Poway Road Corridor Study

Existing Conditions Assessment

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CORRIDOR STUDY

Existing Conditions Assessment

Chapter 1. Introduction

1.1 Project Overview

In the fall of 2014, the City of Poway initiated the Poway Road Corridor Study, with a focus on land use, mobility/circulation, market conditions, and placemaking along Poway Road between Oak Knoll Road and Garden Road. The goals of the study include:

- Develop an overall vision and long-term design objectives for the Corridor
- Prepare recommendations for land use, mobility, and urban design for the Corridor
- Develop a market implementation strategy
- Prepare Poway Road Specific Plan Amendment and conduct associated CEQA review

The study is including stakeholder input in the form of Ad Hoc Committee meetings, community workshops, and City Council workshops, to examine how to improve and revitalize this important commercial corridor. This Existing Conditions Assessment is an early step in the study, by allowing a more comprehensive understanding of baseline conditions for planning, land use, design character, circulation, and market features.

Poway Road intersection and surrounding environment

1.2 Study Area

Poway Road currently serves as a four-lane, east-west major arterial running between the City limits with the SR-67 to the east and City of San Diego to the west , in the southern portion of the City. Poway Road contains the primary commercial area of Poway. The Study Area comprises a 2.65-mile stretch of Poway Road, between Oak Knoll Road and Garden Road, and selected parcels on either side of Poway Road (see **Exhibit 1-1: Poway Road Corridor Study Area**; this oversized exhibit is in the Appendix).

Poway Road's importance as a commercial corridor stems from its history as an early link between the City of San Diego to the south and the mountain areas to the northeast. The tone of the corridor's commercial development was set during the 1950s and 1960s with the establishment of many small shopping centers and highway-oriented commercial areas, before the City of Poway incorporated and enacted development standards. As a result, the corridor lacked aesthetic appeal despite its significance in the City. Other commercial developments have occurred more recently and provide a more welcoming appearance. In addition, improvements to the streetscape itself have been made, including landscaped medians.

1.3 Existing Conditions Assessment Organization

The Existing Conditions Assessment is divided into the following five sections:

- **Chapter 1. Introduction:** This chapter provides an brief overview of the purpose of the Poway Road Corridor Study, and introduces the plan area.
- **Chapter 2. Planning Context and Land Use:** This chapter provides summary of existing relevant plans and studies, describes existing land uses and zoning, and briefly describes the corridor's design character.
- **Chapter 3. Mobility:** This chapter provides an overview of the existing transportation network and transit operations in the Study Area. This includes an analysis of the physical mobility network, pedestrian access and circulation, bicycle access and circulation, and transit operations.
- **Chapter 4. Market Potential Overview:** This chapter assesses the development potential for office, hotel, residential, and retail/restaurant land uses along the Poway Road Corridor, using readily available third party demographic and market data sources. It evaluates the demand for the various land uses, assesses key assets and constraints affecting development and redevelopment in the Study Area, and recommends development opportunities.
- **Appendix – Graphic Exhibits:** This appendix provides a package of supporting larger-format graphic exhibits that are referenced in the text.

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CORRIDOR STUDY

Existing Conditions Assessment

Chapter 2. Planning Context and Land Use

Planning Context and Land Use Findings

Planning Context

1. Poway Road should be the principal commercial activity area in the City, with more unified and integrated site planning and design, consolidated retail uses, specialty commercial clusters, and nodes of commercial activity at major intersections.

2. An architecturally-integrated Town Center along Poway Road should be established to provide a mix of community commercial uses and housing with a "Main Street" appeal.

3. A variety of multi-family and affordable housing, compatible with existing neighborhoods, is encouraged near major roads, transit, commercial areas and public facilities. The Study Area includes 13 parcels designated to include affordable, multi-family housing.

4. Streetscapes should be aesthetically pleasing with integrated design elements, and key segments of Poway Road should have enhanced community design features. There is a need to improve safety and connectivity for pedestrians.

Existing Land Uses and Zoning

5. Commercial uses comprise 72.6 percent of the Study Area acreage: about half of this is in retail, restaurant and entertainment uses; twenty percent is in office uses; and almost 17 percent is in automobile sales and service establishments.

6. Remaining land uses comprise residential (about 11 percent of the Study Area acreage, mostly multi-family housing), industrial (just under seven percent of land use), community/civic uses (approximately three percent of the Study Area), and vacant land (just over two percent of the Study Area). In addition, another 4.5% of the Study Area's parcels are owned by public agencies including the City of Poway and Poway Housing Authority.

7. Ten different zoning designations currently fall within the Study Area (Table 2.2). Most zones are either commercial or mixed commercial and residential uses.

Corridor Design Character

8. The commercial developments along the corridor generally feature perimeter buildings surrounding large parking lots that often have limited landscaping. Architectural character varies in both style and apparent quality of design. Maintenance of buildings and facilities differs among developments.

9. The streetscape character reflects Poway Road as a major vehicle corridor, dominated by hardscape and numerous curb cuts. There are few street trees along Poway Road, although landscaped medians do provide some greenery and can be further improved with more drought-tolerant trees and ground covers.

2.1 Introduction

This Planning Context and Land Use chapter provides background information on the current regulatory context, existing land uses and zoning, design character, and opportunities in the Study Area. This information will be used as a starting point for further identification of opportunities and preparation of land use alternatives later in the planning process.

2.2 Planning Context

Land use and urban design within the Study Area is governed by several City of Poway documents. In addition, regional-level planning incorporates a portion of the Study Area, and recent studies are also relevant and should be considered as planning context for the corridor. The following is a summary of currently adopted City policy documents and other studies that establish the current regulatory context for the Poway Road corridor.

City of Poway General Plan (1991 plus amendments)

Every city in California is required to adopt a general plan. It functions as the City's primary regulatory document and must be used as the basis for all planning-related decisions. The City of Poway General Plan was adopted in 1991, with several plan elements having been updated more recently, and identifies citywide growth and change over a five- to ten-year time frame. The plan is based on a shared community vision of Poway as "the City in the Country."

In the introduction to the General Plan, the following idealistic description of Poway is worth repeating here, to expand on the community vision and articulate values to be reinforced during planning for the Poway Road Study Area:

> *It would be a community of open space reflected in the constant views of rocky, chaparral-covered hillsides ringing the valley floor, a town with human-scale development where people know each other and where their voices can be heard. It is a community which values the family, education and the natural environment, one which is safe, 'a great place to raise a family.' The ideal Poway would provide good recreational and cultural facilities and have housing opportunities for all. It would be easy to get around in and would have attractive places to shop.*[1]

[1] *Poway Comprehensive Plan, Volume One – the General Plan* (1991), 4.

General Plan Goals, Policies and Strategies

The General Plan has twelve overarching goals, with associated policies and strategies, that guide development and provision of facilities and services. Many of these strategies have direct bearing on land use and urban design for the Poway Road corridor.

Relevant Strategies Affecting Land Use Planning

- Infill development in existing built-up areas is encouraged
- Poway Road should be the principal commercial activity area in the City serving the community and subregion, and include general commercial uses such as restaurants, financial institutions, services and roadway-oriented retail
- An architecturally-integrated, centrally-located Town Center should be established to provide a mix of community commercial uses
- A variety of multi-family housing is encouraged, to be located near major roads, transit, commercial areas and public facilities
- Encourage the development of affordable housing near public transportation and community services
- Development in the 100-year floodway is prohibited; development in the 100-year floodplain should be designated for either low-density residential or open space, unless certain development conditions are met

Relevant Strategies Affecting Design

- Some of the General Plan strategies include specific architectural design standards (including building height, materials and colors), arterial roadway access restrictions, parking requirements for multi-family development, and landscaping guidance for development projects
- Setbacks, buffers and other strategies are required where commercial areas abut residential uses
- Streetscapes should be aesthetically pleasing with integrated design elements
- At selected entries into the City, medians should incorporate entry statements with landscaping and signage
- Other signage should be well-designed and integrated into site design
- Site design should be compatible with surrounding development
- Where possible, public spaces in commercial areas should include seating and pedestrian-oriented amenities, and restaurants should provide outdoor eating areas
- Parking areas should consider pedestrian safety, and are encouraged to provide decorative paving and bicycle parking
- If a roadway is to include Class II bicycle lanes per the Bicycle Element, the paved width shall accommodate these lanes
- Several areas along Poway Road should have enhanced community design features, incorporating representations of Poway's rural character, to encourage viable commercial areas:
    - From Oak Knoll Road to Pomerado Road
    - From Quate Court to Gate Drive
    - The eastern entrance to Poway Road at Garden Road

General Plan Land Use Element

The City of Poway has significant open space resources. To continue preserving its open space, the General Plan encourages infill development and redevelopment including areas adjacent to major circulation corridors, which readily applies to the Poway Road Study Area. Any future changes in land use must be consistent with available public services and facilities. The Land Use Element identifies 24 land use categories, which correspond to the City's zoning designations (see **Section 2.3 Existing Land Use and Zoning** for more details).

General Plan Community Design Element

Because some of Poway's developed areas were built before the City's incorporation in 1980, much of the existing development is inconsistent in design and not always supportive of the "City in the Country" theme. The General Plan acknowledges that this is especially notable for Poway Road, which is referred to as "Poway's spine." According to the General Plan, the more recent development along Poway Road helps support the community's design theme and could be emulated in the future, including Poway Town and Country Center, and Oak Knoll Center. The following major design themes, applicable to land uses along Poway Road, are presented in the General Plan:

- **Multi-family Residential:** Integrate with existing neighborhoods and rural character, through design detail and limiting the size of structures, and with inclusion of generous open space and adequate amenities.
- **Commercial:** Establish a unified design theme for commercial activity along Poway Road. Future planning and redevelopment should incorporate more unified and integrated site planning to revitalize the commercial area, with land uses arranged to provide focal points and a central commercial area. Commercial building architecture should express a unified aesthetic in terms of shape, size and color.

The Community Design Element presents many policies and strategies to help achieve more unified design for the Study Area.

General Plan Housing Element Update (May 2013)

This comprehensive update of the City's Housing Element includes a housing needs assessment and presents an inventory of available sites for affordable, multi-family housing; some of these sites are in the Study Area. All sites in the inventory either have or are proposed to have an Affordable Housing Overlay Zone applied to them. The sites in the Study Area comprise 13 parcels; one of these is near the intersection of Poway Road and Pomerado Road, and the others are located along Poway Road between Carriage Road and Tarascan Drive. Some parcels are owned by the City of Poway or the Poway Housing Authority, and others are privately owned. According to the Housing Element, these 13 parcels have the potential to accommodate up to 336 total affordable units, targeting either very low, low, or moderate income households.

SANDAG Smart Growth Areas

The regional planning agency, SANDAG, has designated several "Smart Growth" areas as part of its Regional Comprehensive Plan.[2] Smart growth is a compact and efficient pattern of urban development that directs future growth and infill development near jobs, public facilities, transit and services. In doing so, areas with smart growth maximize the use of existing infrastructure and help preserve open space. One of SANDAG's potential Smart Growth areas overlaps the Poway Road Study Area around the intersection of Poway Road and Community Road (see **Exhibit 2-1: SANDAG Smart Growth Area for North City and North County**; this oversized exhibit is in the Appendix, along with the other exhibits referenced in this chapter).

According to SANDAG, the Smart Growth area along Poway Road is classified as a potential Town Center. Town Centers draw from the immediate area and are characterized by low- and mid-rise residential, office, and commercial buildings with some employment. They are served by corridor/regional transit lines and local services or shuttle services. SANDAG's description for the potential Poway Road Town Center (PW-1) is as follows:

> *The proposed smart growth area is located in the commercial center of Poway and includes property zoned Town Center, Mixed-Use, Community Business, Open Space – Recreation and Public Facilities. The proposed Town Center area includes the library, City Hall, an elementary school, Poway Community Park, retail and office uses, restaurants, and grocery stores as well as several for-rent affordable family housing and ownership townhouse developments. The City of Poway is proposing a mixed-use master planning effort that includes the western portion of the smart growth area on the south side of Poway Road that will revitalize the properties on Poway Road. This effort may also include a plan to renovate the Community Park. The mixed-use project as envisioned may include entertainment, creek restoration, green spaces, new shops, restaurants; view corridors and pedestrian connections into Community Park from Poway Road; a pedestrian-friendly main street with retail on the first floor and residential above; market rate housing, as well as affordable housing and shared parking among the various land uses.*[3]

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[2] SANDAG, *Smart Growth Concept Map*, http://www.sandag.org/index.asp?projectid=296&fuseaction=projects.detail (accessed March 31, 2015).

[3] SANDAG, *Smart Growth Concept Map Site Descriptions*, http://www.sandag.org/uploads/projectid/projectid_296_14002.pdf (accessed March 31, 2015).

Poway Municipal Code

Several chapters of the Poway Municipal Code affect land use planning and urban design. Chapters 17.08 (*Residential Zones*), 17.10 (*Commercial Zones*), and 17.22 (*Public Facilities Zone*) discuss permitted uses and development regulations on residential, commercial and public facility parcels, and are described later in this chapter (see **Section 2.3 Existing Land Use and Zoning** for more details). Chapter 17.40, *Comprehensive Sign Regulations*, includes general requirements for temporary and permanent signs and banners, describes performance standards for signs in various zones, and outlines design standards for signs. Chapter 17.42, *Off-Street Parking*, specifies development standards and minimum off-street vehicle parking requirements for different land uses, as well as parking requirements for bicycles and motorcycles.

City of Poway Landscape and Irrigation Design Manual (2010)

This City of Poway document is a comprehensive manual covering submittals, water conservation and irrigation requirements, planting requirements, and design guidance for specific applications. Some of the manual's requirements are more directly applicable to the Poway Road Study Area, including those related to street trees and right-of-way planting, parking lots, and public works projects.

Poway Road Specific Plan (May 1996)

This document described a vision for Poway Road as an economically healthy, family oriented and mixed-use area to more effectively provide needed products and services for Poway residents and workers, with aesthetic improvements and retail appeal that will draw consumers from beyond the core market area.

The Specific Plan includes a Market Analysis that considered potential support of different commercial markets, given the area's demographics. Key recommendations include:

- **Consolidate retail uses** to better utilize commercially zoned land and improve accessibility and image of relocated businesses, including consolidation of strip retail and automotive repair businesses into planned centers
- **Concentrate commercial** activity at the intersections of Poway Road with Garden Road, Midland Road, Community Road and Pomerado Road; include a **town center** identity between Midland and Community Roads
- Encourage business services in areas that are **convenient to the South Poway Business Park**
- Encourage **specialty commercial clusters** that would provide a regional draw, such as a home furnishings district or restaurant row
- Allow **mixed commercial and residential** uses in selected areas, and **rezone surplus commercial** parcels (between intersection nodes) to allow multiple-family housing
- **Improve connectivity** between adjacent shopping centers

Accessibility by different travel modes to Poway Road's businesses and along the corridor was evaluated as part of the Specific Plan. Recommendations to enhance accessibility include:

- Implement earlier recommendations to **improve safety and traffic flow** on Poway Road: close unnecessary driveways, redesign other existing driveways and adopt driveway design standards, encourage reciprocal access between adjacent land uses, and encourage bus turnouts at transit stops
- Bring all sidewalks up to **current safety standards**
- Provide **more pedestrian linkages** to Poway Road from nearby residential areas, and provide connections between selected adjacent businesses and public facilities

The Land Use portion of the Poway Road Specific Plan recommends **revising commercial land use categories** to facilitate commercial consolidation and allow more residential uses as part of the Market Analysis. The revised zones include *Community Business District, Mixed Use Commercial District, Town Center District*, and *Automotive and General Commercial*. Since the Specific Plan's adoption in May 1996, these revised categories have been codified and are part of the current zoning in the Study Area.

The Specific Plan provides a chapter on Design Guidelines that apply to the entire plan area. These guidelines cover architecture, site design and access, exterior lighting, walls and fences, pedestrian courtyards, site furniture, signage, sidewalks, landscape, and utilities. Many of these guidelines are quite general, and others include reference to City regulations. In addition to area-wide design guidelines, more specific guidelines are offered for the four revised commercial zone types (*Community Business District, Mixed Use Commercial District, Town Center District*, and *Automotive and General Commercial*). These guidelines focus on architecture, landscape architecture, site planning, signage, and public right-of-way improvements.

Town Center and Poway Community Park Studies

In 2006-2007, the City of Poway conducted studies, community outreach and City Council workshops related to the Town Center District (see **Figure 2-1** below) that was proposed in the Poway Road Specific Plan. In 2007, the City also commissioned a study of Poway Community Park, which is immediately south of the proposed Town Center area, to assess current uses and users of Community Park, identify potential park program needs, and define programs and facilities that can fit into Community Park without losing existing parkland.

