

Appendix I 3

Complete Streets Assessment



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Escondido General Plan Update Complete Streets Assessment

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TABLE OF CONTENTS

SECTION	PAGE
1.0 Complete Streets Vision Statement	3
2.0 Purpose.....	4
3.0 Policies.....	7
4.0 City’s Complete Streets Assessment	27
5.0 Corridor Complete Streets Assessment	51
6.0 Escondido Boulevard’s Complete Streets Assessment.....	52
7.0 Broadway’s Complete Streets Assessment.....	65
8.0 Valley Parkway’s Complete Streets Assessment.....	76
9.0 Second (2 nd) Avenue’s Complete Streets Assessment.....	88
10.0 Study Corridor’s Recommendations.....	97

LIST OF FIGURES

SECTION - FIGURE #	PAGE
Figure 4-1 Automobile Commuter Mode Share in Escondido	30
Figure 4-2 Automobile Collisions in Escondido	31
Figure 4-3 Existing Bicycle Facilities and Bicycle Commuter Mode Share in Escondido	35
Figure 4-4 Bicycle Collisions in Escondido	36
Figure 4-5 Pedestrian Commuter Mode Share in Escondido	39
Figure 4-6 Pedestrian-Involved Collisions in Escondido	40
Figure 4-7 Existing Public Transportation and Transit Mode Share in Escondido	43
Figure 4-8 Percentage of Youth (Age 16 or Younger) Population	44
Figure 4-9 Pedestrian-Involved Collisions in Escondido with Victims 16 Year of Younger	45
Figure 4-10 Percentage of Senior (Age 65 or Older) Population	48
Figure 4-11 Pedestrian-Involved Collisions in Escondido with Victims 65 Years of Older	49
Figure 4-12 Percentage of Population with Disability (Ages 5 or Older)	50
Figure 6-1 Auto, Bicycle and Pedestrian Collisions along Escondido Boulevard Corridor	56
Figure 6-2 Existing Public Transportation Service along Escondido Boulevard Corridor	57
Figure 6-3 Commuter Mode Share along Escondido Boulevard Corridor	58
Figure 6-4 Complete Streets Level of Service along Escondido Boulevard Corridor	64

Figure 7-1 Automobile, Bicycle and Pedestrian Collisions along Broadway Corridor	69
Figure 7-2 Existing Public Transportation Service along Broadway Corridor	70
Figure 7-3 Commuter Mode Share along Broadway Corridor	71
Figure 7-4 Complete Streets Level of Service along Broadway Corridor	75
Figure 8-1 Automobile, Bicycle and Pedestrian Collisions along Valley Parkway Corridor	80
Figure 8-2 Existing Public Transportation Service along Valley Parkway Corridor	83
Figure 8-3 Commuter Mode Share along Valley Parkway Corridor	84
Figure 8-4 Complete Streets Level of Service along Valley Parkway Corridor	87
Figure 9-1 Automobile, Bicycle and Pedestrian Collisions along 2 nd Avenue Corridor	91
Figure 9-2 Existing Public Transportation Service along 2 nd Avenue Corridor	92
Figure 9-3 Commuter Mode Share along 2 nd Avenue Corridor	94
Figure 9-4 Complete Streets Level of Service along 2 nd Avenue Corridor	96

LIST OF TABLES

SECTION - TABLE #	PAGE
Table 4-1 Journey to work Mode Share	27
Table 4-2 Intersections with Highest Automobile Collision Rates	29
Table 4-3 Roadway Segments with Highest Automobile Collision Rates	29
Table 4-4 Intersections with Highest Bicycle Collision Rates	37
Table 4-5 Roadway Segments with Highest Bicycle Collision Rates	37
Table 4-6 Intersections with Highest Pedestrian Collision Rates	38
Table 4-7 Roadway Segments with Highest Pedestrian Collision Rates	41
Table 6-1 Escondido Boulevard's Journey to Work Mode Share Comparison	59
Table 6-2 LOS Letter Grade Numerical Equivalents	61
Table 6-3 Escondido Boulevard - Street Segment Operations	63
Table 7-1 Broadway's Journey to Work Mode Share Comparison	68
Table 7-2 Broadway - Street Segment Operations	74
Table 8-1 Valley Parkway's Journey to Work Mode Share Comparison	81
Table 8-2 Valley Parkway - Street Segment Operations	86
Table 9-1 2 nd Avenue's Journey to Work Mode Share Comparison	93
Table 9-2 2 nd Avenue - Street Segment Operations	95

1.0 COMPLETE STREETS VISION STATEMENT

Consistently design and plan all transportation and land use projects in Escondido with all users of all ages and abilities in mind. Provide a balanced multimodal transportation network with context-sensitive solutions throughout the City that promotes non-vehicular facilities, walkability, active living, transit usage and Transportation Demand Management (TDM) measures in downtown & mixed use villages.



2.0 PURPOSE

A Complete Streets Element is one of the recently mandated components that each local government in California must include in any update to their General Plan. The purpose is to ensure that a balanced transportation system is provided by establishing goals and guiding policies for implementing improvements necessary to serve existing and future residents.

Escondido's quality of life depends upon accessibility and services provided to each land use. The relationship between the community's land uses, circulation system and utility infrastructure network is an important consideration for comprehensive planning. Ensuring excellent mobility to transport residents, and goods and services- requires that regular evaluations be conducted when new development and re-development occur.

As Escondido matures, transportation planning must respond to changing conditions to enhance mobility.

Creating complete streets involves changing Escondido's orientation toward building streets primarily for cars and instituting smart growth policies that ensure roads function as a truly "multimodal" transportation network. Efficiency, access, and safety for all modes of travel, including pedestrian, bicycling, and transit will afford residents options when trip planning and lessen dependence on single passenger auto-mobile travel. The result will be cleaner air, a safer environment, an improved economy, and a higher quality of life.

The benefits of implementing multimodal complete streets include increased transportation choices that give people the option to avoid traffic congestion, and increase the overall capacity and activity of the transportation network. Economic benefits are derived from complete streets because transportation costs and travel times are reduced while property values and job growth are enhanced. Additionally, integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project spares the expense of retrofits later. Communities that incorporate complete streets gain quality of life benefits as increased bicycling and walking are indicative of vibrant and livable communities.

Complete Streets play an important role in livable and sustainable communities- where all people, regardless of age, ability or mode of transportation feel safe and welcome on the roadways. A safe walking and bicycling environment is an essential part of improving public transportation and creating friendly, livable communities. Additionally, public health experts are encouraging walking and bicycling as a response to the obesity epidemic. Streets that provide room for bicycling and walking help children get physical activity and gain independence.



2.1 STRATEGIC PRINCIPLES

1. Develop a well-balanced, connected, safe, and convenient multimodal transportation network that is designed and constructed to serve all users of streets, roads, and highways, regardless of their age or ability, or whether they are driving, walking, bicycling, or taking transit.
2. Provide opportunities for future growth that meets the community’s vision, and strengthens the economic viability of employment areas and commercial activity centers.
3. Become a more integrated, walkable, and sustainable community that will enrich and improve residents’ quality of life.
4. Integrate Complete Street Policies into Urban Form Characteristics identified in the Land Use and Community Form Element to help developers, decision makers, and the public share a common understanding of the qualities that contribute to good design for each land use designation.
5. Provide Complete Streets to support the core themes of the Land Use and Community Form Element, which are centered on: 1) Opportunities to Live, Work and Play; 2) Protect, Preserve and Revitalize Neighborhoods; and 3) Conserve and Sustain Resources.
6. Create a sense of community by identifying streets as “destinations” with opportunities to foster a strong sense of place by including such features as seating and shade, public art, gathering places and gateways for unique land use districts, rather than mere traffic conduits.
7. Focus on crafting a network of travel options that are reflective of a community’s individual context. Provide Context-Sensitive Solutions that incorporate flexibility and creativity to shape effective transportation solutions, while preserving and enhancing community and natural environments.
8. Provide Complete Streets to support smart growth principles that broadens transportation choices by enhancing opportunities for pedestrians, bicyclists and transit users while reducing dependence on the automobile and Vehicle Miles Travelled (VMT).
9. Provide improved access for non-motorized users to support new and revitalized employment/activity areas as a means of enhancing Escondido’s livability.



10. Integrate Complete Street elements with mixed use development to complement adjacent areas, improve connections between land uses and intensify activity.
11. Collaborate with local school districts to promote the “Safe Routes to School” program to expand transportation options for students to and from each school.
12. Provide streets in compliance with the American with Disabilities Act accessibilities guidelines.
13. Promote Complete Streets to help the City’s Sustainable Communities Strategy.
14. Explore more efficient and flexible use of existing public rights-of-way that incorporates design standards to balance competing objectives within site specific constraints.



3.0 POLICIES

3.1 INTRODUCTION

The Complete Streets Policies identified in this chapter will provide -clear and consistent guidance for residents, decision makers, planners, engineers and designers to ensure that multimodal transportation elements are incorporated into all projects. As stated in the Vision Statement, the goal is for the City to *consistently design and plan all transportation/land use projects with all users of all ages and abilities in mind*. Policies are provided for the following three complete streets categories:

- A. ***Complete Streets General Policies***
- B. ***Complete Streets “User Groups” Policies***
- C. ***Complete Streets Elements Policies***

It should be noted that additional supplemental Complete Streets Policies for downtown and urban villages are provided at the end of the chapter.

A. COMPLETE STREETS GENERAL POLICIES

Complete Streets Policy A.1

Ensure that the existing and future transportation system is interconnected for safe and convenient travel and serves multiple modes of travel, such as walking, biking, transit, and driving.

Complete Streets Policy A.2

Provide a safe, efficient and accessible transportation network that meets the needs of all ages and users.

Complete Streets Policy A.3

Promote integrated transportation and land use decisions that enhance human-scale, smart growth development served by complete streets, which facilitates multimodal transportation opportunities.

Complete Streets Policy A.4

Remove barriers, where feasible, so people of all abilities can conveniently access the mobility infrastructure serving the community.



Complete Streets Policy A.5

Individually evaluate every transportation/land use project's access, safety and convenience for the eight user groups identified in the AB 1358 statute which defines "all users" as:

- Motorists
- Transit
- Bicyclists
- Pedestrians
- Children
- Disabled
- Seniors
- Goods

Additional specific policies related to the above user groups are identified in the Complete Streets User Group section.



Complete Streets Policy A.6

Assess every project's potential impacts to all user groups defined in Policy A.5 through the environmental review process.

Complete Streets Policy A.7

Cooperate with the San Diego Association of Governments (SANDAG), North County Transit District (NCTD), adjacent communities and other appropriate agencies to prepare, adopt, and implement a Regional Transportation Plan that creates consistent and connected transportation networks and incorporates mobility improvements and programs that support local and regional growth, and promotes reduction of single-occupancy vehicle travel and increased use of alternative modes of transportation.

Complete Streets Policy A.8

Collaborate with SANDAG and NCTD for the efficient allocation of funding resources for transit and transportation improvements and operations.

Complete Streets Policy A.9

Design streets in a manner that is sensitive to the local context recognizing the unique characteristics of mixed use, urban, suburban, and rural settings while maintaining network connectivity flexibility, innovation and the unique needs of various users.

Complete Streets Policy A.10

Regularly assess/evaluate Complete Streets implementations through the following performance measures:

- User data – bike, pedestrian, transit and traffic
- Crash data
- Compliments and complaints
- Linear feet of pedestrian accommodations built
- Number of ADA accommodations built
- Miles of bike lanes/trails built or striped
- Number of transit accessibility accommodations built
- Number of street trees planted
- Number of exemptions from this policy approved

Complete Streets Policy A.11

Consistently ensure that the entire right-of-way is designed to accommodate all modes of transportation.

Complete Streets Policy A.12

Regularly apply for grants to implement additional complete streets policies, standards and implementation plans as a means to fund new or expanded improvements.

Complete Streets Policy A.13

Review feasible funding sources, prioritize projects according to need and benefit, and adopt revisions to the Capital Improvement Program (CIP), as necessary and appropriate for possible ways to implement Complete Streets.



Complete Streets Policy A.14

Revise the project development process to include Complete Streets improvements at the initiation of infrastructure planning projects.

Complete Streets Policy A.15

Promote multimodal access at activity centers such as commercial centers and corridors, employment centers, transit stops/stations, historic places, schools, parks, recreation areas, and tourist attractions.

Complete Streets Policy A.16

Ensure that all new roadway projects and major reconstruction projects provide for the development of an adequate street tree canopy.

Complete Streets Policy A.17

Consistently assess Neighborhood Traffic Management to reduce high traffic flows and parking problems within residential neighborhoods. Work with the community on an individual-project basis to identify feasible solutions to lessen the impacts of arterial and collector improvements on local streets.

Complete Streets Policy A.18

Ensure that identified mobility system improvements are developed in a timely manner to meet the present and future mobility needs of the community.



B. COMPLETE STREETS USER GROUP POLICIES

1. Motorists and Street Network

Street Network Policy B.1.1

Plan, design, and regulate roadways in accordance with the street classifications in the Circulation Element Diagram.

Street Network Policy B.1.2

Strive to maintain LOS C or better throughout the City except for within the urban core. Strive to maintain LOS D or better within the urban core except for certain areas in Downtown where LOS E is acceptable.

Street Network Policy B.1.3

Provide adequate traffic safety measures on all new roadways and strive to provide adequate traffic safety measures on existing roadways subject to fiscal and environmental considerations. These measures may include, but not be limited to, appropriate levels of maintenance, proper street design, traffic control devices (signs, signals, striping), street lighting, and coordination with the school districts and other agencies.

Street Network Policy B.1.4

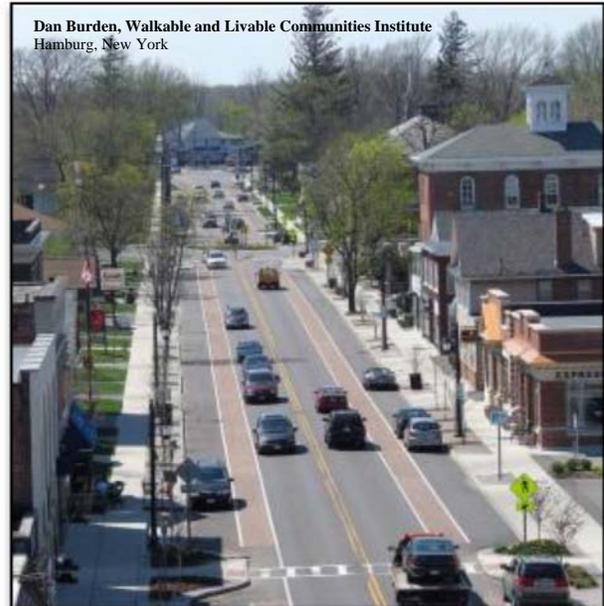
Provide high priority to funding capital improvement projects that complete links on the circulation system, relieve existing congestion in the urbanized core, correct unsafe conditions on existing streets and/or improve the regional circulation system.

Street Network Policy B.1.5

Require new development projects to analyze their local traffic impacts, and construct and implement the improvements required for that development.

Street Network Policy B.1.6

Require new development projects to analyze traffic impacts on the regional transportation system, and pay a fair-share contribution to regional transportation improvements.



Street Network Policy B.1.7

Enhance the safety and efficiency of accessing the public street network from private properties by:

- a. controlling driveway access locations on Prime Arterials and Major Roads;
- b. installing medians and access controls on Collector Roads and higher classifications;
- c. maintaining minimum distances from intersections for accessing Prime Arterials, Major Roads, and Collector streets;
- d. consolidating driveway access; and,
- e. encouraging interconnected parking lots.

Street Network Policy B.1.8

Synchronize traffic signals where feasible as appropriate to facilitate the flow of through-traffic, thus enhancing the movement of vehicles and goods through the City while reducing fuel consumption and air pollution.

Street Network Policy B.1.9

Implement street beautification programs to improve the visual quality and character of roadway corridors and provide a distinct identity for key gateways into the City.

Street Network Policy B.1.10

Designate streets next to parks as Safe Park Zones and establish reduced speed zones, special signs, pavement markings, and extra fines for traffic violations in those zones when children are present.



Street Network Policy B.1.11

Consider roundabouts as an intersection traffic control option where deemed feasible and appropriate which have demonstrated air quality and safety benefits,.

Street Network Policy B.1.12

Balance the needs of various users when establishing speed limits for motor vehicles, consistent with AB 2767 (Jackson, Statutes of 2000).

2. Pedestrians

Pedestrian Network Policy B.2.1

Maintain a pedestrian environment accessible to all that is safe, attractive, and encourages walking.

Pedestrian Network Policy B.2.2

Preserve and enhance pedestrian connectivity within existing neighborhoods and require a pedestrian network in new developments that provides efficient and well-designed connections to adjacent land uses, commercial districts, schools, and parks.

Pedestrian Network Policy B.2.3

Promote walking and improve the pedestrian experience by (a) requiring pedestrian facilities along all classified streets designated on the Circulation Plan; (b) implementing streetscape improvements along pedestrian routes that incorporate such elements as shade trees, street furniture, and lighting; (c) orienting development toward the street;(d) employing traffic calming measures; and (e) enforcing vehicle speeds on both residential and arterial streets.

Pedestrian Network Policy B.2.4

Enhance pedestrian visibility by enforcing “no parking” restrictions at intersection approaches, improving street lighting, and identifying required clearances to minimize obstructions.

Pedestrian Network Policy B.2.5

Encourage and support the development of pedestrian-friendly mixed-use, commercial, transit-oriented, and multi-tenant office districts with active, accessible, connected, and unique public spaces that promote walking.

Pedestrian Network Policy B.2.6

Repair sidewalk and pedestrian paths in the public-right-of-way that impede pedestrian travel, and maintain the pedestrian network in a manner that facilitates accessibility and safety.

Pedestrian Network Policy B.2.7

Develop a citywide pedestrian way-finding program that communicates general travel and right-of-way information.



Pedestrian Network Policy B.2.8

Design and construct streetscape improvements to reduce storm water and pollutant runoff into the drainage system, using such techniques as urban bioswales for the filtering of pollutants and permeable hardscapes.

Pedestrian Network Policy B.2.9

Develop, maintain and implement a Pedestrian Master Plan that implements the goals and policies of the General Plan and defines the following: the type and location of pedestrian-oriented streets and pathways; standards for sidewalk width, improvements, amenities, and street crossings; the schedule for public improvements; and developer responsibilities. All new development shall be consistent with the applicable provisions of the Pedestrian Master Plan.



Pedestrian Network Policy B.2.10

Develop and manage pedestrian facilities to maintain LOS D or better during all times.

Pedestrian Network Policy B.2.11

Improve pedestrian safety at intersections and mid-block locations by providing safe, well-marked pedestrian crossings, bulb-outs, or median refuges that reduce crossing widths, and/or provide audio sound warnings.

3. Bicyclists

Bicycle Network Policy B.3.1

Maintain and implement a Bicycle Master Plan that enhances existing bicycle routes and facilities; defines gaps and needed improvements; outlines standards for their design and safety; describes funding resources; and involves the community. All new development shall be consistent with the applicable provisions of the Bicycle Master Plan.

Bicycle Network Policy B.3.2

Promote bicycling as a common mode of transportation and recreation to help reduce traffic congestion and improve public health.



Bicycle Network Policy B.3.3

Coordinate with adjacent jurisdictions to develop bicycle routes that provide connectivity between the communities.

Bicycle Network Policy B.3.4

Incorporate bicycle parking facilities in public places such as transit stops, libraries, and parks, where feasible.

Bicycle Network Policy B.3.5

Require large new development projects (e.g., employment centers, educational institutions, and commercial centers) to

provide bicycle support facilities such as bicycle parking, personal lockers, showers, etc., to encourage biking.

Bicycle Network Policy B.3.6

Support education programs for motorists and bicyclists regarding bicycling safety and the public health and environmental benefits of bicycling.

Bicycle Network Policy B.3.7

Require that new development provide connections to existing and proposed bicycle facilities.

Bicycle Network Policy B.3.8

Develop and manage bicycle facilities to maintain LOS D or better during all times.



4. Transit

Transit System Policy B.4.1

Maintain and improve the City's transit system to meet the needs of residents and visitors including seniors, disabled persons, and transit-dependent persons.

Transit System Policy B.4.2

Cooperate with North County Transit District (NCTD) efforts to increase the use of transit by providing services within the City that are timely and cost effective; establishing criteria for transit improvements; locating routes and access points that are responsive to growth patterns; developing short and long-range service plans; and preserving the rights-of-way for commuter-rail lines.

Transit System Policy B.4.3

Coordinate with NCTD to establish transit stops in areas of concentrated activity such as near senior housing projects, medical facilities, major employment, entertainment, and shopping centers, and mixed use areas.



Transit System Policy B.4.4

Coordinate with NCTD to accommodate transit centers and major stops with facilities that are well designed, comfortable, and attractive that includes adequate bicycle and pedestrian access, and secure bicycle storage, where appropriate..

Transit System Policy B.4.5

Cooperate with NCTD, Caltrans, SANDAG, and other appropriate agencies to expand the commuter rail system including the appropriate location of stops, service schedules, bus routes and parking needs.

Transit System Policy B.4.6

Work with the High Speed Rail Authority (HSRA), SANDAG, and other pertinent agencies to coordinate the development of the proposed high-speed rail station to ensure its compatibility with adjoining uses and connectivity with local pedestrian, bicycle, transit, and automobile transportation systems.

Transit System Policy B.4.7

Require that new developments incorporate transit-supporting facilities into the project design, where appropriate.

Transit System Policy B.4.8

Construct transit facilities including bus pullouts on Prime Arterials, Major Roads, and Collector streets when appropriate.

Transit System Policy B.4.9

Provide connections to transit stations by identifying roadway, bikeway, and pedestrian improvements to be constructed within ½ mile of major transit stations. Transportation improvements in the vicinity of major transit stations shall emphasize the development of complete streets.



Transit System Policy B.4.10

Whenever feasible consider a variety of transit types including high speed rail, inter-city rail, regional rail, light rail transit, bus rapid transit, trolleys (streetcars), enhanced buses, express buses, local buses, neighborhood shuttles, paratransit, real time monitors and personalized automatic notification arrivals car/van pooling, dial-a-ride, demand-responsive services, pedi-cabs, and jitneys to meet the needs of residents, workers, and visitors.

Transit System Policy B.4.11

Develop and manage transit facilities to maintain LOS D or better during all times.

5. Goods and Services Transport

Goods and Services Transport Policy B.5.1

Designate official truck routes to minimize the impacts of truck traffic on residential neighborhoods and other sensitive land uses.

Goods and Services Transport Policy B.5.2

Minimize noise and other impacts of truck traffic and deliveries in residential and mixed-use neighborhoods by limiting when these can occur.



Goods and Services Transport Policy B.5.3

Discourage use of public streets for freight loading and unloading.

Goods and Services Transport Policy B.5.4

Work with railroad operators to facilitate the transport by rail of goods through the city.

Goods and Services Transport Policy B.5.5

Work with railroad operators to coordinate schedules to occur during off-peak travel hours.

Goods and Services Transport Policy B.5.6

Encourage business owners to schedule deliveries at off-peak traffic periods.

Goods and Services Transport Policy B.5.7

Support infrastructure improvements and the use of emerging technologies that facilitate the clearance, timely movement, and security of trade, including facilities for the efficient intermodal transfer of goods between truck, rail, and air transportation modes.

6. Children

Along with all the policies included for Pedestrian user group the following additional policies should be considered for Children.

Children’s Policy B.6.1

Support the “Suggested routes to schools” (SRTS) program and partner with schools, non-profit organizations, and transit agencies with the goal of encouraging more children to walk and bicycle to school in a safe environment.

Children’s Policy B.6.2

Collaborate with local school districts to develop SRTS for all existing and proposed schools. Build a database including all routes identified as SRTS routes. The development of SRTS programs should address pedestrian and bicycle safety for a two mile radius around all elementary, middle, and high school facilities.

Children’s Policy B.6.3

Provide Pedestrian and Bicycle Master Plans to promote the connectivity of neighborhoods with their local schools, keeping in mind the specific needs of children.

Children’s Policy B.6.4

Utilize the SRTS program to determine and prioritize infrastructure projects.



Children’s Policy B.6.5

Regularly apply for grants to implement additional SRTS programs.

Children’s Policy B.6.6

Cooperate with local school districts’ efforts to formulate policies related to new school’s sitting, closure and consolidation. The policies should focus on situating the proposed schools within the neighborhoods, avoiding primary access from major/high volume streets and providing pedestrian/bike connections on all frontages.

Children’s Policy B.6.7

Encourage schools to provide arrival and departure plans for all modes of transportation. Adequate minimum bicycle parking should be required from the schools.

Children’s Policy B.6.8

Support infrastructure programs that encourage children to bike safely to school.

7. Disabled

Along with all the policies included for Pedestrian user group the following additional policies should be considered for Disabled Residents.

Disabled Policy B.7.1

Comply with American with Disability (ADA) standards for all existing and future infrastructure improvements.



Disabled Policy B.7.2

Provide adequate crossing times and detection for disabled at signalized intersections, consistent with AB 1581 (Fuller, Statutes of 2007).

