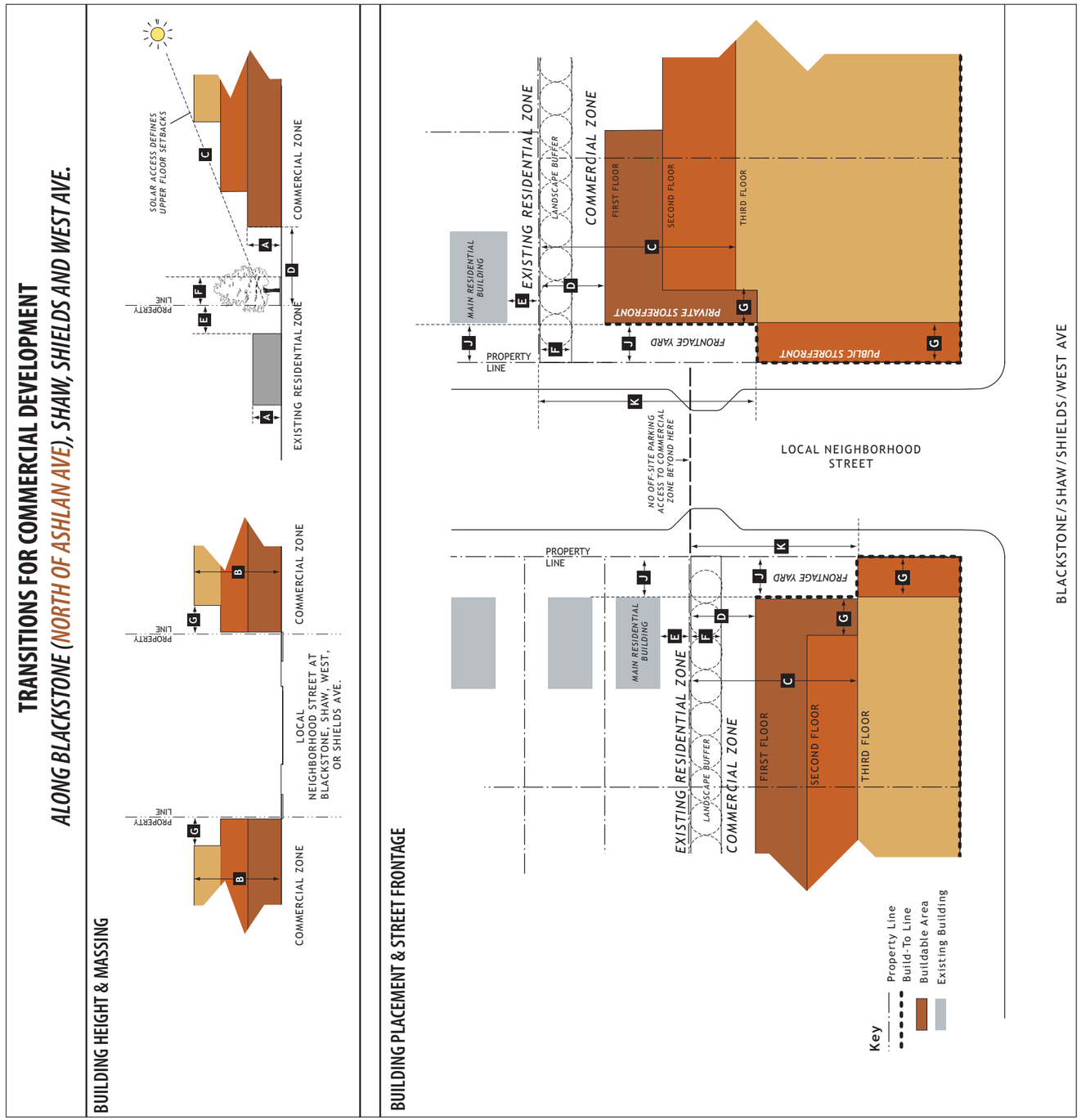
- Defining the depth of the landscape buffer on the commercial parcel based upon the setback of existing residential buildings from mixed use zones and to mitigate visual impacts on residential parcels; and
- Defining setbacks for upper floors to protect visual vistas on existing neighborhood streets.