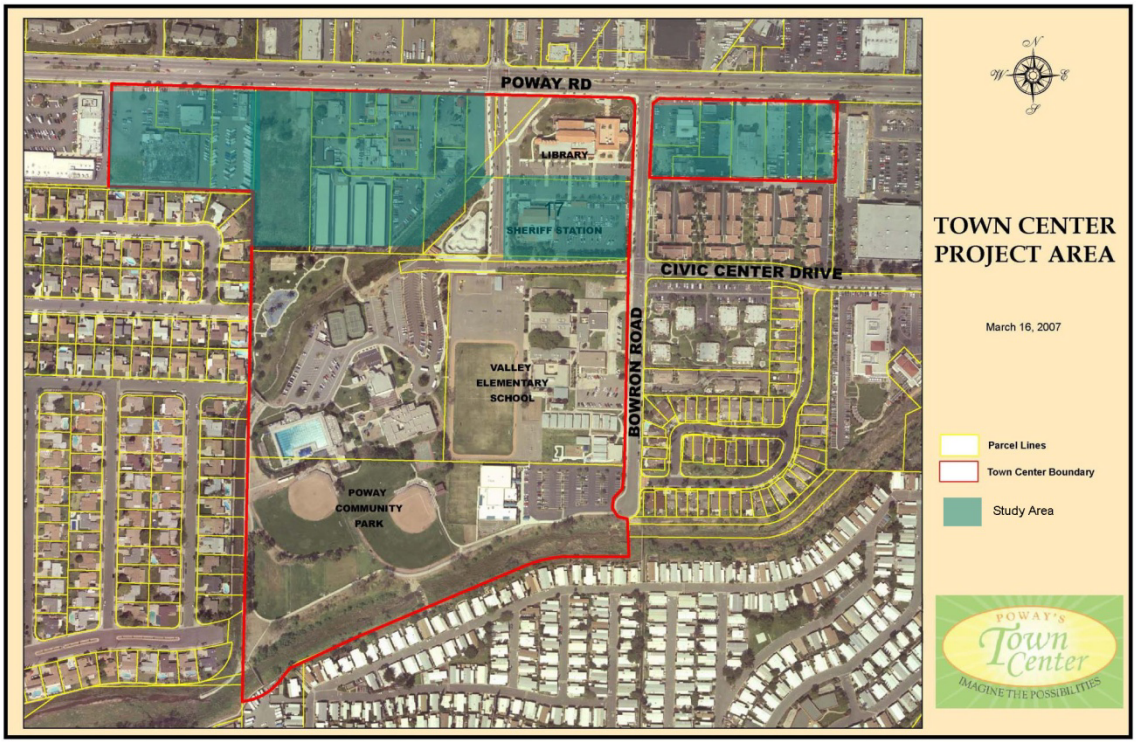

Figure 2-1: Location of Town Center Study Area; note Poway Community Park adjacent to Town Center (Source: City of Poway)

Town Center

Community input[4] resulted in the following expressed values, concerns and visions for the proposed Town Center:

- **Values:** family-oriented; sense of community; open spaces and parks; small town and country feel; peaceful and safe place; sense of history and culture
- **Concerns:** traffic and circulation; project design; cost and funding; types of businesses;, parking; types of housing; increased population

[4] City of Poway, *Poway Town Center: Community Input Summary*, May 2007

- **Visions:** pedestrian-friendly; entertainment, events and culture; distinct character; open spaces and landscaping; existing park and community facilities; local, small businesses; outdoor dining; public spaces and amenities

Based on community input and subsequent market testing, City of Poway staff presented Town Center development goals and parameters to City Council in October 2007.[5] The following development goals have been articulated:

- **Main Street:** pedestrian-friendly, with a mix of active uses
- **Public Spaces:** included within private development, plus creek enhancements
- **Look and Feel:** quality and varied architecture with step-backs
- **Community Park:** physical and visual connections to Park, enhanced public uses/amenities, and maintain/increase green space
- **Housing:** market rate and affordable senior units
- **Poway Road / Neighborhood Interface:** strong physical and visual connection to Poway Road, complementary to residential neighborhoods

Developer interest in the Town Center is expected to be attracted by strong housing and commercial tenant demand, limited residential and commercial land, housing trends toward mixed-use settings, a large employment base, and above-average incomes and spending patterns. The following development parameters have been proposed for Town Center:

- Concepts should include at least two blocks of retail-lined main street, for strong pedestrian orientation and active ground-floor retail
- Building heights should vary from one to three stories (up to 45 feet in height); a four-story building (up to 57 feet in height) could be considered in the core area that abuts Poway Community Park
- Include shared parking concept based on a parking study
- At least 10 percent of the developed area should comprise public spaces and landscaping, including pedestrian plazas, paseos and amenities such as water fountains
- Include a balanced mix of commercial, residential and public uses, with careful integration of private development with Poway Community Park renovations
- Big box retail is not desired; mid-size tenants could be appropriate for a vital main street if well-designed

[5] City of Poway, *Agenda Report Summary: Town Center Development Parameters and Developer Solicitation Process*, October 16, 2007

Poway Community Park

The City's study of Poway Community Park generated the following recommendations,[6] based on park system and demographic analyses, plus a community survey and public workshop:

- Respond to a changing population (demographically as well as more people who could walk or bike to the park)
- Improve and enhance the creek: restore the creek back to a more natural state, and include paths and trail amenities
- Increase availability and quality of indoor community space
- "Go green" in terms of both facility design and education programs
- Improve and augment open space and athletic fields
- Provide additional park amenities
- Promote increased physical activity
- Focus on park maintenance and safety
- Update park policy and standards

Town Center Streetscape Standards (1998)

Streetscape standards for the proposed Town Center have been incorporated in the City of Poway Supplemental Engineering Standards. The Town Center Streetscape Standards cover the following components:

- Street lights
- Landscape seat planters
- Tree grates
- Street trees

[6] RBF Consulting, *Poway Community Park Study*, October 2007

2.3 Existing Land Uses and Zoning

The Poway Road corridor contains a mix of existing land uses and building types. The following is a summary of existing land uses and current zoning requirements within the Study Area.

Existing Land Uses

Given Poway Road's history as an early thoroughfare in the area's development, there are many different existing land uses within the Study Area. The majority of uses are commercial, and the remaining are split among industrial, residential, and civic and community uses.

Commercial uses comprise 72.6 percent of the parcel acreage in the Study Area. They are distributed throughout the corridor, with clusters located near Pomerado Road, Carriage Road and Community Road. About half of the commercial acreage is for retail, restaurant and entertainment uses. Much of the commercial development is characterized by multi-tenant shopping centers. Major retailers along the corridor include HomeGoods, Lowe's, and grocers such as Vons and Stater Brothers. Office uses comprise about twenty percent of commercial uses, and automobile sales and service establishments make up almost 17 percent of commercial uses. These tend to be concentrated near the east end of the corridor, between Midland Road and Garden Road.

About 11 percent of the acreage in the Study Area is currently residential, with most of it dedicated to multi-family housing, located in several developments between Pomerado Road and Community Road. There also are two condominium developments that comprise the bulk of remaining residential acreage.

Industrial uses, such as warehousing, self-storage facilities, and auto repair garages comprise just under seven percent of land use in the Study Area. They are distributed along the corridor, and include a small cluster of industrial parcels at the east end of the Study Area.

Approximately three percent of the Study Area is devoted to community and civic uses, such as government buildings and institutional or quasi-institutional facilities. These include the library and sheriff's office. In addition, 4.5% of the Study Area's parcels are owned by public agencies including the City of Poway and Poway Housing Authority; these parcels lack a formal land use description based on assessor information attached to parcel data. The remaining two percent of land within the Study Area comprises vacant parcels.

The locations of existing land uses are shown in **Exhibit 2-2: Existing Land Use** (in Appendix), and **Table 2-1** summarizes the overall acreage for each land use (*note: existing land use refers to homes, businesses, public uses, and other uses that currently exist. It is based on County Assessor information and is different from General Plan land use/zoning designations).*

Table 2-1: Existing Land Uses within the Plan Area		
Land Use Type	Total Acres	% of Total
Residential: Single Family	1.53	0.6%
Residential: Condominium	8.00	3.3%
Residential: Multi-Family	16.39	6.8%
Commercial: General	15.11	6.2%
Commercial: Retail/Restaurant/Entertainment	93.08	38.4%
Commercial: Office	36.06	14.9%
Commercial: Hotel/Motel	1.95	0.8%
Commercial: Auto Sales + Specialty Service	29.69	12.3%
Industrial	16.57	6.8%
Community/Civic	7.45	3.1%
No Use Classification: Public Agency-Owned	10.84	4.5%
Vacant	5.43	2.2%
Total	**242.10**	**100%**

Data source: City of Poway GIS data (sde.GISADMIN.land_Parcels)

Current Zoning Regulations

The City of Poway currently has ten different zoning designations applied within the Plan Area. **Table 2-2** (below) provides a summary of total acres for each zone type, and **Exhibit 2-3: Existing Zoning Designation** (in Appendix) shows their locations.

Most of the Study Area is currently zoned for commercial uses and mixed uses, with over half the acreage zoned for commercial, and about another one-third zoned for a mix of commercial and residential uses (MU and TC zones). About eight percent is zoned for residential uses, with most of this designated for higher-density condominium and apartment uses. A negligible portion of the Study Area is zoned for open space (resource management); this area is associated with an existing condominium development.

Table 2-2: Summary of Zoning Acreage

Zoning Designation		Total Acres	% of Total
Residential			
RS-2	Residential Single Family 2	0.9	0.4%
RS-7	Residential Single Family 7	0.3	0.1%
RC	Residential Condominium	7.7	3.2%
RA	Residential Apartment	11.2	4.6%
Commercial and Mixed Use			
AGC	Automotive General Commercial	54.5	22.5%
CB	Community Business	72.5	29.9%
CG	Commercial General	9.5	3.9%
MU	Mixed Use	19.2	7.9%
TC	Town Center	66	27.3%
Open Space			
OS-RM	Open Space Resource Management	0.3	0.1%
Total		*242.1*	*100%*

Data sources: City of Poway GIS data (sde.GISADMIN.plan_Zoning) and Poway Road Corridor Study RFP Attachment 1

The following is a summary of each zone within the Study Area, including their intended uses and major development standards.

Residential Zones[7]

- **RS-2: Residential Single-Family 2 Zone.** The RS-2 residential single-family 2 zone is intended as an area for low density residential uses with minimum lot size of 20,000 square feet and maximum density of two units per net acre. Additional uses are permitted that are complementary to, and can exist in harmony with, low density neighborhoods. Development standards include:

Minimum net lot area:	20,000 square feet
Minimum lot width:	100 feet (30 feet for cul-de-sac or unusually shaped lot, 20 feet for flag lot)
Maximum lot coverage:	35 percent
Maximum building height:	35 feet or 2 stories, whichever is less, or as expressly authorized pursuant to an adopted specific plan
Parking spaces per unit:	Two spaces, garages required

- **RS-7: Residential Single-Family 7 Zone.** The RS-7 residential single-family 7 zone is intended as an area for single-family residential development on minimum lot sizes of 4,500 square feet and maximum densities of eight units per acre. Additional uses are permitted that are complementary to, and can exist in harmony with, a residential neighborhood. Development standards include:

Minimum net lot area:	4,500 square feet
Minimum lot width:	50 feet (30 feet for cul-de-sac or unusually shaped lot, 20 feet for flag lot)
Maximum lot coverage:	50 percent
Maximum building height:	35 feet or 2 stories, whichever is less, or as expressly authorized pursuant to an adopted specific plan
Parking spaces per unit:	Two spaces, garages required

[7] City of Poway Municipal Code, *Chapter 17.08: Residential Zones*

- **RC: Residential Condominium Zone.** The RC residential condominium zone is intended as an area for the development of residential condominiums with provisions for adequate light, air, open space and landscaped areas at a maximum density of 12 units per net acre. Additional uses are permitted that are complementary to, and can exist in harmony with, a residential condominium development. Development standards include:

Minimum net lot area:	2 acres
Minimum lot width:	135 feet (corner) or 165 feet (interior)
Maximum lot coverage:	50 percent
Maximum building height:	35 feet or 2 stories, whichever is less, or as expressly authorized pursuant to an adopted specific plan
Parking spaces per unit:	1.75 spaces (1 garage)/1 bedroom unit; 2.25 spaces (1 carport)/2 bedroom unit; 3.00 spaces (2 garages)/3 bedroom or larger unit

- **RA: Residential Apartment Zone.** The RA residential apartment zone is intended as an area for the development of residential apartments with provisions for adequate light, air, open space and landscaped areas at a maximum density of 20 units per net acre. Additional uses are permitted that are complementary to, and can exist in harmony with, a residential apartment development. Development standards include:

Minimum net lot area:	3 acres
Minimum lot width:	135 feet (corner) or 165 feet (interior)
Maximum lot coverage:	50 percent
Maximum building height:	35 feet or 2 stories, whichever is less, or as expressly authorized pursuant to an adopted specific plan
Parking spaces per unit:	1.5 spaces (1 carport)/1 bedroom unit; 2.25 spaces (1 carport)/2 bedroom unit; 2.75 spaces (1 carport)/3 bedroom or larger unit

Commercial Zones[8]

- **AGC: Automotive General Commercial Zone.** The AGC automotive commercial general zone is intended to accommodate a full range of roadway-oriented retail, service and wholesale commercial activities including especially motor vehicle sales and service. Development standards include:

Maximum lot coverage:	35 percent
Front yard setback:	20 feet
Maximum building height:	35 feet or two stories, whichever is less, except as permitted by PMC 17.10.140(C) or as expressly authorized pursuant to an adopted specific plan

- **CB: Community Business Zone.** The CB community business zone is intended to accommodate local and community-wide commercial centers that typically serve large areas of the City. The land uses are intended to provide a less intensive range of retail and service business than would be found in the General Commercial zone. Typical land uses would include a wide range of retail and service-type businesses, junior department stores, medical and financial office complexes, food chains, restaurants, hotels, and specialty stores. Land Development standards include:

Maximum lot coverage:	35 percent
Front yard setback:	20 feet
Maximum building height:	35 feet or two stories, whichever is less, except as permitted by PMC 17.10.140(C) or as expressly authorized pursuant to an adopted specific plan

- **CG: Commercial General Zone.** The CG commercial general zone is intended as an area for the location of a broad range of uses and provides locations for major retail and service businesses. Development standards include:

Maximum lot coverage:	30 percent
Front yard setback:	20 feet
Maximum building height:	35 feet or two stories, whichever is less, except as permitted by PMC 17.10.140(C) or as expressly authorized pursuant to an adopted specific plan

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[8] City of Poway Municipal Code, *Chapter 17.10: Commercial Zones*
City of Poway, *Poway Road Specific Plan*, May 1996

- **MU: Mixed Use Zone.** The MU mixed use zone is intended for a mix of commercial and residential land uses that could exist separately or in combination on the same site. Land uses applicable to this zone would include single or multiple family residential units, retail, professional services, financial and other office-related uses, pharmacies, and real estate agencies. Development standards include:

Maximum lot coverage:	35 percent
Front yard setback:	20 feet
Maximum building height:	35 feet or two stories, whichever is less, except as permitted by PMC 17.10.140(C) or as expressly authorized pursuant to an adopted specific plan

- **TC: Town Center Zone.** The TC town center zone is intended to be the commercial center of the City and to accommodate various forms of general and specialty retail, dining and entertainment establishments and civic uses. Development standards include:

Maximum lot coverage:	45 percent
Front yard setback:	0
Maximum building height:	35 feet or two stories, whichever is less, except as permitted by PMC 17.10.140(C) or as expressly authorized pursuant to an adopted specific plan

Open Space Zone[9]

- **OS-RM: Open Space Resource Management Zone.** This zone is intended for lands where valuable natural resources are located. The mountainous areas, prominent ridges, riparian areas, wildlife corridors, areas of high biological value, areas with geologic hazards, and areas with valuable historic and prehistoric resources are included within this zone. Limited activity, involving minimal disturbance of the existing terrain and habitat, may be allowed on lands carrying this zone with the approval of the City Council.

[9] City of Poway Municipal Code, *Chapter 17.24 Open Space Resource Management Zone*

2.4 Corridor Design Character

The look and feel of the Poway Road corridor results primarily from its history as a commercial road with vehicle-oriented uses.

Site Development and Architecture

The numerous commercial developments are generally characterized by perimeter buildings surrounding large parking lots. Parking lots tend to be dominated by pavement, with very limited landscaping, except for more recent developments that offer more landscaped islands in the parking areas. Utility vaults, which vary in condition and appearance, are often located in front of commercial buildings and adjacent to the sidewalk. In some cases, they encroach into the sidewalk.

Architectural styles vary greatly, from modest single-level office buildings, to stucco-clad shopping centers, modern auto sales establishments, and "country" themed commercial development that is more human-scaled and inviting. Buildings along the corridor are maintained in various condition including some poorly-maintained strip retail. Much renovation and redevelopment will need to occur if the corridor is to present a more unified character in the future.

Streetscape

The corridor streetscape character reflects Poway Road as a major vehicle corridor. Hardscape and numerous curb cuts dominate the corridor. Although these curb cuts promote access to the parcels along the road, they are also safety hazards to pedestrians and can impede traffic flow.

In terms of landscaping, there are few street trees along Poway Road. Occasionally, adjacent parcels provide landscaped areas adjacent to the sidewalk. There are landscaped medians along much of Poway Road. Although the plantings in these medians vary in their appearance and vigor, the medians provide a prime opportunity to improve the greenery along the road with more drought-tolerant native trees, such as Coast Live Oak, and lower-maintenance ground cover plantings. In general, the corridor does not provide enough landscaping to enhance the "City in the Country" theme.

Corridor Issues and Opportunities

Poway Road's planning context, as well as existing physical conditions and design character, present several issues and opportunities associated with private and public realm development. Initial observations of these issues and opportunities are presented in **Exhibit 2-4: Issues and Opportunities Map** (in Appendix).

CITY OF POWAY

poway road

CORRIDOR STUDY

Existing Conditions Assessment

Chapter 3. Mobility and Transportation

Mobility and Transportation Findings

Walkability

1. Sidewalks are continuously present on both sides of Poway Road within the study area with no noticeable physical obstructions or breaks. However, due to high vehicular volumes (35,000 ADT) and speeds (35 mph), as well as narrow sidewalks with limited to no buffer between pedestrians and moving vehicles, multi-modal analysis results show level of service "D" which indicates a poor pedestrian environment.

2. Intersections with the highest pedestrian activities include:

   - Bowron Road / Civic Center Drive (224 AM / 119 PM)
   - Poway Road / Pomerado Road (54 AM / 56 PM)
   - Poway Road / Community Road (39 AM / 59 PM)

3. Intersections with the highest number of pedestrian collisions for the five year period between 2009 and 2013 include:

   - Poway Road / Community Road (2 collisions)
   - Poway Road / Pomerado Road (1 collision)
   - Poway Road / Tarascan-Civic Center Drive (1 collision)

Cycling

1. A Class II bike lane extends along the entire Poway Road Corridor on both sides of the roadway with no gaps in connectivity. However, high vehicular volumes (35,000 ADT), relatively high speeds (35 mph), the lack of physical barriers, and numerous conflict points with driveways create a stressful environment for cyclists along Poway Road, especially in the Town Center area.