Disabled Policy B.7.3

Provide safe and efficient multimodal access to and within transit terminals, complying with ADA standards.

8. Seniors

Along with all the policies included for Pedestrian user group the following additional policies should be considered for Seniors.

Seniors Policy B.8.1

Coordinate with the NCTD to establish transit stops in areas of concentrated activity such as near senior housing projects.

Seniors Policy B.8.2

Provide adequate crossing times and detection for seniors at signalized intersections, consistent with AB 1581 (Fuller, Statutes of 2007).



C. OTHER COMPLETE STREETS ELEMENT POLICIES

1. Traffic Calming

Traffic Calming Policy C.1.1

Reduce congestion in areas surrounding schools, parks, and other activity centers by applying effective traffic management solutions.

Traffic Calming Policy C.1.2

Encourage the use of innovative methods for traffic control (such as roundabouts and traffic circles) that can add character and create opportunity for improved aesthetics while effectively managing traffic.



Traffic Calming Policy C.1.3

Protect residential neighborhoods from cut-through traffic and other traffic-related issues by implementing appropriate traffic calming measures.

2. Transportation Demand Management

TDM Policy C.2.1

Consider Transportation Demand Management (TDM) and complete street programs to reduce automobile travel demand that may include, but shall not be limited to: preparing site-specific peak-hour traffic-management plans; promoting ride-sharing and carpooling for residents and non-residents through preferential parking; providing park-and-ride facilities adjacent to the regional transit system; and supporting transit subsidies.

TDM Policy C.2.2

Encourage employers to offer programs, facilities, and incentives to their employees that would promote carpooling, transit use, and use of other alternative transportation modes.

TDM Policy C.2.3

Establish a TDM program for City staff that promotes carpooling, use of transit, and use of alternative modes of transportation.

3. Emerging Technologies and Services



Emerging Technologies Policy C.3.1

Assist in the provision of support facilities such as alternative fueling stations (e.g., electric and hydrogen) for emerging technologies.

Emerging Technologies Policy C.3.2

Encourage developments and street systems that support the use of Neighborhood Electric Vehicles (NEV).

Emerging Technologies Policy C.3.3

Coordinate with Caltrans and provide a fair share of funding to implement Intelligent Transportation Systems improvements on SR 15 and SR 78 freeway segments, upon mutual agreement of terms between the City and Caltrans.

3.2 DOWNTOWN AND URBAN VILLAGES' SUPPLEMENTAL POLICIES

As stated in the vision statement for downtown and urban villages the goal is to *provide/promote non-vehicular facilities, walkability, active living, transit usage and TDM measures in downtown & urban villages*. A map identifying these areas is included in figure --. Additional Policies are provided for the following three complete streets categories:

- A. ***Complete Streets General Policies***
- B. ***Complete Streets “User Group” Policies***
- C. ***Complete Streets Element Policies***

These policies only apply to downtown and urban villages and are in addition to City-wide complete streets policies.

A. COMPLETE STREETS GENERAL POLICIES

Complete Streets Policy A.19

Provide integrated transportation and land use decisions that enhance human-scale smart growth development served by complete streets, which facilitate multimodal transportation opportunities.

Complete Streets Policy A.20

Evaluate every transportation/land use project’s access, safety and convenience of the eight user groups individually.

Complete Streets Policy A.21

Require new development projects to provide a pedestrian and a bicycle connectivity map to ensure adequate multimodal access to activity centers such as commercial centers and corridors, employment centers, transit stops/stations, historic places, schools, parks, recreation areas, and tourist attractions.



Complete Streets Policy A.22

Design streets to provide a pleasant environment for walking and biking by incorporating elements such as detached sidewalks, frequent and safe pedestrian crossings, shade trees, plantings, well-designed benches, trash receptacles, news racks, and other furniture; pedestrian-scaled lighting fixtures, way-finding signage, integrated transit shelters, public art, Class II bike lanes, frontage roads with on-street parking, and/or grade-separated crossings.

Complete Streets Policy A.23

Establish new street design guidelines to enable context-sensitive solutions based on General Plan land uses and General Plan policies. Accept innovative and/or non-standard design options and flexible design standards when feasible and safe. .

Complete Streets Policy A.24

Establish a Strategic Implementation Plan to articulate a clear strategy for implementing the Complete Streets Vision through an approach that includes an incremental combination of short-term and long-term actions such as regulatory changes, administrative changes, and capital improvements. The Plan should also identify, prioritize and develop conceptual plans and designs for catalyst projects to demonstrate the application of the new complete street policies, guidelines and standards to specific corridor segments. The Strategic Implementation Plan shall also recommend a monitoring program that would measure the impacts and effectiveness of the Complete Streets Initiative.

B. COMPLETE STREETS USER GROUP POLICIES

1| Motorists and Street Network

Street Network Policy B.1.13

Allow for a lower Level of Service (LOS) standards for vehicular traffic, which will permit increased densities and mix of uses to increase transit ridership, biking, and walking. However LOS D shall be maintained for pedestrian, bicycle and transit facilities. In the case of a significant vehicular traffic impact by a new development, the project may not be required to physically mitigate the impact, but instead could be required to provide additional complete streets improvements, TDM measures and/or a fairshare contribution towards the improvements identified in the vicinity of the project.



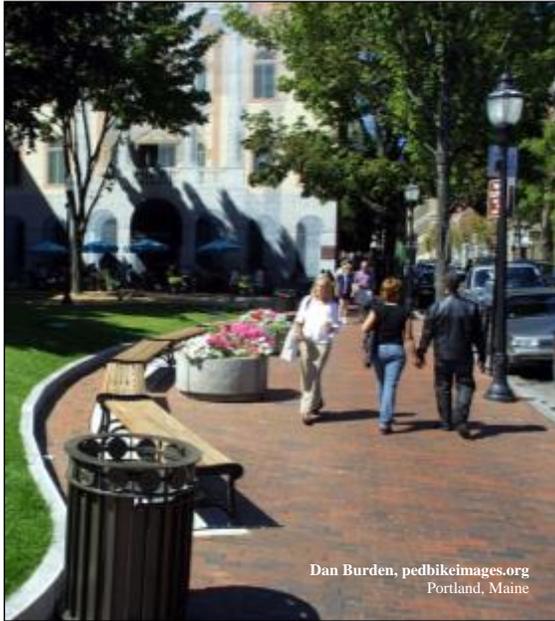
Street Network Policy B.1.14

Synchronize all traffic signals which are within ¼ mile of each other.

Street Network Policy B.1.15

In mixed-use areas consider an alternative street design that emphasizes an increased use of pedestrian, bicycle and transit design elements.

2| Pedestrians



Pedestrian Network Policy B.2.12

Provide walkable neighborhoods and improve the pedestrian experience by (a) requiring pedestrian facilities along all classified streets designated on the Circulation Plan; (b) implementing streetscape improvements along pedestrian routes that incorporate such elements as shade trees, street furniture, and lighting; (c) orienting development toward the street; (d) employing traffic calming measures; and (e) enforcing vehicle speeds on both residential and arterial streets.

Pedestrian Network Policy B.2.13

Provide adequate levels of lighting on all streets for pedestrian safety and comfort.

3| Bicyclists

Bicycle Network Policy B.3.9

Require education programs for motorists and bicyclists regarding bicycling safety and the public health and environmental benefits of bicycling.

Bicycle Network Policy B.3.10

Coordinate with transit operators to provide for secure short- and long-term bicycle parking at all transit stations.

4| Transit

Transit System Policy B.4.12

Consider a variety of transit types in large development projects including neighborhood shuttles, real time monitors and personalized automatic notification arrivals car/van pooling, dial-a-ride, demand-responsive services, pedi-cabs, and jitneys to meet the needs of residents, workers, and visitors.

Transit System Policy B.4.13

Work with transit providers to incorporate features such as traffic signal priority, queue jumps, and exclusive transit lanes to improve transit operations.

Transit System Policy B.4.14

Work with NCTD to maintain fares at reasonable rates and support efforts to establish a cost-sharing program with developers for projects within the downtown and urban villages. Require developer contributions for bus facilities and improvements.

Transit System Policy B.4.15

Work with NCTD to incorporate transit facilities into new private development and City projects including incorporation of transit infrastructure (i.e., electricity, fiber-optic cable, etc.), alignments for transit route extensions, persevering of right-way-way suitable for transit services and new station locations.

Transit System Policy B.4.16

Promote the continued operation of taxi service, including the provision of dedicated, on-street loading spaces where appropriate, incremental improvements in gas mileage, and improved access for passengers with disabilities.

Transit System Policy B.4.17

Develop, maintain and implement a Transit Master Plan that carries out the goals and policies of the General Plan and defines the following: public and private transit routes, types, services, location and characteristics of transit terminals to maximize accessibility by all modes of transportation, public and private transit terminals and stops, development of intermodal transfer facilities such as bicycle parking and bus transfer stations, provision of adequate and safe transit facilities including covered shelters, lighting, safe crossings, and locations that support “eyes on the street,” etc. This should be conducted in collaboration with NCTD. All new development shall be consistent and pay a fairshare toward the applicable provisions of the Transit Master Plan.



5| Goods and Services Transport

Goods and Services Transport Policy B.5.8

Require business deliveries to only occur during off-peak traffic periods.

C. OTHER COMPLETE STREETS ELEMENT POLICIES

1| Transportation Demand Management

TDM Policy C.2.4

Provide Transportation Demand Management (TDM) and complete street programs to reduce automobile travel demand that may include, but shall not be limited to: preparing site-specific peak-hour traffic-management plans; promoting ride-sharing and carpooling for residents and non-residents through preferential parking; providing park-and-ride facilities adjacent to the regional transit system; and supporting transit subsidies.

TDM Policy C.2.5

Encourage employers to offer programs, facilities, and incentives to their employees that would promote carpooling, transit use, and use of other alternative modes.

2| Emerging Technologies and Services

Emerging Technologies Policy C.3.4

Utilize public right-of-ways, including parking facilities at major transit stations and employment centers, for support facilities such as alternative fueling stations where appropriate.

Emerging Technologies Policy C.3.5

Utilize regional Intelligent Transportation Systems (ITS) investments to achieve cost-effective improvements in transportation system, performance and operations, and develop a plan to implement a local ITS.



4.0 CITY'S COMPLETE STREETS ASSESSMENT

Per the Policy A.5, this chapter evaluates access, safety and convenience of the following eight user groups individually. These user groups are based on the AB 1358 statute which defines “all users” as the following eight user groups.

- Motorists
- Bicyclists
- Pedestrians
- Transit
- Children
- Seniors
- Disabled
- Goods



To assess the travel patterns in Escondido, a journey-to-work mode share assessment was conducted and is included in **Table 4-1**. As indicated

in the table, in comparison with the region, the City is more auto dependent in comparison to the San Diego Region . However, it should be noted that the public transportation and bicycling mode share in Escondido are similar to the region as a whole.

TABLE 4-1
JOURNEY TO WORK MODE SHARE

Travel Mode	City of Escondido	San Diego Region
Automobile (including Carpool)	90%	87%
Public Transportation	3%	3%
Walking	2%	3%
Bicycling	1%	1%
Other*	4%	6%

*Other includes worked from home, motorcycle and other means

Source: US Census (2000)

4.1 MOTORISTS

The street network that serves motorists comprises the backbone of the community’s transportation system. Streets and highways contribute to the overall community in three ways. First, they connect neighborhoods with each other, and to areas beyond. Second, they allow for the movement of commodities or freight and, therefore, provide economic benefit. Third, they are a focal point for activity and social events that help establish community identity.

Escondido’s General Plan’s Quality of Life standard strives for a level of service “C” (defined by the Highway Capacity Manual) that provides for minimal delays. The standard also acknowledges that physical design characteristics, implementation of pedestrian-oriented “smart growth” design improvements, high density infill areas, environmental resource considerations, existing development, freeway inter-change impacts, and incomplete system improvements, may override the ability to meet this standard.

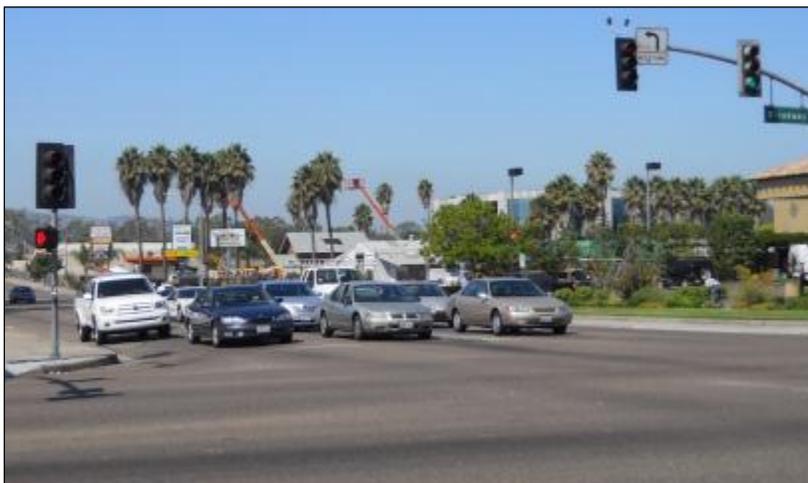
Figure 4-1 displays the percent of population who commute to work by automobile. As shown, the mode share for the automobile is lowest in the downtown.

A comprehensive motorist’s assessment was conducted and is included in the Escondido’s General Plan Circulation Element Traffic Study.

4.1.1 Motorist’s Collision Assessment

Data on collisions can help planners and other decision-makers identify specific locations and support programs—safety, education or enforcement—on which to focus efforts. To assess the safety of transportation facilities in Escondido, historical collision data was obtained. The data presented in this chapter comes from the California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS).

SWITRS maintains records for all police-reported motor vehicle collisions, bicycle collisions and pedestrian-vehicle collisions in the State of California. Records are kept in a tabular format and contain information collected by police officer(s) present at the scene including the cause of the collision, fault, roadway and ambient conditions, social characteristics of the parties involved, and whether there



were injuries and/or fatalities. Each record also contains the location, typically provided as a pair of intersecting cross-streets and the distance and direction from the cross streets. The location information enables the collision records to be created as Geographic Information Systems (GIS) data either through the address geocoding process or through manual creation.

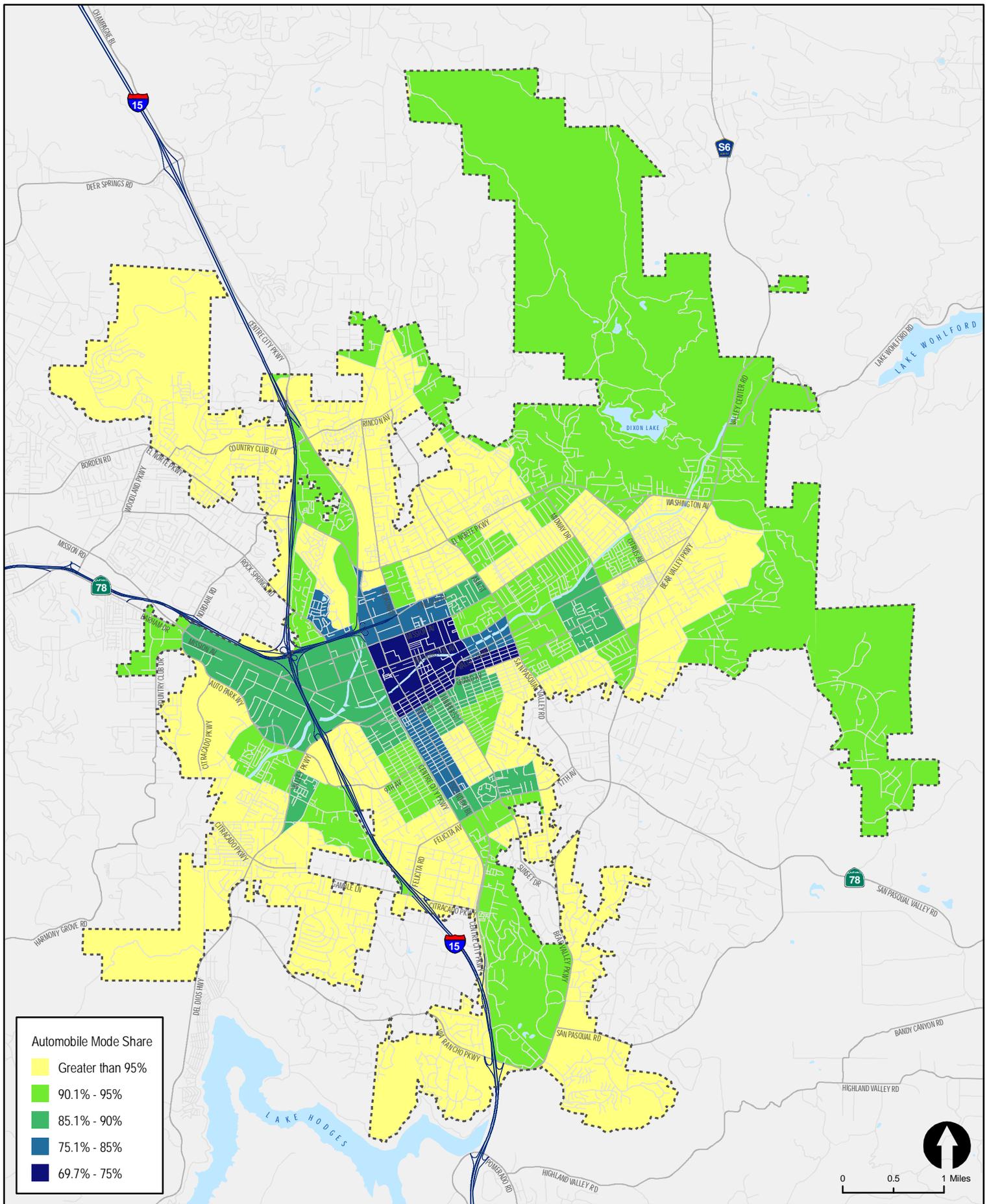
Figure 4-2 displays automobile collisions along Escondido’s roadways. Based on the assessment, there were 4,189 automobile collisions in the City during the period between 2006 and 2010. Of those collisions, 2,596 occurred along the City roadways. **Table 4-2** shows the intersection locations with the highest total of collisions. **Table 4-3** shows the General Plan Circulation Element study roadway segments with the highest total number of automobile collisions.

**TABLE 4-2
INTERSECTIONS WITH HIGHEST AUTOMOBILE COLLISION RATES**

Intersection	Number of Collisions (2006-2010)
Centre City Parkway / Second Avenue	35
Rose Street / Washington Avenue	34
Centre City Parkway / Valley Parkway	29
Rock Springs Road / Mission Avenue	27
Centre City Parkway / Mission Avenue	27
Centre City Parkway / El Norte Parkway	27
Midway Drive / Valley Parkway	27

**TABLE 4-3
ROADWAY SEGMENTS WITH HIGHEST AUTOMOBILE COLLISION RATES**

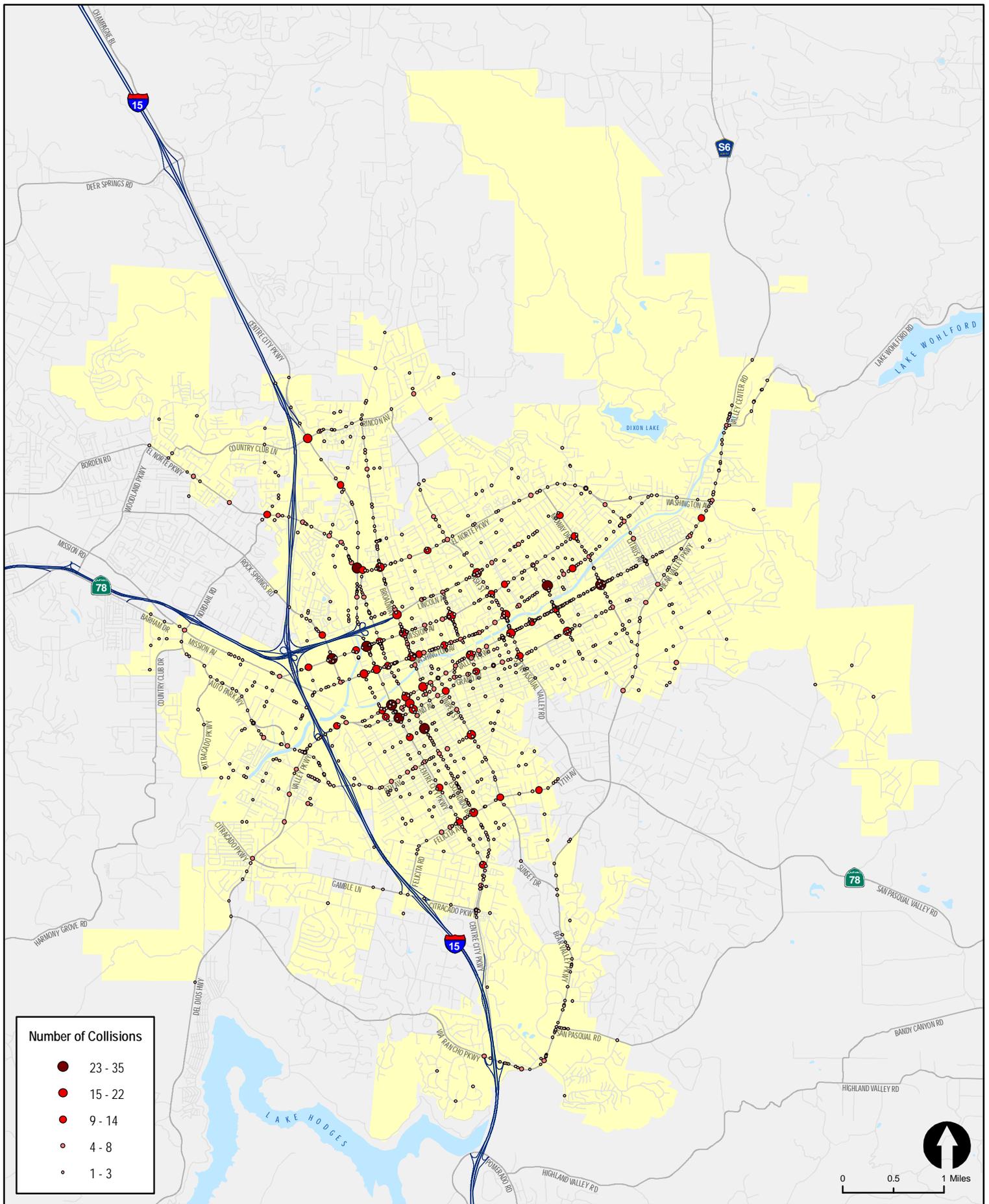
Street	From	To	Number of Collisions (2006-2010)
Washington Avenue	Rose Street	Midway Drive	72
Valley Parkway	Rose Street	Midway Drive	64
Valley Parkway	Centre City Parkway	Escondido Boulevard	58
Rose Street	Washington Avenue	Valley Parkway	56
2 nd Avenue	Centre City Parkway	Escondido Boulevard	56



Source: US Census (2000)



Figure 4-1
Automobile Commuter Mode Share in Escondido
 Escondido General Plan



Source: SWITRS (2010)

Figure 4-2
Automobile Collisions in Escondido (2006-2010)
Escondido General Plan

4.2 BICYCLISTS

Escondido is committed to supporting bicycling as a form of mobility and recreation. Bicycling is a basic, fundamental mode of transportation that in today's motorized world of travel is often overlooked as an option to help manage circulation issues and concerns. As part of the city's long-term vision contained in the General Plan, Escondido supports the planning and development of bicycle-friendly projects, streets, and neighborhoods for both commuter and recreational riders.

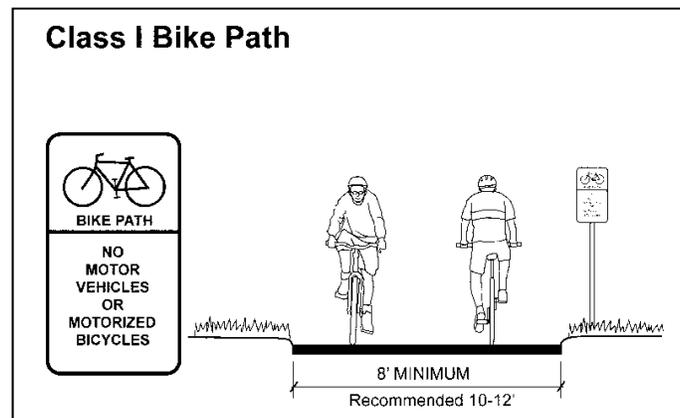


An underlying principle in planning for cyclists is to provide a system that allows users significant mode choices and that creates a reasonable balance in accommodating those choices, without favoring one mode at the expense of all others. In order to achieve a balance within the current transportation network, bicycling must be made to be an attractive and viable option. This includes creating a non-motorized network comprised of on-street facilities, off-street facilities, and end-of-trip facilities.

Chapter 2 identifies policies related to bicyclists. Additionally, Escondido has adopted a Citywide Bicycle Master Plan that will guide the development and maintenance of bicycle facilities throughout the community as part of its complete streets network. The policies in Chapter 2 and in the Bicycle Master Plan address issues related to Escondido's bikeways such as planning, community involvement, utilization of existing resources, facility design, safety and education, funding and more. The following three types of bikeway classifications are proposed in the Bicycle Master Plan. Additional information regarding these classifications can be found in the City's Bicycle Master Plan.