The design transition components are illustrated in Figures 5.26 a, b, and c wherein key built form controls are illustrated, and should be addressed by the City's future building standards for Blackstone and the other arterial corridors that bound the Fig Garden Area. The figures are reflective of the current two scenarios applicable to the interface between Old Fig Garden and the growth areas. The first scenario covers mixed use transitions on shallow parcels along Shaw, Shields, West Avenues, and on Blackstone Avenue, north of Ashlan Avenue, called out as "Corridors" in the City's General Plan Update. A potential future building height of up to three stories has been identified by City representatives as likely for this area. The second scenario covers deeper mixed use parcels on Blackstone Avenue, south of Ashlan, wherein building heights could be higher next to the arterial street, this area is called an "Activity Center" in the City's General Plan Update. A potential future building height of up to five stories along the corridor frontage has been identified by City representatives as likely for this area.

5.3.2.2 Transition Zone Streetscape Recommendations

In addition to developing controls on the built form in the transition zone, it is also crucial to have design recommendations for the streetscape in the transition that will help provide the visual cues of transitioning from a mixed use node or corridor to a residential zone, while maintaining certain cues of continuity and identity of the street. The following design recommendations should be developed as standards to complement the built form controls:

- Complete the historic planting of street trees on local streets up to Blackstone Avenue. This will add to the existing asset of street foliage, as well as provide specific identity to streets such as Gettysburg Avenue with Cork Oaks (Quercus suber) or Indianapolis Avenue with California Pepper (Schinus molle).
- The street trees within the mixed-use zone should be planted along the curbed edge of the sidewalk in either tree wells or planting strips. This will narrow the visual appearance of the street making it less inviting for cut-through traffic.
- The pedestrian realm transition from the wide sidewalks at Blackstone to the narrower sidewalks or pedestrian paths on the curb-less sections of the local streets should be designed in accordance to ADA standards.