2. Intersections with the highest bicyclist activities include:

   - Poway Road / Community Road (38 AM / 52 PM)
   - Poway Road / Midland Road (8 AM / 19 PM)
   - Poway Road / Pomerado Road (9 AM / 6 PM)

High pedestrian activities are also present at these intersections.

3. Intersections with the highest number of bicycle collisions for the five year period between 2009 and 2013 include:

    - Poway Road / Silver Lake Drive (2 collisions)
    - Poway Road / Pomerado Road (1 collision)
    - Poway Road / Community Road (1 collision)

Transit System

1. Metropolitan Transit System (MTS) maintains three (3) bus routes that serve 34 bus stops along the Poway Road Corridor area: Route 944, Route 945, and 945A. Bus Route 944 and 945 run at 30-minute headways during weekdays and Saturdays while Route 945A runs at 1-hour headways only during weekdays.

2. Bus stops with the highest average daily boardings and alightings in 2014 include:

    - Poway Road / Pomerado Road (68)
    - Poway Road / Bowron Road (46)
    - Poway Road / Community Road (25)

Vehicular Travel

1. All of the roadway segments within the Poway Road Corridor study area are operating within design capacity thresholds with the exception of Garden Road, between Poway Road and Claire Drive, which currently operates at over capacity.

2. Intersections along the Poway Road Corridor operate under acceptable level of service "D" or better with the exception of Poway Road / Community Road, which operates at level of service "E" during both AM and PM peak hours.

3. Arterial speed analysis results show substandard levels of operation in the following roadway segments along the Poway Road Corridor:

    - WB between Oak Knoll Road and Pomerado Road; LOS F – AM & PM peak hour
    - EB between Oak Knoll Road and Pomerado Road; LOS E - PM peak hour
    - EB between Silver Lake Drive and Carriage Road; LOS E - AM & PM peak hours
    - WB between Community Road and Midland Road; LOS F - AM & PM peak hour
    - WB between Midland Road and Gate Drive; LOS E - PM peak hour

4. Intersections with the highest number of vehicular collisions for the five year period between 2009 and 2013 include:

    - Poway Road / Pomerado Road (41 collisions)
    - Poway Road / Community Road (30 collisions)
    - Poway Road / Midland Road (24 collisions)

3.1 Introduction

This chapter documents the existing physical and operational mobility conditions of the Poway Road Corridor located within the City of Poway. The project extent runs approximately three miles between Garden Road in the east to Oak Knoll Road in the west. It provides an analysis of existing pedestrian, bicycle, transit, and vehicular mobility conditions, as well as discusses mobility opportunities and constraints. **Figure 3-1** displays the project study area. Note that all figures referenced in this chapter are provided at the end of the chapter (starting on page 3-38).

3.2 Relevant Planning Documents and Policies

This section provides an overview of planning documents relevant to the Poway Road Corridor Study context.

City of Poway Transportation Master Element

In 2010, the City of Poway adopted the Transportation Master Element to set forth goals, policies and strategies that promote effective, safe, and efficient use of existing transportation facilities and development of new facilities, while protecting and managing the natural and economic resources of the City.

San Diego 2050 Regional Transportation Plan (2011)

The 2050 Regional Transportation Plan (RTP) provides long-range guidance for the regional transportation system. Looking ahead 40 years, the RTP envisions new jobs and housing to be situated in environmentally sustainable communities that are more conducive to walking and bicycling. The plan also envisions these communities having more access to public transit. To achieve a more multi-modal regional transportation network, the 2050 RTP outlines projects for transit, rail and bus services, express or managed lanes, highways, local streets, bicycling, and walking. Projects identified in the RTP within the project area include the following:

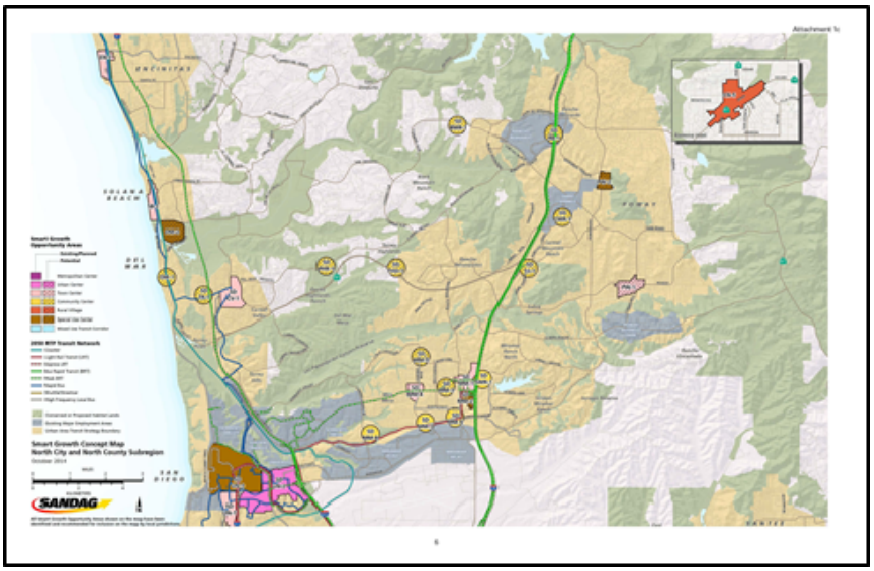
- 2035 Local Bus Routes – Under the Revenue Constrained scenario of the RTP key local bus routes throughout the region are projected to increase headways to 10 minutes. This could potentially include routes along Poway Road.

Smart Growth Concept Map (2014)

The initial Smart Growth Concept Map (SGCM) was adopted by SANDAG in 2006 to illustrate the location of existing, planned, and potential smart growth areas. The SGCM was developed as a "key implementation action of the Regional Comprehensive Plan (RCP)." Seven smart growth "place types" were used to categorize each opportunity area identified in the RCP and SGCM. Smart growth designated areas serve to determine eligibility to participate in the Smart Growth Incentive Program (SGIP) which is funded through TransNet. The SGIP provides funding for local transportation-related infrastructure and planning projects that support smart growth.

Poway Road from Tarascan Drive/Civic Center Drive to Midland Road is identified as a potential Town Center according to the SGCM. The following definition of the place type is provided in SANDAG's *Designing for Smart Growth* guidelines:

Town Center – Town Centers are areas with a mix of office and commercial development, including residential mixed-use, that draw from their subregional areas and are served by regional or corridor transit lines, local bus services or shuttle services.



3.3 Analysis Methodology

Multi-Modal Analysis

In general, street and freeway system level of service (LOS) is based on facility operations, while multi-modal LOS (MMLOS) for pedestrian, transit, and bicycle facilities are evaluated based on the user's perception of the quality of the environment or systems while using these modes. The multi-modal operations analysis was performed utilizing the HCS 2010 (2010 HCM methodology) multi-modal software.

The HCS 2010 software outputs numerical ratings of the various modes of travel, and these rating are then converted into A - F letter grades to represent the travelers' perception of the resulting quality of service provided by the subject facility. LOS A represents the best conditions from the traveler's perspective, while LOS F represents the worst. Table 3.1 displays the LOS letter grade numerical equivalents for the non-vehicular facilities (pedestrian, transit, and bicycle).

Table 3.1 Multi-Modal LOS Letter Grade Numerical Equivalents

LOS Letter Grade	Multi-Modal Score
A	≤ 2.00
B	2.00 < and ≤ 2.75
C	2.75 < and ≤ 3.50
D	3.50 < and ≤ 4.25
E	4.25 < and ≤ 5.00
F	> 5.00

Source: Transportation Research Board NCHRP Project 3-70, Highway Capacity Manual 2010.

Pedestrian LOS

Pedestrian LOS is a measure of the pedestrian's experience at intersections and on street links between the intersections. Pedestrian LOS is a function of the following number of variables:

- Lateral separation between pedestrians and vehicular traffic
- Width of sidewalk
- Speed and makeup of the vehicular traffic
- Difficulty of crossing arterial
- Right-turn on red

- Permissive Left-turn during "Walk" phase
- Delay waiting to cross at signal
- Intersection crossing distance
- Cross-street vehicular traffic volume and speed

Bicycle LOS

Bicycle LOS is a weighted combination of the bicyclist's experience at intersections and on street links between the intersections. Bicycle LOS is a function of the following five variables:

- Lateral separation between bicycles and vehicular traffic
- Speed and makeup of the vehicular traffic
- Pavement conditions
- Directional vehicular traffic volumes
- Intersection crossing distance

Transit LOS

Transit LOS is based on a combination of the user's experience while accessing the transit system, while waiting for transit service, and while riding on transit. The access experience is represented by the pedestrian LOS score (discussed above) while the pedestrian is accessing a bus stop. This score is specific to the direction of travel along a street. The waiting and riding experiences are combined into a transit wait/ride score. The transit wait/ride score is a function of the average headway between transit vehicles and the perceived travel time.

The following variables are used to determine the transit LOS:

- Frequency of service
- Mean speed
- Load factors
- Quality of pedestrian access to transit stops
- Transit stop amenities

Vehicular Analysis

Roadway Segment Capacity Standards and Thresholds

Unlike other jurisdictions within the region, the City of Poway does not assign a daily LOS to roadway facilities. Instead, the City developed a series daily traffic volume design thresholds for each facility type (Primes, Majors, Collectors, etc.) and for unique individual facilities (Espola Road, Poway Road, Community Road, etc.), which are outlined in Table V-1 of the *City of Poway Transportation Master Element, March 2010*. To determine if average daily traffic volumes on the study area roadway segments are within the design threshold, the appropriate volumes were compared to the daily design capacity of the roadway segments.

Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Obtained from existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all intersections within the study area.
- Peak Hour Factor: Obtained from existing peak hour counts.
- Signal Timing: Obtained from existing signal timing plans (as of December 2014).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in 2010 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (seconds/vehicle).

The 2010 HCM methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The LOS criteria used for this technique are described in Table 3.2. The computerized analysis of intersection operations was performed utilizing the Synchro 8.0 (2010 HCM methodology) traffic analysis software (by Trafficware, 2011).

Table 3.2 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method	
Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
<10.0	LOS A occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	LOS B occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	LOS C occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	LOS D occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	LOS E occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	LOS F occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.
Source: 2010 Highway Capacity Manual, Transportation Research Board Special Report 209	

According to the SANTEC/ITE TIS guidelines, LOS D generally represents the upper limit of satisfactory operations.

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the *2010 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or measured average control delay of all movements. The LOS for a side-street stop controlled (SSSC) intersection is determined by the computed or measured delay of the worst approach. Table 3.3 summarizes the level of service criteria for unsignalized intersections.

Table 3.3 Level of Service Criteria for Stop Controlled Unsignalized Intersections	
Average Control Delay (sec/veh)	Level of Service (LOS)
<10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F
Source: 2000 Highway Capacity Manual	

Arterial Speed Analysis

The arterial speed analysis was performed utilizing the Synchro 8.0 software which follows the HCM 2000 methodology. Arterial speed analysis takes the following factors into consideration to produce an arterial LOS:

- Length of Roadway Segment
- Flow Speed (posted speed limit)
- Running Time (roadway segment distance divided by flow speed)
- Signal Delay
- Travel Time (running time + signal delay)
- Arterial Speed (length of roadway segment divided by travel time)

After the software classifies the roadway segments based on distances between intersections and roadway segment speeds, it assigns an arterial LOS.

3.4 Mobility Analysis

3.4.1 Walkability

Walkability refers to the pedestrian network's comfort, safety, convenience and connectivity, and is an important mobility and quality of life consideration for communities. The degree to which people walk for transportation and recreation is influenced by the comfort, safety and convenience of their walking experience. Comfort is influenced by traffic volumes, travel speed, and separation from through traffic, topography, the presence of sidewalks and improved paths, and climate. Safety is influenced by the speed and volume of conflicting vehicle traffic, street widths, traffic control, number of conflict points, and infrastructure design. Convenience is influenced by distance and directness of travel. As connectivity increases, travel distances decrease and route options increase for the pedestrian.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, signage, curb ramps, and other amenities such as street trees for shading.

Figure 3-2 displays existing sidewalk and curb ramps throughout the study area. Five-foot wide sidewalks with no buffer are the most common type of sidewalk present on both sides of Poway Road within the study area, with some exceptions comprised of short segments of buffered sidewalks, between Tarascan Drive/Civic Center Drive and Community Road, and meandering sidewalks east of Sudan Road. The sidewalks generally have good pavement conditions with no noticeable physical obstructions. ADA compliant curb ramps are present at all intersections within the study area with the exception of Poway Road / Garden Road, Civic Center Drive / Civic Center Drive (where Valley Elementary School and Poway skate park are located), and Civic Center Drive / Community Road, where curb ramps are available but are not ADA compliant.

Pedestrian Demand

Figure 3-3 displays the existing AM and PM peak hour pedestrian counts at all study area intersections. Pedestrian counts were conducted in February, 2015.

The pedestrian counts show high pedestrian demands along the following intersections along Poway Road Corridor:

- Bowron Road / Civic Center Drive (224 AM / 119 PM)
- Poway Road / Pomerado Road (54 AM / 56 PM)
- Poway Road / Community Road (39 AM / 59 PM)
- Poway Road / Midland Road (47 AM / 50 PM)

As shown, the intersection of Civic Center Drive / Bowron Road has the greatest observed pedestrian volumes, likely due to the proximity of Valley Elementary School located on the southwest corner of the intersection. Other potential factors related to the high pedestrian volumes in this intersection could relate to the proximity of Poway Branch Library and the bus stop at the intersection of Poway Road and Bowron Road.

Pedestrian Level of Service

Pedestrian level of service was evaluated along the Poway Road Corridor using the multi-modal level of service methodology discussed previously.

Table 3.4 displays existing pedestrian LOS along Poway Road study segments for AM and PM peak hours. As shown, pedestrian LOS operates at LOS D or better within the study area. HCS Multi-Modal Analysis Worksheets are included in Appendix A.

Table 3.4 Existing Multi-Modal Analysis – Pedestrian LOS

Roadway	Segment	AM		PM	
		EB	WB	EB	WB
Poway Road	Oak Knoll Road to Pomerado Road	D	D	D	D
	Pomerado Road to Silver Lake Drive	D	D	D	D
	Silver Lake Drive to Carriage Road	D	D	D	D
	Carriage Road to Tarascan Drive	D	D	D	D
	Tarascan Drive to Community Road	D	D	D	D
	Community Road to Midland Road	D	D	D	D
	Midland Road to Gate Drive	D	D	D	D
	Gate Drive to Garden Road	D	D	D	C

Source: Chen Ryan Associates; April 2015

Figure 3-4a and Figure 3-4b graphically display the existing AM and PM peak hour pedestrian LOS, respectively, along the study area. As shown, LOS D prevails along Poway Road during AM and PM peak hours with the exception of the roadway segment between Gate Drive and Garden Road in the westbound direction, which displays a LOS C due to the presence of meandering sidewalks, which provide lateral separation between pedestrians and vehicular traffic. Despite the fact of sidewalks being present on both sides of Poway Road, possible factors affecting LOS results may include the width of the sidewalk (5-ft), the lack of separation between the sidewalk and moving vehicles, as well as high vehicular speeds and traffic volumes along Poway Road.

Pedestrian Safety

Pedestrian collision data was obtained from SWITRS (Statewide Integrated Traffic Records System) and TIMS (Transportation Injury Mapping System) for the period from 2009 to 2013. During this 5-year period, six (6) pedestrian-involved collisions with no fatalities, were reported along the Poway Road study area extent. **Figure 3-5** displays the distribution of the six pedestrian-involved collisions along Poway Road.

Table 3.5 summarizes the reported pedestrian-involved collisions by collision cause. As shown, the leading primary collision cause was attributed to "pedestrian violations", accounting for 67% of the pedestrian-involved collisions.

TABLE 3.5 Primary Pedestrian-Involved Collision Cause (2009-2013)

Primary Collision Cause	Collisions	Percent Total
Violation of Pedestrian's R/W	2	33%
Pedestrian Violation	4	67%
Total	6	100%

Source: TIMS, SWITRS, Chen Ryan Associates; April 2015

3.4.2 Cycling

Bicycle facilities are an integral component of a transportation system. Adequate bicycle facilities encourage active transportation, enhance recreational opportunities, and help attract visitors. Bikeways not only provide local opportunities for cyclists, but also offer regional connections and connections to transit. This section discusses existing bicycle facilities, activity levels, and safety analyses for the Poway Road Corridor.

Bicycle Facilities

Bicycle facilities are classified based on a standard typology as follows:

- Class I Bikeway (Bike Path) provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.

Class I Bikeway in San Juan Capistrano, CA

- Class II Bike Lane provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally five feet wide. Vehicle parking and vehicle/pedestrian cross-flow are permitted.

Class II Bike Lane along Poway Road

- Class III Bike Route provides for a right-of-way designated by signs or pavement markings for shared use with cyclists and motor vehicles.

Class III Bike Route on Saturn Boulevard in Imperial Beach

- Class IV Cycle Track provides for a right-of-way designated exclusively for bicycle travel within the roadway and physically protected from vehicular traffic. Types of separation include, but are not limited to grade separation, flexible posts, or on-street parking.

Class IV Cycle Track in Washington DC

Figure 3-6 displays existing bicycle facilities within the study area. As shown, there is a well-connected bicycle network throughout the study area, primarily comprised of Class II bike lanes, with additional connections made from bike routes and bike paths. The network provides for north-south and east-west travel through intersecting facilities.

Bicycle Demand

Figure 3-7 displays the existing AM and PM peak hour bicycle counts at all study area intersections. Bicycle counts were conducted on February 2015. The bicycle counts show high bicycling demands at the following intersections along Poway Road Corridor:

- Poway Road / Community Road (38 AM / 52 PM)
- Poway Road / Midland Road (8 AM / 19 PM)
- Poway Road / Pomerado Road (9 AM / 6 PM)

The intersection of Poway Road / Community Road had the greatest observed bicycle volumes, potentially due to the location of various shopping centers adjacent to the intersection. Other potential factors related to the high bicyclist volumes in this intersection could relate to the connectivity that Community Road provides to northern areas of the City such as the Poway Center of Performing Arts and Twin Peaks Road.