Class I – Shared-use Bike Paths

Class I bike paths provide a facility for the exclusive use of bicycles and pedestrians. Motor vehicles are excluded except for maintenance, security, or emergencies vehicles.

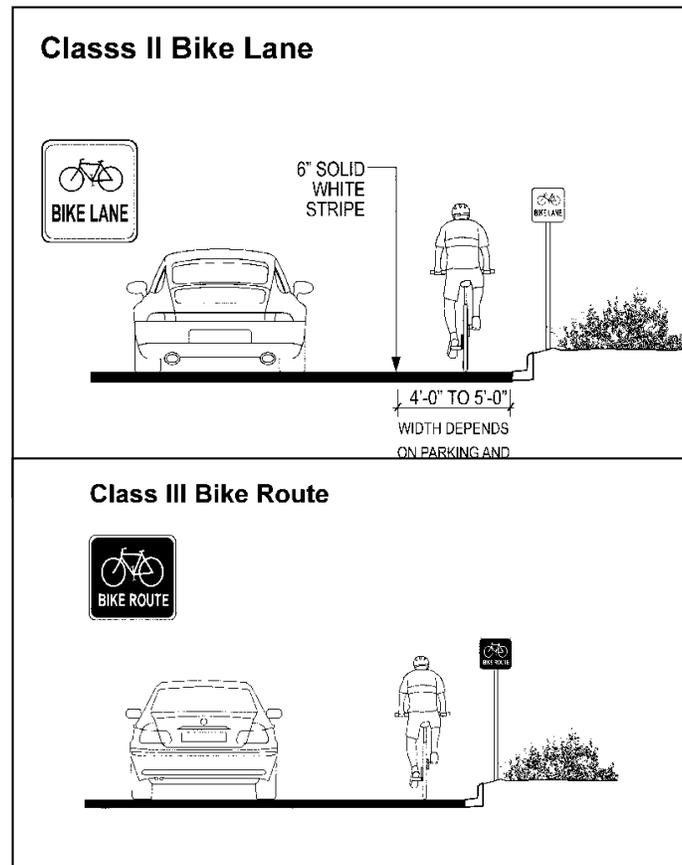


Class II - Bicycle Lanes

Class II bikeways (bike lanes) are installed within the paved area of roadways adjacent to vehicle lanes through identifiable pavement striping and markings and signage. The width of bicycle lanes varies depending on parking and street conditions.

Class III - Bicycle Routes

Class III bike routes are intended to provide continuity to the bikeway system on roadways where there isn't adequate width to establish a bike lane and to connect discontinuous segments of bike lanes. Class III facilities are shared facilities, either with motor vehicles on the street or with pedestrians on sidewalks. In either case, bicycle usage is secondary. Class III facilities are designated by installing bike route signs along roadways. Class III bike routes are selected to encourage bicyclists to travel along selected routes based on traffic speed and volume, parking, traffic control devices, and surface quality.

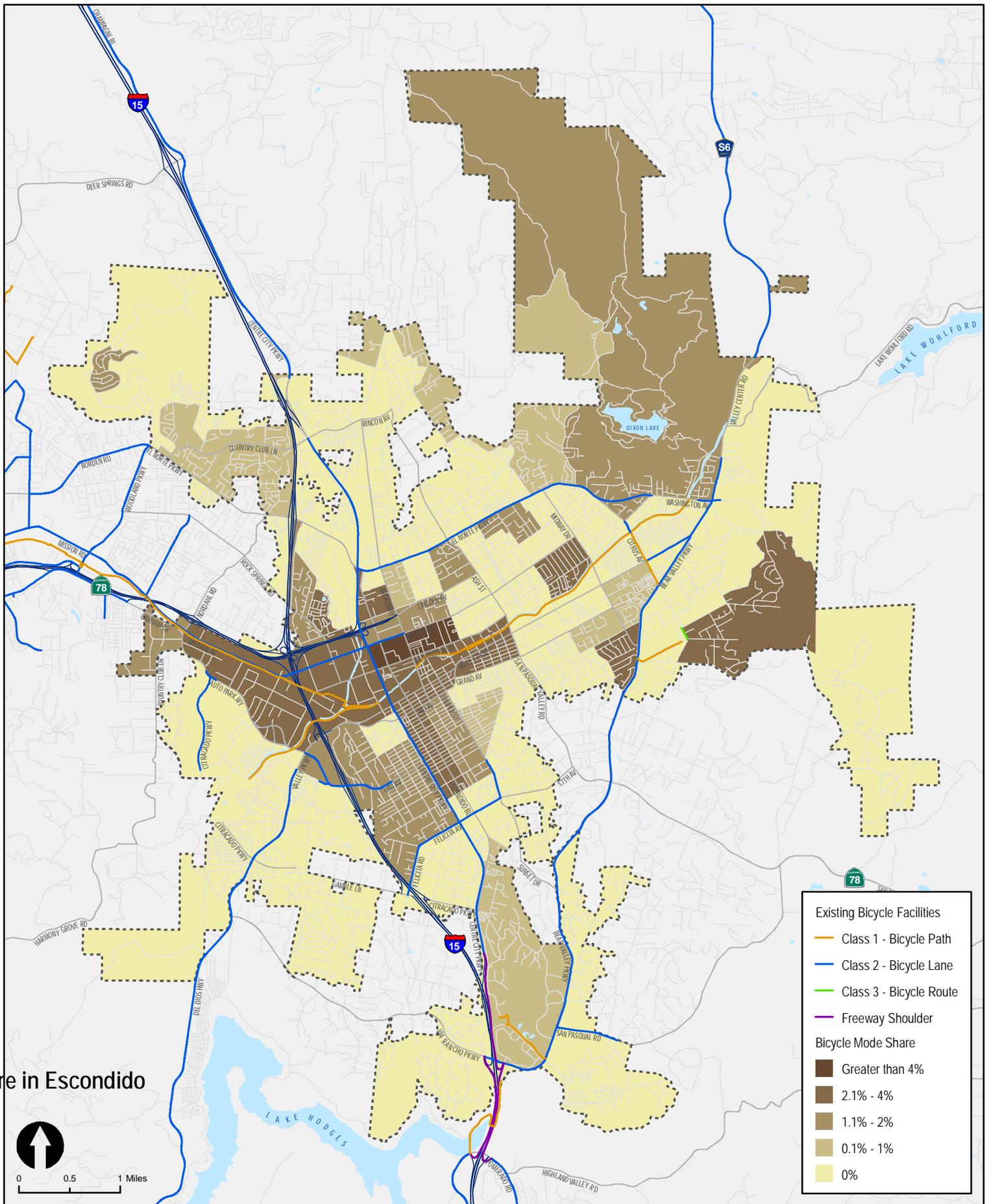


In September 2005, the “shared lane marking” was approved by the California Traffic Control Devices committee for use by California jurisdictions. The primary purpose of the shared lane marking (sometimes referred to as “sharrows”) is to provide positional guidance to bicyclists on roadways that are too narrow to be striped with bicycle lanes and to alert motorists of the location a cyclist may occupy on the roadway.

Figure 4-3 displays the existing percent of bicycle commuters and includes existing bicycle facilities. Escondido has two regionally significant off-street bike paths: the Inland Rail Trail and the Escondido Creek Bikeway. The Inland Rail Trail follows the railroad right-of-way west to San Marcos and Vista. The Escondido Creek Bikeway extends east-west across the city through the downtown area. Several major roadways are equipped with bike lanes, including Centre City Parkway, Bear Valley Parkway, El Norte Parkway and Mission Avenue. There is only a 1% bicycle commuter mode share in Escondido, though there are slightly higher concentrations of bicycle commuters in the downtown.

4.2.1 Bicycle Collisions Assessment

Figure 4-4 displays the citywide bicycle collisions. Based on the assessment, there were 242 bicyclist-involved collisions reported during the period between 2006 and 2010. There were 19 locations that experienced more than one bicycle collision over the study period. **Table 4-4** shows the intersection locations with three or more collisions. **Table 4-5** shows the General Plan circulation element study roadway segments with the highest total number of bicycle collisions. As shown, Rose Street between Washington Avenue and Valley Parkway had the highest number of reported bicycle collisions in the City. Five other segments had 7 collisions each.



Share in Escondido

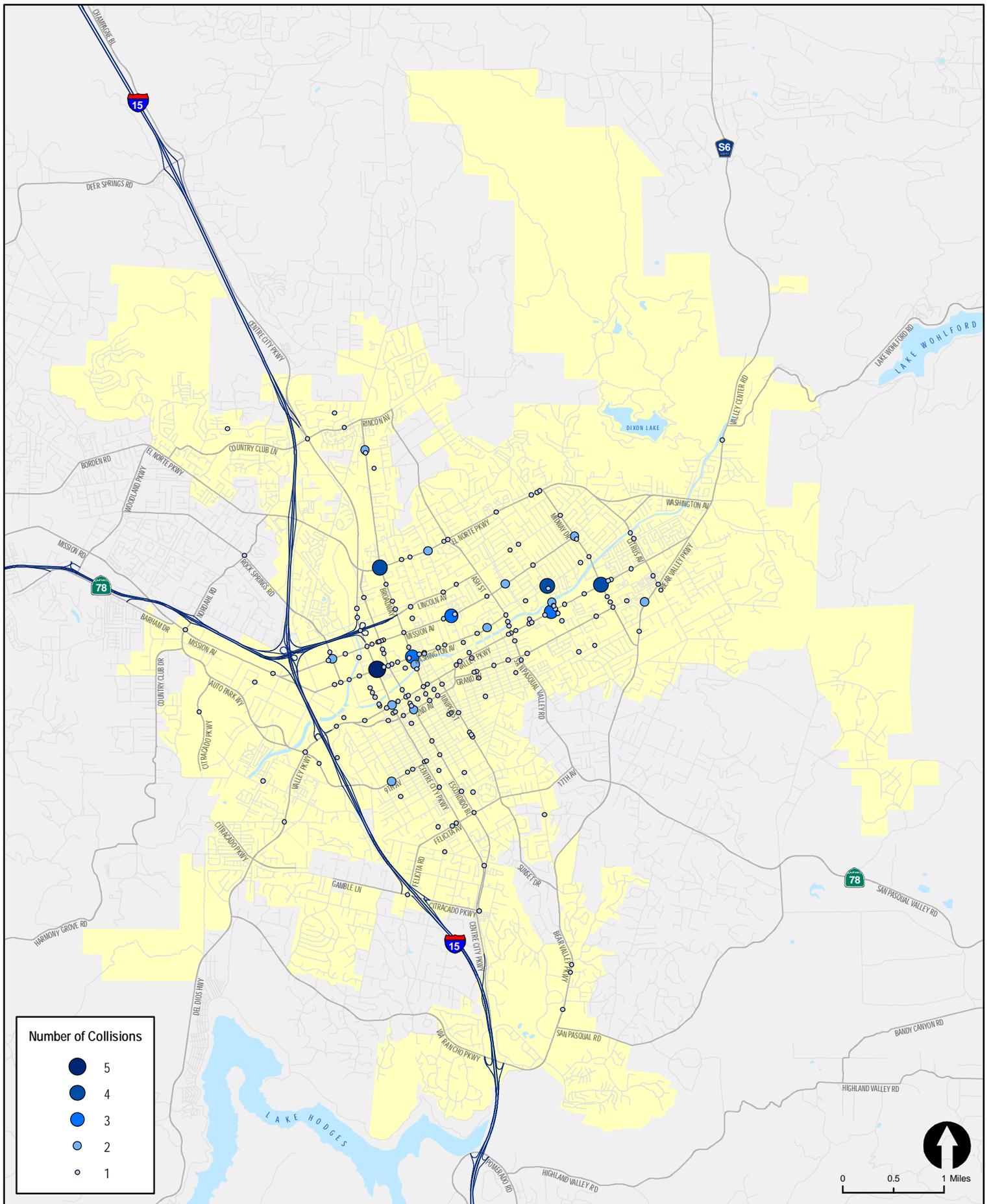


Source: SANDAG (2011), US Census (2000)



Figure 4-3 Existing Bicycle Facilities and Bicycle Commuter Mode Share in Escondido

Escondido General Plan



Source: SWITRS (2010)

Figure 4-4
Bicycle Collisions in Escondido (2006-2010)
Escondido General Plan

**TABLE 4-4
INTERSECTIONS WITH HIGHEST BICYCLE COLLISION RATES**

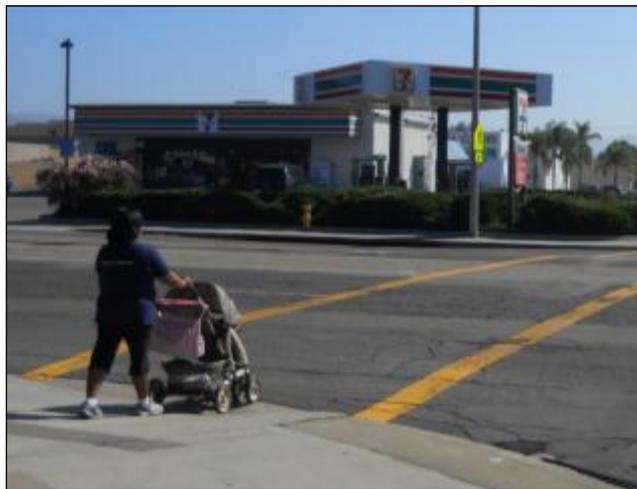
Intersection	Number of Collisions (2006-2010)
Centre City Parkway / Washington Avenue	5
Broadway / El Norte Parkway	4
Rose Street / Washington Avenue	4
Midway Drive / Valley Parkway	4
Broadway / Washington Avenue	3
Fig Street / Mission Avenue	3
Shopping Center Entrance / Valley Parkway	3

**TABLE 4-5
ROADWAY SEGMENTS WITH HIGHEST BICYCLE COLLISION RATES**

Street	From	To	Number of Collisions (2006-2010)
Rose Street	Washington Avenue	Valley Parkway	10
Broadway	Washington Avenue	Valley Parkway	7
Midway Drive	Valley Parkway	Grand Avenue	7
Valley Parkway	Midway Drive	Citrus Avenue	7
Washington Avenue	Centre City Parkway	Escondido Boulevard	7
Washington Avenue	Escondido Boulevard	Broadway	7

4.3 PEDESTRIANS

A safe and accessible pedestrian network for all ages and all abilities is a key component to creating a livable community. People need to feel safe, both from traffic accidents or hazards, and also from crime. Well-designed pedestrian networks can improve the safety of a neighborhood on both levels. An environment in which people are comfortable using the sidewalks helps build a healthy community, prevents crime by adding “eyes on the street,” and also facilitates a lively atmosphere. Ensuring that streets and intersections are accessible to all ages and ability levels, such as the elderly, children, and people with disabilities, ensures safety, opportunities for physical activity and a



pleasant pedestrian experience for everyone. Escondido’s General Plan envisions a pedestrian-friendly environment where public spaces, including sidewalks and off-street paths, offer a level of convenience, safety and attractiveness to the pedestrian that will encourage and reward the choice to walk.

Figure 4-5 displays the percent of walking commuters. As shown, there are higher proportions of walking commuters in the core and to the eastern limits of the city.

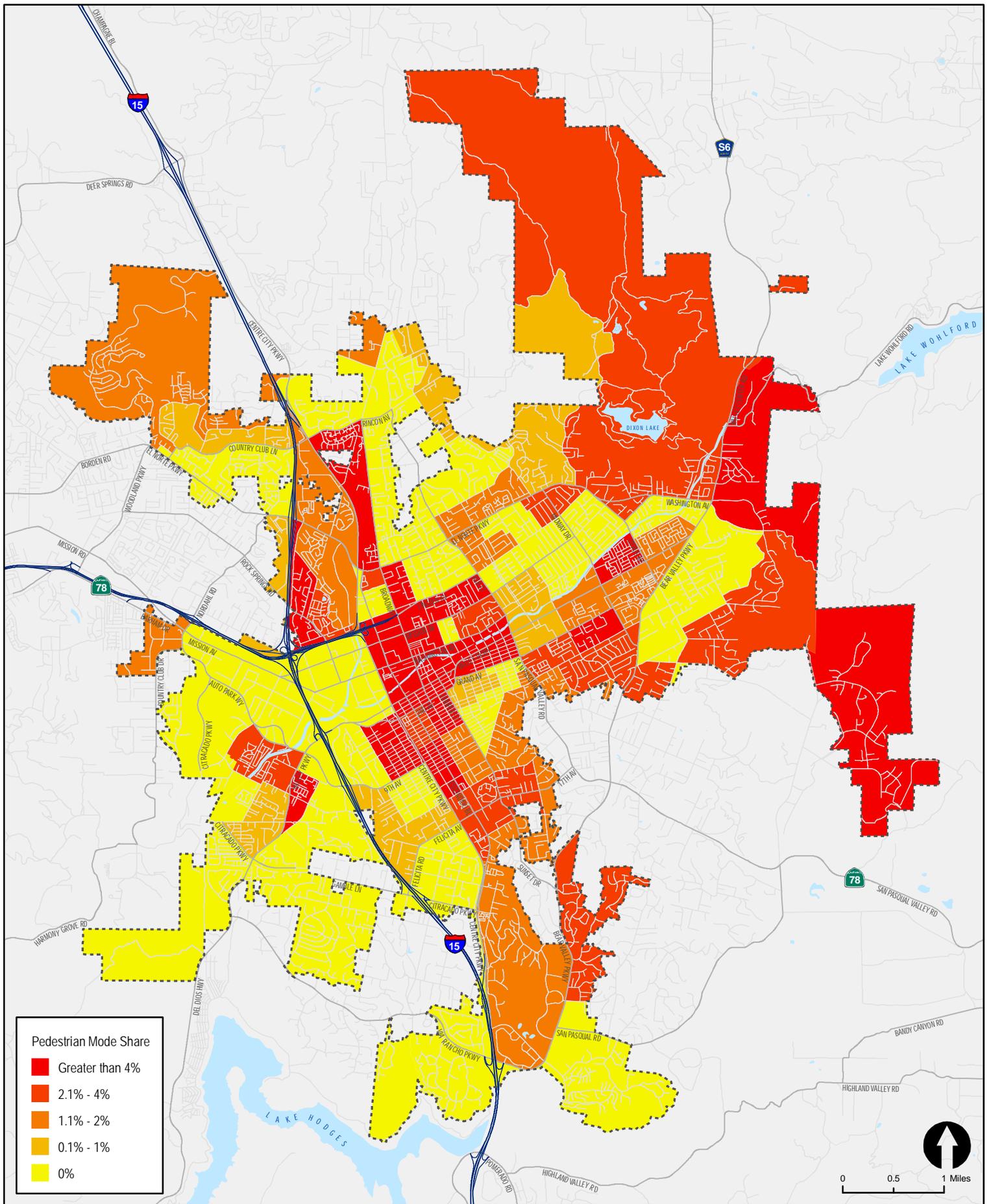


4.3.1 Pedestrian Collisions Assessment

Figure 4-6 displays citywide pedestrian-involved collisions. Based on the assessment, there were 270 pedestrian-vehicle collisions during the period between 2006 and 2010. **Table 4-6** shows the intersection locations which experienced three collisions. Another 17 locations had two pedestrian collisions over the time period. **Table 4-7** shows the General Plan circulation element study roadway segments with the highest total number of pedestrian collisions.

TABLE 4-6
INTERSECTIONS WITH HIGHEST PEDESTRIAN COLLISION RATES

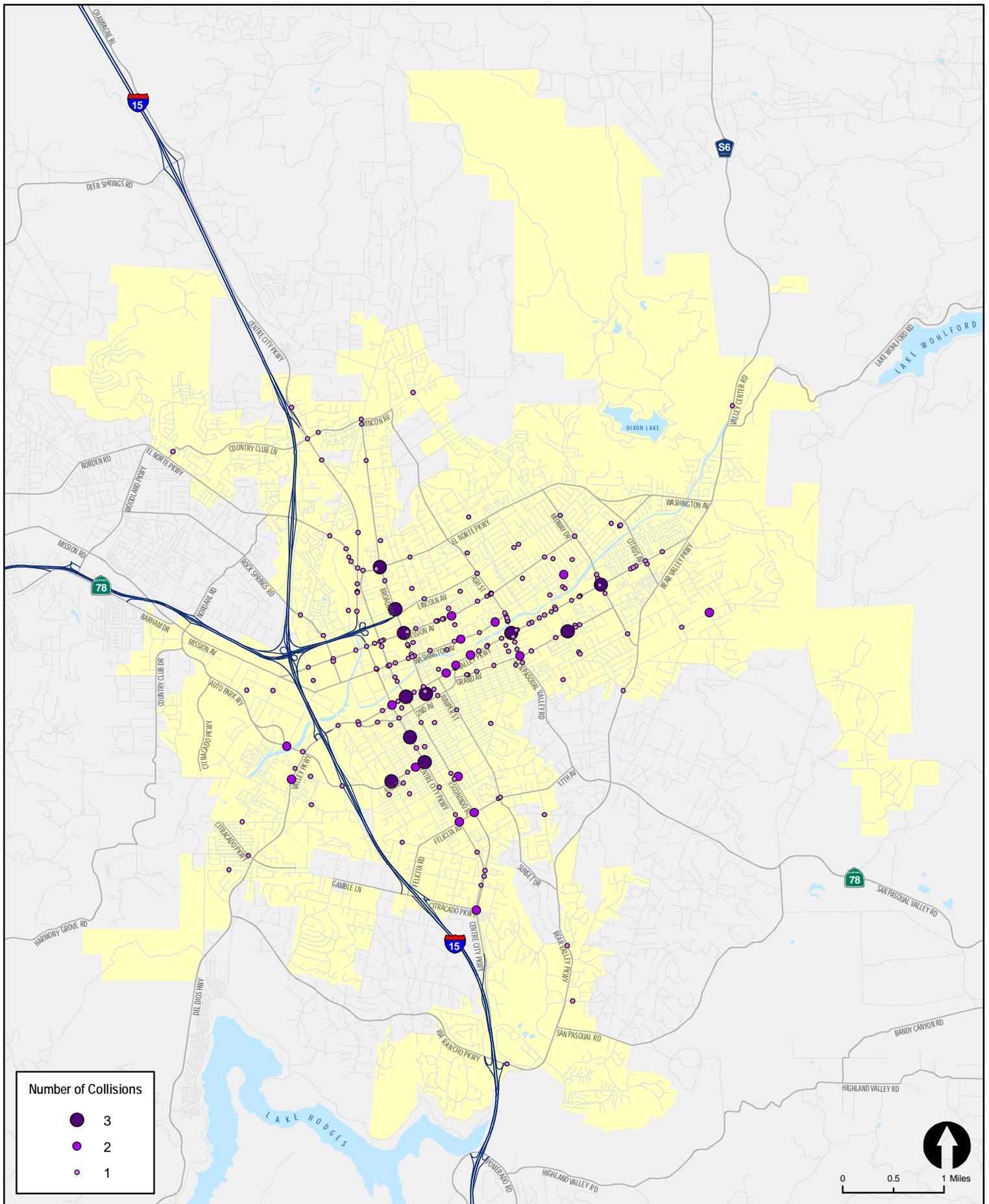
Intersection	Number of Collisions (2006-2010)
Broadway / El Norte Parkway	3
Broadway / Mission Avenue	3
Tulip Street / Ninth Avenue	3
Ash Street / Valley Parkway	3
Rose Street / Grand Avenue	3
Broadway / Grand Avenue	3
Centre City Parkway / 5 th Avenue	3
Broadway / Lincoln Avenue	3
Centre City Parkway / 9 th Avenue	3
Midway Drive / Valley Parkway	3
Escondido Boulevard / Valley Parkway	3



Source: US Census (2000)



Figure 4-5
Pedestrian Commuter Mode Share in Escondido
 Escondido General Plan



Source: SWITRS (2010)

Figure 4-6
Pedestrian-Involved Collisions in Escondido (2006-2010)
 Escondido General Plan

**TABLE 4-7
ROADWAY SEGMENTS WITH HIGHEST PEDESTRIAN COLLISION RATES**

Street	From	To	Number of Collisions (2006-2010)
Ash Street	Valley Parkway	Grand Avenue	8
Valley Parkway	Rose Street	Midway Drive	8
Ash Street	Washington Avenue	Valley Parkway	7
Broadway	Mission Avenue	Washington Avenue	7
Centre City Parkway	5 th Avenue	9 th Avenue	7
Grand Avenue	Ash Street	Rose Street	7
Valley Parkway	Ash Street	Harding Street	7
Valley Parkway	Midway Drive	Citrus Avenue	7

4.4 TRANSIT

Transit includes a variety of transportation modes that provide mobility to the public in shared vehicles, ranging from shared taxis and shuttle vans, to local and intercity buses, and passenger rail. Transit plays an integral role in improving national prosperity, equity and mobility, and has been cited as crucial part of the solution to economic, energy, and environmental challenges - helping to bring a better quality of life.