STREET VIEW SIMULATION OF TRANSITION ZONE, NORTH OF ASHLAN AVENUE

Figure 5.26a: Urban design transition components and built-form controls

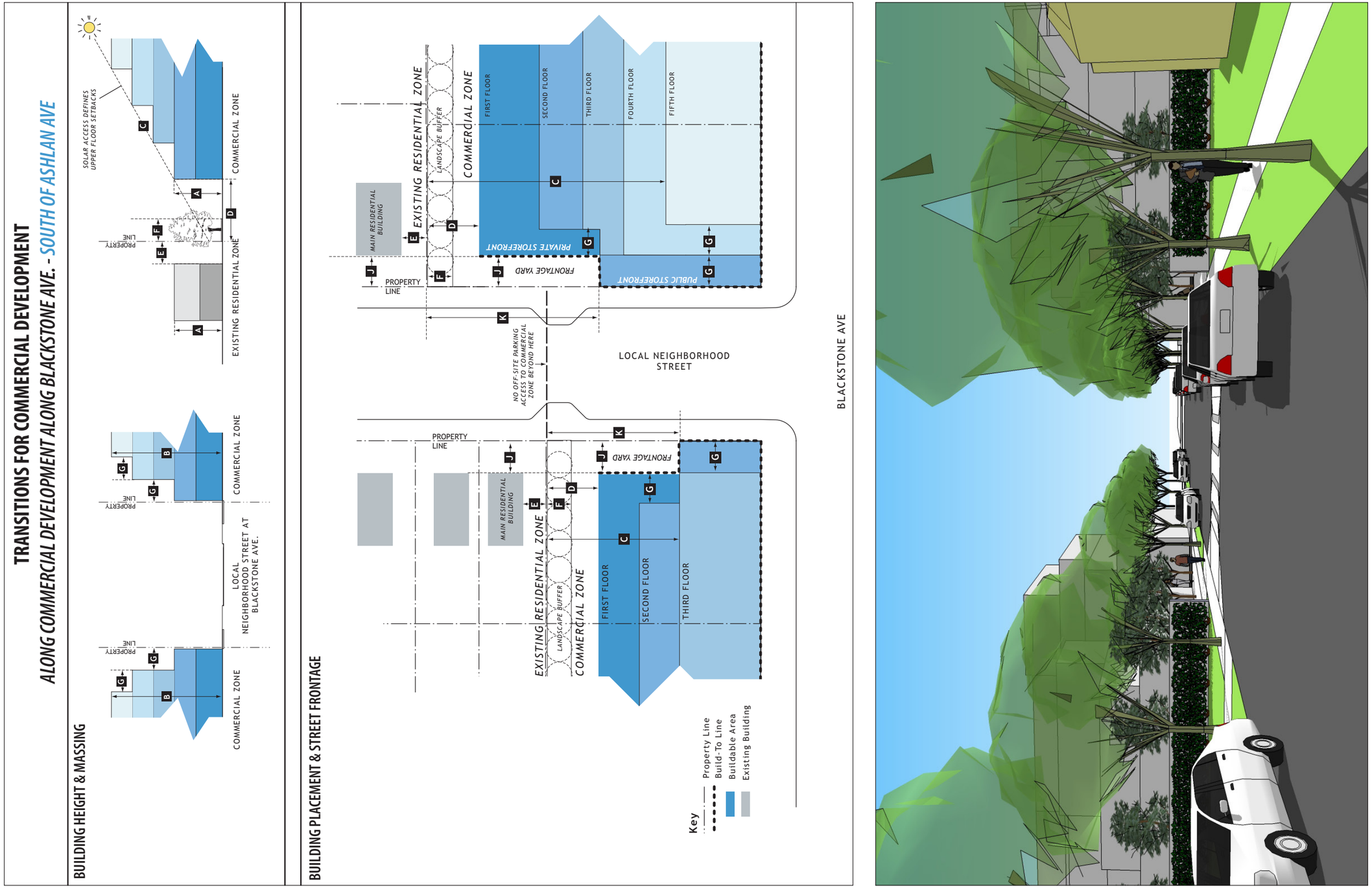


Figure 5.26b: Urban design transition components and built-form controls (continued)

A Set maximum height for immediate adjacent building in Commercial Zone not to exceed height of adjacent existing main residential building in Residential Zone.

B Set height of new Commercial Zone buildings not to exceed five (5) floors on Blackstone Avenue, south of Ashlan Avenue; and not to exceed three (3) floors north of Ashlan Avenue on Blackstone Avenue, Shaw Avenue, West Avenue, and Shields Avenue.

C Determine building step-back angle **C** in consideration for solar access, visual impact, and yard privacy concerns.

D Set setback standard for Commercial Zone buildings from Residential Zone boundary in consideration with yard privacy, and visual impacts on existing residential parcels.

E Existing main residential building setback from Commercial Zone.

F Set minimum Landscape Buffer width by considering width of **E** in regards to privacy, and visual impacts on existing residential parcels.

G Set minimum setback for upper floors in consideration to maintain visual character on existing neighborhood streets

J Set Commercial Zone Build-To Line adjacent to Residential Zone setback from property line to match adjacent main residential building in Residential Zone but not to exceed 20'.

K Set length of Commercial Zone Build-To Line setback **J** in consideration to existing land uses across the street, and/or desired length of transition zone.

WHAT IS PUBLIC STOREFRONT?

The Public Storefront frontage type is a major basis for the character of the planned development along Blackstone Avenue and other arterial streets bounding the Fig Garden Area. This type provides an open, welcoming face to the street and easy movement between the sidewalk and places of business or gathering. In the Public Storefront type, the building façade directly abuts the sidewalk and is characterized by frequent entrances and large areas of windows to provide visual transparency to the activity inside of the building.

WHAT IS A PRIVATE STOREFRONT?

The Private Storefront frontage type is characterized by uses either not visited by the general public or those where visitation is appointment-based, such as professional or medical offices. The Private Storefront provides a measure of privacy for offices and other uses within buildings by allowing for some opacity of windows and the potential for a landscape screen to separate the facade from the sidewalk. The Private Storefront will provide the visual transition from the Commercial Zone to the Residential Zone.