Bicycle Level of Service

Table 3.6 displays existing bicycle LOS along Poway Road roadway segments for AM and PM peak hours. HCS Multi-Modal Analysis Worksheets are included in Appendix A.

Table 3.6 Existing Multi-Modal Analysis - Bicycle LOS

Roadway	Segment	AM		PM	
		EB	WB	EB	WB
Poway Road	Oak Knoll Road to Pomerado Road	D	D	D	D
	Pomerado Road to Silver Lake Drive	D	**E**	D	**E**
	Silver Lake Drive to Carriage Road	D	D	D	D
	Carriage Road to Tarascan Drive	**E**	D	**E**	D
	Tarascan Drive to Community Road	D	**E**	**E**	**E**
	Community Road to Midland Road	C	D	D	D
	Midland Road to Gate Drive	D	D	D	D
	Gate Drive to Garden Road	D	D	D	D

Source: Chen Ryan Associates; April 2015

Note: Bold letters indicate sub-standard LOS E or F.

As shown in Table 3.6, the following segments currently have a sub-standard bicycle LOS:

- Poway Road between Pomerado Road and Silver Lake Drive; LOS E in the westbound direction during the AM and PM peak hours. This could potentially be attributed to a plethora of business driveways that exist along this roadway segment.
- Poway Road between Carriage Road and Civic Center Drive; LOS E in the eastbound direction during the AM and PM peak hours. This could potentially be attributed to a plethora of business driveways, pavement condition not being optimal, and high vehicular volumes.
- Poway Road between Community Road and Tarascan Drive; LOS E in the westbound direction during AM peak hour. This could potentially be attributed to a substantial number of business driveways, pavement condition not being optimal, and high vehicular volumes.
- Poway Road between Tarascan Drive/Civic Center Drive and Community Road; LOS E in the eastbound and westbound directions during PM peak hour. This could potentially be attributed to a substantial number of business driveways, pavement condition not being optimal, and high vehicular volumes.

Figure 3-8a and Figure 3-8b display existing AM and PM peak hour bicycle LOS, respectively, along the study area. All of the study roadway segments along Poway Road operate between LOS D and LOS E during both AM and PM peak hour with the exception of the roadway segment between Community Road and Midland Road in the eastbound direction during AM peak hour which operates at LOS C, potentially due to the roadway being recently repaved, which benefits the bicyclist by reducing friction and potential accidents such as falling off the bicycle.

It is important to note that although bicycle facilities and a bicycle network exists, factors such as high vehicular traffic, a plethora of driveways, and insufficient lateral physical separation from vehicular traffic, contribute towards the substandard LOS results.

Bicycle Safety

Bicycle collision data was obtained from SWITRS and TIMS for the period from 2009 to 2013. During this 5-year period, nine (9) bicyclist-involved collisions were reported along the Poway Road study area, with no fatalities.

Figure 3-9 displays the distribution of the nine bicycle-involved collisions along Poway Road. As shown, the roadway segment between Pomerado Road and Carriage Road has the highest number of bicycle-involved collisions with a total of four (4) over the previous 5 years.

Table 3.7 summarizes the reported bicyclist-involved collisions by collision cause. As shown, the leading primary collision cause was attributed to "Wrong Side of Road", accounting for 44% of the bicyclist-involved collisions.

TABLE 3.7 Primary Bicycle-Involved Collision Cause (2009-2013)

Primary Collision Cause	Collisions	%
Wrong Side of Road	4	44%
Improper Turning	2	22%
Violated Vehicle's R/W	1	11%
Other	2	22%
Total	9	100%

Source: TIMS, SWITRS, Chen Ryan Associates; April 2015

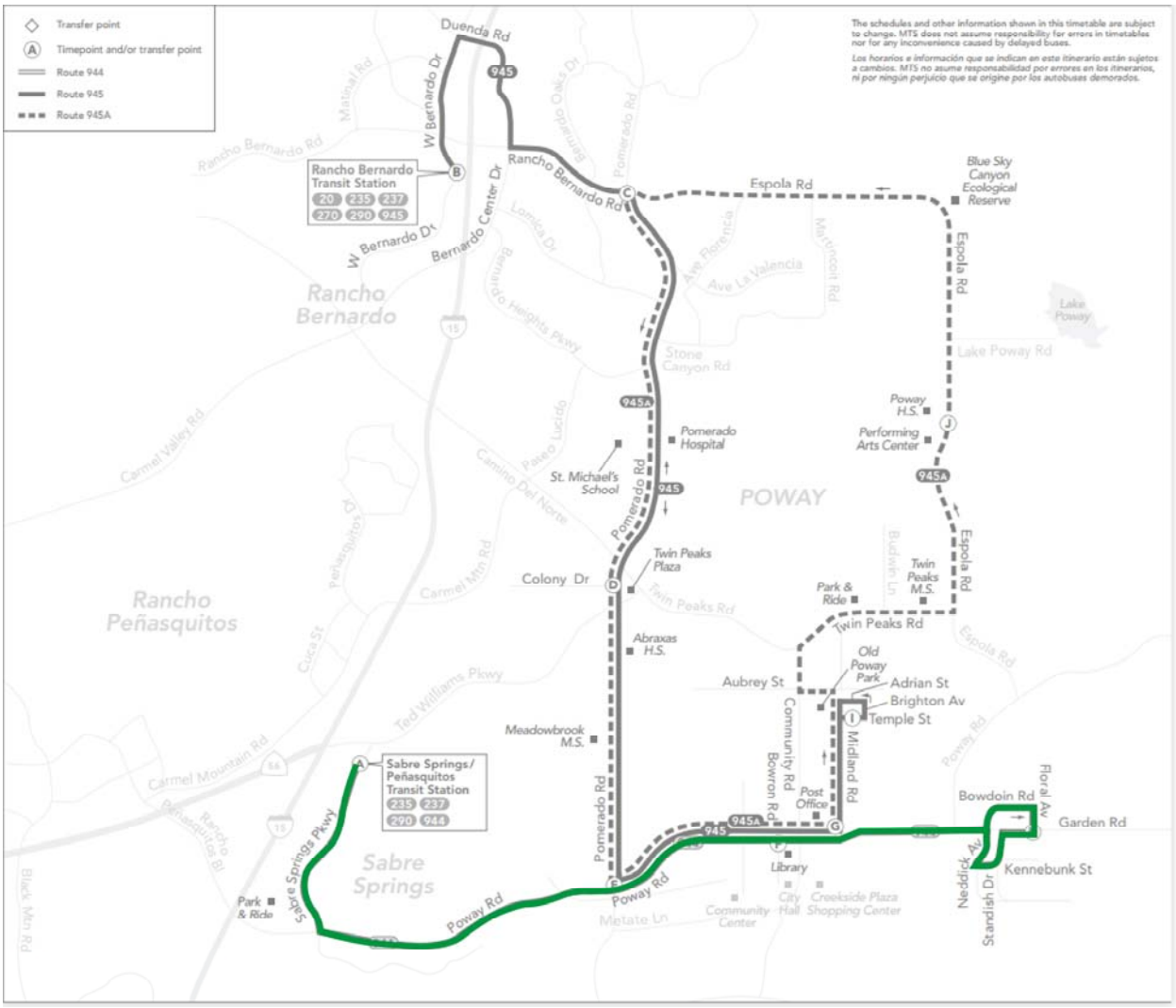
3.4.3 Transit System

Existing Transit Service

The regional transit agency, MTS, provides bus service in the City of Poway with a number of stops along the Poway Road Corridor. Bus stops along Poway Road within the study area are located at:

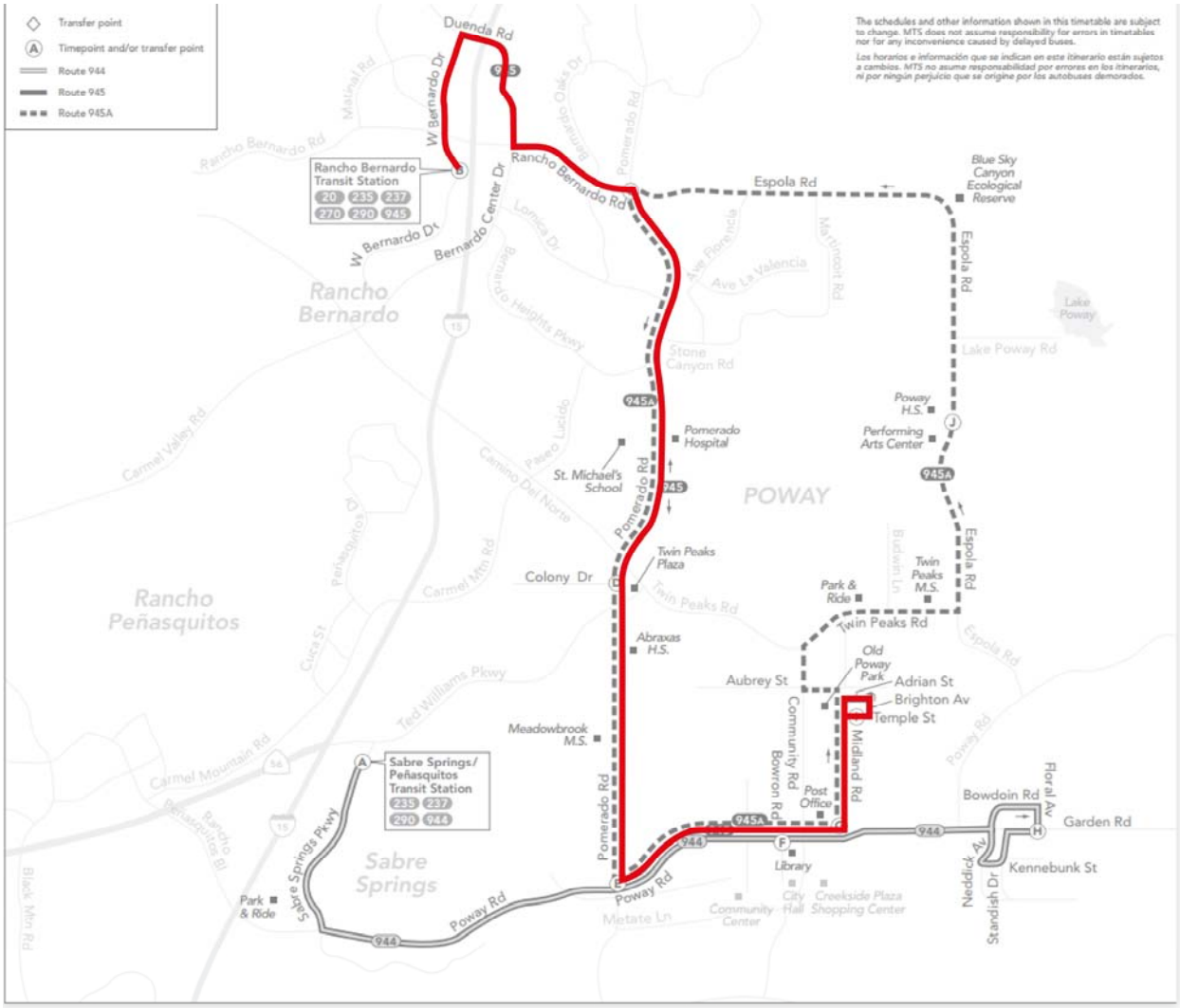
- Poway Road / Oak Knoll Road
- Poway Road / Pomerado Road
- Poway Road / Pomerado Road
- Poway Road / Countryside Apt
- Poway Road / Ridgedale Drive
- Poway Road / Silver Lake Drive
- Poway Road / Carriage Road
- Poway Road / Carriage Heights Way
- Poway Road / Quate Court
- Poway Road / Bowron Road
- Poway Road / Poway Plaza
- Poway Road / Midland Road
- Poway Road / Gate Drive
- Poway Road / Vista View Drive
- Poway Road / Adah Lane
- Poway Road / Sudan Road
- Poway Road / Golden Way
- Poway Road / Olivia Tree Lane
- Poway Road / Anne O Reno Lane
- Poway Road / Evanston Road
- Poway Road / Gate Drive
- Poway Road / Midland Road
- Poway Road / Midland Road
- Poway Road / Community Road
- Poway Road / 13236 Poway Road
- Poway Road / Tarascan Road
- Poway Road / Tarascan Road
- Poway Road / 12900 Poway Road
- Poway Road / Carriage Road
- Poway Road / Silver Lake Drive
- Poway Road / Ridgedale Drive
- Poway Road / Pomerado Road
- Poway Road / 12312 Poway Road
- Poway Road / 12222 Pomerado Plaza

Route 944 – Runs east to west between the Sabre Springs Transit Station and the Garden Road/Floral Avenue stop connecting the Sabre Springs community and southeast Poway via Sabre Springs Parkway, Poway Road, Neddick Avenue, Bowdoin Road, and Floral Avenue. Route 944 currently runs between 5:00 AM and 6:58 PM on weekdays and between 6:00 AM and 6:22 PM on Saturdays. Route 944 does not operate on holidays and Sundays. Route 944 runs at 30-minute headways at all times.



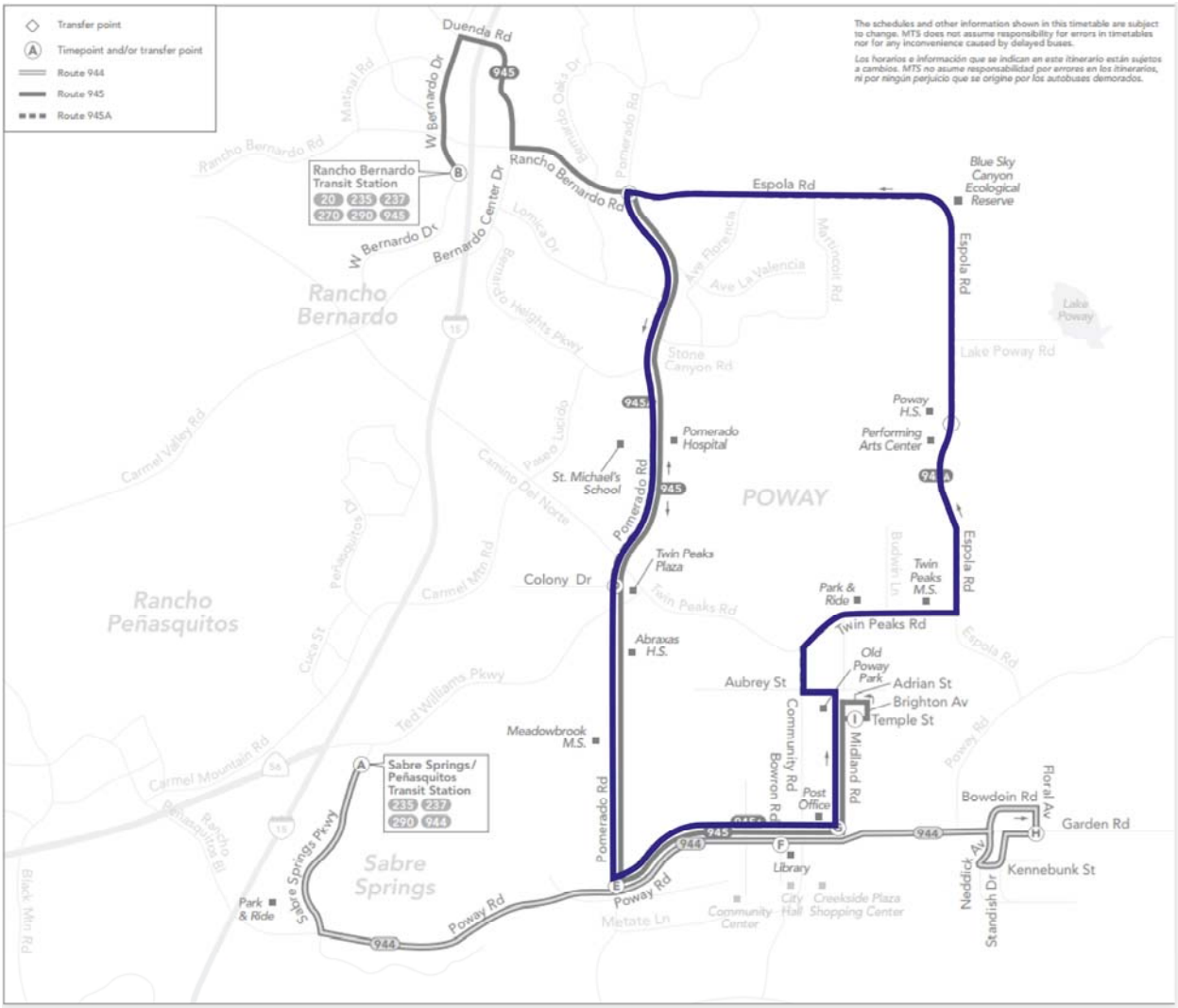
Source: MTS; April 2015

Route 945 – Runs north to south between the Rancho Bernardo Transit Station and the Temple/Midland stop connecting Poway's commercial area and the Rancho Bernardo community via Temple Street, Brighton Avenue, Adrian Street, Midland Road, Poway Road, Pomerado Road, Rancho Bernardo Road, Bernardo Center Drive, Duenda Road, and West Bernardo Drive. Route 945 currently runs between 5:12 AM and 7:45 PM on weekdays and between 6:40 AM and 7:33 PM on Saturdays. Route 945 does not operate on holidays and Sundays. Route 945 runs at 30-minute headways at all times.



Source: MTS; April 2015

Route 945A – Runs counterclockwise between the Midland Road/Poway Road, the Pomerado Road / Espola Road stop, and back to the Midland Road/Poway Road stop connecting Poway's commercial corridor and northern Poway via Midland Road, Aubrey Street, Community Road, Twin Peaks Road, Espola Road, Pomerado Road, Poway Road, and Midland Road. Route 945A only runs on weekdays and it operates between 6:36 AM and 4:34 PM. Route 945A runs at 1-hour headways during the morning and afternoon peak periods.