Escondido is served by the North County Transit District (NCTD), which includes the cities of Escondido, San Marcos, Vista, Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar and portions of the unincorporated county. From Escondido’s multimodal transit center NCTD operates the Breeze bus system, with bus stops located throughout the community, and also manages the Sprinter light rail line that provides passenger service from Escondido to Oceanside.

Transit is envisioned to help Escondido’s crowded network by providing energy efficient, pollution-reducing transportation choices, thereby reducing greenhouse gas (GHG) emissions--and increased usage could have an even greater impact in the future. Additionally, transit continues to be one of the safest modes of travel in the United States. Studies indicate that riding a transit bus is 91 times safer than car travel.

Transit offers many economic benefits for the individual rider and the community. The American Automobile Association cost of driving a single-occupant vehicle compared with one adult’s average fee for traveling on transit is several thousand dollars savings per year, depending upon mileage, time of day, type of vehicle or service. For communities, land values are increased near convenient transit,

which is viewed as a public amenity. Additionally, areas well-served by transit stimulate economic development and increase local sales and property tax revenues.

The San Diego Association of Governments (SANDAG), in cooperation with the City of Escondido and NCTD, initiated a Bus Rapid Transit (BRT) service that provides a “rapid bus” connection along Escondido Boulevard between the Escondido Transit Center and Westfield Shoppingtown. This service also connects to the SPRINTER passenger rail line at Escondido Transit Center, to existing Metropolitan Transit System services, and to future I-15 BRT services.



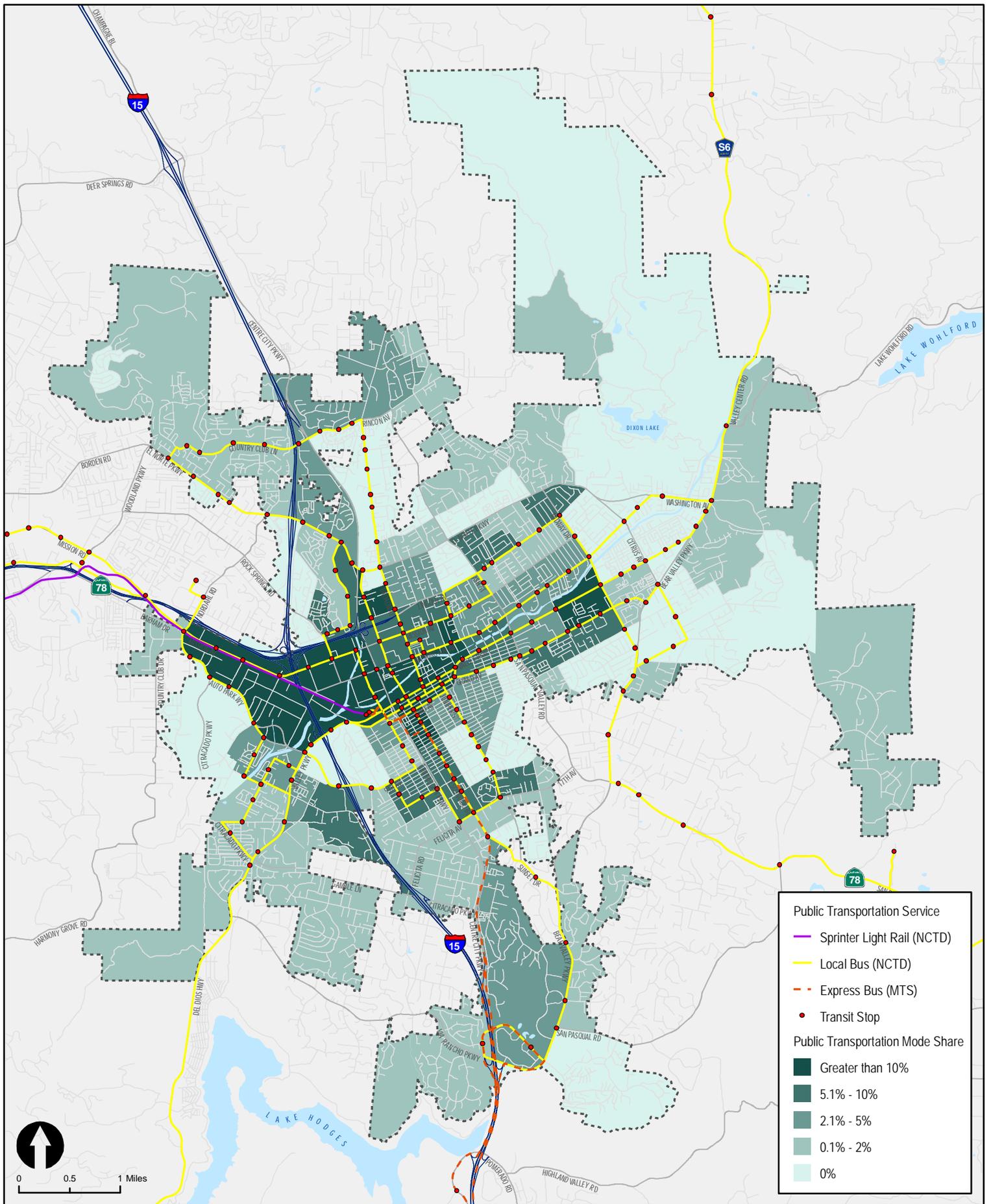
The many benefits derived from a robust transit system establish the basis for its inclusion in Escondido’s vision of building a stronger community. Transit is a key feature in smart growth complete streets by creating corridors that become natural focal points for economic and social activities. Studies have shown that the ability to travel in an area conveniently, without a car, is an important component of a community’s livability. These activities help create strong neighborhood centers that are more economically stable, safe and productive.

4.5 CHILDREN

As described in Section 4.3, ensuring that streets and intersections are accessible to children ensures safety, opportunities for physical activity and a pleasant pedestrian experience for everyone.

There are approximately 37,000 children (under the age of 16) in the City of Escondido, based on 2000 Census Information comprising 28% of the city's population. **Figure 4-8** displays the geographic distribution of youth population. The figure also shows the locations of schools throughout the city. There is a slightly higher proportion of youth in the downtown and slightly less proportion in the outer parts of the city, particularly in the northwest quadrant (north of State Route 78 and west of Interstate 15).

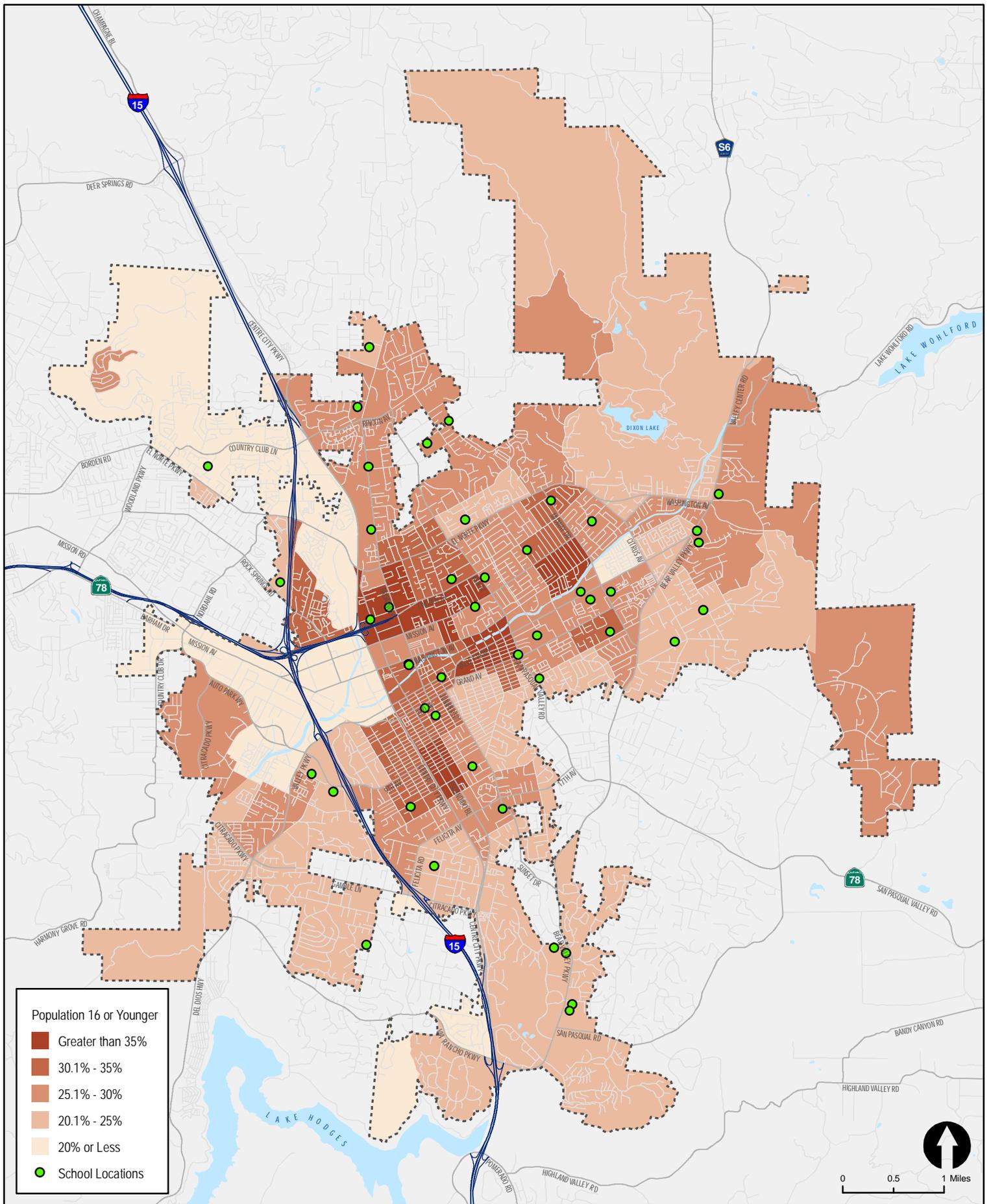
Figure 4-9 displays the locations of pedestrian collisions involving youth under the age of 16.



Source: US Census (2000)



Figure 4-7
Existing Public Transportation and Public Transportation Mode Share in Escondido
 Escondido General Plan



Source: US Census (2000)



Figure 4-8
Percentage of Youth (Age 16 or Younger) Population
 Escondido General Plan

4.6 SENIORS

As described in Section 4.3, ensuring that streets and intersections are accessible to seniors ensures safety, opportunities for physical activity and a pleasant pedestrian experience for everyone.

Based on 2000 Census information, there are 14,722 senior citizens living in the City of Escondido, representing a total of about 11% of the city's population. **Figure 4-10** displays the geographic distribution of the senior population. As shown, there is a high concentration of seniors living in the northwest quadrant of the city that is disproportionate to the percentage of seniors citywide.

Figure 4-11 displays pedestrian collisions involving senior citizens (age 65 or older). There were 30 pedestrian collisions involving senior citizens, including two at the intersection of Escondido Boulevard and Valley Parkway.

4.7 DISABLED

As described in Section 4.3, streets and intersections should be accessible to the disabled. Additionally, guidelines for accessibility included in American with Disabilities (ADA) design standards call for the inclusion of ADA improvements when designing, constructing, and/or altering buildings and facilities to the extent required by regulations issued by Federal agencies, including the Department of Justice, under the ADA Act of 1990.



There are 24,134 persons with a disability living in Escondido based on 2000 Census information, totaling about 20% of the population for whom disabled status is determined. **Figure 4-12** displays the geographic distribution of the disabled population. As shown, there are higher concentrations of disabled persons in the downtown and in the southwest quadrant.

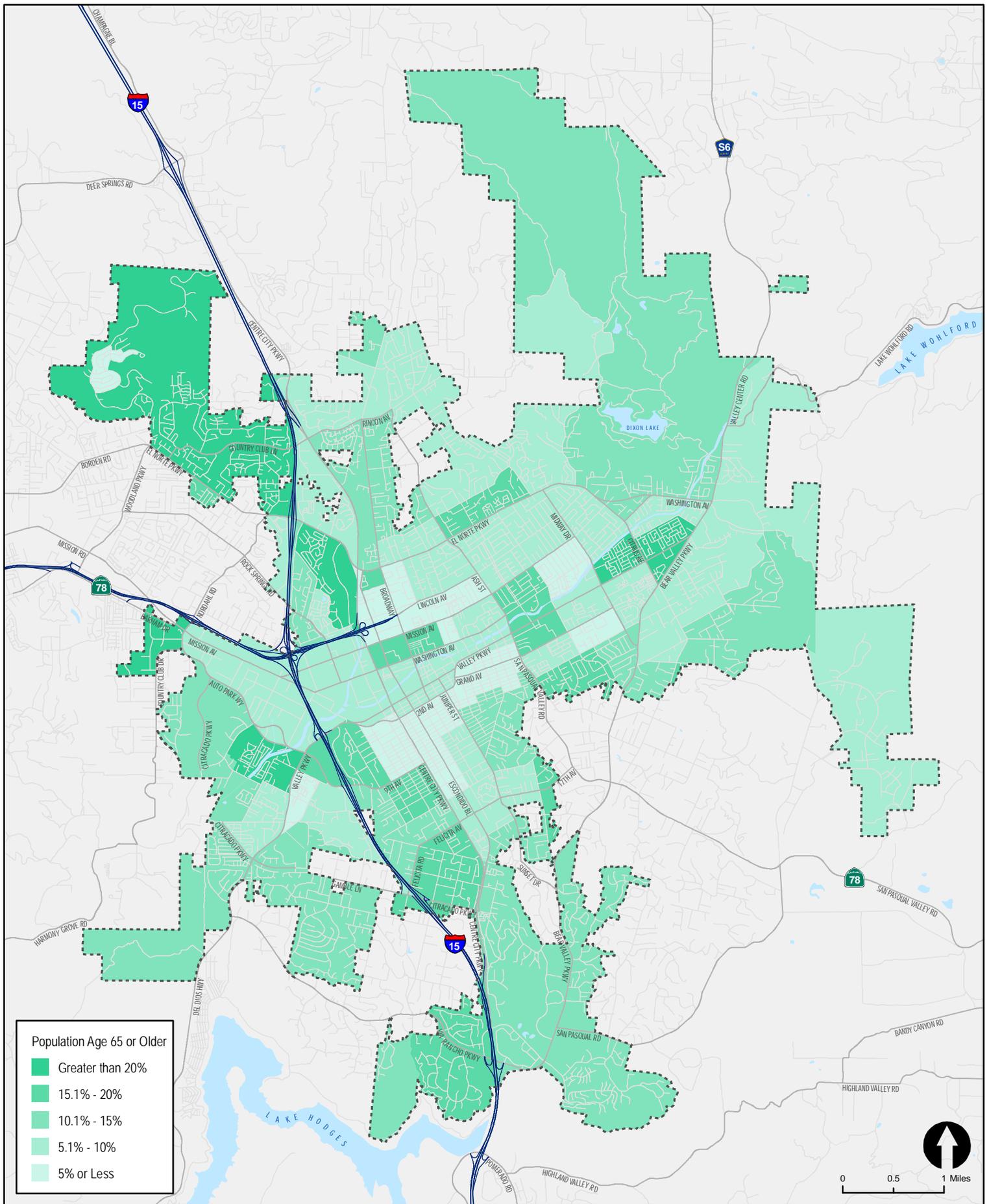
4.8 GOODS

Transportation is central to Escondido's economic competitiveness. The retail, manufacturing, finance, insurance, real estate, and service sectors of Escondido's economy make up a large percentage of the city's revenue sources. Interstate 15 and State Highway 78, as well as the NCTD rail line providing freight service, comprise a critical component of the city's circulation system.

Ensuring an efficient city street system to facilitate the movement of goods and services helps ensure that those revenues remain reliable.

Escondido's rail line from Oceanside that offers North County Transit District (NCTD) passenger service also provides freight service on a scheduled basis. The rail line played an important role in Escondido's early history years when transporting agricultural goods was the community's primary revenue generator. Rail freight service has played a declining role in Escondido's circulation system over the past several decades. However, policies are included in the General Plan to guide this transportation component.

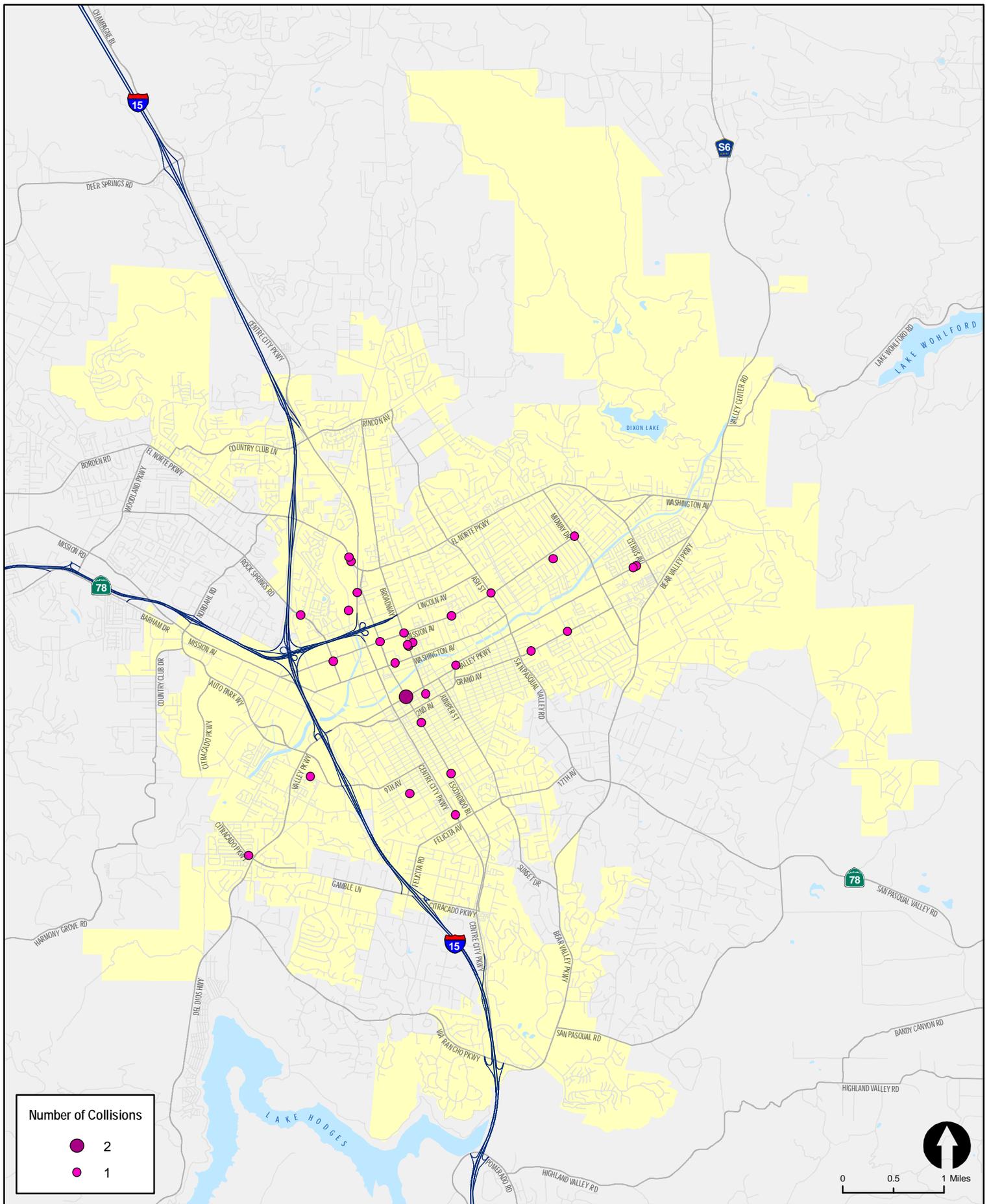
Truck transport of goods on local surface streets is the most frequent method of delivery for products in the community. Designating appropriate truck routes are important for balancing quality of life factors for quiet residential neighborhoods and for maintaining economic interests that ensure efficiency in service. Truck routes were provided within the City to control the size and type of trucks that travel within an area of the city, thereby lessening the impact on residents.



Source: US Census (2000)

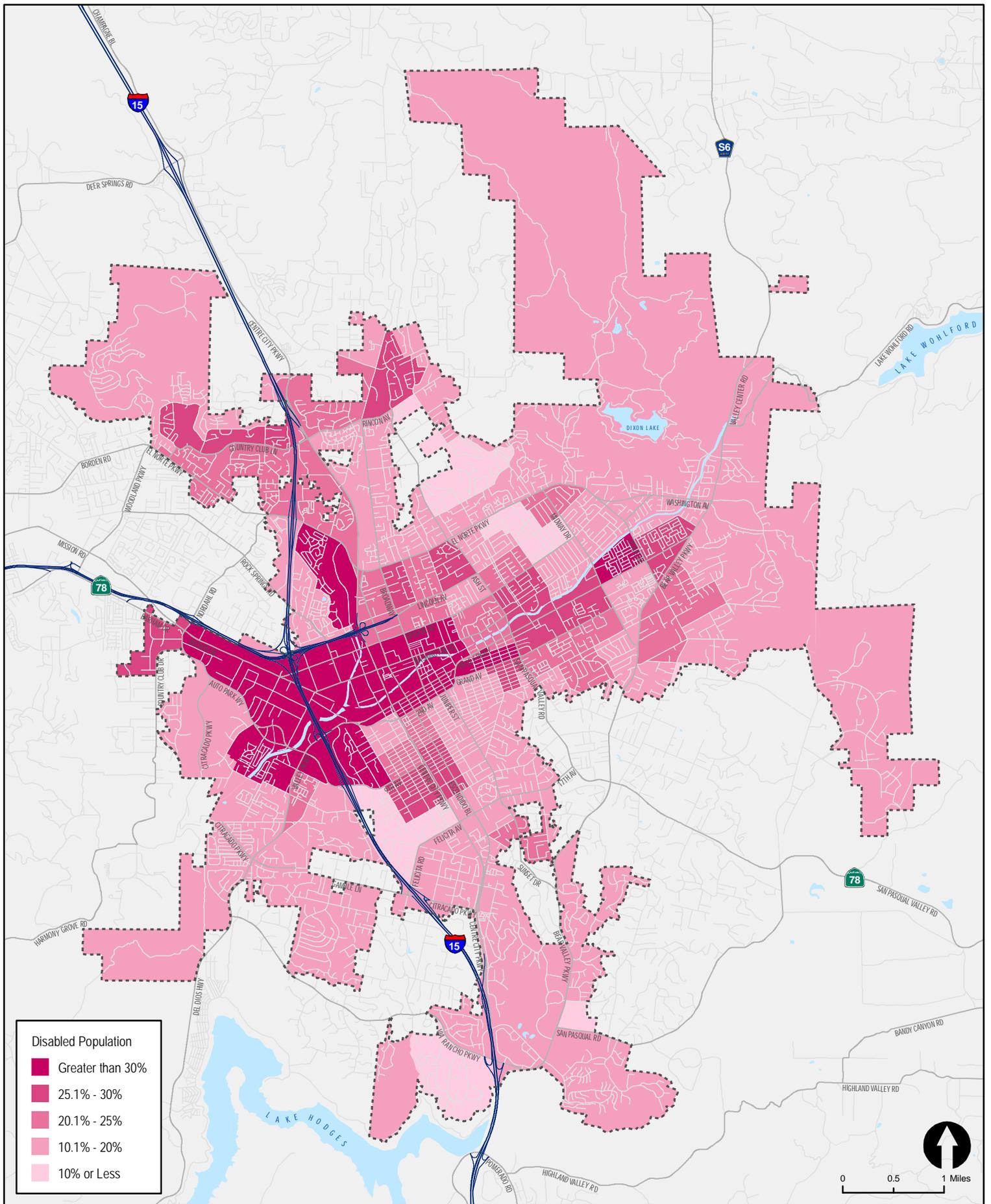


Figure 4-10
Percentage of Senior (Age 65 or Older) Population
 Escondido General Plan



Source: SWITRS (2010)

Figure 4-11
Pedestrian-Involved Collisions in Escondido (2006-2010) with Victims 65 Years or Older
Escondido General Plan



Source: US Census (2000)



Figure 4-12
Percentage of Population with Disability (Ages 5 or Older)
 Escondido General Plan

5.0 CORRIDOR COMPLETE STREETS ASSESSMENT

The Complete Street Assessment includes an analysis of a street's multimodal access, safety and convenience for user groups. The Assessment includes an evaluation of the following four principal corridors within, and adjacent to, Escondido's Downtown Area:

- Escondido Boulevard (between Washington Avenue and Ninth Avenue)
- Broadway (between Lincoln Parkway and Third Avenue)
- Valley Parkway (between Quince Street and Hickory Street)
- Second Avenue (between Quince Street and Valley Boulevard)

Results of the multimodal performance are outlined for each corridor in the following chapters.



6.0 ESCONDIDO BOULEVARD'S COMPLETE STREETS ASSESSMENT

This chapter evaluates Escondido Boulevard between Washington Avenue and Ninth Avenue regarding multimodal access, safety and convenience for each user group and provides recommendations accordingly. The chapter is divided in the following four sections:

- Infrastructure Assessment
- Mode Share Assessment
- Collision Assessment
- Complete Streets Analysis

Recommendations based on the above, the analysis in the Escondido General Plan Traffic Report, and the proposed land uses in the General Plan are provided in Chapter 10.0.