WHAT IS A FRONTAGE YARD?

The Frontage Yard between the public sidewalk and the Private Storefront frontage should typically provide a landscape screen as a measure of privacy for offices and other uses within buildings. The yard should also provide pedestrian access to the private storefront uses. The yard should not be utilized for public or private vehicular parking or drive-throughs.

Figure 5.26c: Urban design transition components and built-form controls

- Curb extensions and raised crosswalks or speed tables should be installed at the neighborhood entries, providing a clear indication to drivers to the end of the mixed use zone and to be aware that they are entering a residential area. The raised crosswalk will also act as a speed reduction device, checking vehicular speeds entering the neighborhood.
- In cases of uneven depths of mixed use parcels on both sides of a local street, access to surface parking or parking structures on mixed use parcels on either side of the local street should be restricted to be only within the shorter parcel depth distance from the arterial street. The parking access points should not be beyond the neighborhood entry feature.
- Surface parking should have an adequate landscape buffer adjacent to public sidewalks to maintain safety and a welcoming pedestrian realm along the sidewalk.
- Adequate pedestrian access from the surface parking lots should be provided through the landscape buffer to the public sidewalk.

Figures 5.27 a & b provides visual examples that illustrate the intent of the above recommendations.

TRANSITION ZONE LANDSCAPE AND SURFACE PARKING BUFFER RECOMMENDATIONS

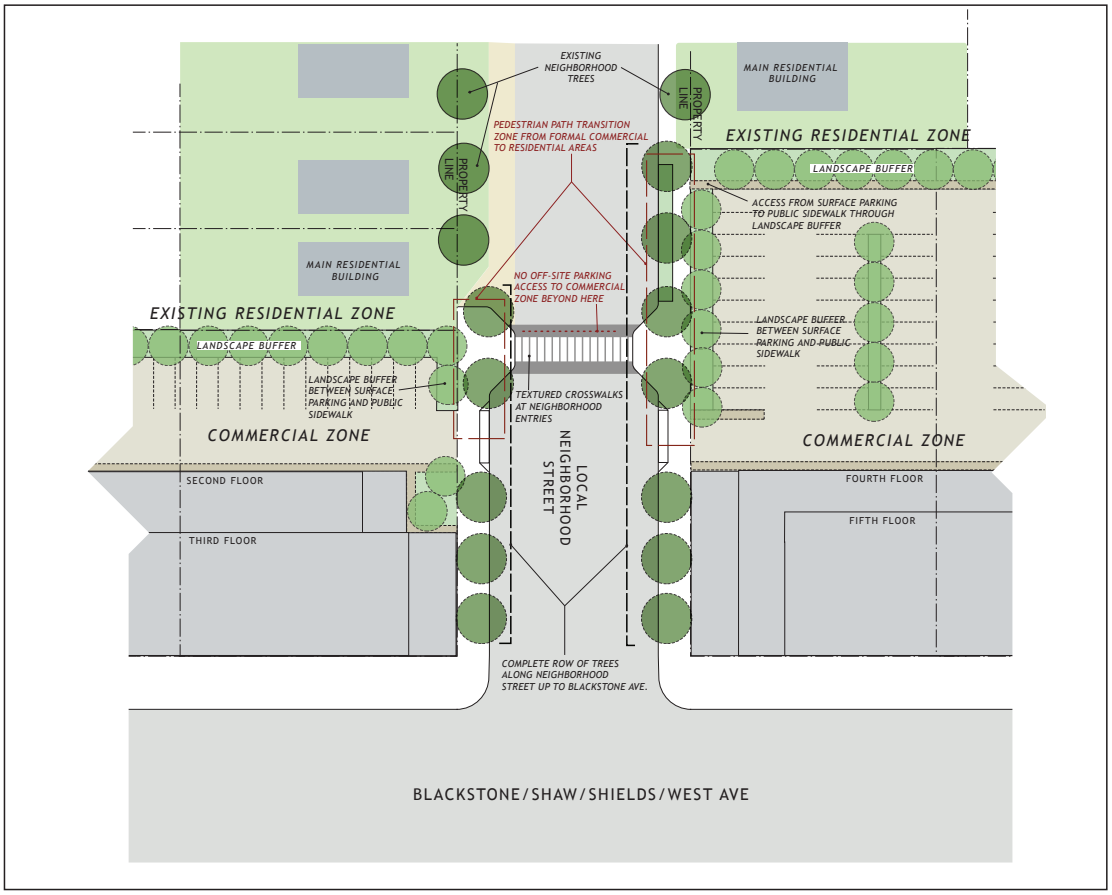


Figure 5.27a: Transition zone streetscape recommendations

EXAMPLE OF PUBLIC FRONTAGE

EXAMPLE OF PRIVATE FRONTAGE

EXAMPLE OF FRONTAGE YARD

EXAMPLE OF SURFACE PARKING LANDSCAPE BUFFER

EXAMPLE OF NEIGHBORHOOD TRANSITION ZONE TO COMMERCIAL CORRIDOR

Figure 5.27b: Transition zone streetscape recommendations (continued)

5.4 Implementation and Funding

5.4.1 Implementation Recommendations

The Old Fig Garden Community Transportation Study is a first – but critical – step in a longer project development and planning process (see Table 5.1 on the facing page). This process is required for practically all improvements within the public right-of-way of streets and therefore applies to the potential implementation of the improvements discussed in this Study Report. The following table provides an overview of typical project implementation steps for transportation improvement as those discussed in this document. It is expected that only a few of the improvements discussed in this report would require a more comprehensive environmental review, such as an environmental impact report.