Source: MTS; April 2015

Transit Demand

Table 3.8 displays the existing amenities and the estimated average weekday boardings and alightings for the 2014 fiscal year (July 2013 to June 2014), obtained from the Metropolitan Transit Systems (MTS), at each of the 34 transit stops within the Poway Road Corridor study area. Transit stops throughout the corridor are closely spaced (900 feet apart on average), which provides for more than adequate transit coverage throughout the corridor (less than a ¼ mile spacing).

There are approximately 233 boardings and 252 alightings on a daily basis – for a total of 485 daily transit trip ends within the study area. Figure 3-10 displays the existing transit demand within the study area. This figure also displays a 1/4 mile buffer around transit stops, which is generally associated with a 5-minute walk

As shown in the table and the figure, due to the close transit stop spacing throughout the corridor there is a wide range in average daily boarding and alightings (between 0 and 68), with stops such as 12222 Pomerado Plaza, Gate Drive and Evanston Road averaging no daily boardings and alightings and stations Pomerado Road average 68 daily boarding and alightings in the eastbound direction and 51 in the westbound. The limited usage at some stops may indicate an oversaturation of transit stops within the corridor.

Sheltered bus stop located along Poway Road, between Pomerado Road and Ridgedale Drive. Source: Chen Ryan Associates, December 2015

Table 3.8 Existing Transit Stops, Amenities, and Average Weekday Boardings and Alightings (FY-2014)

Stop ID	Bus Stop	Shelters	Benches	Trash Cans	Route(s)	Boardings	Alightings	Total
40113	Poway Road / Oak Knoll Road		✓	✓	944	1	1	2
41235	Poway Road / Pomerado Road		✓		944	2	4	6
40114	Poway Road / Pomerado Road		✓	✓	944,945,945A	25	43	68
40009	Poway Road / Countryside Apt	✓	✓	✓	944,945,945A	9	0	9
40886	Poway Road / Ridgedale Drive				944,945,945A	1	1	2
40116	Poway Road / Silver Lake Drive		✓	✓	944,945,945A	6	3	9
40118	Poway Road / Carriage Road		✓	✓	944,945,945A	6	17	23
40917	Poway Road / Carriage Heights Way		✓		944,945,945A	1	15	16
40010	Poway Road / Quate Court		✓		944,945,945A	3	5	8
40011	Poway Road / Bowron Road	✓	✓	✓	944,945,945A	13	33	46
40920	Poway Road / Poway Plaza		✓	✓	944,945,945A	5	41	46
99134	Poway Road / Midland Road				944	5	42	47
40014	Poway Road / Gate Drive		✓	✓	944	1	0	1
41035	Poway Road / Vista View Drive				944	0	1	1
40017	Poway Road / Adah Lane				944	0	0	0
40139	Poway Road / Sudan Road				944	0	2	2
40140	Poway Road / Golden Way				944	0	3	3
40379	Poway Road / Olive Tree Lane		✓	✓	944	3	0	3
40377	Poway Road / Anne O Reno Lane		✓	✓	944	1	0	1
40373	Poway Road / Evanston Road		✓		944	0	0	0
40368	Poway Road / Gate Drive		✓	✓	944	0	0	0
40257	Poway Road / Midland Road		✓	✓	944	16	6	22
40363	Poway Road / Midland Road		✓		944,945	18	6	24
40359	Poway Road / Community Road		✓	✓	944,945	25	0	25

Table 3.8 Existing Transit Stops, Amenities, and Average Weekday Boardings and Alightings (FY-2014)

Stop ID	Bus Stop	Shelters	Benches	Trash Cans	Route(s)	Boardings	Alightings	Total
40951	Poway Road / 13236 Poway Road		✓	✓	944,945	6	0	6
40356	Poway Road / Tarascan Road	✓	✓	✓	944,945	12	0	12
40355	Poway Road / Tarascan Road		✓	✓	944,945	12	2	14
40948	Poway Road / 12900 Poway Road		✓		944,945	2	2	4
40351	Poway Road / Carriage Road		✓	✓	944,945	13	2	15
40359	Poway Road / Silver Lake Drive		✓	✓	944,945	4	2	6
40252	Poway Road / Ridgedale Drive		✓	✓	944,945	10	1	11
40347	Poway Road / Pomerado Road	✓	✓	✓	944	32	19	51
40979	Poway Road / 12312 Poway Road		✓	✓	944	1	1	2
40251	Poway Road / 12222 Pomerado Plaza	✓	✓	✓	944	0	0	0

Source: Fiscal Year 2014 Data from MTS, Chen Ryan Associates; April 2015

Transit Level of Service

Table 3.9 displays existing transit LOS along Poway Road roadway segments for AM and PM peak hours. HCS Multi-Modal Analysis Worksheets are included in Appendix A.

Table 3.9 Existing Multi-Modal Analysis - Transit LOS

Roadway	Segment	AM		PM	
		EB	WB	EB	WB
Poway Road	Oak Knoll Road to Pomerado Road	D	D	D	D
	Pomerado Road to Silver Lake Drive	B	B	B	B
	Silver Lake Drive to Carriage Road	A	A	B	A
	Carriage Road to Tarascan Drive	C	B	C	B
	Tarascan Drive to Community Road	B	B	B	B
	Community Road to Midland Road	B	B	C	C
	Midland Road to Gate Drive	C	C	D	C
	Gate Drive to Garden Road	B	B	B	B

Source: Chen Ryan Associates; April 2015

As shown in the table above, all of the transit segments operate at LOS D or better.

Figure 3-11a and Figure 3-11b display existing AM and PM peak hour transit LOS, respectively along Poway Road within the study area. As shown, during the AM peak hour transit operates at LOS C or better throughout the project area with the exception of the westernmost segment between Oak Knoll Road and Pomerado Road, possibly due to only one bus route (Route 944) serving this roadway segment. During PM peak hour, the same trend is observed as in the AM peak hour with the addition of the roadway segment between Midland Road and Gate Drive, operating at LOS D. Similar to the segment between Oak Knoll Road and Pomerado Road, only one bus route (Route 944) is serving this segment.

Pedestrian and Bicycle Collisions Near Transit Stops

Due to the closely spaced transit stops throughout the corridor (900-foot average spacing), all pedestrian and bicycle collisions within the corridor over the last 5 years (2009 to 2013) occurred within 500 feet of a transit stop. Therefore, as noted in the previous sections, six (6) pedestrian collisions and nine (9) bicycle collisions occurred within the corridor, near transit stops, over the past 5 years with no fatalities. Safety improvements for pedestrian and bicycle access to transit stops could potential reduce collisions.

3.4.2 Vehicular Travel

Geometrics and Traffic Volumes

Figure 3-12 shows both the existing ADT volumes for study area roadway segments and the existing roadway functional classifications. The roadway segment and study area intersection traffic counts were conducted in February 2015. Count worksheets are provided in Appendix B. As shown, the greatest ADT volumes were recorded on Poway Road, just west of Oak Knoll Road, while the lowest volumes were recorded just east of Garden Road.

East-West Roadways

Poway Road – Within the project study area, Poway Road is a four-lane roadway with a landscaped raised median and is classified as a Major Arterial in the *City of Poway Transportation Master Element, March 2010*. Poway Road serves as a connection between SR-67 and I-15 and runs through the City's main commercial area. Poway Road has a posted speed limit of 35 miles per hour (MPH) and a paved width of 80 feet with the exception of the roadway segment between Community Road and Midland Road, where the paved width is 92 ft. Sidewalks and Class II bicycle facilities are present on both sides of the roadway. Parking is prohibited on both sides of the roadway within the study area.

Oak Knoll Road – Within the project study area, Oak Knoll Road is an undivided two-lane roadway, classified as a two-lane Local Collector in the *City of Poway Transportation Master Element, March 2010.* Oak Knoll Road has a posted speed limit of 30 MPH and a paved width of 40 ft. Sidewalks are present on both sides of the roadway but there is a lack of bicycle facilities. Parking is permitted on both sides of the roadway within the study area.

Garden Road – Within the project study area, Garden Road is an undivided two-lane roadway, classified as a two-lane Collector according to the *City of Poway Transportation Master Element, March 2010.* Garden Road connects Poway Road's commercial core to the residential neighborhood to the southeast of the City. Garden Road has a posted speed limit of 35 MPH and a paved width of 50 ft. Sidewalks and Class II bicycle facilities are present on both sides of the roadway. Parking is permitted on both sides of the roadway within the study area.

North-South Roadways

Pomerado Road – Within the project study area, Pomerado Road is a divided four-lane roadway, classified as a Major Arterial in the *City of Poway Transportation Master Element, March 2010.* Pomerado Road provides a major connection between residential areas to the north and office/industrial areas in the southern part of the City. Pomerado Road has a posted speed limit of 45 MPH and a paved width of 78 ft. Sidewalks and Class II bicycle facilities are present on both sides of the roadway. Parking is prohibited on both sides of the roadway within the study area.

Civic Center Drive – Within the project study area, Civic Center Drive is a two-lane local street and not classified as a Circulation Element road in the *City of Poway Transportation Master Element, March 2010*. Civic Center Drive provides access to Poway Civic Center and Poway Library. Civic Center Drive has a posted speed limit of 25 MPH and a paved width of 48 ft. Sidewalks and Class II bicycle facilities are present on both sides of the roadway. Parking is permitted on both sides of the roadway within the study area.

Carriage Road – Within the project study area, Carriage Road is a two-lane roadway with a raised median north of Poway Road and a striped median south of Poway Road. Carriage Road is classified as a two-lane Collector in the *City of Poway Transportation Master Element, March 2010*. Carriage Road has a posted speed limit of 30 MPH and a paved width of 64 ft. to the north of Poway Road and of 54 ft. to the south of Poway Road. Sidewalks and Class II bicycle facilities are present on both sides of the roadway. Parking is permitted along Carriage Road within the study area.

Silver Lake Drive – Within the project study area, Silver Lake Drive is a two-lane roadway and it is classified as a two-lane Local Collector in the *City of Poway Transportation Master Element, March 2010*. Silver Lake Drive has paved width of 50 ft. and sidewalks are present on both sides of the roadway but there is a lack of bicycle facilities. Parking is generally permitted along Silver Lake Drive within the study area.

Bowron Road – Within the study area, Bowron Road is a two-lane local street and not classified as a Circulation Element road in the *City of Poway Transportation Master Element, March 2010*. Bowron Road provides a connection between Poway Road, Poway Community Park, and Valley Elementary School. Bowron Road has a posted speed limit of 25 MPH and a paved width of 40 ft. Sidewalks are present on both sides of the roadway but Class II bicycle facilities are only present on the west side of the roadway (SB). Parking is permitted on both sides of the roadway within the study area.

Community Road – Within the project study area, Community Road is a divided four-lane Major Arterial according to the *City of Poway Transportation Master Element, March 2010*. Community Road serves as a connection between the central residential areas of the City with the office/industrial uses in the South Poway Business Park. Community Road has a posted speed limit of 35 MPH and a paved width that varies between 80 ft. and 95 ft. Sidewalks and Class II bicycle facilities are present on both sides of the roadway within the study area. Parking is prohibited on both sides of the roadway.

Intersections

The following 14 study intersections were analyzed throughout the mobility analysis:

1. Poway Road / Oak Knoll Road
2. Poway Road / Pomerado Road
3. Poway Road / Ridgedale Drive
4. Poway Road / Silver Lake Drive
5. Poway Road / Carriage Road
6. Poway Road / Tarascan Drive – Civic Center Drive
7. Poway Road / Bowron Road
8. Poway Road / Community Road
9. Poway Road / Midland Road
10. Poway Road / Gate Drive
11. Poway Road / Garden Road
12. Civic Center Drive/Civic Center Drive
13. Civic Center Drive / Bowron Road
14. Civic Center Drive / Community Road

Intersection lane configurations are displayed in **Figure 3-13**.

Roadway Conditions

Table 3.10 displays each study roadway segment's design threshold, ADT, and whether the roadway operates within its design threshold or not. As shown, the Garden Road segment between Poway Road and Claire Drive carries vehicular volumes that surpass its design threshold. The design thresholds used in this analysis are summarized in Appendix C.

Table 3.10 Existing Roadway Segment ADT and Thresholds

Roadway	Segment	Functional Classification	Design Threshold	ADT	Within Design Threshold?
Poway Road	Between Francis Terrace and Oak Knoll Road	4-Lane Major Arterial	43,000	36,495	Yes
	Between Oak Knoll Road and Pomerado Road	4-Lane Major Arterial	43,000	31,629	Yes
	Between Pomerado Road and Ridgedale Road	4-Lane Major Arterial	43,000	35,298	Yes
	Between Ridgedale Road and Silver Lake Drive	4-Lane Major Arterial	43,000	33,110	Yes
	Between Silver Lake Drive and Carriage Road	4-Lane Major Arterial	43,000	33,358	Yes
	Between Carriage Road and Tarascan Drive/Civic Center	4-Lane Major Arterial	43,000	34,596	Yes
	Between Civic Center Drive and Bowron Road	4-Lane Major Arterial	43,000	32,285	Yes
	Between Bowron Road and Community Road	4-Lane Major Arterial	43,000	33,380	Yes
	Between Community Road and Midland Road	4-Lane Major Arterial	43,000	29,650	Yes
	Between Midland Road and Gate Drive	4-Lane Major Arterial	43,000	26,419	Yes
	Between Gate Drive and Garden Road	4-Lane Major Arterial	43,000	21,786	Yes
	Between Garden Road and Match Point Drive	4-Lane Major Arterial	43,000	11,548	Yes
Pomerado Road	Between Poway Road and Robison Blvd	4-Lane Collector	32,000	23,012	Yes
	Between Poway Road and Oak Knoll Road	4-Lane Collector	32,000	16,092	Yes
Civic Center Drive	Between Poway Road and Civic Center Drive	2-Lane Local Collector	10,900	4,504	Yes
Bowron	Between Poway Road and Civic	2-Lane Local Collector	10,900	2,601	Yes

Table 3.10 Existing Roadway Segment ADT and Thresholds

Roadway	Segment	Functional Classification	Design Threshold	ADT	Within Design Threshold?
Road	Center Drive				
Community Road	Between Hilleary Place and Poway Road	4-Lane Major Arterial	43,000	26,078	Yes
	Between Poway Road and Civic Center Drive	4-Lane Major Arterial	43,000	24,302	Yes
	Between Civic Center Drive and Hillside Village	4-Lane Major Arterial	43,000	24,743	Yes
Garden Road	Between Poway Road and Claire Drive	2-Lane Local Collector	10,900	12,334	**No**

Source: NDS, Chen Ryan Associates; April 2015

Intersection Level of Service

Table 3.11 displays the LOS analysis results for the study area intersections under existing conditions. LOS analysis was conducted using the methodologies discussed in Chapter 2.0. Peak hour intersection LOS Worksheets are included in **Appendix D**.

Table 3.11 Existing Peak Hour Intersection Level of Service Results

#	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
1	Poway Road / Oak Knoll Road	Signal	33.8	C	50.0	D
2	Poway Road / Pomerado Road	Signal	47.5	D	53.8	D
3	Poway Road / Ridgedale Drive	SSSC	20.4	C	24.3	C
4	Poway Road / Silver Lake Drive	Signal	8.9	A	14.5	B
5	Poway Road / Carriage Road	Signal	17.0	B	31.4	C
6	Poway Road / Tarascan Drive-Civic Center Drive	Signal	39.2	D	26.9	C
7	Poway Road / Bowron Road	SSSC	16.7	C	17.9	C
8	Poway Road / Community Road	Signal	40.6	D	45.3	D
9	Poway Road / Midland Road	Signal	20.6	C	22.1	C
10	Poway Road / Gate Drive	Signal	10.8	B	9.6	A
11	Poway Road / Garden Road	Signal	15.1	B	32.7	C
12	Civic Center Drive / Civic Center Drive	AWSC	12.4	B	9.9	A
13	Civic Center Drive / Bowron Road	AWSC	12.1	B	10.4	B
14	Civic Center Drive / Community Road	Signal	17.4	B	22.8	C

Source: Chen Ryan Associates; April 2015

Notes:
AWSC = All-way stop control.
SSSC = Side Street Stop Control. Delay represents the worst controlled delay.

As shown in the table above, all of the study intersections operate under acceptable LOS D or better .

Figure 3-14 displays the AM and PM peak hour intersection traffic counts collected for this project. Figure 3-15 displays the current AM and PM peak period intersection LOS at study intersections. As shown, all intersections within the study area currently operate at LOS D or better.

Arterial Speed Analysis

Table 3.12 summarizes the existing arterial LOS for Poway Road Corridor study segments. Peak hour arterial speed analysis worksheets are included in Appendix E.

TABLE 3.12 Arterial Speed Level of Service

Roadway	Segment	AM Peak Hour			PM Peak Hour		
		Direction	Speed	LOS	Direction	Speed	LOS
Poway Road	Oak Knoll Road to Pomerado Road	EB	18.1	C	EB	11.9	**E**
		WB	12.4	**F**	WB	11.7	**F**
	Pomerado Road to Silver Lake Drive	EB	23.6	C	EB	26.7	B
		WB	17.6	D	WB	18.0	D
	Silver Lake Drive to Carriage Road	EB	11.8	**E**	EB	13.5	**E**
		WB	20.8	D	WB	20.9	D
	Carriage Road to Tarascan Drive-Civic Center Drive	EB	16.8	D	EB	20.2	C
		WB	28.5	B	WB	24.0	C
	Tarascan Drive-Civic Center Drive to Community Road	EB	20.7	C	EB	14.9	D
		WB	21.0	D	WB	22.0	C
	Community Road to Midland Road	EB	23.8	C	EB	20.4	C
		WB	12.5	**F**	WB	11.1	**F**
	Midland Road to Gate Drive	EB	25.1	B	EB	23.4	C
		WB	18.5	D	WB	14.6	**E**
	Gate Drive to Garden Road	EB	25.6	B	EB	25.3	B
		WB	30.8	B	WB	31.1	B
Poway Road	**Average speed along Poway Road**	EB	19.6	C	EB	17.6	D
	Average speed along Poway Road	WB	19.5	D	WB	18.5	D

Source: Chen Ryan Associates; April 2015

Note: Bold letters indicate sub-standard LOS E or F.