6.1 EXISTING INFRASTRUCTURE ASSESSMENT

6.1.1 Motorists and Goods

Escondido Boulevard is classified as a Collector on Escondido's Circulation Element and is aligned in a north / south direction. The Boulevard is currently built as a four-lane roadway with a center two-way left turn lane from Washington Avenue to 5th Avenue and as a two-lane roadway with a center two-way left turn lane from 5th Avenue to 9th Avenue. Curbside parking is intermittently provided. Two aerial views of Escondido Boulevard can be seen below:



The specific study area along Escondido Boulevard includes the following street segments:

Escondido Boulevard

- Washington Avenue to Woodward Avenue
- Woodward Avenue to Signature Pavilions
- Signature Pavilions to Valley Parkway
- Valley Parkway to Grand Avenue
- Grand Avenue to 2nd Avenue
- 2nd Avenue to 5th Avenue
- 5th Avenue to 9th Avenue

6.1.2 Bicyclists

Escondido Boulevard does not have any bicycle facilities, although a Class II bike lane exists on Centre City Parkway, a parallel arterial one block to the west. Existing bicycle facilities within the vicinity of the study corridor are shown in **Figure 6-1**. As noted in Chapter 4.0, Class II bikeways (bike lanes) for preferential use by bicyclists are installed within the paved area of roadways adjacent to vehicle lanes through identifiable pavement striping and markings and signage. The width of bicycle lanes varies depending on parking and street conditions.

6.1.3 Pedestrians, Children, Seniors and Disabled

The Escondido Boulevard study roadway segments provide sidewalks along both sides of the street for pedestrian use. These sidewalks have an average width of 12 feet. Marked crosswalks are not prevalent at the intersections along Escondido Boulevard. However, pedestrian signals and push buttons are commonly found at the signalized intersections.

6.1.4 Transit

The subject portion of Escondido Boulevard has three North County Transit District (NCTD) *Breeze* local bus transit routes, 350, 354 and 356 and one Metropolitan Transit System (MTS) express route, 810. **Figure 6-2** displays the routes and bus stops along the study corridor and the service provided by each of the routes is summarized in the following paragraphs:

NCTD *Breeze* Route 350 provides Bus Rapid Transit (BRT) local bus service between Escondido Transit Center and Del Lago Park and Ride via Escondido Boulevard, Sunset Drive and Bear Valley Parkway. Bus frequency along this route typically ranges between 10 and 15 minutes all day, which are among the highest bus frequencies within the North County Transit District.

NCTD *Breeze* Route 354 provides local bus service between Escondido Transit Center and Orange Glen High School in eastern Escondido. This route accesses Escondido Boulevard between Grand Avenue and Mission Avenue, before heading eastward at Mission. Route 354 provides 30 minute frequencies all day.

NCTD *Breeze* Route 356 is a one-way loop route running clockwise providing local bus service in central Escondido. This route utilizes Escondido Boulevard southbound between El Norte Parkway and Valley Parkway. At its northernmost point, the service extends up to Morning View Drive and El Norte Parkway and passes Escondido Transit Center at its southernmost point. Escondido Boulevard southbound comprises the entire easternmost extent of the loop. Route 356 provides 30 minute frequencies all day.

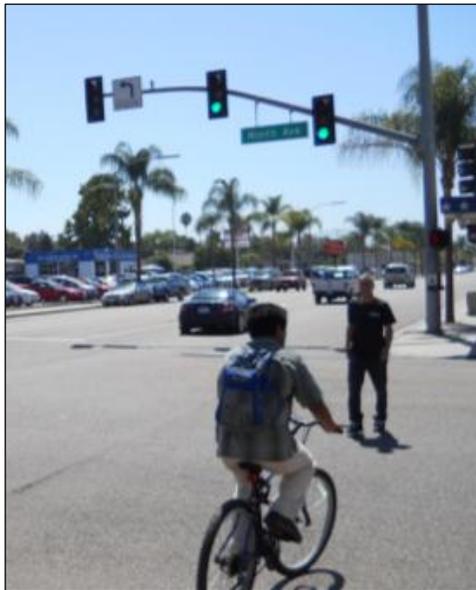
MTS Premium Express Route 810 is a rush-hour only express bus route that provides bus service to downtown San Diego. The southbound route utilizes Escondido Boulevard between Grand Avenue and Felicita Avenue, picking up passengers at bus stops on 9th Avenue and Felicita Avenue before eventually entering the Interstate 15 high-occupancy toll lanes in southern Escondido. When heading north-bound, the route first stops at Escondido Transit Center and then proceeds south on Escondido Boulevard stopping at 9th Avenue and terminating at Felicita Avenue. This service only runs during weekday rush hour periods, with the AM direction heading toward San Diego and the PM direction heading toward Escondido.

6.2 EXISTING MODE SHARE ASSESSMENT

Table 6-1 shows the distribution of journey-to-work mode share for Escondido Boulevard, the City of Escondido and the San Diego region. **Figure 6-3** displays the percentages of public

transportation, walking and bicycling commuters in the census tracts surrounding the Escondido Boulevard study corridor. The census tracts within a quarter mile of the Escondido Boulevard study corridor have an automobile commuter mode share well below the city average. Transit commuting mode share is particularly high in the blocks adjacent this corridor, with an average mode share of over 8% and one census tract nearly 15%. These totals represent some of the highest public transportation mode share in the northern San Diego County area.

Pedestrian commuting is also common in the blocks surrounding this area with the average mode share for pedestrians estimated to be 8%. Bicycle commuting is not as prevalent as commuting by transit or walking, though percentages for this mode (3%) within the census tracts surrounding Escondido Boulevard are still well above the city and regional average of 1%.



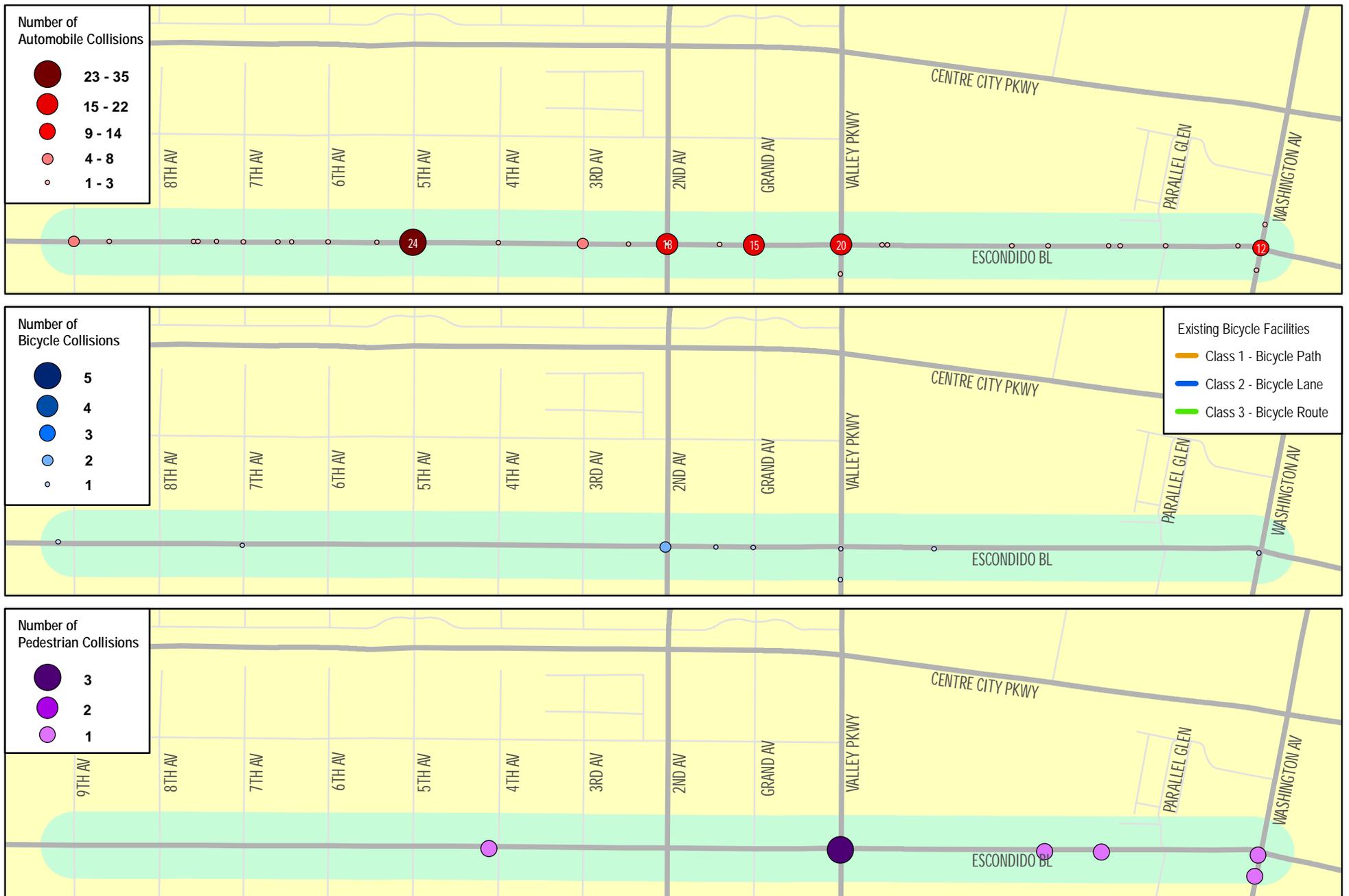
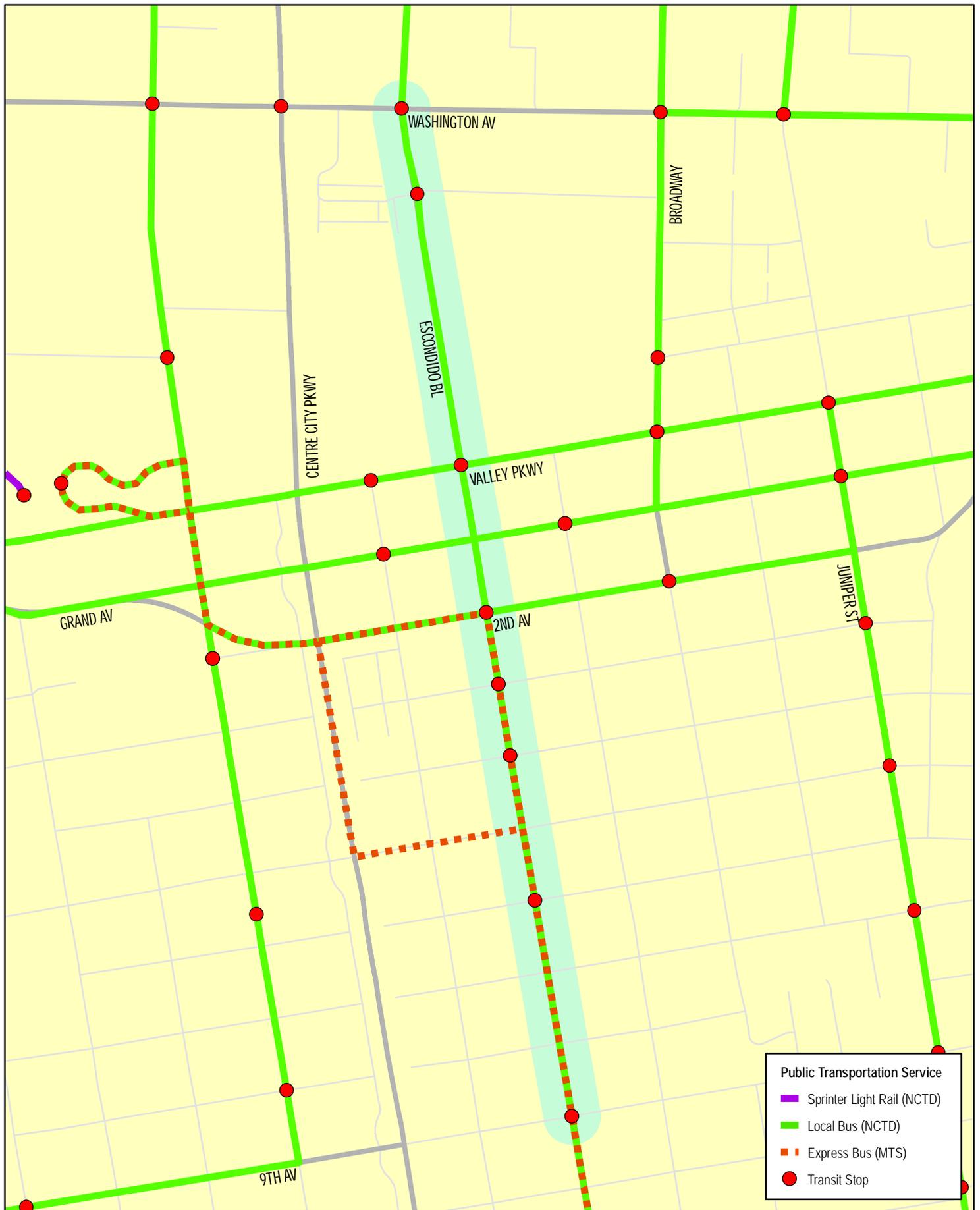


Figure 6-1
Automobile, Bicycle and Pedestrian Collisions along Escondido Boulevard Corridor (2006-2010)
Escondido General Plan



Source: SANDAG (2011)

Figure 6-2
Existing Public Transportation Service along Escondido Boulevard Corridor
Escondido General Plan



Source: US Census (2000)

Figure 6-3
Commuter Mode Share along Escondido Boulevard Corridor
Escondido General Plan

TABLE 6-1
ESCONDIDO BOULEVARD'S JOURNEY TO WORK MODE SHARE COMPARISON

Travel Mode	0.25 mile radius from Escondido Boulevard ^a	City of Escondido	San Diego Region
Automobile (including Carpool)	79.2%	90%	87%
Public Transportation	8.3%	3%	3%
Walking	8.0%	2%	3%
Bicycling	3.3%	1%	1%
Other ^b	1.2%	4%	6%

Footnotes:

a. GIS calculation estimate

b. Other includes worked from home, motorcycle and other means

Source: US Census (2000)

6.3 EXISTING COLLISION ASSESSMENT

Figure 6-1 displays vehicle collisions involving automobiles, bicyclists and pedestrians along the Escondido Boulevard study area between Washington Avenue and 9th Avenue. There were 89 automobile collisions reported during the period between 2006 and 2010, 71 of which took place at roadway intersections. The intersection of Escondido Boulevard and 5th Avenue had the most of any intersection within the corridor with 24 collisions. The intersection of Escondido Boulevard and Valley Parkway had 20 collisions. Several other intersections within the study corridor had between 12 and 16 collisions reported.

There were 9 collisions involving a bicyclist that took place along the study corridor, with two occurring at Escondido Boulevard and 2nd Avenue. Three collisions took place at midblock locations, while six collisions were at the intersection.

There were a total of 7 collisions involving a pedestrian that occurred along the corridor, with three instances at the intersection of Escondido Boulevard and Valley Parkway. Three collisions took place at midblock locations, while four collisions were at the intersection.



6.4 COMPLETE STREETS ANALYSIS

6.4.1 Complete Streets Analysis Overview

Urban streets typically service multiple travel modes, in particular the automobile, pedestrian, bicycle, and transit modes. Travelers associated with each of these modes perceive the service provided to them by the urban street in different ways. Design or operational decisions that are intended to improve the service provided to one mode using an urban street can have both adverse and beneficial impacts on the service provided to other modes. The challenge is to design and operate an urban street in such a way that all relevant travel modes are reasonably accommodated.

The National Cooperative Highway Research Program (NCHRP) Project 3-70 developed a multimodal level of service (MMLOS) method to analyze the performance of urban streets from the perspective of all users of the street. Particular attention was paid to consistency in level of service (LOS) grades across modes and the interaction among the modes in an urban street setting. The LOS grades are directly based on users' perception of urban street service quality. This method was tested in ten metropolitan areas around the United States, including San Diego, and the results were evaluated by the local agency as to its suitability. The MMLOS method of analysis is more enhanced than methods found in the *2000 Highway Capacity Manual (HCM2000)*. The MMLOS models were incorporated into Chapters 16 and 17 of the *2010 Highway Capacity Manual (HCM2010)*. This analysis was conducted for all four study segments.



6.4.2 Complete Streets Analysis Methodology

LOS is a term used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as street design, traffic devices, traffic volumes and speed, frequency and reliability of transit services, and safety. Level of service provides an index to the operational qualities of a roadway segment. Level of service designations range from A to F, with LOS A representing the best quality of service and LOS F representing the worst quality of service.

The MMLOS analysis produces four separate LOS grades, one for each travel mode (automobile, bicycle, pedestrian, bus). The LOS grades are calculated using a unique model for each mode that processes various factors affecting the degree to which the study roadway segment meets the needs of the traveler. The study roadway segments are determined using a signalized intersection or ramp terminal as a segment boundary. The required input data can be gathered during a field visit or through information readily available on the internet.



Source: Florida Department of Transportation 2002 Quality /Level of Service Handbook, Figure 1-2.

The study roadway segments were analyzed in the AM and PM peak hour conditions. Each model produced a numerical score for both directions of travel along the segment. The LOS scores for each travel mode were determined based upon the procedures found in the *NCHRP Report 616* and Chapter 17 of the *2010 Highway Capacity Manual*, with the assistance of the *CompleteStreetsLOS* (version 1.1) computer software. The numerical scores were qualified with a corresponding LOS letter grade, as shown in **Table 6-2**. A graphical representation of the LOS definitions for automobile, pedestrian, bicycle and transit facilities is shown above.

TABLE 6-2
LOS LETTER GRADE NUMERICAL EQUIVALENTS

LOS Model Outputs	LOS Letter Grade
Score \leq 2.00	A
2.00 < Score \leq 2.75	B
2.75 < Score \leq 3.50	C
3.50 < Score \leq 4.25	D
4.25 < Score \leq 5.00	E
Score > 5.00	F

6.4.3 Existing Analysis Inputs

The MMLOS analysis requires greater data collection than for traditional auto LOS analysis. *Google Earth*, *Google Maps*, and recent in-house data were used to determine the appropriate inputs, such as the number of lanes, number of trees and barriers along the sidewalks, number of driveways, speed limits, median types, traffic volumes, and number of bus stops along each roadway segment. Information on the transit services, such as bus route, schedules, and on-time performance, were obtained from the North County Transit District website. From this, the transit speed and frequency were calculated for both directions of each segment. Using recent average daily traffic (ADT) counts, the peak hour and direction factors were calculated for each study corridor.



6.4.4 Existing Multimodal Operations

Escondido Boulevard

Table 6-3 summarizes the peak hour performance on Escondido Boulevard for existing conditions from the perspective of bus passengers, pedestrians, and bicyclists. A graphical summary of the analysis results is shown in **Figure 6-4**. The results of the auto LOS analysis are not shown but are included in the General Plan Update traffic study. As seen in **Table 6-3**, the following roadway segments are calculated to currently operate at an unacceptable level of service (LOS E or F) in terms of their bicycle facility:

- Washington Avenue to Woodward Avenue: The bicycle facility is operating at an unacceptable level of service along the northbound direction of this segment during both the AM and PM peak hours. This is due to the high traffic volumes and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The short segment length between signalized intersections and number of driveways along the right side of the segment are also factors since they contribute to the amount of potential conflict areas between bicyclists and moving vehicles.
- Woodward Avenue to Signature Pavilions: The bicycle facility is operating at an unacceptable level of service along the northbound direction of this segment during the PM peak hours. This is due to the high traffic volumes and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane).
- Signature Pavilions to Valley Parkway: The bicycle facility is operating at an unacceptable level of service along the northbound direction of this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane).

Valley Parkway to Grand Avenue: The bicycle facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways along the right side of the segment is also a factor because they contribute to the amount of potential conflict areas between bicyclists and moving vehicles.

- Grand Avenue to 9th Avenue: The bicycle facility is operating at an unacceptable level of service along the southbound direction of this segment during both the AM and PM peak hours. This is due to the high traffic volumes, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways and unsignalized intersections along the right side of the segment are also factors because they contribute to the amount of potential conflict areas between bicyclists and moving vehicles.

TABLE 6-3
ESCONDIDO BOULEVARD - STREET SEGMENT OPERATIONS

Escondido Boulevard		Transit LOS		Pedestrian LOS		Bicycle LOS	
		AM	PM	AM	PM	AM	PM
Washington Ave to Woodward Ave	Northbound	C	D	C	C	F	F
	Southbound	D	C	C	C	D	D
Woodward Ave to Signature Pavilions	Northbound	D	D	C	C	D	E
	Southbound	C	B	C	C	D	D
Signature Pavilions to Valley Pkwy	Northbound	B	B	B	B	E	E
	Southbound	C	B	C	C	D	D
Valley Pkwy to Grand Ave	Northbound	B	B	C	C	F	F
	Southbound	B	B	C	C	F	F
Grand Ave to 2 nd Ave	Northbound	B	B	C	C	D	D
	Southbound	C	B	C	B	F	E
2 nd Ave to 5 th Ave	Northbound	B	B	B	C	D	D
	Southbound	B	B	B	B	E	E
5 th Ave to 9 th Ave	Northbound	B	B	B	C	D	D
	Southbound	C	B	C	B	E	E

General Notes:

1. LOS – Level of Service
2. Auto LOS can be found in the Escondido General Plan Update Traffic Study

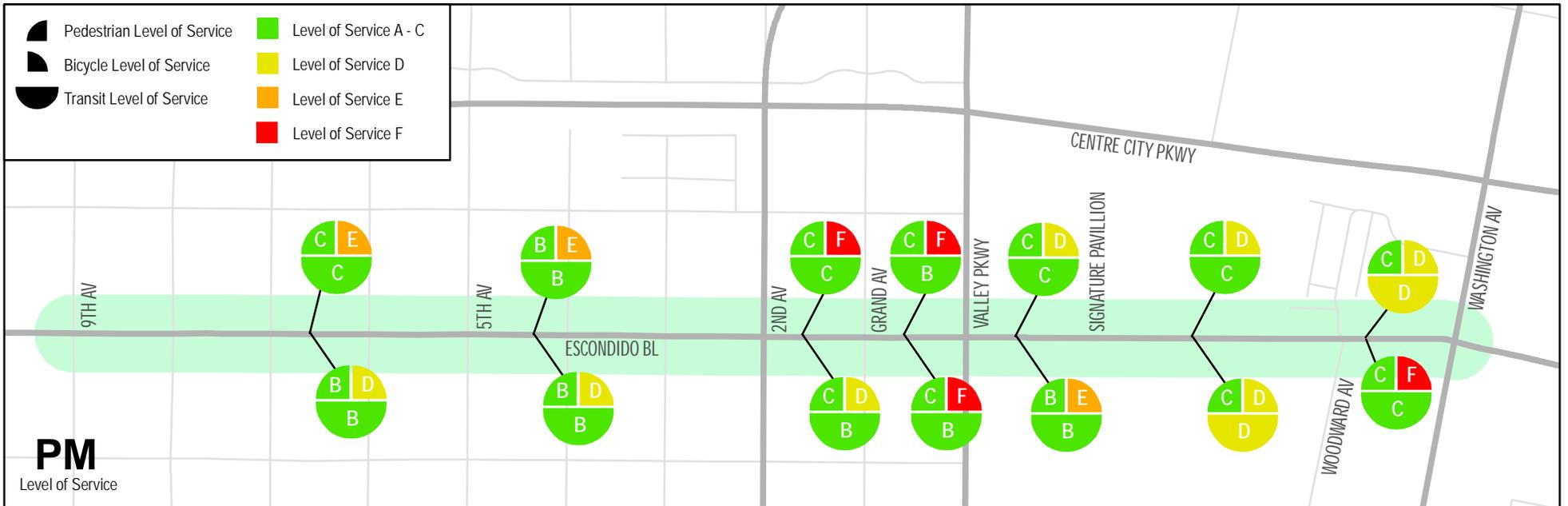
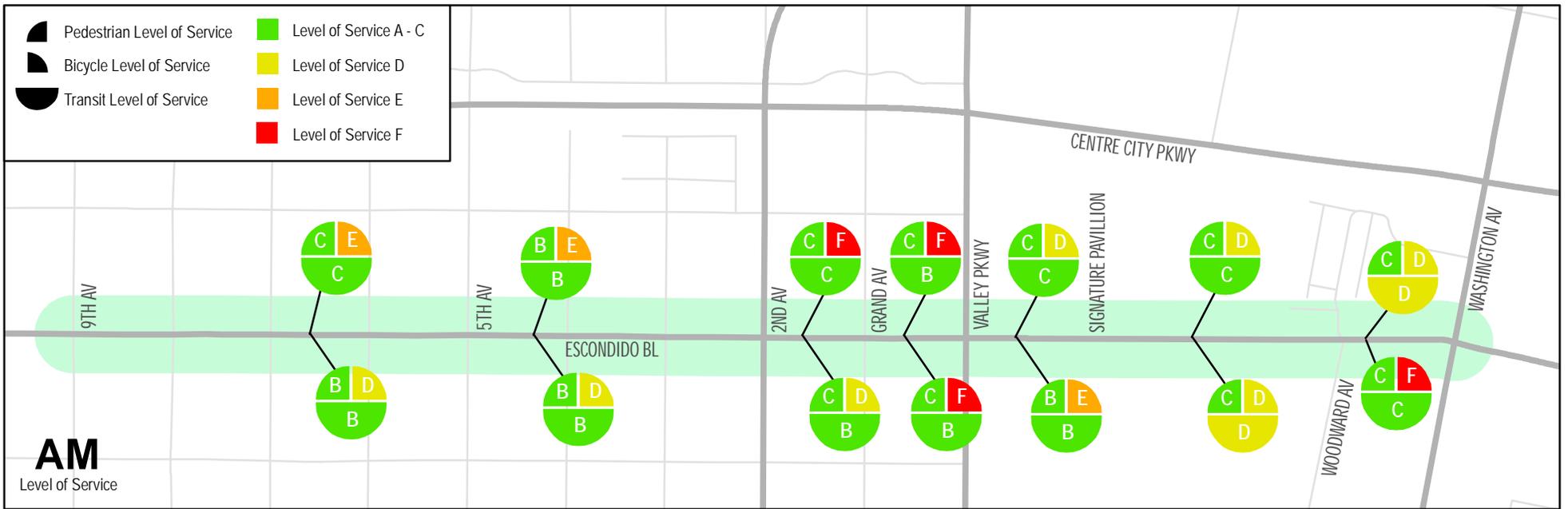


Figure 6-4
Complete Streets Level of Service along Escondido Boulevard Corridor
Escondido General Plan

7.0 BROADWAY'S COMPLETE STREETS ASSESSMENT

This chapter evaluates Broadway between Lincoln Parkway and Third Avenue regarding multimodal access, safety and convenience of the following all user groups and provides recommendations accordingly. The chapter is divided in the following four sections:

- Infrastructure Assessment
- Mode Share Assessment
- Collision Assessment
- Complete Streets Analysis

Recommendations based on the above, the analysis in the Escondido General Plan Traffic Report, and the proposed land uses in the General Plan are provided in Chapter 10.0.