Project Development Step		… in the Context of Fig Garden
Step 1	Community Vision and Goals	These first two steps have been accomplished by the Old Fig Garden Community Transportation Study. The Study provides all stakeholders with: ▪ Overview of how projects relate to community vision and one another ▪ Next steps on road to implementation ▪ Long-term "Blueprint" for implementation as funding opportunities arise
Step 2	Concept Development	
Step 3	Design Development	Step includes: ▪ Refinement of the Study's concept designs into preliminary engineering drawings ▪ Tailoring of concept designs to specific locations; addresses site-specific stakeholder concerns ▪ Preliminary engineering and concept approval by local agencies ▪ Preliminary cost estimates for improvements
Step 4	Environmental Process	This step can overlap with the Design Development step. Improvement project may be exempt from CEQA/NEPA. If not, an Initial Study/ Environmental Impact Assessment determines environmental review "path". Potential "paths" include: Negative Declaration/Finding of No Significant Impact, or Mitigated Negative Declaration, or Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) are required.
Step 5	Construction Documents	Step includes: ▪ Final Engineering and final approval by local agencies (permits) ▪ Final cost estimates ▪ Project schedule ▪ Mitigation measures for potential construction impacts
Step 6	Construction	Step includes: ▪ Improvements are constructed This step can occur in phases.
Step 7	Maintenance & Operation	Improvements are maintained and operated by parties identified in maintenance agreements (County, City, HOAs, Residents)

Table 5.1: Project Development Steps

With the completion of this Study, its content can begin to inform City and County policy, such as City and County Land Use, Transportation, and Capital Improvement Plans. It can also serve as a tool to coordinate planning, design, and funding activities between the two jurisdictions as well as the COG and stakeholders in the Fig Garden Community.

In this context it should be understood that funding for the implementation of any of the design concepts in this Study Report is contingent upon:

- The availability of funds and competing priorities across the county;
- A match between a project's intent and the eligibility and scoring criteria dictated by a given (grant) funding source;
- Old Fig Community and City/County engaging in joint grant application work will be necessary and a key factor for success;
- Ongoing monitoring and advocacy by Fig Garden Community with respect to City/County budgets and spending priorities will be necessary and is encouraged; and
- Maintaining a positive, ongoing relationship between stakeholder from the Fig Garden Community and City/County staff and elected officials strongly encouraged.