As shown in Table 3.12, all of the study roadway segments operate at LOS D or better with the exception of the following:

- Poway Road between Oak Knoll Road and Pomerado Road; LOS F during AM peak hour in the westbound direction.
- Poway Road between Oak Knoll Road and Pomerado Road; LOS E during PM peak hour in the eastbound direction and LOS F in the westbound direction.
- Poway Road between Silver Lake Drive and Carriage Road; LOS E during AM and PM peak hour in the eastbound direction.
- Poway Road between Community Road and Midland Road; LOS F during AM and PM peak hour in the westbound direction.
- Poway Road between Midland Road and Gate Drive; LOS E during PM peak hour in the westbound direction.

Low average travel speeds (LOS E or F) are generally caused by intersection approach delay and general congestion within the corridor. Average speeds can generally be improved by signal optimization and synchronization. Intelligent Transportation Systems can also be implemented to increase the flow and speed of traffic throughout a corridor.

Figure 3-16a and Figure 3-16b graphically display arterial speed LOS along Poway Road within the study area.

Vehicular Safety

Vehicle collision data was obtained from SWITRS and TIMS for the period from 2009 to 2013. During this 5-year period, 257 vehicular collisions were reported along the Poway Road study area.

Figure 3-17 graphically displays the distribution of the 257 vehicular collisions along Poway Road. As shown, the intersections with the highest number of collisions are Poway Road / Pomerado Road and Poway Road / Community Road.

Table 3.13 summarizes the reported vehicular collisions by collision cause. As shown, the leading primary collision cause was attributed to "Unsafe Speed", accounting for 37% of the vehicular collisions. Traffic calming treatments, radar speed feedback signs or increased enforcement should be considered to address this issue.

Table 3.13 Primary Vehicular Collision Cause (2009-2013)

Primary Collision Cause	Collisions	%
Driving Under the Influence	17	7%
Unsafe Speed	95	37%
Following Too Closely	18	7%
Wrong Side of Road	2	1%
Improper Passing	6	2%
Unsafe Lane Change	13	5%
Improper Turning	23	9%
Violation of Automobile Right of Way	51	20%
Ran Traffic Signal / Ran Stop Sign	11	4%
Unsafe Starting or Backing	9	4%
Other	8	3%
Unknown	4	2%
Total	257	100%
Source: TIMS, SWITRS, Chen Ryan Associates; April 2015		

Table 3.14 summarizes the reported vehicular collisions by collision type. As shown, 49% of the vehicular collisions were attributed to "Rear End" collisions.

Table 3.14 Type of Vehicular Collision (2009-2013)

Type of Collision	Collisions	%
Head-On	7	3%
Sideswipe	43	17%
Rear End	125	49%
Broadside	56	22%
Hit Object	20	7%
Overturned	2	1%
Other	3	1%
Unknown	1	1%
Total	257	100%

Source: TIMS, SWITRS, Chen Ryan Associates; April 2015

3.5 Issues and Needs

This chapter provides a summary of mobility needs to guide the future direction of the Poway Road Corridor.

Mobility needs are conceptualized as areas of high demand and high deficiency, as deduced from the assessments presented throughout this chapter. Directions for future mobility improvements are synthesized from a review of currently adopted local and regional studies/documents.

This summary is intended to initiate discussions about the potential future improvements to the Poway Road Corridor's mobility network.

3.5.1 Walkability

Pedestrian comfort and safety is a cornerstone of the City of Poway Transportation Master Element. In order for compact, mixed use developments to thrive, legitimate travel choices need to be broadened so that a significant amount of trips are made without the use of a car. A crucial component of this includes residents making short trips to local services by foot, and making longer trips through the combination of walking and transit. Walking and transit should not be a mode of last resort, rather it should be a convenient, pleasant, safe and desirable mode of transportation.

The remainder of this section outlines pedestrian needs, in terms of high demand and high deficiency, as identified throughout the existing conditions assessment, as well as planned pedestrian improvements as identified through a review of previous documents.

Pedestrian Needs

Figure 3-18 graphically displays the identified pedestrian needs. Pedestrian needs include areas of high demands and high deficiencies. High demand is evaluated through the pedestrian count data collected for this report while high deficiency is evaluated through objects blocking the sidewalk and pedestrian-involved collisions.

The pedestrian count data indicates high pedestrian activity along the following intersections within the study area:

- Bowron Road / Civic Center Drive (224 AM / 119 PM)
- Poway Road / Pomerado Road (54 AM / 56 PM)
- Poway Road / Community Road (39 AM / 59 PM)

In general, high pedestrian demands along Poway Road Corridor tend to occur in conjunction with commercial/retail and education land uses, as well as in conjunction with high levels of transit service.

Pedestrian deficiencies are assessed in terms of missing pedestrian facilities and high levels of pedestrian-involved collisions. Currently, there are 10 non-ADA compliant curb ramps and located within the study area at the intersections of Poway Road / Garden Road (4), Civic Center Drive / Civic Center Drive (4), and Civic Center Drive / Community Road (2).

There are three (3) intersection locations along the corridor where 4 out of the 6 pedestrian-involved collisions occurred during the 5-year period from 2009-2013 and they are:

- Poway Road / Community Road (2)
- Poway Road / Pomerado Road (1)
- Poway Road / Tarascan-Civic Center Drive (1)

Planned Pedestrian Improvements

There are no planned pedestrian improvements along the Poway Road Corridor study area.

3.5.2 Cycling

Bicycle Needs

Cycling needs include areas of high demands and high deficiencies. High demand is evaluated through the bicycle count data collected for this report, as well as through the Cycling Propensity Model developed for SANDAG's Regional Bicycle Plan; while high deficiency is evaluated through bicycle-involved collisions, as well as through the Bicycle Barriers Model developed for SANDAG's Regional Bicycle Plan.

The bicycle count data shows higher cycling demands along the following roadway segments along Poway Road Corridor:

- Poway Road / Community Road (38 AM / 52 PM)
- Poway Road / Midland Road (8 AM / 19 PM)
- Poway Road / Pomerado Road (9 AM / 6 PM)

In addition, the Bicycle Propensity Model displays medium to high potential bicycle demand between Civic Center Drive and Midland Road, which is the Town Center area along the corridor. **Figure 3-19** provides a visual representation of the aforementioned Bicycle Propensity Model.

In relation to areas of high deficiencies, the segment between Pomerado Road and Carriage Road has the highest number of bicycle-involved collisions with a total of 4 over the previous 5 years. **Figure 3-20** displays identified cycling needs along the Poway Road Corridor. It is important to note that although designated bicycle facilities are present along the entire extent of the corridor, the high volumes of vehicular traffic as well as high posted speed limits undermine the benefits of having an exclusive bike lane.

As shown in Figure 3-20, within the project extents, Poway Road is currently classified as a very high stress facility by the Bicycle Level of Traffic Stress (LTS) methodology for characterizing cycling environments. LTS classifies the street network according to the estimated level of stress it causes cyclists, taking into consideration a cyclist's physical separation from vehicular traffic, vehicular traffic speeds along a roadway segment, number of travel lanes, and factors related to intersection approaches with right-turn lanes and unsignalized crossings. LTS scores range from 1 (lowest stress) to 4 (highest stress), and correspond to roadway conditions that different cycling demographics would find suitable for riding on the basis of stress tolerance.

Bicycle LTS is determined for roadway segments and intersections using a series of factors including:

- Mixed traffic, no bike lanes
- Roadway with bike lane and on-street parking
- Roadway with bike lane and no on-street parking
- Intersection approaches with no bicycle facility and a right-turn lane
- Intersection approaches with bike pocket lane to the left of a right-turn lane
- Unsignalized crossing location without a median refuge
- Unsignalized crossing location with a median refuge (at least 6 feet wide)

Planned Bicycle Improvements

There are no planned bicycle improvements along the Poway Road Corridor study area.

3.5.3 Transit System

Transit Needs

High quality transit service is critical to fulfill the City of Poway Transportation Element policy of creating a viable alternative to the automobile. Transit needs are identified in terms of high demand and high frequency. Areas of high demand include locations with relatively high transit boardings and alightings. Areas with high deficiencies include transit network gaps, or underserved corridors, and transit stop locations with relatively high pedestrian and bicycle-involved collisions within 500 feet.

Figure 3-21 displays transit needs along the Poway Road Corridor, as identified through an assessment of demand and deficiencies.

As shown, there are three(3) high transit demand nodes along the corridor located at:

- Poway Road / Pomerado Road (68 boardings and alightings)
- Poway Road / Bowron Road (46 boardings and alightings)
- Poway Road / Community Road (25 boardings and alightings)

Although transit service is limited to 30 minute headways and transit riders would benefit from increased service, the existing service may be considered appropriate for the environment given the suburban context of Poway and its geographic location within San Diego County.

Due to the closely spaced transit stops throughout the corridor (900 foot average spacing), all pedestrian and bicycle collisions within the corridor over the last 5 years (2009 to 2013) occurred within 500 feet of a transit stop. Therefore as noted in the previous sections, six (6) pedestrian collisions and nine (9) bicycle collisions occurred within the corridor, near transit stops, over the past 5 years with no fatalities.

3.5.4 Vehicular Travel

Roadway Needs

Capacity Deficiencies

There are currently no capacity deficiencies found along the Poway Road Corridor. However, Garden Road between Poway Road and Claire Drive is currently operating at over capacity conditions.

Operational Deficiencies

All intersections within the study area currently operate at LOS D or better.

Safety Deficiencies

The existing conditions analysis also reviewed vehicular collisions data, obtained from SWITRS and TIMS for the period from 2009-2013. The following three (3) locations experienced the highest amount of vehicular collisions over the 2009-2013 period:

- Poway Road / Pomerado Road (41 collisions)
- Poway Road / Community Road (30 collisions)
- Poway Road / Midland Road (24 collisions)

Planned Roadway Improvements

There are no planned roadway improvements along the Poway Road Corridor.

Intelligent Transportation Systems (ITS)

The Poway Road corridor currently has coordinated traffic signal timing plans in place. The signal coordination helps to improve the operations of a roadway corridor by allowing motorists to travel through the corridor with minimal delays and without having to stop at red lights.

Additional ITS improvement concepts for future consideration include:

- Expand signal coordination;
- Regularly update the timing of traffic signals to reflect shifting travel patterns;
- Consider the use of traffic responsive or adaptive traffic control in areas with variable traffic patterns; and

  Implement transit signal priority treatments at signalized intersections serving bus routes.

3.6 Reports and Data

City of Poway, Transportation Master Element, March 2010.
Poway Road Specific Plan, May 1996.
Riding to 2050, San Diego Regional Bike Plan.
SANDAG Smart Growth
Mineta Transportation Institute, Low-Stress Bicycling and Network Connectivity, MTI Report

Websites

California Highway Patrol, Statewide Integrated Traffic Records System, accessed via Transportation Injury Mapping System, available at: www.tims.berkeley.edu.
Metropolitan Transit System, available at: www.sdmts.com.
City of Poway website at: www.poway.org

3.7 Mobility Figures

Figures 1 through 21, referenced in this chapter, are provided on the following pages.