7.1 EXISTING INFRASTRUCTURE ASSESSMENT

7.1.1 Motorists and Goods

Broadway is classified as a Collector on Escondido's Circulation Element and is aligned in a north / south direction. The street is currently built as a four-lane roadway with a center two-way left turn lane from Lincoln Parkway to Grand Avenue and as a two-lane roadway with a center two-way left turn lane from Grand Avenue to 3rd Avenue. Curbside parking is intermittently provided. Two aerial views of Broadway can be seen below:



The specific study area along Broadway includes the following street segments:

Broadway

- Lincoln Parkway to Mission Avenue
- Mission Avenue to Washington Avenue
- Washington Avenue to Valley Parkway
- Valley Parkway to Grand Avenue
- Grand Avenue to 3rd Avenue

7.1.2 Bicyclists

Broadway does not have any bicycle facilities, although two major bikeways terminate at Broadway: The eastern segment of the Escondido Creek Bikeway, a physically separated Class I bicycle path that traverses the City of Escondido, terminates near Broadway and Clark Street. This bicycle path extends 4.25 miles east along Escondido Creek and terminates at the intersection of Lake Wohlford Road and Valley Center Road. The Class II bike lane along Mission Avenue terminates at Broadway. Mission Avenue provides a continuous Class I and Class II bicycle facility from the bike lane's terminus at Broadway to the City of San Marcos. Existing bicycle facilities within the vicinity of the study corridor are shown in **Figure 7-1**.

As noted in Chapter 4.0, Class I bike paths provide a facility for the exclusive use of bicycles and pedestrians. Motor vehicles are excluded except for maintenance, security, or emergencies vehicles. Similarly Class II bikeways (bike lanes) for preferential use by bicyclists are installed within the paved area of roadways adjacent to vehicle lanes through identifiable pavement striping and markings and signage. The width of bicycle lanes varies depending on parking and street conditions.

7.1.3 Pedestrians, Children, Seniors and Disabled

The Broadway study roadway segments provide sidewalks along both sides of the street for pedestrian use. These sidewalks have an average width of 12 feet. Marked crosswalks are not prevalent at the intersections along Broadway. However, pedestrian signals and push buttons are commonly found at the signalized intersections.

7.1.4 Transit

There are two North County Transit District (NCTD) *Breeze* bus transit routes that use 2nd Avenue corridor for a brief segment, primarily to access the Escondido Transit Center, located a block to the north. **Figure 7-2** displays the routes



and transit stops along the study corridor. The transit routes which traverse the corridor are summarized in the following paragraphs:

NCTD Breeze Routes 351/352 provides bi-directional loop service on an east-west axis through central Escondido. The routes primarily traverse clockwise and counter-clockwise along Washington and Grand Avenues while also service the Escondido Transit Center. These routes run along Broadway between Washington Avenue and Grand Avenue and provide 30 minute frequencies all day.

NCTD Breeze Routes 358/359 provides bi-directional loop service between Escondido Transit Center and Northern Escondido along El Norte Parkway, Country Club Lane and Broadway. These routes utilize Broadway between the El Norte Parkway and Valley Parkway. These two routes provide two hour frequencies all day.

7.2 EXISTING MODE SHARE ASSESSMENT

Table 7-1 shows the distribution of journey to work mode share for Broadway, the City of Escondido and the San Diego region. **Figure 7-3** displays the percentages of public transportation, walking and bicycling commuters in the census tracts surrounding the Broadway study corridor. The census tracts within a quarter mile of the Broadway study corridor have an automobile commuter mode share well below the city average. Transit commuting mode share is very high in the blocks adjacent this corridor, with an average mode share of over 8%.

Pedestrian commuting is also well above the city and regional average in the blocks surrounding 2nd Avenue with the average mode share for pedestrians at 7%. Bicycle commuting is not as prevalent as commuting by transit or walking, though percentages for this mode within the census tracts surrounding Valley Parkway are still above the city and regional average of 1%.



**TABLE 7-1
BROADWAY'S JOURNEY TO WORK MODE SHARE COMPARISON**

Travel Mode	0.25 mile radius from Broadway^a	City of Escondido	San Diego Region
Automobile (including Carpool)	79.6%	90%	87%
Public Transportation	8.4%	3%	3%
Walking	7.1%	2%	3%
Bicycling	2.7%	1%	1%
Other ^b	2.2%	4%	6%

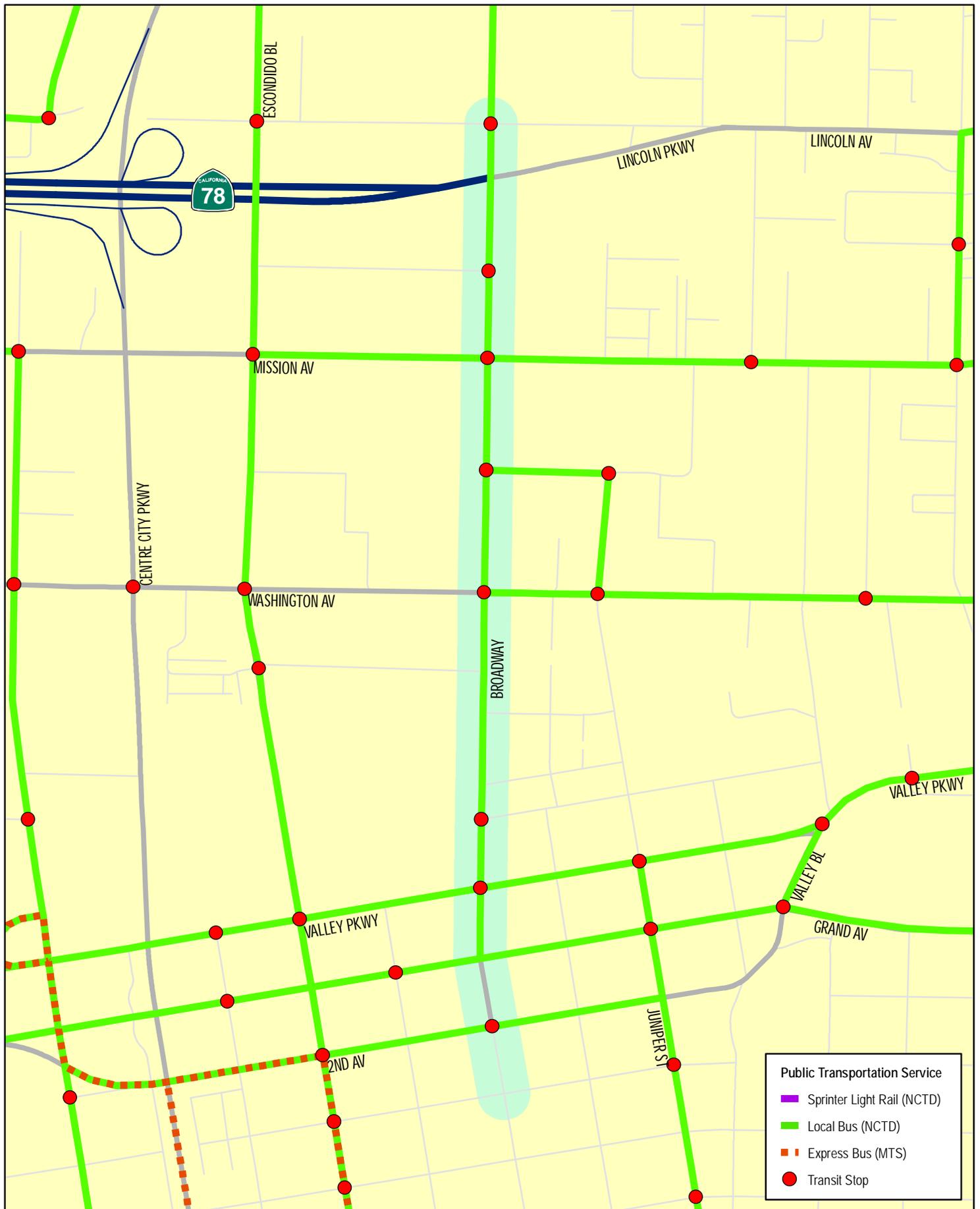
Footnotes:

- a. GIS calculation estimate
- b. Other includes worked from home, motorcycle and other means

Source: US Census (2000)

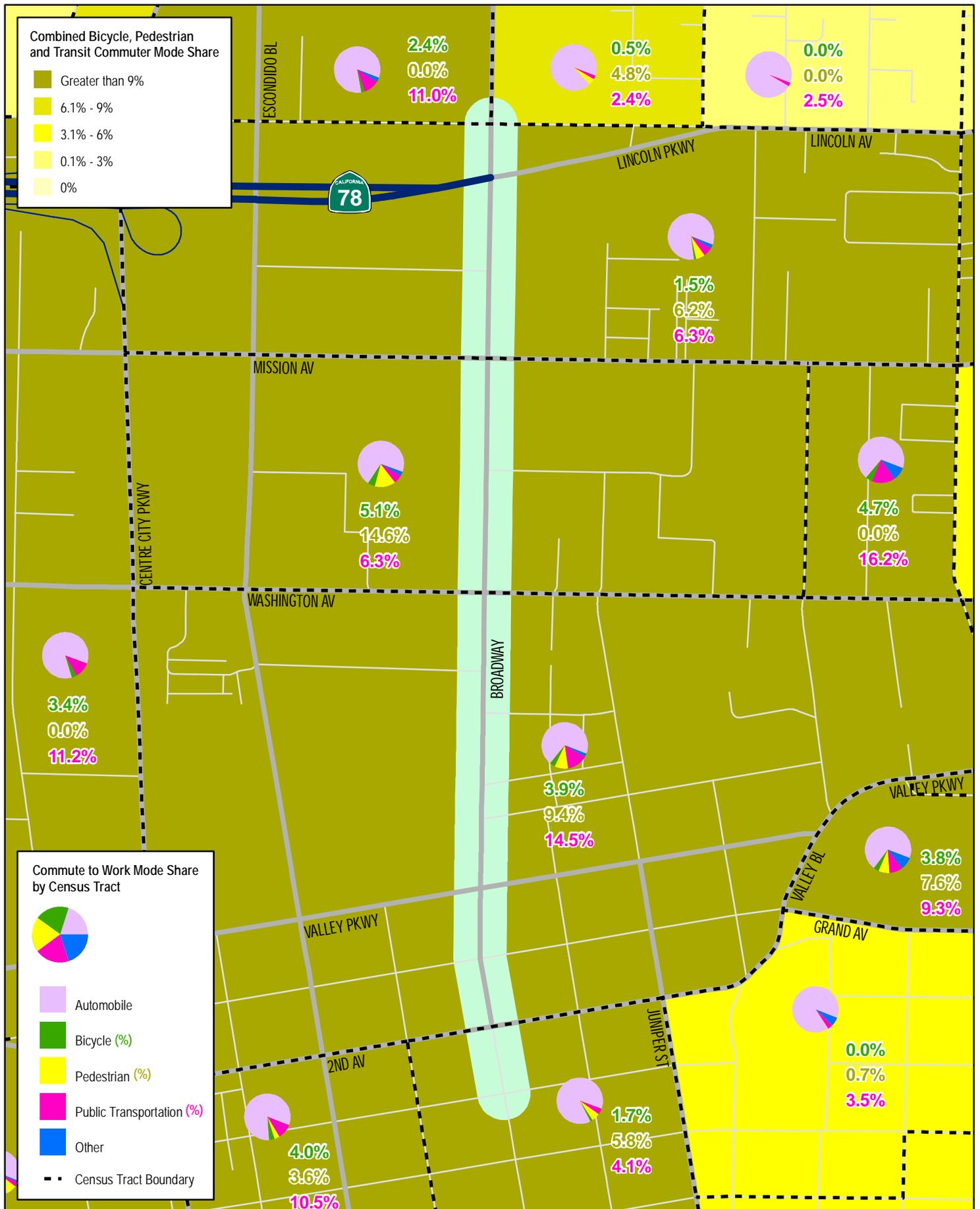


Figure 7-1
Automobile, Bicycle and Pedestrian Collisions along Broadway Corridor (2006-2010)
Escondido General Plan



Source: SANDAG (2011)

Figure 7-2
Existing Public Transportation Service along Broadway Corridor
Escondido General Plan



Source: US Census (2000)

Figure 7-3
Commuter Mode Share along Broadway Corridor
 Escondido General Plan

7.3 EXISTING COLLISION ASSESSMENT

Figure 7-1 displays vehicle collisions involving automobiles, bicyclists and pedestrians along the segment of Broadway between Lincoln Avenue and 3rd Avenue. There were a total of 124 automobile collisions reported during the period between 2006 and 2010. The intersections of Broadway with Mission Avenue, Washington Avenue and Valley Parkway each had 18 collisions. The intersection of Broadway and Lincoln Parkway/SR-78 had 15 collisions reported.



There were 11 collisions involving a bicyclist that took place along the study corridor, with three collisions occurring at Broadway and Washington Avenue. The intersection of Broadway and Woodward Avenue had two collisions.

There were three intersections along the study corridor where each experienced 3 collisions involving a pedestrian. Those locations were Broadway and Lincoln Avenue, Broadway and Mission Avenue and Broadway and Grand Avenue. In total, there were 15 pedestrian-involved collisions along the study corridor.

7.4 COMPLETE STREETS ANALYSIS

Complete Streets analysis was conducted for the study segment based on the analysis methodology and inputs described in Section 6.4.

7.4.1 Existing Multimodal Operations

Broadway

Table 7-2 summarizes the peak hour roadway segment performance for existing conditions from the perspective of bus passengers, pedestrians, and bicyclists. A graphical summary of the analysis results is shown in **Figure 7-4**. The results of the auto LOS analysis are not shown but are included in the General Plan Update traffic study. As seen in **Table 7-2**, the following roadway segments are calculated to currently operate at LOS E or F during either the AM or PM peak hours:

- **Lincoln Parkway to Mission Avenue**: The bicycle facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the high traffic volumes and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways along the right side of the segment is also a

factor because they contribute to the amount of potential conflict areas between bicyclists and moving vehicles. The transit facility is also operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the low frequency of buses serving this segment;

- Mission Boulevard to Washington Avenue: The bicycle facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the high traffic volumes and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways along the right side of the segment is also a factor because they contribute to the amount of potential conflict areas between bicyclists and moving vehicles. The transit facility is operating at an unacceptable level of service along the northbound direction this segment during both the AM and PM peak hours. This is due to the low frequency of buses serving this side of the segment.
- Washington Avenue to Grand Avenue: The bicycle facility is operating at an unacceptable level of service along the northbound direction of this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways and unsignalized intersections along the right side of the segment is also a factor because they contribute to the amount of potential conflict areas between bicyclists and moving vehicles;
- Grand Avenue to 2nd Avenue: The bicycle facility is operating at an unacceptable level of service along the southbound direction of this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane).



**TABLE 7-2
BROADWAY - STREET SEGMENT OPERATIONS**

Broadway		Transit LOS		Pedestrian LOS		Bicycle LOS	
		AM	PM	AM	PM	AM	PM
Lincoln Pkwy to Mission Ave	Northbound	F	F	C	C	F	F
	Southbound	F	F	B	B	E	E
Mission Blvd to Washington Ave	Northbound	E	F	B	B	E	E
	Southbound	B	B	C	C	E	E
Washington Ave to Valley Pkwy	Northbound	C	C	B	C	E	E
	Southbound	D	D	B	B	D	D
Valley Pkwy to Grand Ave	Northbound	B	C	B	B	E	E
	Southbound	C	C	B	B	D	D
Grand Ave to 2 nd Ave	Northbound	C	C	B	B	D	D
	Southbound	C	C	B	B	E	E

General Notes:

1. LOS – Level of Service
2. Auto LOS can be found in the Escondido General Plan Update Traffic Study

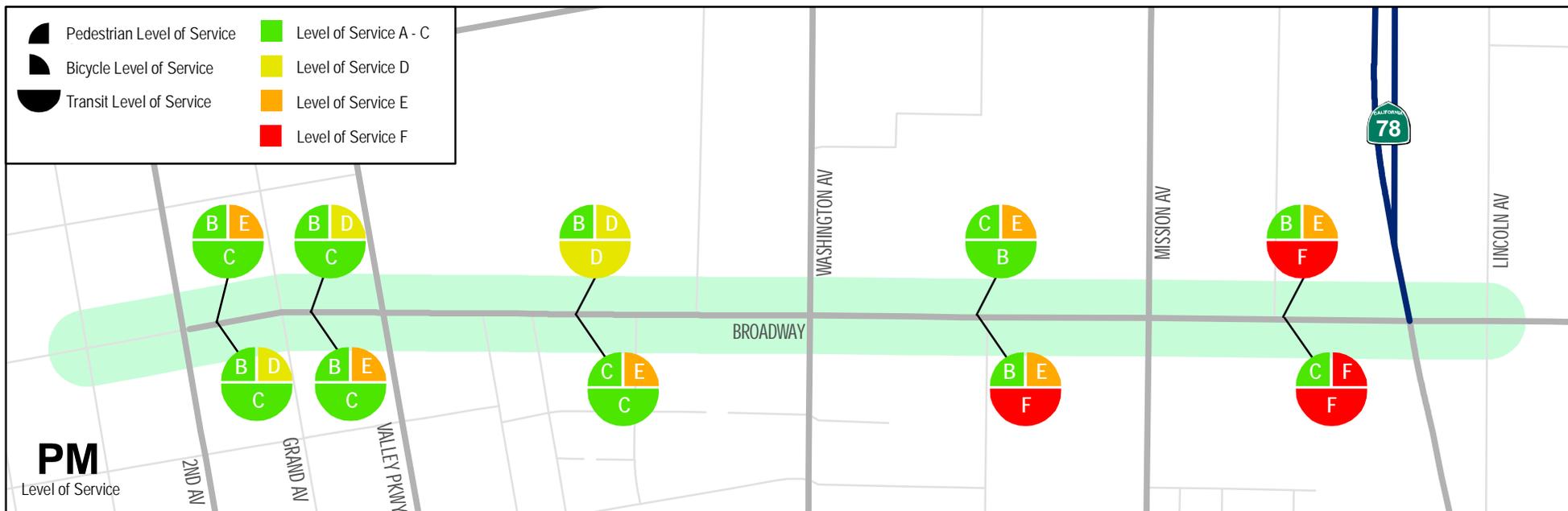
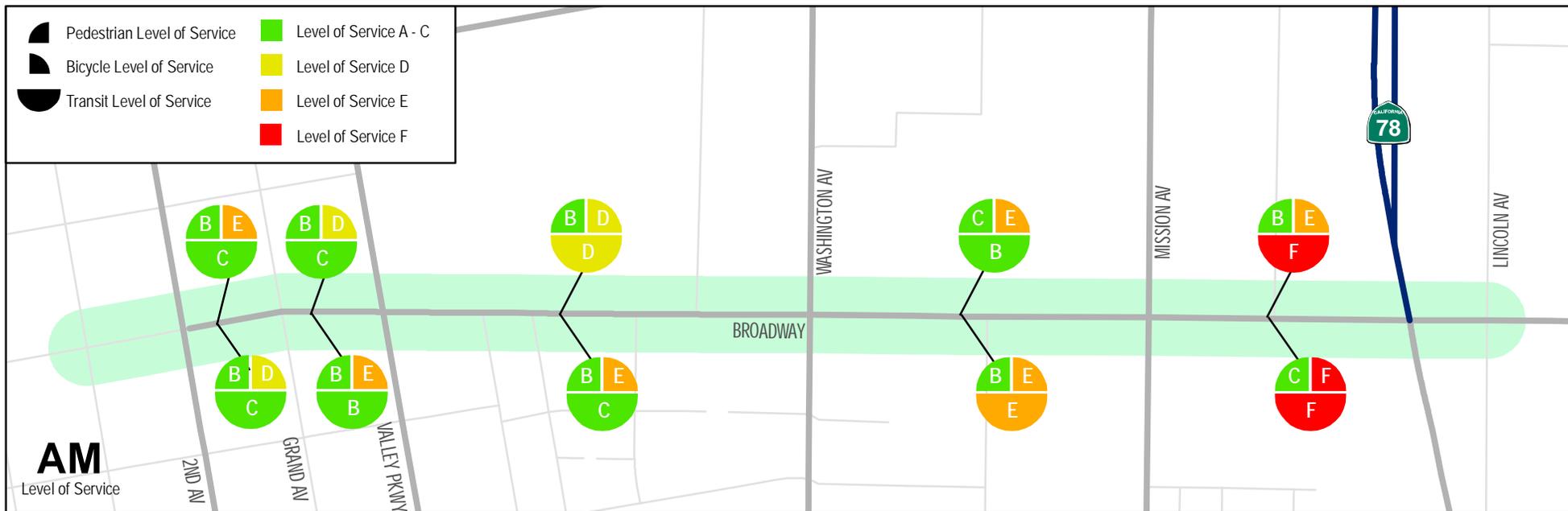


Figure 7-4
Complete Streets Level of Service along Broadway Corridor
Escondido General Plan

8.0 VALLEY PARKWAY'S COMPLETE STREETS ASSESSMENT

This chapter evaluates Valley Parkway between Quince Street and Hickory Street regarding multimodal access, safety and convenience of the following all user groups and provides recommendations accordingly. The chapter is divided in the following four sections:

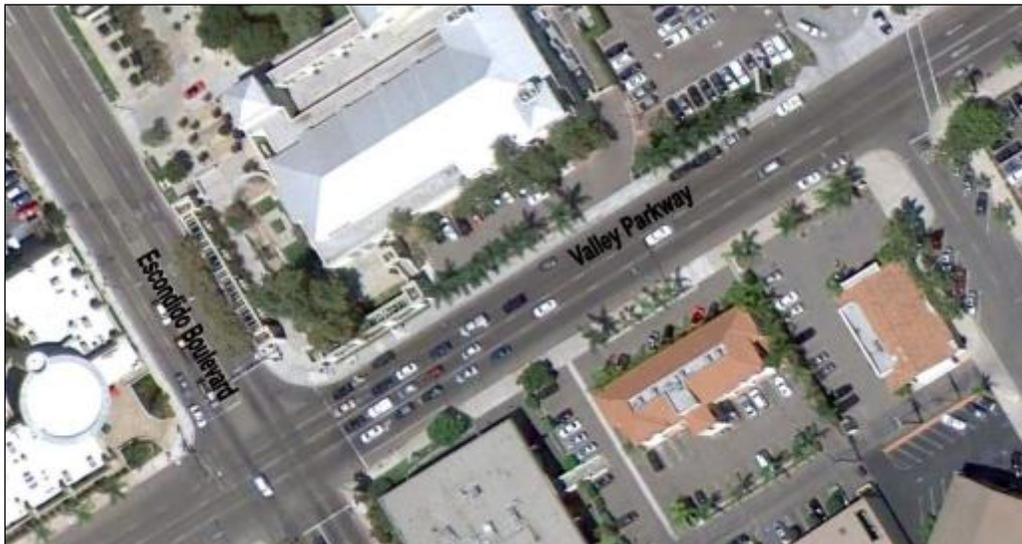
- Infrastructure Assessment
- Mode Share Assessment
- Collision Assessment
- Complete Streets Analysis

Recommendations based on the above, the analysis in the Escondido General Plan Traffic Report, and the proposed land uses in the General Plan are provided in Chapter 10.0.