Table 5.2 provides an overview of "next steps" to immediately follow the completion of the Old Fig Garden Community Transportation Study. It also outlines the continuing implementation process and actions required to keep the implementation process moving forward through 2013 and into 2014 and beyond.

Timeline	Next Steps/Action Items
Early 2013	▪ Present Study to Fresno County Board of Supervisors and Fresno City Council
2013	▪ City to use Study in finalizing work on General Plan Update ▪ City, County, COG, and Clovis to discuss regional circulation and reclassification of Ashlan Avenue from "Arterial" to "Collector" ▪ HOA and Fig Garden residents to decide on which design option to select as preferred for pedestrian and bike priority streets on a street-by-street level ▪ City, County, and Fig Garden HOA to collaborate in identifying potential funding sources ▪ City, County, and Fig Garden HOA to coordinate which projects can be funded locally and approved without a lengthy process (list of short-term projects) ▪ City and County to submit eligible projects to COG for inclusion in the Regional Transportation Plan (update in October 2013) and the Federal Transportation Improvement Program ▪ City, County, and HOA to collaborate in writing grant applications to programs that can fund the Design Development step
2014 and beyond	▪ Conduct Design Development and Environmental Clearance ▪ City, County, and HOA to collaborate in writing grant applications to capital grant programs ▪ Preparation of Construction Documents for projects that have received funding ▪ Construct funded programs

Table 5.2: Outline of Next Steps and Implementation Action Items

Implementation Phasing

When considering the implementation of improvements discussed in this study report it is important to consider opportunities for implementing a project in phases or as part of low-cost "early improvement opportunities". These could be:

- The implementation of "striping first" rather than the moving or installation of new curbs where this is feasible (i.e along Ashlan Avenue between West and Fruit Avenues);
- The implementation of test or pilot projects prior to the implementation of full improvements (This may build community support for the improvement.); or
- The advancing of design plans to a point in the project development process where they can be funneled into and "co-implemented" with other projects. Examples of such project might be sewer replacement projects (i.e. Ashlan Avenue) or roadway paving projects.

It should be noted, however, that striping and/or temporary test installations still require review and approval of responsible agencies, such as Fresno County or City of Fresno Public Works.

Funding Sources

A variety of sources are available for the funding of the transportation improvements discussed in this study report, including:

- Federal and State grant programs
- City of Fresno Capital Improvement Program
- Local tax initiatives, such as Measure C funding
- County of Governments (COG) – includes County/City projects in Regional Transportation Plan and Federal Transportation Improvement Plan

Note: The County does not have a standing transportation improvement program and relies on grant funding for specific improvements (Safe Routes to School, Measure C funds for bicycle improvements etc.).

It is important to understand that in today's funding environment grant programs are typically highly competitive and often tied to specific goals and measurable outcomes as determined by the funding agency or entity. It is therefore important to closely study these criteria in order to gage the possibility of success. For instance, a significant amount of funds is available for multi-modal and complete streets-type improvements. In this context, it is important to be able to provide the funding

agency with documentation of goals and principles, policies, and design concepts that clearly demonstrate that the applicant's desired improvements do match the goals of the funding program.

Table 5.3 provides an overview of the funding sources currently available to fund the further design and construction of the improvements outlined in this study report. It is important to bear in mind that the City and County have limited or no capacity to take on additional maintenance liabilities at this time. The funding sources discussed in this section typically do not include maintenance beyond warranty periods for the constructed improvements (including landscaping). The ongoing maintenance of desired landscape elements, for instance those included in some of the presented traffic calming features and medians, therefore may have to be taken on by homeowner associations or individual residents committed to the verdant image of Old Fig Garden and who are willing to "chip in".

Table 5.4 provides a website addresses and links to the most important Federal, State, and local funding sources that provide grant opportunities and funding for the types of improvements discussed in this report.