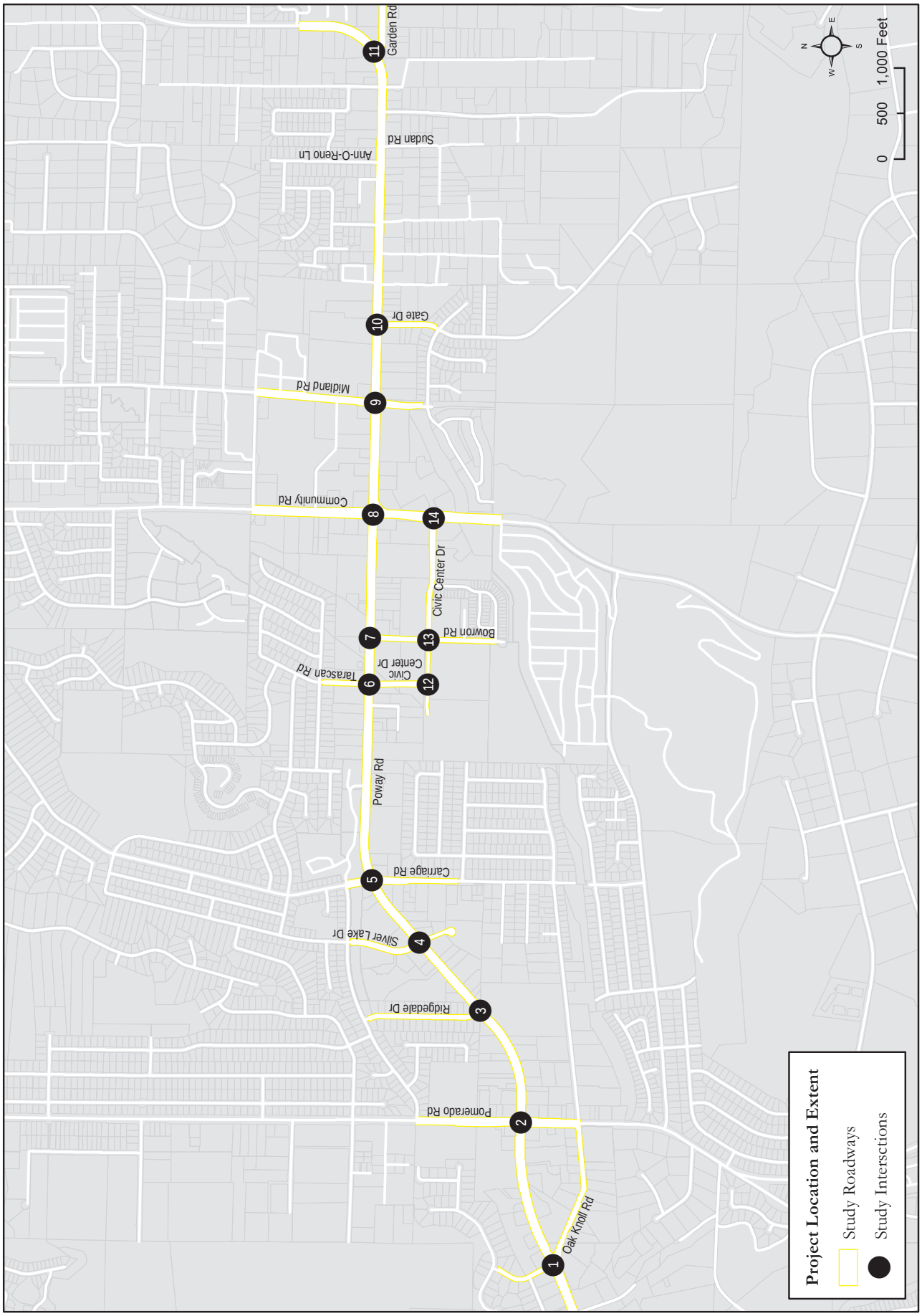


Figure 3-1
Project Location and Extent

Poway Road Corridor Study

CHEN RYAN

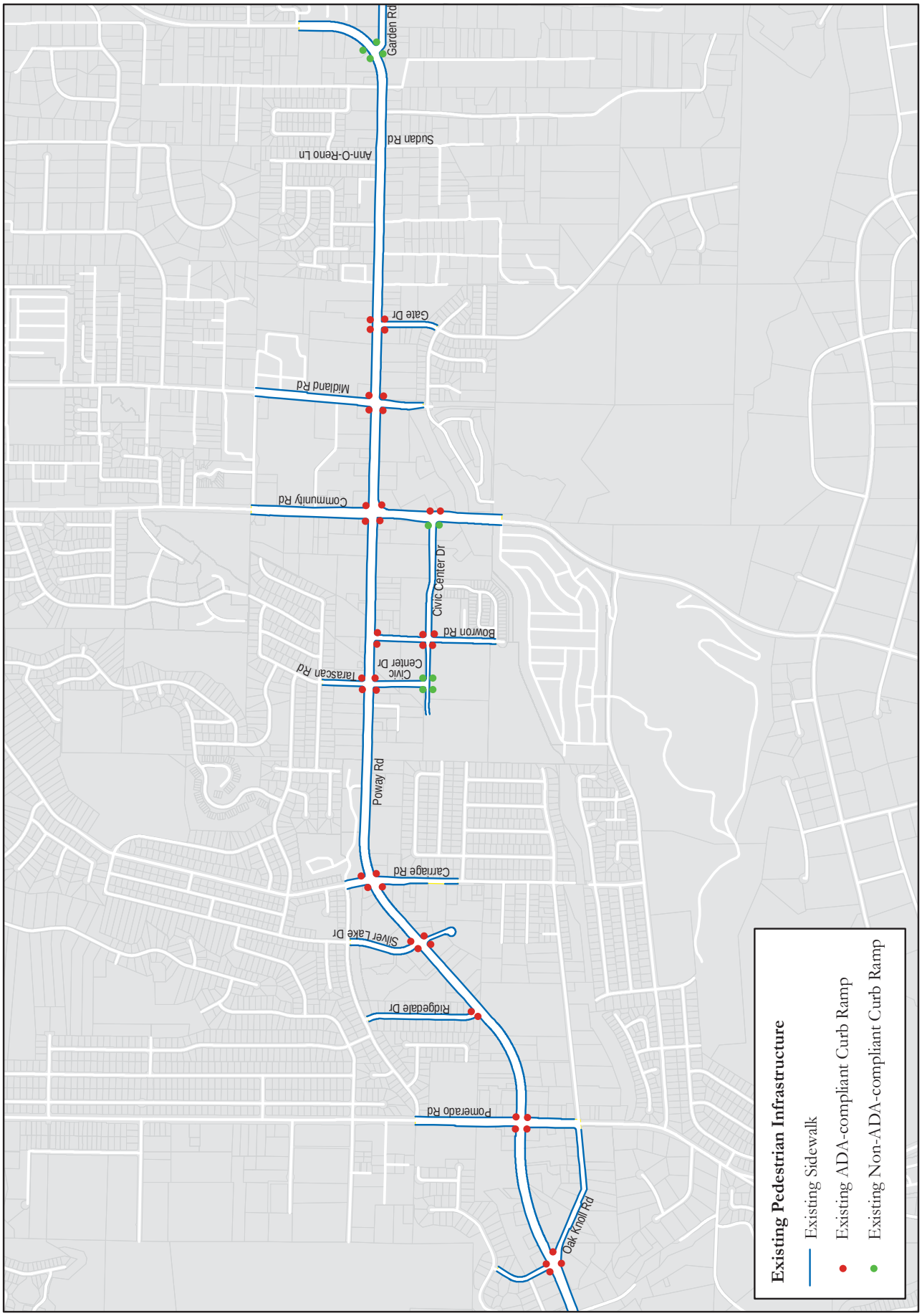
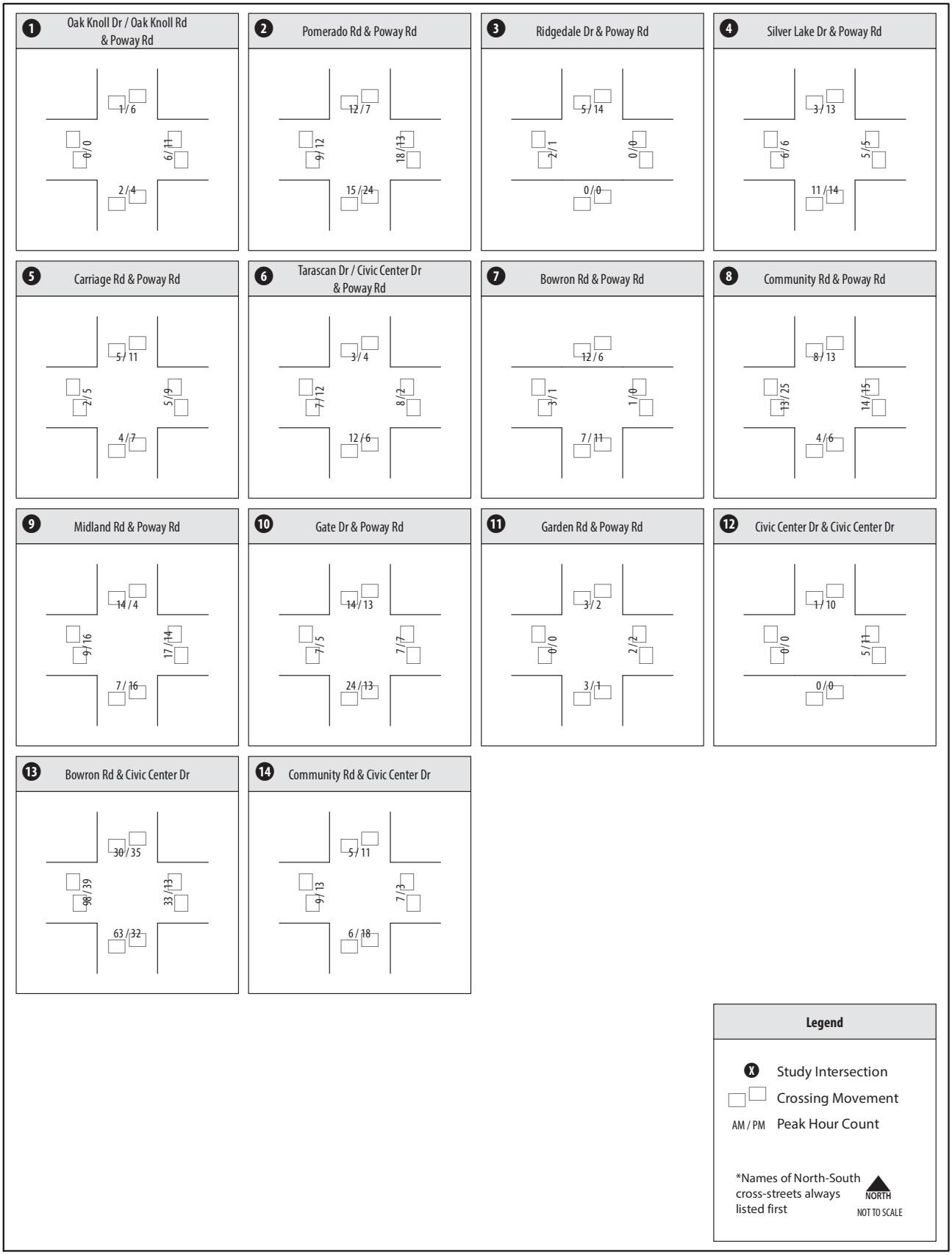


Figure 3-2
Existing Sidewalks and Curb Ramps

Poway Road Corridor Study

CHEN RYAN



Poway Road Corridor Study

Figure 3-3

AM/PM Peak Hour Intersection Pedestrian Counts (Intersections 1-14)

CHEN RYAN

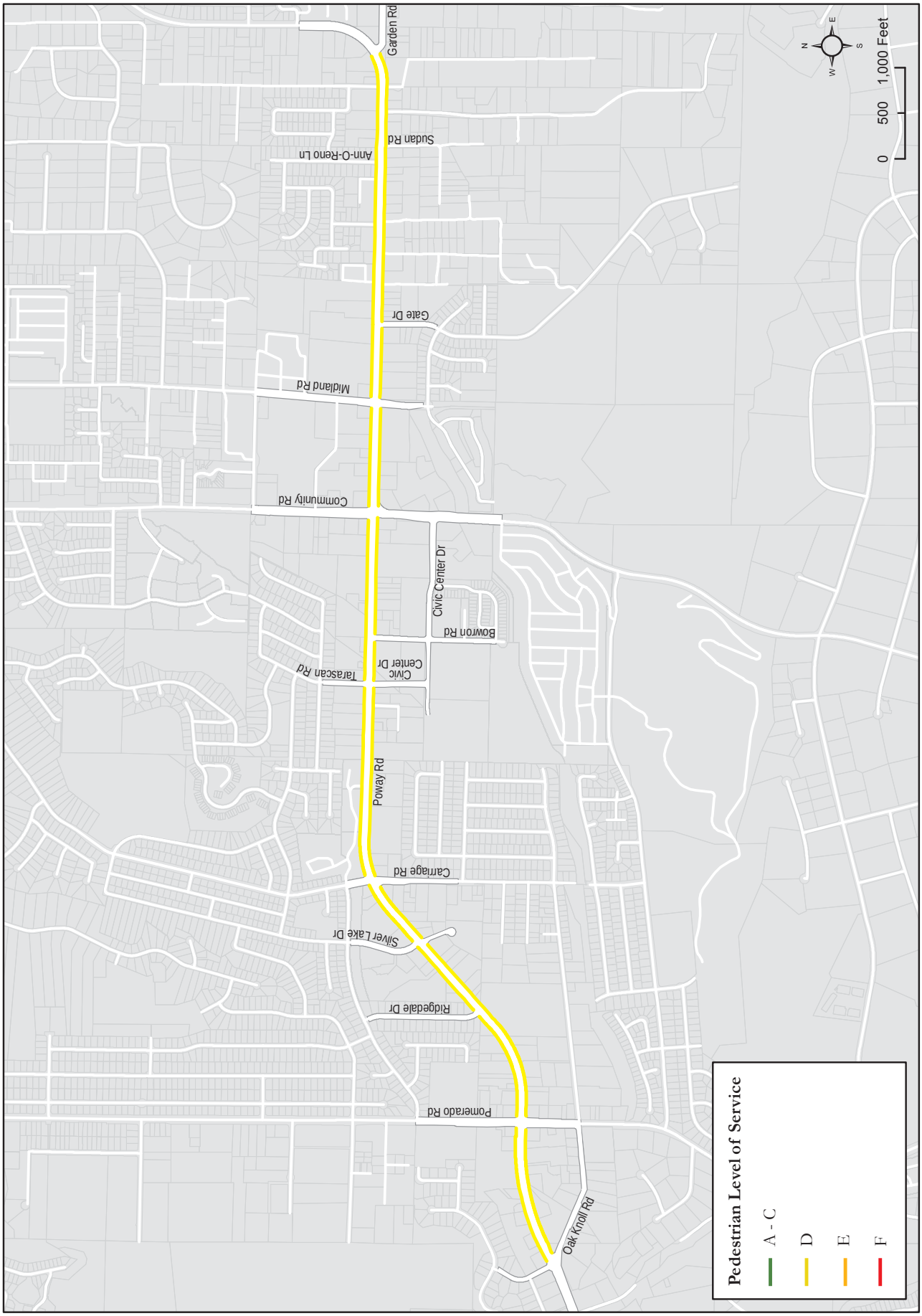


Figure 3-4a
AM Peak Hour Pedestrian Level of Service

Poway Road Corridor Study

CHEN RYAN

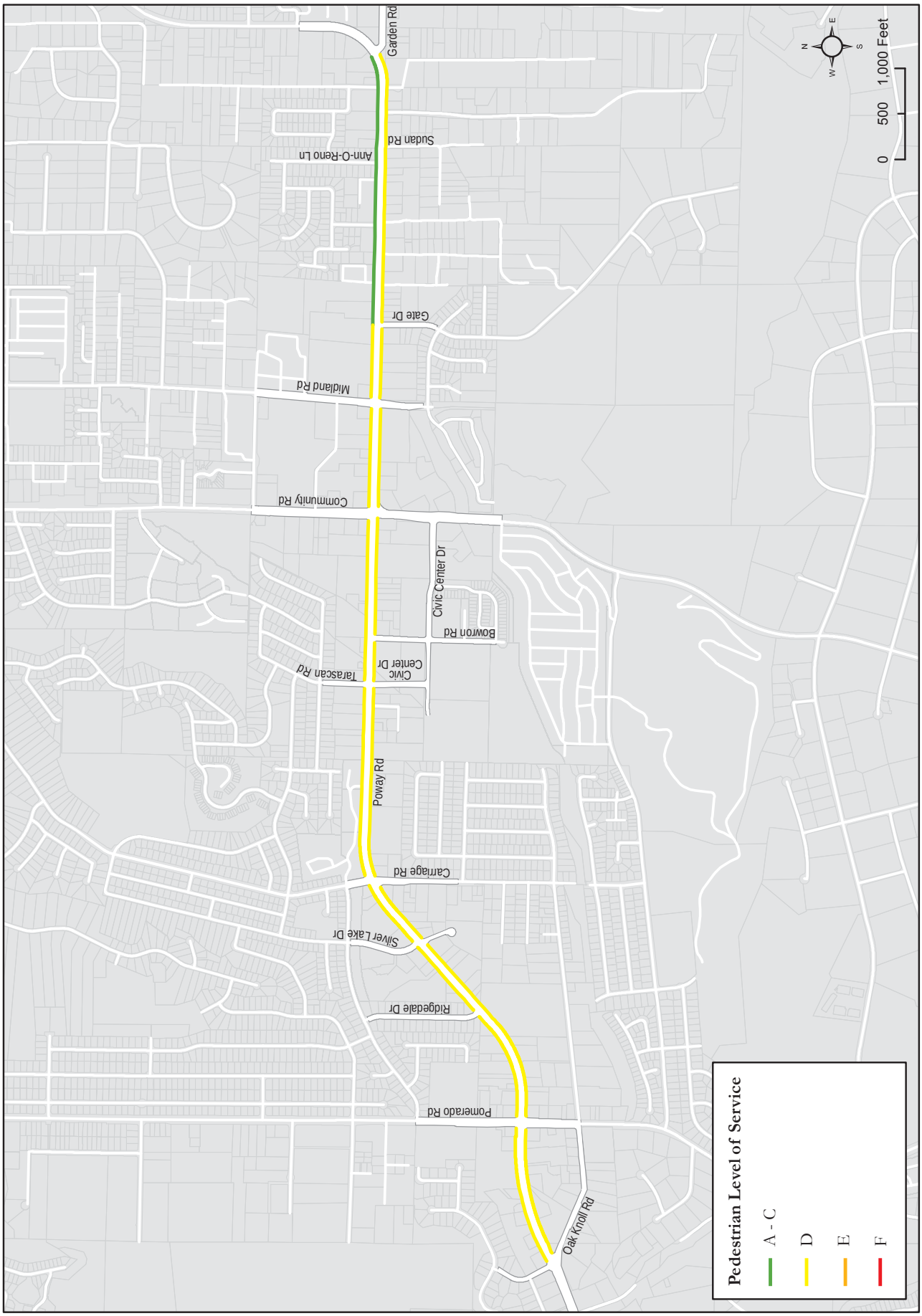


Figure 3-4b
PM Peak Hour Pedestrian Level of Service

Poway Road Corridor Study

CHEN RYAN

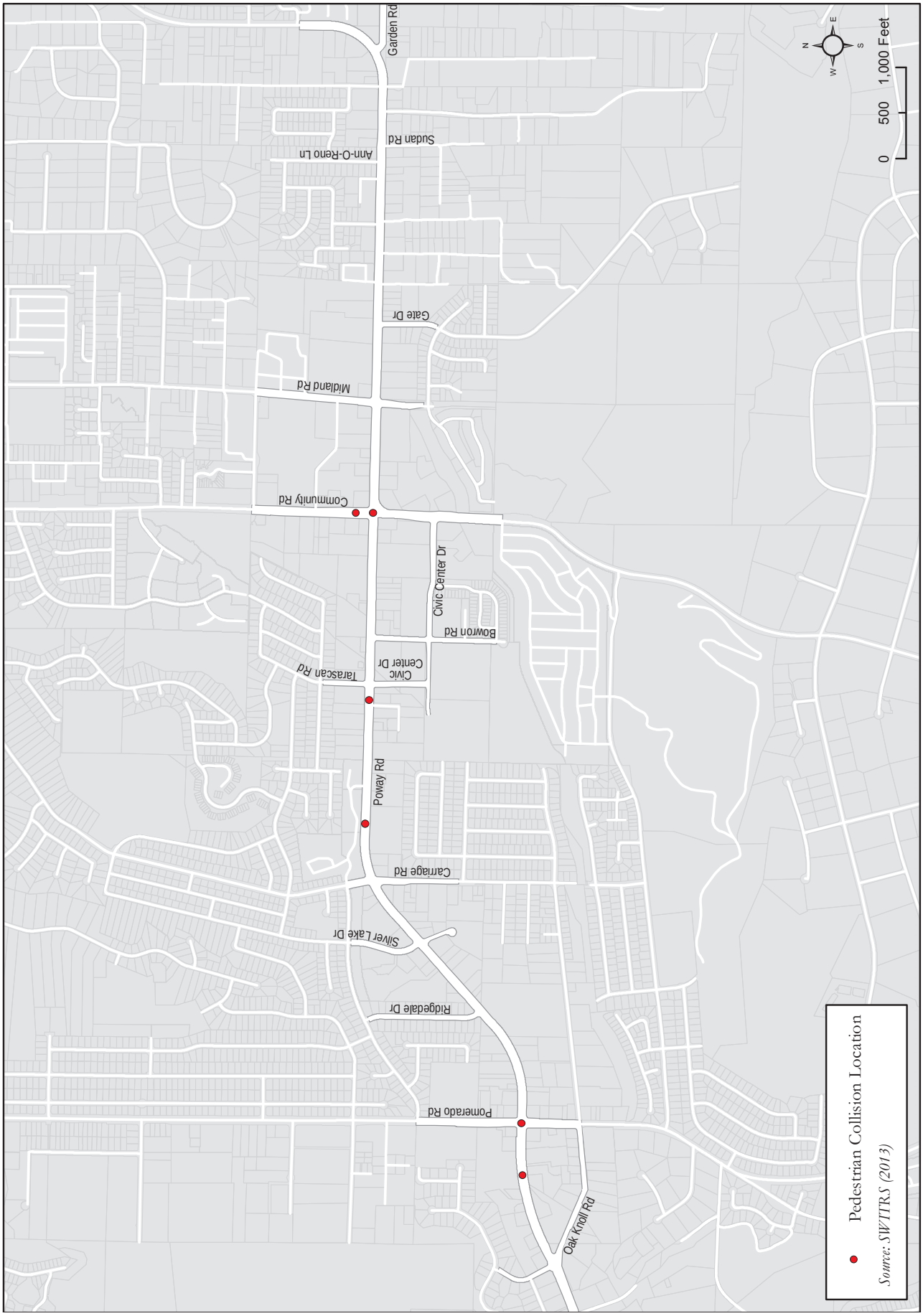


Figure 3-5
Pedestrian Collisions (2009-2013)