8.1 EXISTING INFRASTRUCTURE ASSESSMENT

8.1.1 Motorists and Goods

Valley Parkway is classified as a Collector on Escondido's Circulation Element and is aligned in an east / west direction. The street varies between three to five lanes between Hickory Street and Quince Street and operates as a one-way roadway with vehicles traveling in a westbound direction. Curbside parking is generally provided. An aerial view of Valley Parkway can be seen below:



The specific study area along Valley Parkway includes the following street segments:

Valley Parkway

- Quince Street to Centre City Parkway

- Centre City Parkway to Orange Street
- Orange Street to Escondido Boulevard
- Escondido Boulevard to Broadway
- Broadway to Juniper Street
- Juniper Street to Hickory Street

8.1.2 Bicyclists

Valley Parkway does not have any bicycle facilities, although a Class II north-south bike lane intersects Valley at Centre City Parkway. The Escondido Creek Bikeway, a physically separated (Class I) bike path that traverses western Escondido, terminates at Quince Street a block north of Valley Parkway and extends 2.5 miles west to the intersection at Harmony Grove Road. This path also connects to the Inland Rail Trail, a regionally significant Class I bike path terminating in Vista. Existing bicycle facilities within the vicinity of the study corridor are shown in *Figure 8-1*.

As noted in Chapter 4.0, Class I bike paths provide a facility for the exclusive use of bicycles and pedestrians. Motor vehicles are excluded except for maintenance, security, or emergencies vehicles. Similarly Class II bikeways (bike lanes) for preferential use by bicyclists are installed within the paved area of roadways adjacent to vehicle lanes through identifiable pavement striping and markings and signage. The width of bicycle lanes varies depending on parking and street conditions.

8.1.3 Pedestrians, Children, Seniors and Disabled

The Valley Parkway study roadway segments provide sidewalks along both sides of the street for pedestrian use. These sidewalks have an average width of 12 feet. Marked crosswalks are not prevalent at the intersections along Valley Parkway. However, pedestrian signals and push buttons are commonly found at the signalized intersections.

8.1.4 Transit

The Valley Parkway corridor is an extremely active corridor for public transportation. The Escondido Transit Center, situated at the western end of the corridor study area is the hub of the public transportation in Escondido. All bus lines which serve



the City of Escondido pass through Escondido Transit Center. There are 13 North County Transit District (NCTD) *Breeze* bus transit routes. All but two of these routes are local routes which do not travel beyond the City of Escondido sphere of influence. There are two NCTD *Breeze* routes which provide bus service to other north county cities: Route 347 to San Marcos/Palomar College and Route 308 to Solana Beach. The *Sprinter* light rail, which terminates at the transit center, serves the cities of San Marcos, Vista and Oceanside. **Figure 8-2** displays the routes and transit stops along the study corridor. The transit routes which traverse the corridor are summarized in the following paragraphs:

NCTD *Breeze* Route 350 provides Bus Rapid Transit (BRT) local bus service between Escondido Transit Center and Del Lago Park and Ride via Escondido Boulevard, Sunset Drive and Bear Valley Parkway. Bus frequency along this route typically ranges between 10 and 15 minutes all day, which are among the highest bus frequencies within the North County Transit District.

NCTD *Breeze* Routes 351/352 provides bi-directional loop service on an east-west axis through central Escondido. The routes primarily traverse clockwise and counter-clockwise along Washington and Grand Avenues, though they converge upon Valley Parkway, which provides access to the Escondido Transit Center. These two routes provide 30 minute frequencies all day.

NCTD *Breeze* Route 354 provides local bus service between Escondido Transit Center and Orange Glen High School in eastern Escondido. This route accesses Valley Parkway between Escondido Transit Center and Escondido Boulevard. Route 354 provides 30 minute frequencies all day.



NCTD *Breeze* Route 356 is a one-way loop route running clockwise providing local bus service in central Escondido. This route utilizes Valley Parkway between the Escondido

Transit Center and Escondido Boulevard. At its northernmost point, the service extends up to Morning View Drive and El Norte Parkway. Route 356 provides 30 minute frequencies all day.

NCTD *Breeze* Routes 358/359 provides bi-directional loop service in Northern Escondido along El Norte Parkway, Country Club Lane and Broadway. These routes utilize Valley Parkway

between the Escondido Transit Center and Broadway. These two routes provide two hour frequencies all day.

NCTD Breeze Routes 388/389 provides bi-directional loop service in Northern Escondido along El Norte Parkway, Country Club Lane and Broadway. These routes utilize Valley Parkway between the Escondido Transit Center and Broadway. These two routes provide two hour frequencies all day.

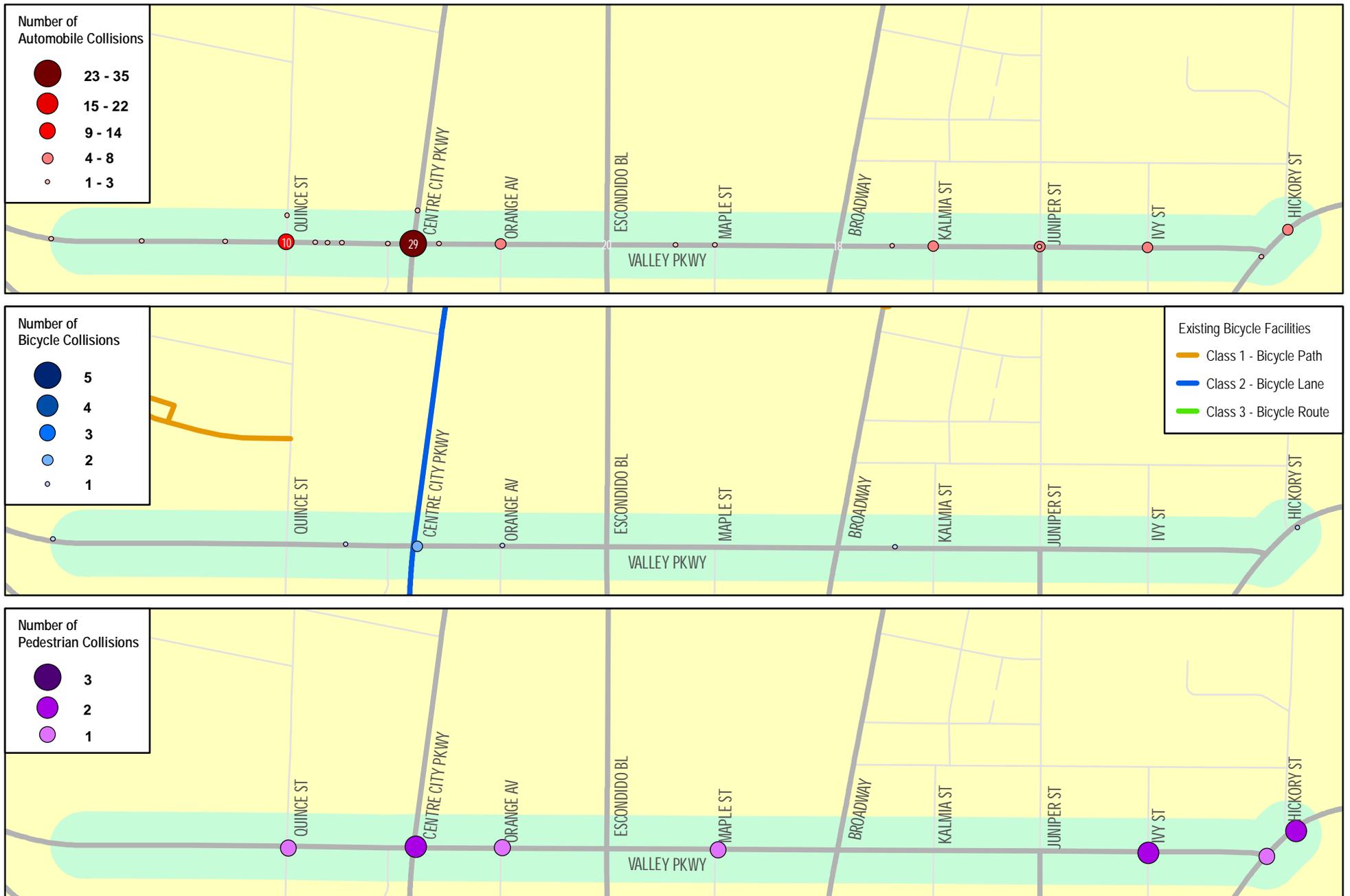


Figure 8-1
Automobile, Bicycle and Pedestrian Collisions along Valley Parkway Corridor (2006-2010)
Escondido General Plan

8.2 EXISTING MODE SHARE ASSESSMENT

Table 8-1 shows the distribution of journey to work mode share for Valley Parkway, City of Escondido and the San Diego region. **Figure 8-3** displays the percentages of public transportation, walking and bicycling commuters in the census tracts surrounding the Valley Parkway study corridor. The census tracts within a quarter mile of the Valley Parkway study corridor have an automobile commuter mode share well below the city average. Transit commuting mode share is very high in the blocks adjacent this corridor, with an average mode share of over 10%. These totals represent some of the highest public transportation mode share in the northern San Diego County area.

Pedestrian commuting is also common in the blocks surrounding this area with the average mode share for pedestrians at nearly 7%. Bicycle commuting is not as prevalent as commuting by transit or walking, though percentages for this mode (3%) within the census tracts surrounding Valley Parkway are still well above the city and regional average of 1%.



TABLE 8-1
VALLEY PARKWAY'S JOURNEY TO WORK MODE SHARE COMPARISON

Travel Mode	0.25 mile radius from Valley Parkway ^a	City of Escondido	San Diego Region
Automobile (including Carpool)	77.4%	90%	87%
Public Transportation	10.2%	3%	3%
Walking	6.8%	2%	3%
Bicycling	2.7%	1%	1%
Other ^b	2.9%	4%	6%

Footnotes:

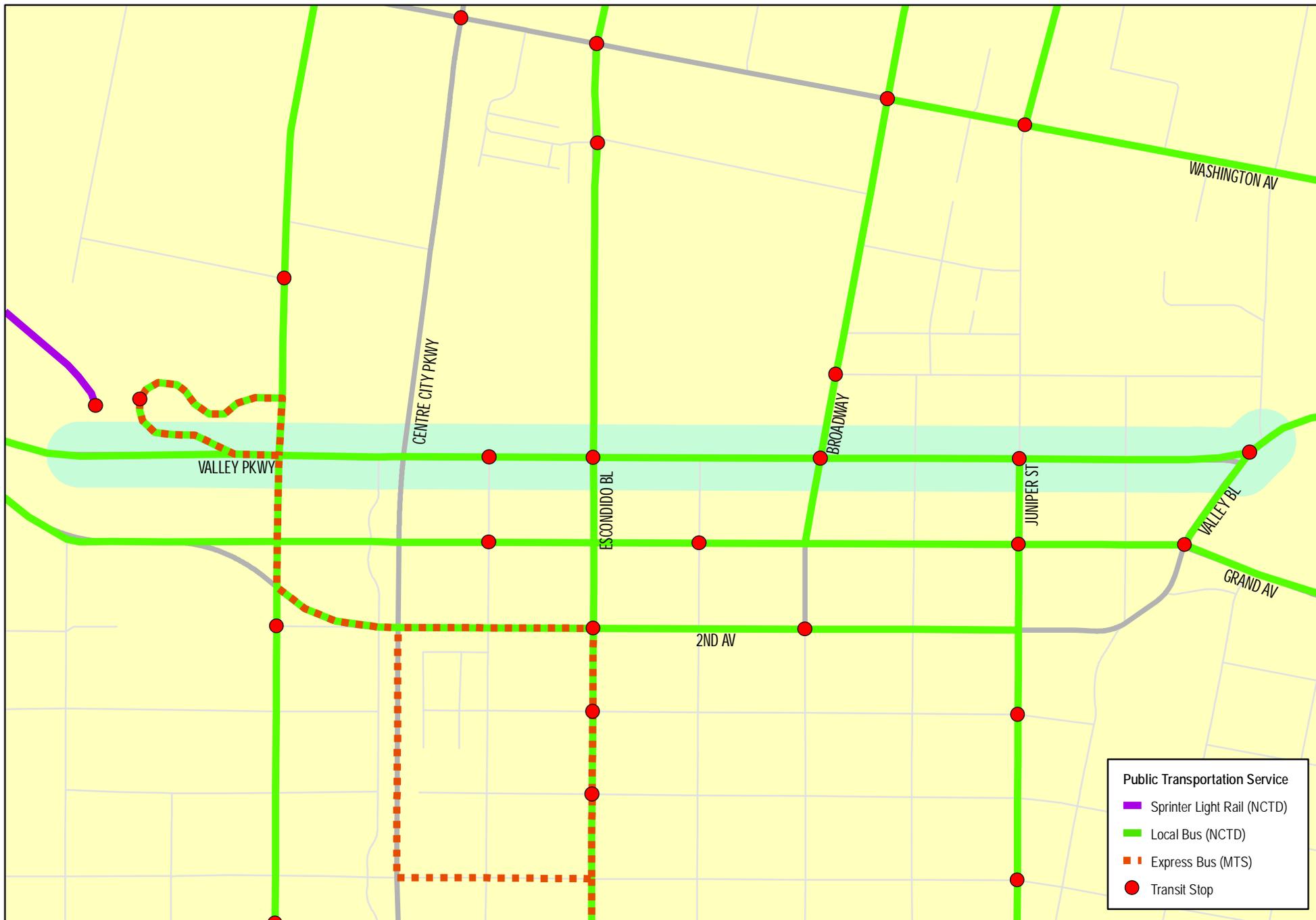
a. GIS calculation estimate

b. Other includes worked from home, motorcycle and other means

Source: US Census (2000)

8.3 EXISTING COLLISION ASSESSMENT

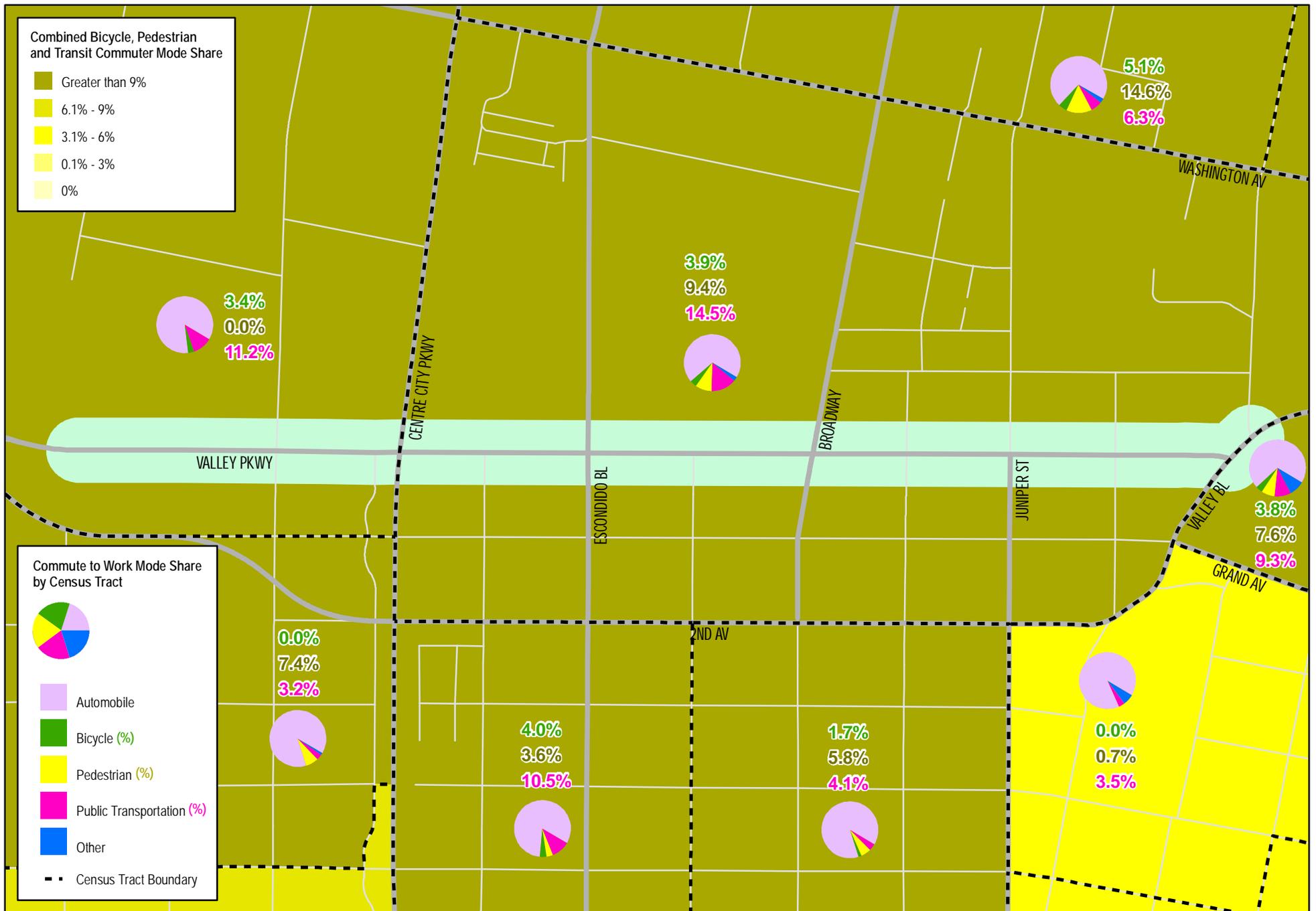
Figure 8-1 displays vehicle collisions involving automobiles, bicyclists and pedestrians along the studied portion of Valley Parkway between the Escondido Transit Center and Hickory Street. There were a total of 118 automobile collisions reported during the period between 2006 and 2010, 108 of which took place at roadway intersections. The intersection of Centre City Parkway and Valley Parkway had the highest total of any intersection within the corridor with 29 collisions. The intersection of Escondido Boulevard and Valley Parkway had 20 collisions. Two other intersections within the study corridor had at least 10 collisions reported.



- | Public Transportation Service | |
|---|----------------------------|
|  | Sprinter Light Rail (NCTD) |
|  | Local Bus (NCTD) |
|  | Express Bus (MTS) |
|  | Transit Stop |

Source: SANDAG (2011)

Figure 8-2
Existing Public Transportation Service along Valley Parkway Corridor
Escondido General Plan



Source: US Census (2000)

Figure 8-3
Commuter Mode Share along Valley Parkway Corridor
Escondido General Plan

There were 8 collisions involving a bicyclist that took place along the study corridor, with two occurring at Centre City Parkway and Valley Parkway. Three collisions took place at midblock locations, while five collisions were at the intersection.

There were a total of 13 collisions involving a pedestrian that occurred along the corridor, the intersection of Escondido Boulevard and Valley Parkway had three collisions – equal to the citywide highest total.

8.4 COMPLETE STREETS ANALYSIS

Complete Streets analysis was conducted for the study segment based on the analysis methodology and inputs described in Section 6.4.

8.4.1 Existing Multimodal Operations

Valley Parkway

Table 8-2 summarizes the peak hour roadway segment performance for existing conditions from the perspective of bus passengers, pedestrians, and bicyclists. A graphical summary of the analysis results is shown in *Figure 8-4*. The results of the auto LOS analysis are not shown but are included in the General Plan Update traffic study. As seen in *Table 8-2*, the following roadway segments are calculated to currently operate at LOS E or F during either the AM or PM peak hours:



- Quince Street to Orange Street: The bicycle facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane); and
- Broadway to Hickory Street: The transit facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the low frequency of buses serving this segment.

TABLE 8-2
VALLEY PARKWAY - STREET SEGMENT OPERATIONS

Valley Parkway	Transit LOS		Pedestrian LOS		Bicycle LOS	
	AM	PM	AM	PM	AM	PM
Quince St to Centre City Pkwy	C	C	C	C	E	E
Centre City Pkwy to Orange St	C	C	C	C	E	E
Orange St to Escondido Blvd	B	B	C	C	D	D
Escondido Blvd to Broadway	C	C	B	C	D	D
Broadway to Juniper St	F	F	B	C	C	C
Juniper St to Hickory St	F	F	B	B	D	D

General Notes:

1. LOS – Level of Service
2. Auto LOS can be found in the Escondido General Plan Update Traffic Study

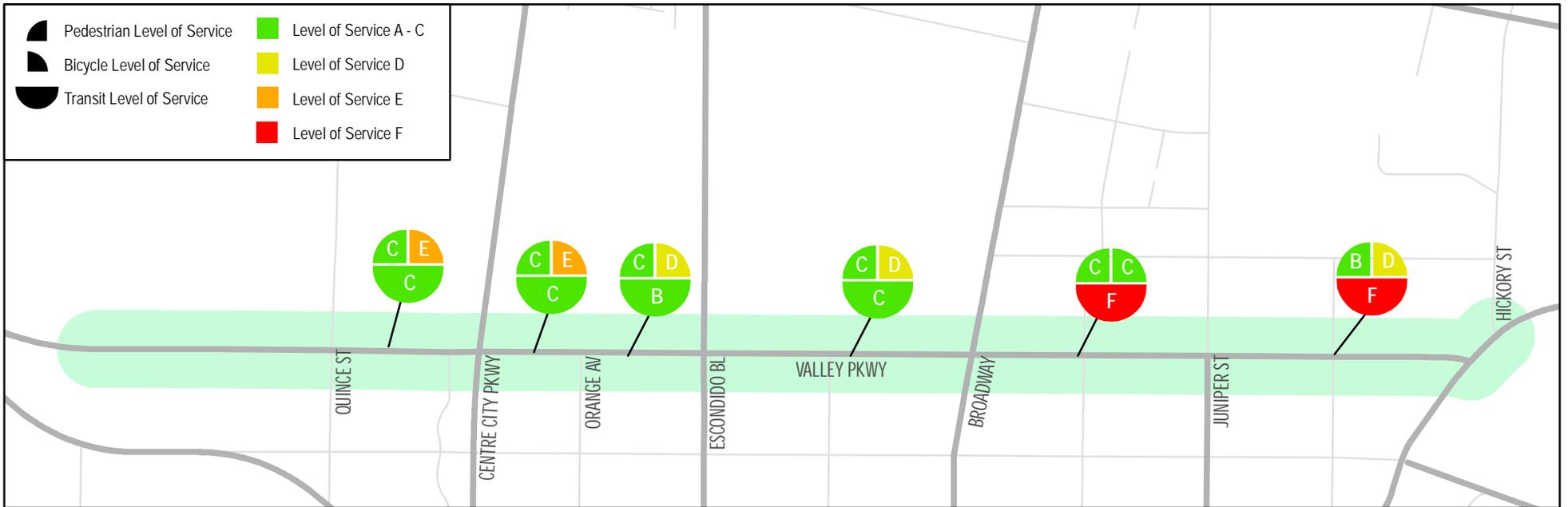
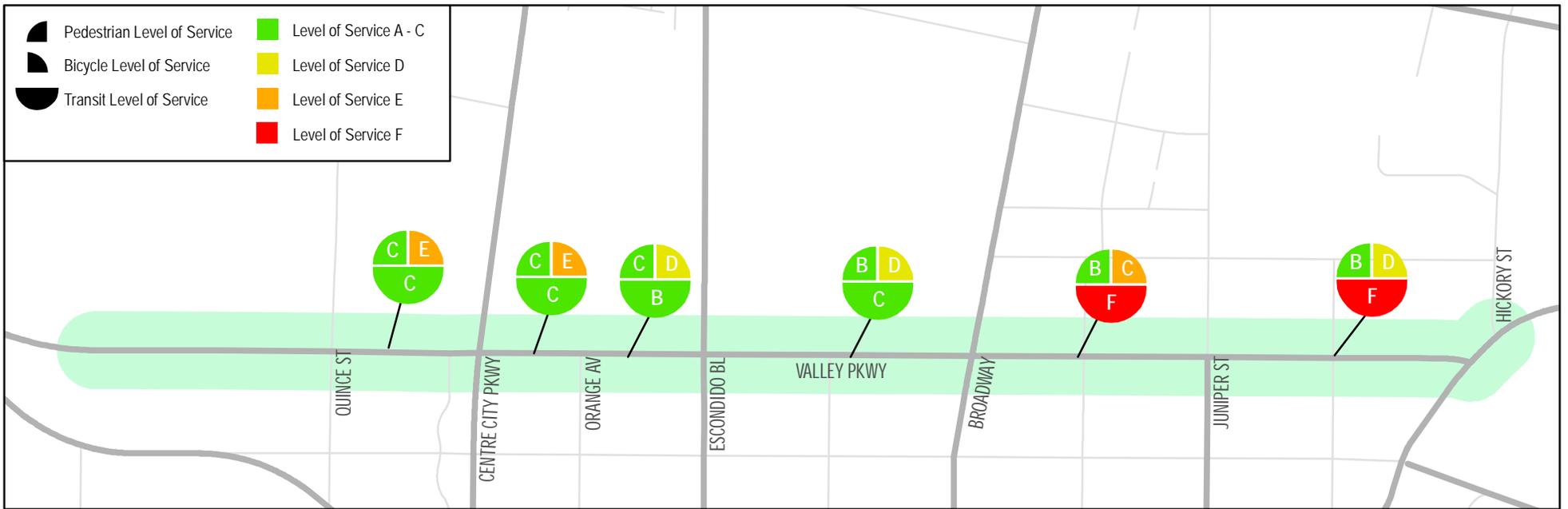


Figure 8-4
Complete Streets Level of Service along Valley Parkway Corridor
Escondido General Plan

9.0 SECOND (2ND) AVENUE'S COMPLETE STREETS ASSESSMENT

This chapter evaluates Second (2nd) Avenue between Quince Street and Valley Boulevard regarding multimodal access, safety and convenience of the following all user groups and provides recommendations accordingly. The chapter is divided in the following four sections:

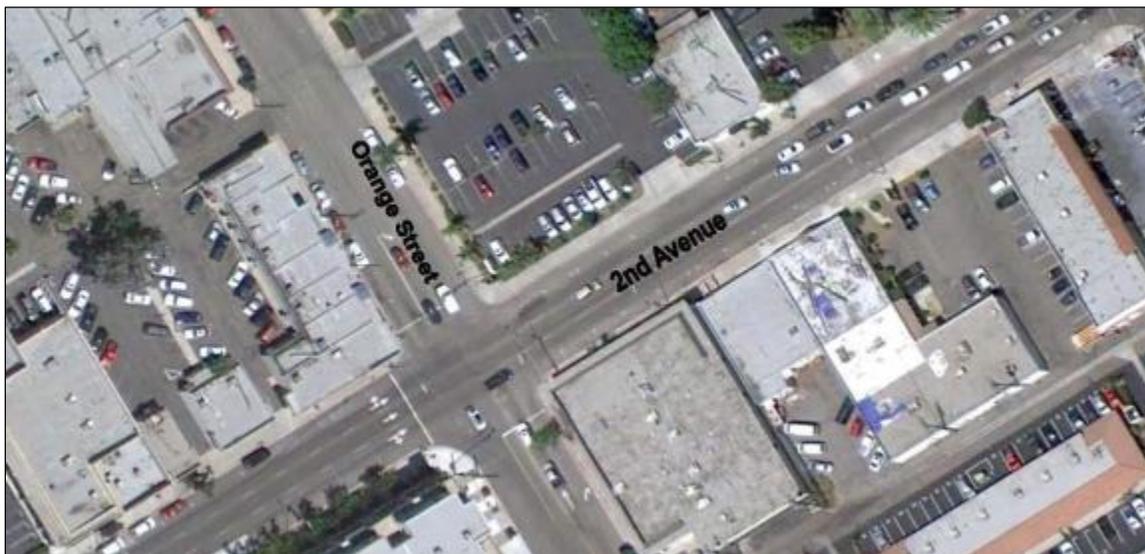
- Infrastructure Assessment
- Mode Share Assessment
- Collision Assessment
- Complete Streets Analysis

Recommendations based on the above, the analysis in the Escondido General Plan Traffic Report, and the proposed land uses in the General Plan are provided in Chapter 10.0.