Projects		Timing (pending approved fundir			Potential Funding Sources												
No.	Project / Project Element	Short-Term (1 to 2 yrs.)	Mid-Term (2 to 5 yrs.)	Long-Term (> 5 yrs.)	* MAP 21 CMAQ	MAP 21 Transportation Alternatives	MAP 21 HSIP	* MAP 21 STP	* MAP 21 Caltrans SRTS	* MAP 21 Recreational Trails	* City or County Fresno Measure C Roads	* City or County of Fresno Measure C Bike Alloc.	State Bicycle Transportation Account	State Transportation Development Act	City of Fresno Development Impact Fees	Home Owners Association	Other Privately Raised Funds
Ped-Bike Safety Enhancements on Curbless Neighborhood Streets																	
Bike Priority Streets																	
1	"Sharrows" on Pavement (striping only)	X			X	X		X				X	X	X			
2	Striped Bike Lanes (through 6 feet total of roadway widening)		X		X	X		X				X	X	X			
Pedestrian Priority Streets																	
1	Two Painted 6-foot Paths (through 6 feet total of roadway widening)		X		X	X		X			X						
2	Single Painted 5-foot Path (on existing roadway)		X		X	X		X			X						
3	Two Separated 5-foot Paths		X		X	X		X			X						
4	Singel Separated 5-foot Path		X		X	X		X			X						
Combined Pedestrian and Bicycle Priority Streets																	
1	Two Painted 6-foot Paths (through 6 feet total of roadway widening) plus "Sharrows"		X		X	X		X			X	X	X	X			
2	Single Painted 5-foot Path and "Sharrows" on existing roadway		X		X	X		X			X	X	X	X			
3	Two Separated 4-foot Paths and Striped Bike Lanes (through 6 feet total of roadway widening)		X		X	X		X			X	X	X	X			
4	Single Separated 4-foot Path and Striped Bike Lanes (through 6 feet total of roadway widening)		X		X	X		X			X	X	X	X			
5	Two Separated 5-foot Paths and "Sharrows" on existing roadway		X		X	X		X			X	X	X	X			
6	Single Separated 5-foot Path and "Sharrows" on existing roadway		X		X	X		X			X	X	X	X			
Neighborhood Traffic Calming Treatments																	
1	Test Installations of TC Features	X			?	?		?			?						
2	Mini Traffic Circle - No Landscaping		X		X	X		X									
3	Mini Traffic Circle - Add Landscaping		X	X												X	X
4	Midblock Median - No Landscaping		X		X	X		X			X						
5	Midblock Median - Add Landscaping		X	X												X	X
6	Midblock Median with Refuge - No Landscaping		X		X	X		X			X						
7	Midblock Median with Refuge - Add Landscaping		X	X												X	X
8	Neighborhood Entry Speed Table			X	X	X		X			X				X		
9	Roadway Edge Striping	X									X					X	X
10	Enhanced Stop Markings	X						X			X						
Individual Crossing Improvements along Priority Streets (near Bus Stops and Schools)																	
1	Curb Extensions		X					X	X		X						
2	High-Visibility Crosswalk Markings	X						X	X		X						
3	Additional Signage	X						X	X		X						
Ashlan Avenue (Road Diet - Blackstone to Maroa)																	
1	New Bike Lanes (through restriping of roadway)	X			X	X	X	X				X	X	X			
2	Sidewalk Widening (north side)		X		X	X	X	X			X						
3	New Street Trees		X			X		X			X				X		
Ashlan Avenue (Maroa to Palm)																	
1	Midblock Median with Refuge - No Landscaping		X			X	X	X			X						
2	Midblock Median with Refuge - Add Landscaping		X	X				X			X						
3	Roadway Edge Striping	X				X	X	X			X						
Ashlan Avenue (Palm to Thorne)																	
1	New Sidewalk (on south side)		X		X	X	X	X			X						
2	New Bike Lanes (through restriping of roadway)	X			X	X	X	X				X	X	X			
3	Midblock Median with Refuge - No Landscaping		X			X	X	X			X						
4	Midblock Median with Refuge - Add Landscaping		X	X				X			X					X	X
5	New Street Trees		X								X					X	X
Ashlan Avenue (Thorne to Fruit)																	
1	New Sidewalks (on north and south side)		X		X	X	X	X			X						
2	New Bike Lanes (through 2- to 4-foot roadway widening and restriping)		X		X	X	X	X				X	X	X			
3	Midblock Median with Refuge - No Landscaping		X			X	X	X			X						
4	Midblock Median with Refuge - Add Landscaping		X	X				X			X					X	X
Ashlan Avenue (Road Diet - Fruit to West)																	
1	Widened Sidewalks (on north and south side)			X	X	X	X	X			X						
2	Restriping of Roadway (includes new parking lane on south side)		X		X	X	X	X			X						
4	New Street Trees		X					X			X					X	X
Fruit Avenue (South of Ashlan)																	
1	Widening and Buffering of Existing Bike Lanes (restriping)	X				X	X	X				X	X	X			
Fruit Avenue (North of Ashlan)																	
1	New Sidewalk (on west side)		X		X	X	X	X			X			X			
2	New Multiuse Path (on east side)		X		X	X	X	X				X	X	X			
3	New On-Street Bike Lane (west side)		X		X	X	X	X				X	X	X			
Palm Avenue																	
1	New Sidewwalks (east and west side)		X		X	X	X	X			X						
Recreational /Multi-Modal Trails																	
1	Ped-Bike Trail along Herndon Canal between Maroa and Palm			X						X							
2	Ped-Bike Trail Along remainder of Herndon Canal			X	X	X	X	X		X		X	X	X			
3	Recerational Trail along Enterprise Holland Canal			X						X						X	X
4	Safety Enhancement of Ped-Bike Trail Crossings at Intersections			X						X		X					
Other Safety Enhancements																	
1	Pedestrian-Scale Lighting along Pedestrian Priority Routes			X							X					X	X
2	Sidewalk Gap Closure along Residential Streets (that already have curbs)	X	X	X	X	X	X	X			X						
3	Pedestrian- and Bicycle-friendly Railroad Underpass on Van Ness (reconstruction)			X	X	X	X	X			X	X	X	X			

* Hyperlink is for the primary informational website. Additional hyperlinks for program are provided below.

Table 5.3: Funding Sources

Funding Source Web References

Potential Funding Sources	Web Information	Web Link(s)
MAP 21* – Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Program apportionment recommendation of the Office of Federal California Department of Transportation program information Federal Highway Administration program information	http://www.dot.ca.gov/hq/transprog/map21/FACT SHEETS/Program Restructuring/CMAQ Fact Sheet 10.31.12 rev.pdf http://www.dot.ca.gov/hq/transprog/federal/cmaq/Official_CMAQ_Web_Page.htm http://www.fhwa.dot.gov/map21/cmaq.cfm
MAP 21* – Transportation Alternatives Program (TAP)	Federal Highway Administration program information	http://www.fhwa.dot.gov/map21/tap.cfm
MAP 21* – Highway Safety Improvement Program (HSIP)	Federal Highway Administration program information	http://www.fhwa.dot.gov/map21/hsip.cfm
MAP 21* – Surface Transportation Program (STP)	Federal Highway Administration program information Federal Highway Administration program implementation guidance information	http://www.fhwa.dot.gov/map21/stp.cfm http://www.fhwa.dot.gov/map21/guidance/guidestp.cfm
MAP 21* – Caltrans Safe Routes to School (SRTS)	Caltrans program information	http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/srts.htm See MAP 21–TAP for additional allocation information
MAP 21* – Recreational Trails	Federal Highway Administration program information Federal Highway Administration information on authorized funding	http://www.fhwa.dot.gov/environment/recreational_trails/ http://www.fhwa.dot.gov/environment/recreational_trails/overview/map21.cfm
City or County Fresno – Measure C Roads	Information on the 2006 Measure C Transportation Expenditures Extension	http://www.measurec.com/
City of County Fresno – Measure C Bike Allocation	Fresno Council of Governments program information	http://www.fresnocog.org/measure-c
State – Bicycle Transportation Account (BTA)	Caltrans program information	http://www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm
State – Transportation Development Act (TDA)	California Department of Transportation program information	http://www.dot.ca.gov/hq/MassTrans/State-TDA.html

Table 5.4: Funding source web reference

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