9.1 EXISTING INFRASTRUCTURE ASSESSMENT

9.1.1 Motorists and Goods

2nd Avenue is classified as a Collector on Escondido's Circulation Element and is aligned in an east / west direction. The street contains four vehicle travel lanes between Quince Street and Centre City Parkway and three vehicle travel lanes between Centre City Parkway and Valley Boulevard. The street operates as a one-way roadway with vehicles traveling in an eastbound direction. Curbside parking is generally provided. Sidewalks are generally available on both sides of the street. An aerial view of 2nd Avenue can be seen below:



The specific study area along 2nd Avenue includes the following street segments:

2nd Avenue

- Quince Street to Centre City Parkway
- Centre City Parkway to Orange Street
- Orange Street to Escondido Boulevard
- Escondido Boulevard to Broadway
- Broadway to Juniper Street
- Juniper Street to Valley Boulevard

9.1.2 Bicyclists

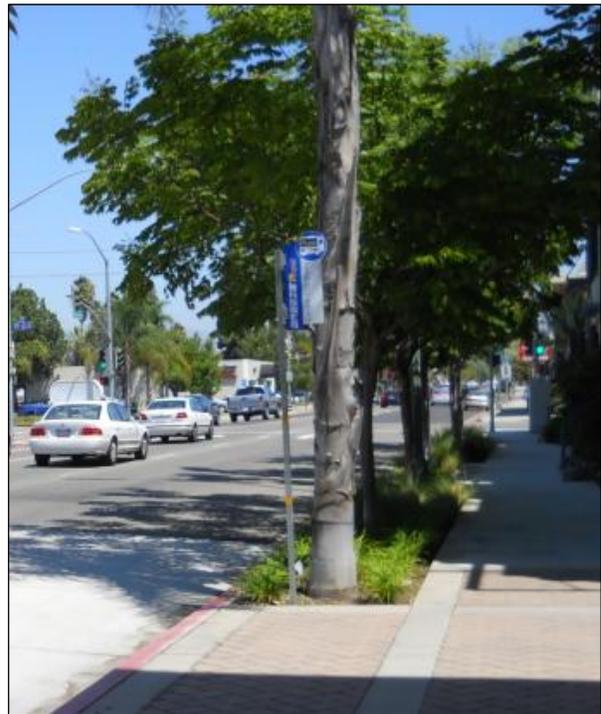
2nd Avenue does not have any bicycle facilities, although a Class II facility intersects 2nd Avenue at Centre City Parkway. The Escondido Creek Bikeway, a physically separated bike path which traverses western Escondido, terminates at Quince Street, several blocks north of 2nd Avenue. This path also connects to the Inland Rail Trail, a regionally significant bike path terminating in Vista. Existing bicycle facilities within the vicinity of the study corridor are shown in **Figure 9-1**.

9.1.3 Pedestrians, Children, Seniors and Disabled

The 2nd Avenue study roadway segments provide sidewalks along both sides of the street for pedestrian use. These sidewalks have an average width of 12 feet. Marked crosswalks are located at the intersection of Quince Street and Centre City Parkway. Pedestrian signals and push buttons are found at all signalized intersections within the study area.

9.1.4 Transit

There are two North County Transit District (NCTD) *Breeze* bus transit routes that use 2nd Avenue corridor for a brief stretch, primarily to access the Escondido Transit Center, situated a block to the north. **Figure 9-2** displays the routes and transit stops along the study corridor. The transit routes which traverse the corridor are summarized in the following paragraphs:

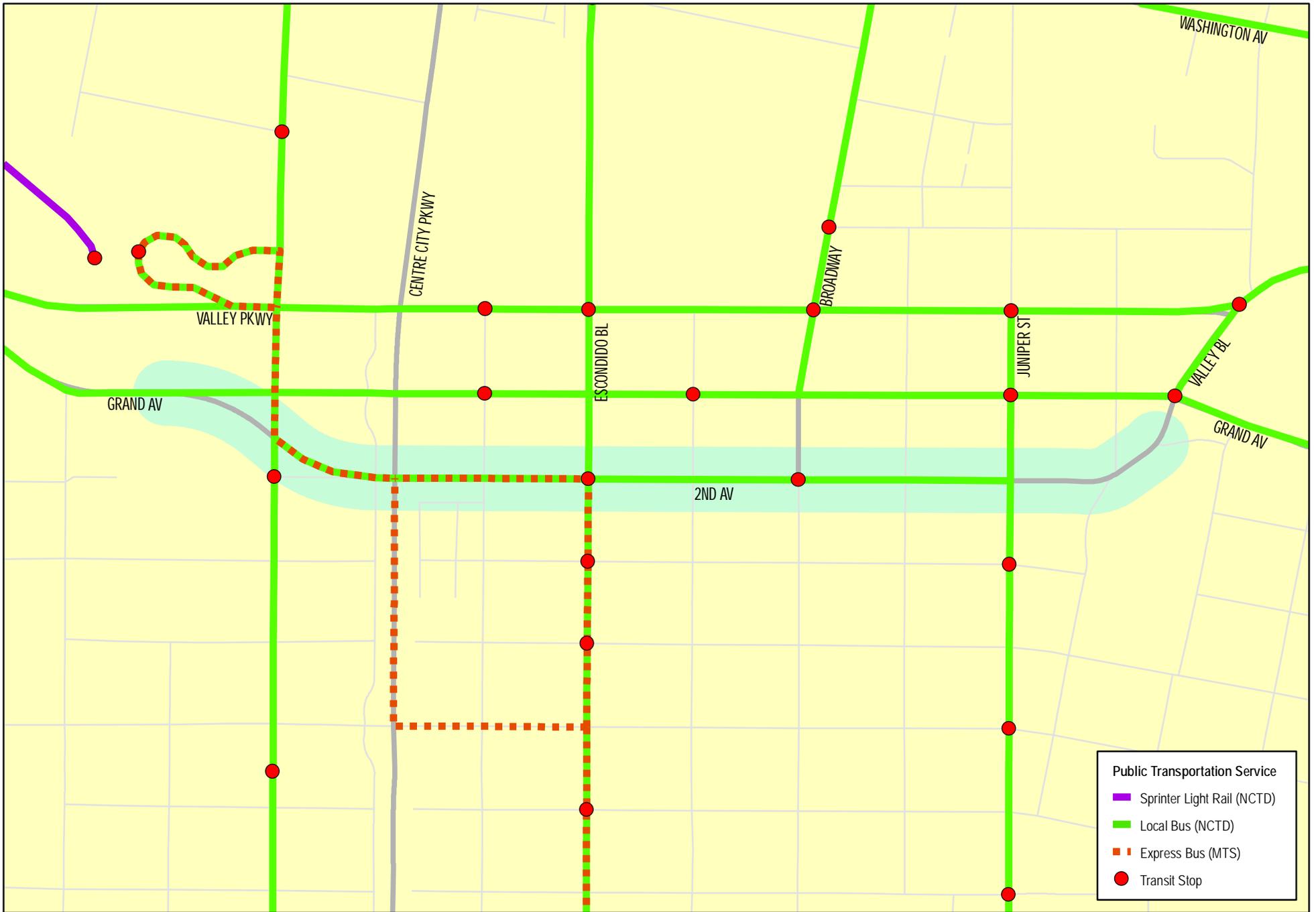


NCTD Breeze Route 350 provides Bus Rapid Transit (BRT) local bus service between Escondido Transit Center and Del Lago Park and Ride via Escondido Boulevard, Sunset Drive and Bear Valley Parkway. Bus frequency along this route typically ranges between 10 and 15 minutes all day, which are among the highest bus frequencies within the North County Transit District. This route accesses 2nd Avenue eastbound for a three block segment, between Quince Street and Escondido Boulevard.

NCTD Breeze Route 354 provides local bus service between Escondido Transit Center and Orange Glen High School in eastern Escondido. This route accesses 2nd Avenue eastbound only for a three block segment, between Quince Street and Escondido Boulevard. Route 354 provides 30 minute frequencies all day.



Figure 9-1
Automobile, Bicycle and Pedestrian Collisions along 2nd Avenue Corridor (2006-2010)
Escondido General Plan



Source: SANDAG (2011)

Figure 9-2
Existing Public Transportation Service along 2nd Avenue Corridor
Escondido General Plan

9.2 EXISTING MODE SHARE ASSESSMENT

Table 9-1 shows the distribution of journey to work mode share for 2nd Avenue, the City of Escondido and the San Diego region. **Figure 9-3** displays the percentages of public transportation, walking and bicycling commuters in the census tracts surrounding the 2nd Avenue study corridor. The census tracts within a quarter mile of the 2nd Avenue study corridor have an automobile commuter mode share well below the city average. Transit commuting mode share is very high in the blocks adjacent this corridor, with an average mode share of just below 8%.

Pedestrian commuting is also well above the city and regional average in the blocks surrounding 2nd Avenue with the average mode share for pedestrians at 5.5%. Bicycle commuting is not as prevalent as commuting by transit or walking, though percentages for this mode within the census tracts surrounding Valley Parkway are still above the city and regional average of 1%.

TABLE 9-1
2ND AVENUE'S JOURNEY TO WORK MODE SHARE COMPARISON

Travel Mode	0.25 mile radius from 2 nd Avenue ^a	City of Escondido	San Diego Region
Automobile (including Carpool)	81.8%	90%	87%
Public Transportation	7.8%	3%	3%
Walking	5.5%	2%	3%
Bicycling	2.0%	1%	1%
Other ^b	2.9%	4%	6%

Footnotes:

- a. GIS calculation estimate
- b. Other includes worked from home, motorcycle and other means

Source: US Census (2000)

9.3 EXISTING COLLISION ASSESSMENT

Figure 9-1 displays vehicle collisions involving automobiles, bicyclists and pedestrians along the studied portion of 2nd Avenue between Grand Avenue and Valley Boulevard. There were a total of 86 automobile collisions reported during the period between 2006 and 2010. The intersection Centre City Parkway and 2nd Avenue had the highest total of any intersection in the city with 35 collisions. Two other intersections within the study corridor had at least 12 collisions reported.



There were 6 collisions involving a bicyclist that took place along the study corridor, with two occurring at Escondido Boulevard and 2nd Avenue. There were a total of 3 collisions involving a pedestrian that occurred along the corridor.



Source: US Census (2000)

Figure 9-3
Commuter Mode Share along 2nd Avenue Corridor
Escondido General Plan

9.4 COMPLETE STREETS ANALYSIS

Complete Streets analysis was conducted for the study segment based on the analysis methodology and inputs described in Section 6.4.

9.4.1 Existing Multimodal Operations

2nd Avenue

Table 9-2 summarizes the peak hour roadway segment performance for existing conditions from the perspective of bus passengers, pedestrians, and bicyclists. A graphical summary of the analysis results is shown in **Figure 9-4**.



The results of the auto LOS analysis are not shown but are included in the General Plan Update traffic study. As seen in **Table 9-2**, the following roadway segment's bicycle facility is calculated to currently operate at LOS E during both the AM or PM peak hours:

- **Orange Street to Broadway:** The bicycle facility is operating at an unacceptable level of service along this segment during both the AM and PM peak hours. This is due to the high traffic volumes, the short segment length between signalized intersections, and lack of lateral separation between vehicles and bicyclists (i.e. a bicycle lane). The number of driveways and unsignalized intersections along the right side of the segment are also factors since they contribute to the amount of potential conflict areas between bicyclists and moving vehicles.

TABLE 9-2
2ND AVENUE - STREET SEGMENT OPERATIONS

2 nd Avenue	Transit LOS		Pedestrian LOS		Bicycle LOS	
	AM	PM	AM	PM	AM	PM
Quince to Centre City Pkwy	C	C	B	B	D	D
Centre City Pkwy to Orange St	D	D	B	C	D	D
Orange St to Escondido Blvd	C	D	B	C	E	E
Escondido Blvd to Broadway	A	B	B	B	E	E
Broadway to Juniper St	B	C	B	B	D	D
Juniper St to Valley Blvd	B	C	B	B	D	D

General Notes:

1. LOS – Level of Service
2. Auto LOS can be found in the Escondido General Plan Update Traffic Study

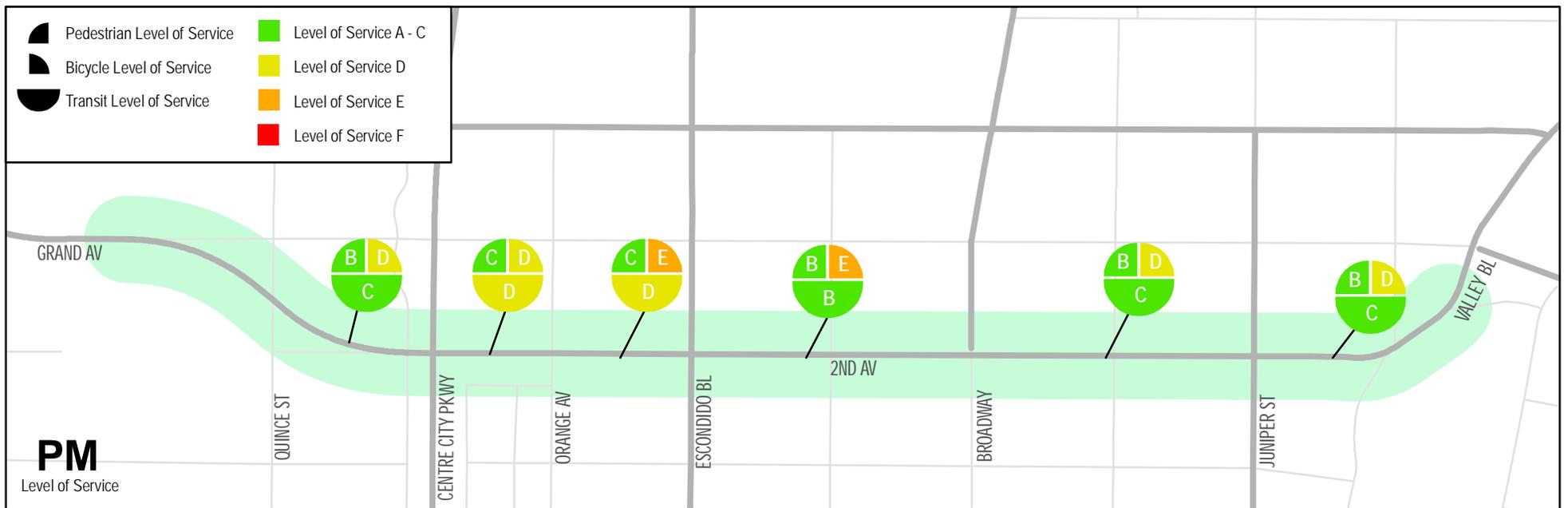
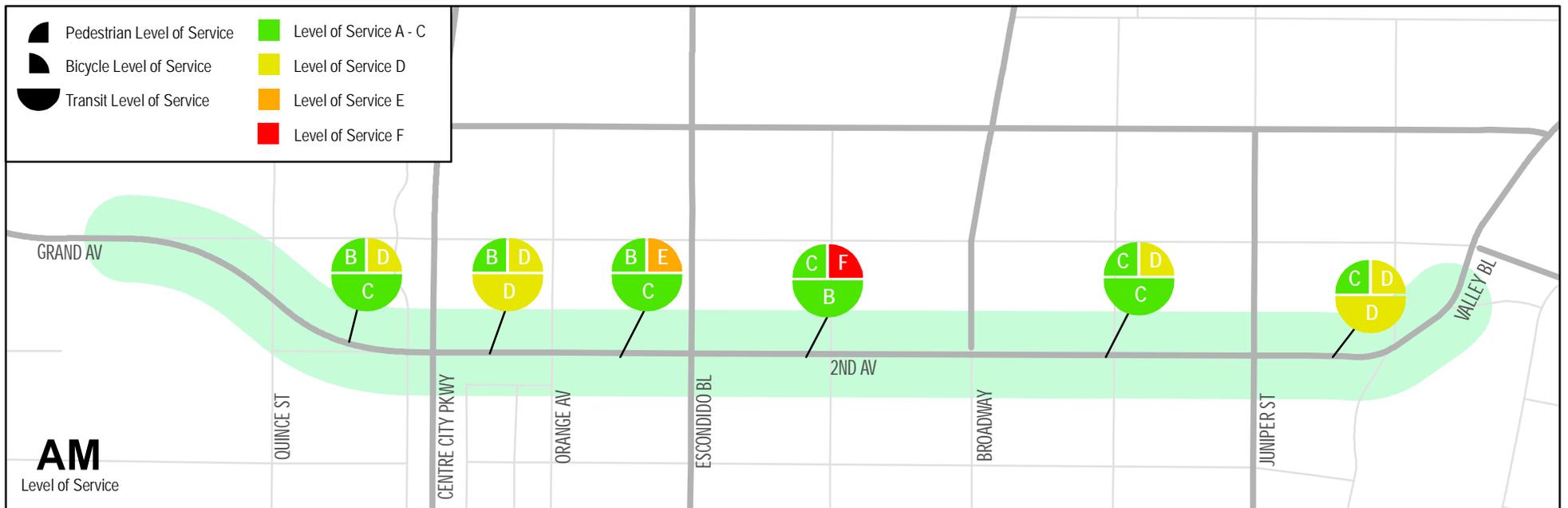


Figure 9-4
Complete Streets Level of Service along 2nd Avenue Corridor
Escondido General Plan

10.0 STUDY CORRIDOR'S RECOMMENDATIONS

The following recommendations are provided based on the transportation assessment of each of the four study corridors, the analysis in the Escondido General Plan Traffic Report, and the land uses proposed in the General Plan. These recommendations are intended for the four study corridors analyzed in Sections 6.0-9.0.

1. Motorists and Street Networks

- Plan, design, and regulate roadways in accordance with the street classification identified in the Circulation Element Figure in the General Plan.
- Strive to maintain LOS D or better.
- Provide adequate traffic safety measures on the four study corridors. Particular attention should be given to the following intersections:
 - Escondido Boulevard/5th Avenue;
 - Escondido Boulevard/Valley Parkway;
 - Broadway/Mission Avenue;
 - Broadway/Washington Avenue;
 - Broadway/Valley Parkway;
 - Centre City Parkway/Valley Parkway; and
 - Centre City Parkway/2nd Avenue

These measures may include, but should not be limited to, appropriate levels of maintenance, adequate street design per City's latest Design Standards, traffic control devices (signs, signals, striping), street lighting, and coordination with other agencies.

- Enhance the safety and efficiency of accessing the four study corridors from private properties by:
 - a. controlling driveway access locations on the four study corridors i.e. limiting the number of driveways/conflicts, reduce interference with through traffic due to turns into or out of a site, provide adequate on-site storage areas, driveway width etc;
 - b. provide sufficient spacing between at-grade intersections;
 - c. consolidating driveway access. Particular attention should be given to the following segments
 - Escondido Boulevard from Washington Avenue to Woodward Avenue;
 - Escondido Boulevard from Valley Parkway to 9th Avenue;
 - Broadway from Lincoln Parkway to Grand Avenue
 - 2nd Avenue from Orange Street to Broadway
 - d. encouraging interconnected parking lots.

- Implement street beautification programs such as landscaping, public art, coordinated banners etc to improve the visual quality and character of the four study corridors.
- Synchronize traffic signals where feasible as appropriate to facilitate the flow of through-traffic, thus enhancing the movement of vehicles and goods through the four study corridors while reducing fuel consumption and air pollution.
- Balance the needs of various users when establishing speed limits for motor vehicles, consistent with AB 2767 (Jackson, Statutes of 2000).



2. Pedestrians

- Provide crosswalks at all the major intersections along the four study corridors.
- Consider improving pedestrian safety at intersections by providing bulbouts, or median refuges that reduce crossing widths, and/or provide audio sound warnings.
- Maintain a pedestrian environment accessible to all that is safe, attractive, and encourages walking. Provide an “attractive pedestrian environment that encourages walking” such as shaded sidewalks, seating areas, landscaping, public art, interpretive way-finding features, etc.
- Enhance pedestrian visibility by enforcing “no parking” restrictions at intersection approaches, improving street lighting, and identifying required clearances to minimize obstructions.
- Maintain sidewalks in the public-right-of-way.
- Design and construct streetscape improvements to reduce storm water and pollutant runoff into the drainage system, using such techniques as urban bioswales for the filtering of pollutants and permeable hardscapes.
- Manage pedestrian facilities to maintain LOS D or better during all times.
- Ensure that all new roadway projects and major reconstruction projects provide for the development of an adequate street tree canopy.



3. Bicyclists

- Provide bike lanes along the four study corridors and consider providing bike boxes along major intersections.
- Incorporate bicycle parking, personal lockers, showers, and other bicycle support facilities to encourage biking facilities in places such as bus stops and large new development projects (e.g., employment centers, educational institutions, and commercial centers).
- Develop and manage bicycle facilities to maintain LOS D or better during all times.
- Prioritize these segments for implementing improvements identified in the Bicycle Master Plan.



4. Transit

- Require that new developments incorporate transit-supporting facilities into the project design, where appropriate.
- Coordinate with NCTD and increase the bus frequency and bus routes along certain segments of Broadway and Valley Parkway to meet transit ridership demands.
- Construct, when appropriate, transit facilities including bus pullouts on Escondido Boulevard and 2nd Avenue.
- Manage transit facilities to maintain LOS D or better during all times.

5. Goods and Services Transport

- Discourage use of public streets for freight loading and unloading.
- Encourage business owners to schedule deliveries at off-peak traffic periods.

6. Children

- Assess if Escondido Boulevard should be included in the “Suggested Routes to School” (SRTS) program. If Escondido Boulevard is determined to be a part of SRTS, appropriate infrastructure should be provided.

7. Disabled

- Comply with Americans with Disability Act (ADA) standards for all existing and future infrastructures.
- Provide adequate crossing times and detection for disabled at signalized intersections, consistent with AB 1581 (Fuller, Statutes of 2007).



- Provide safe and efficient multimodal access to the bus stops, complying with ADA standards.

8. Seniors

- Provide adequate crossing times and detection for seniors at signalized intersections, consistent with AB 1581 (Fuller, Statutes of 2007).