Poway Road Corridor Study

CHEN RYAN

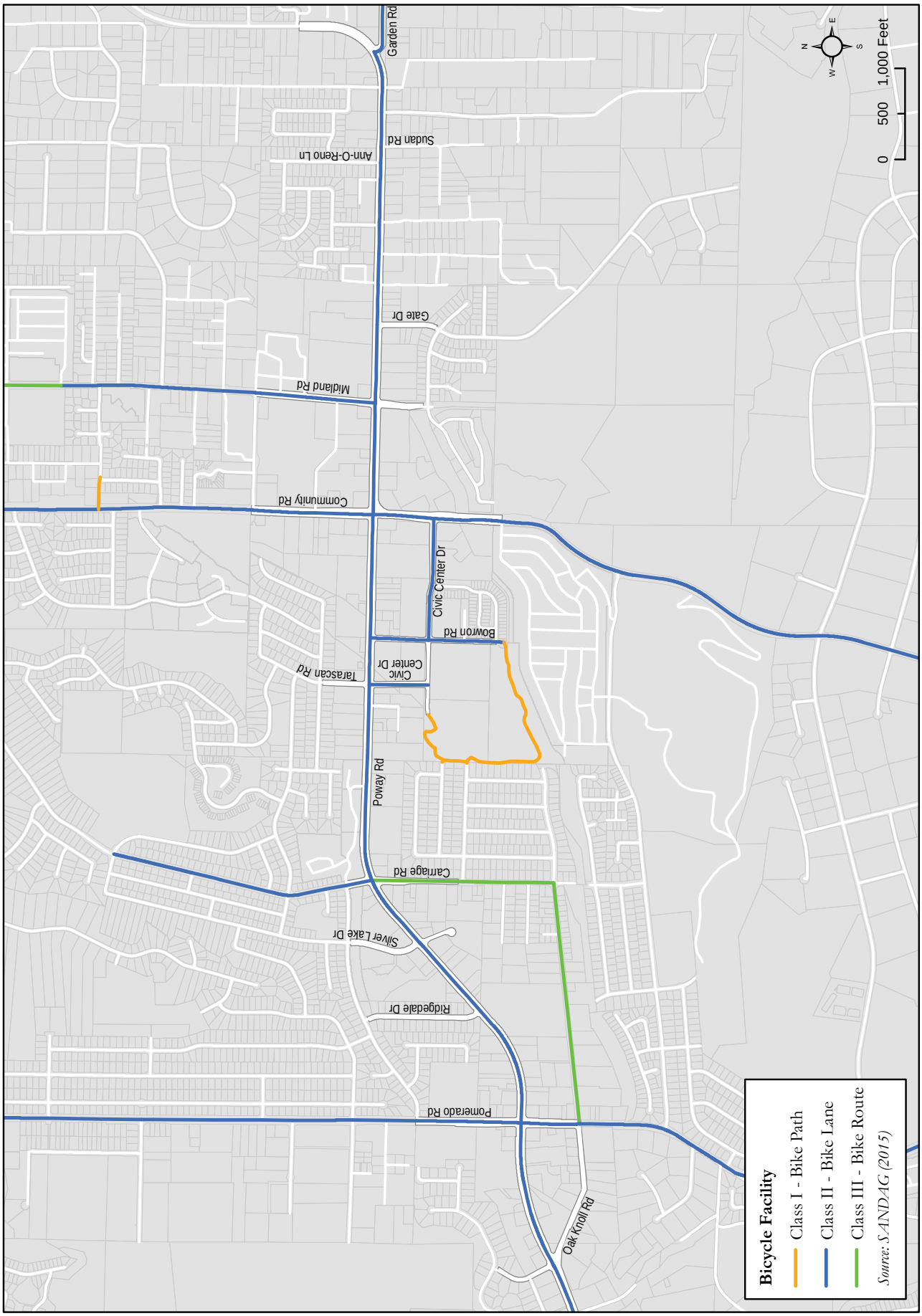
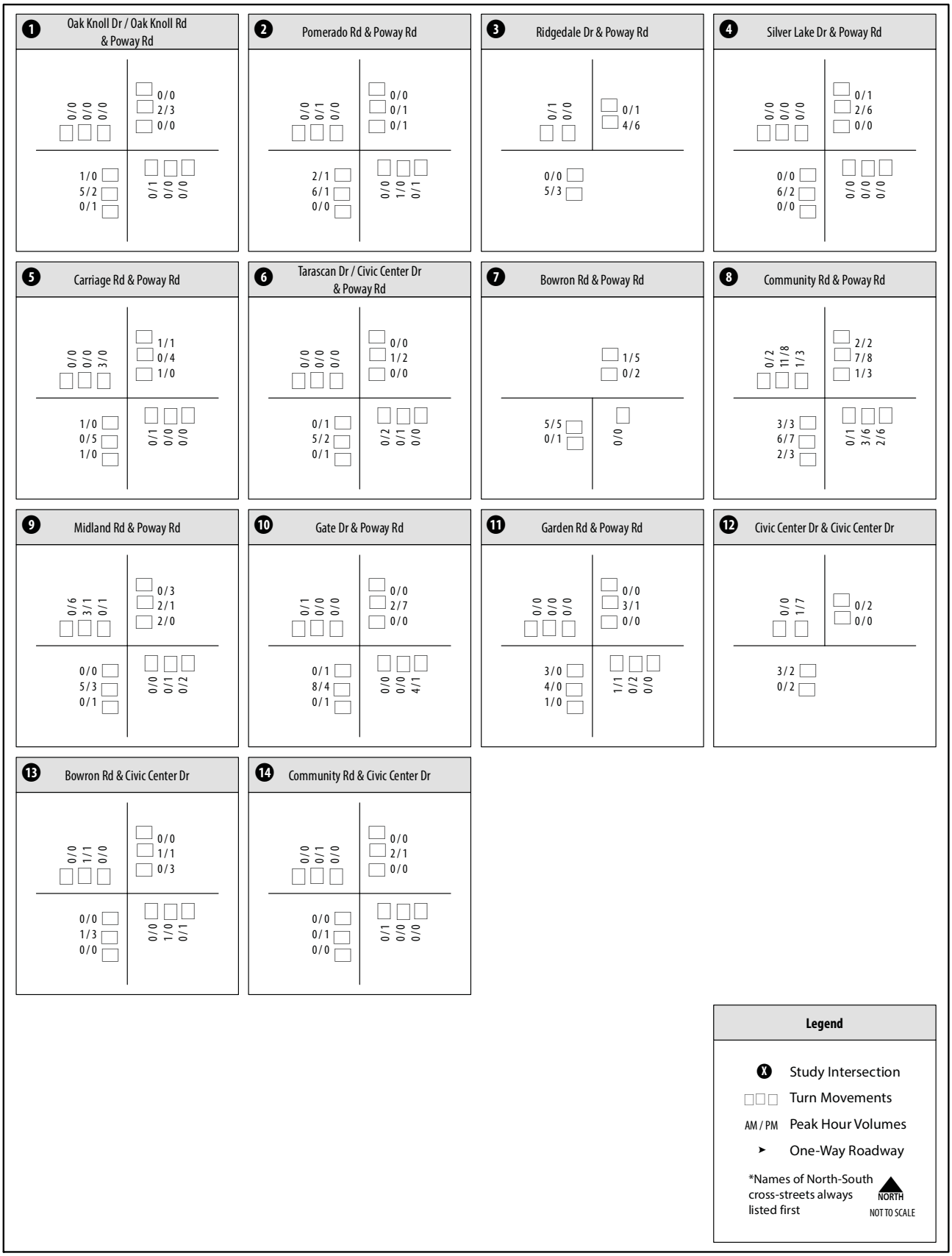


Figure 3-6
Existing Bicycle Facilities

Poway Road Corridor Study

CHEN RYAN



Poway Road Corridor Study

Figure 3-7

AM/PM Peak Hour Intersection Bicycle Counts (Intersections 1-14)

CHEN RYAN

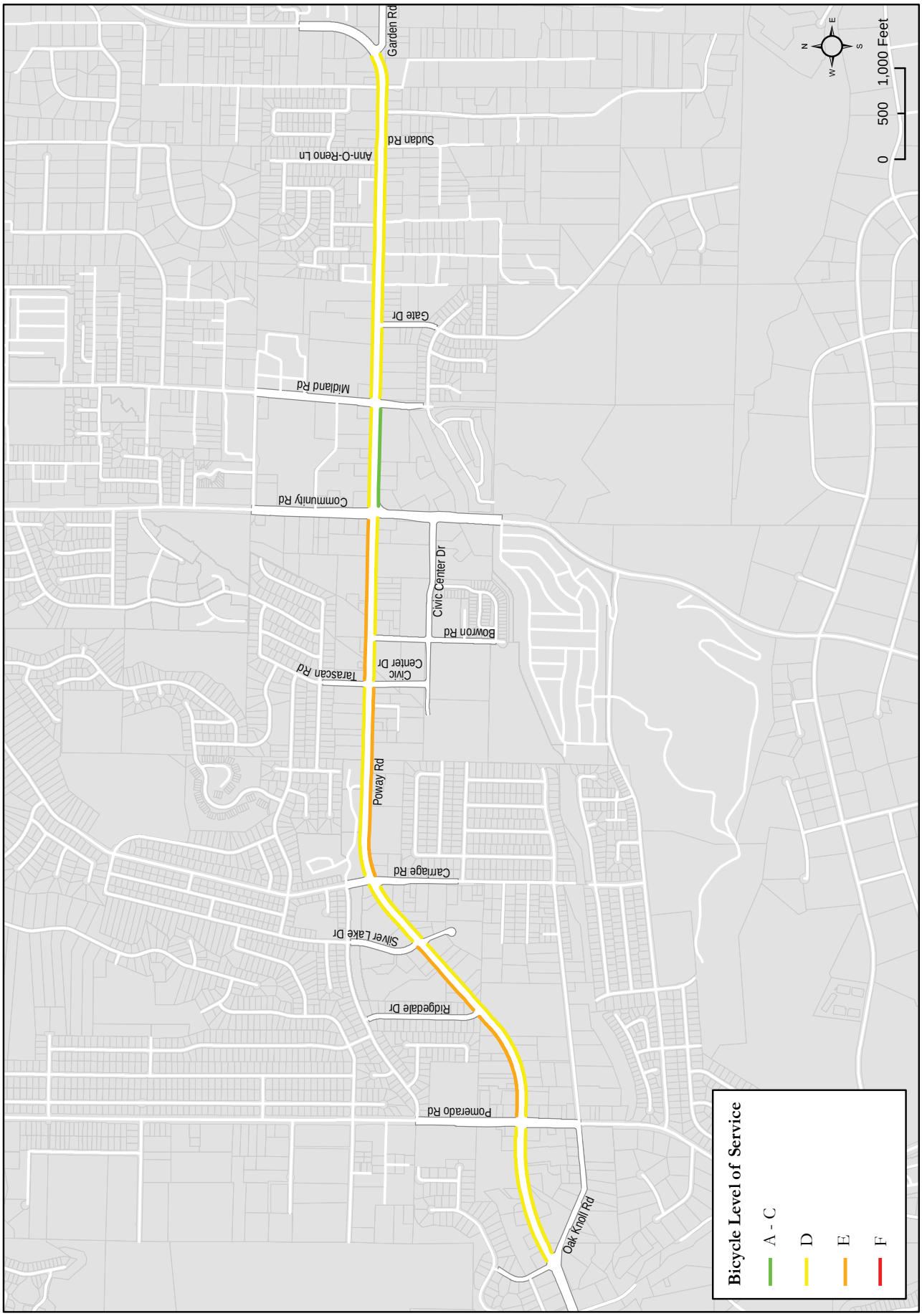


Figure 3-8a
AM Peak Hour Bicycle Level of Service

Poway Road Corridor Study

CHEN RYAN

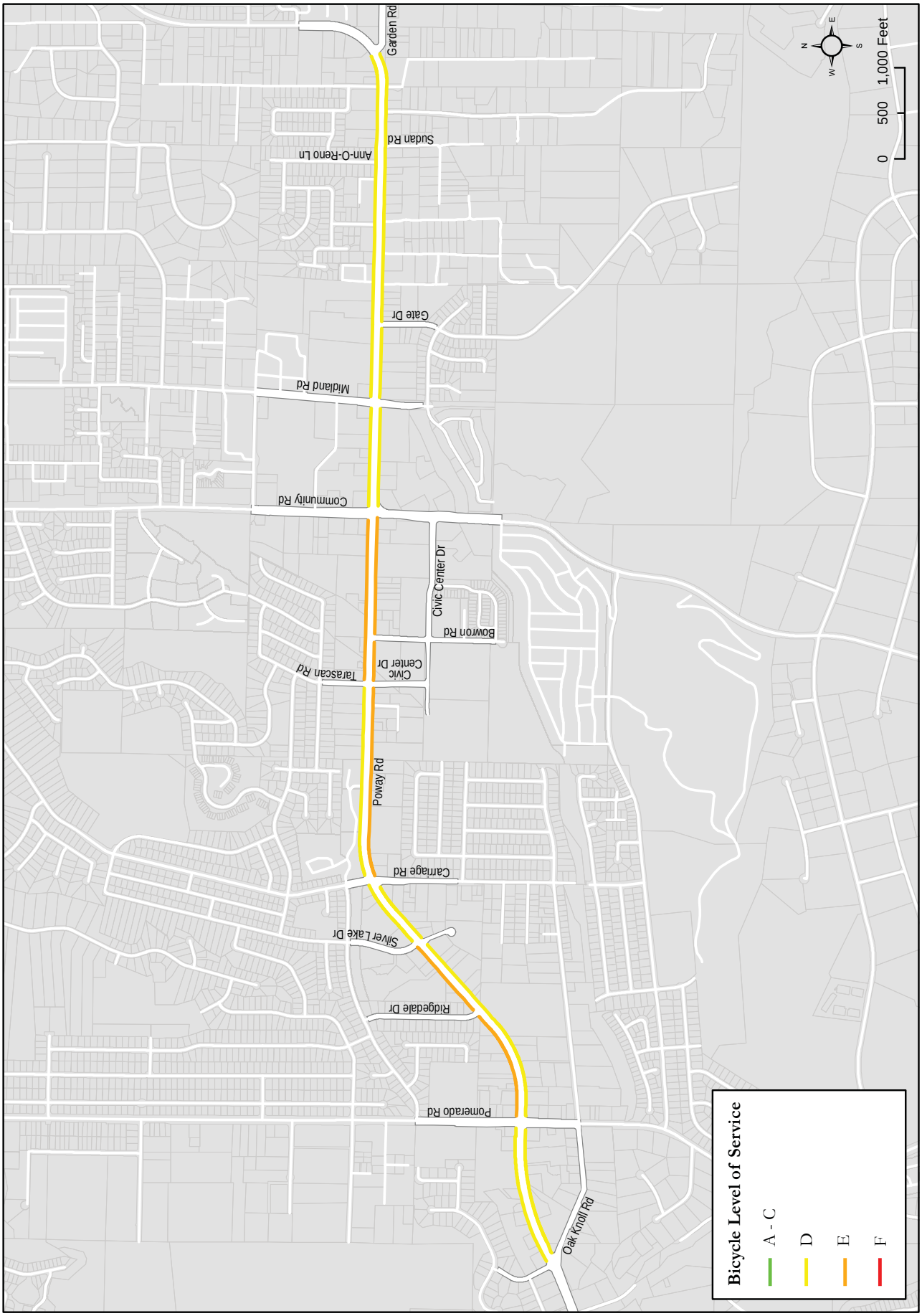


Figure 3-8b
PM Peak Hour Bicycle Level of Service

Poway Road Corridor Study

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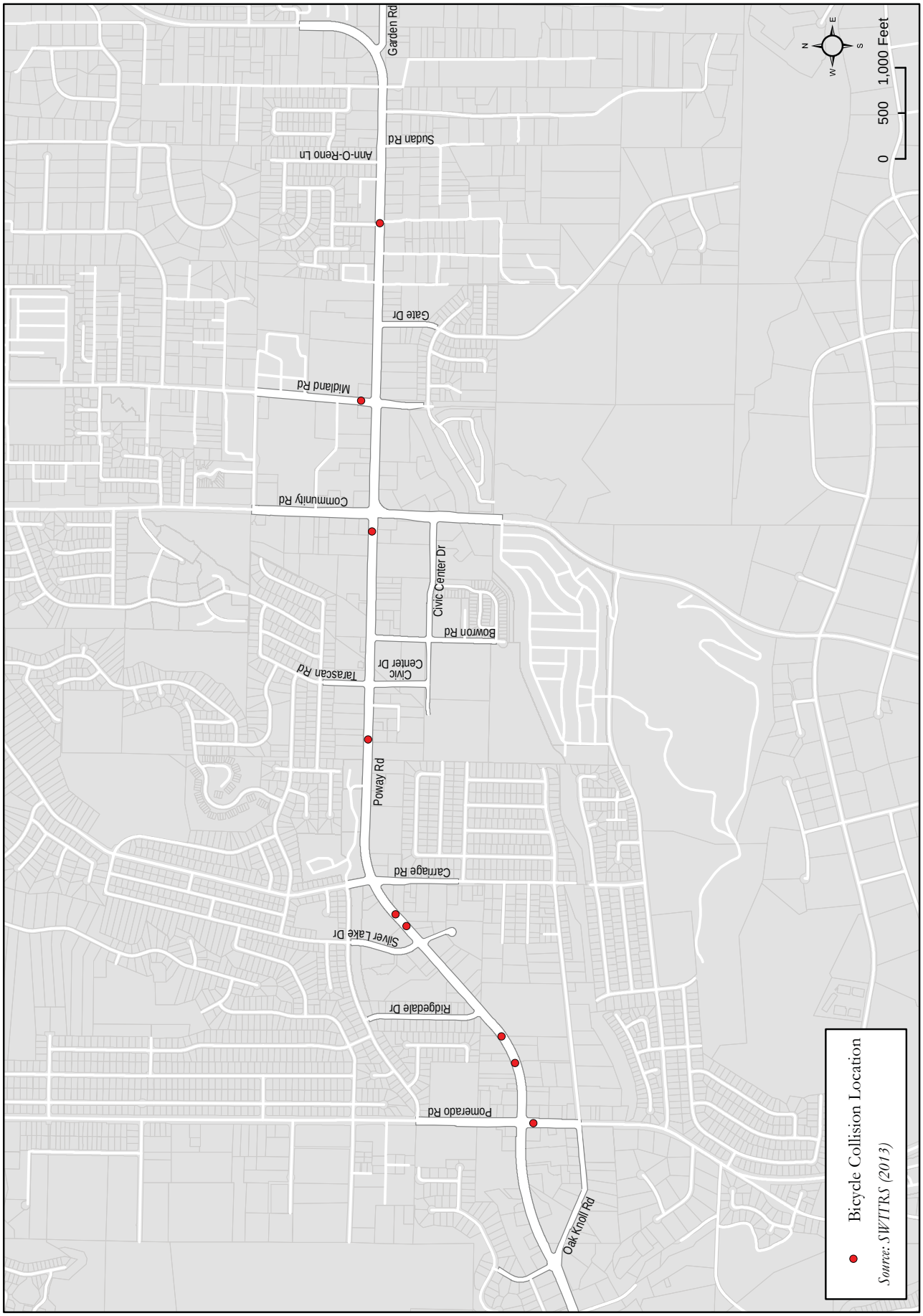


Figure 3-9
Bicycle Collisions (2009-2013)

Poway Road Corridor Study

CHEN RYAN

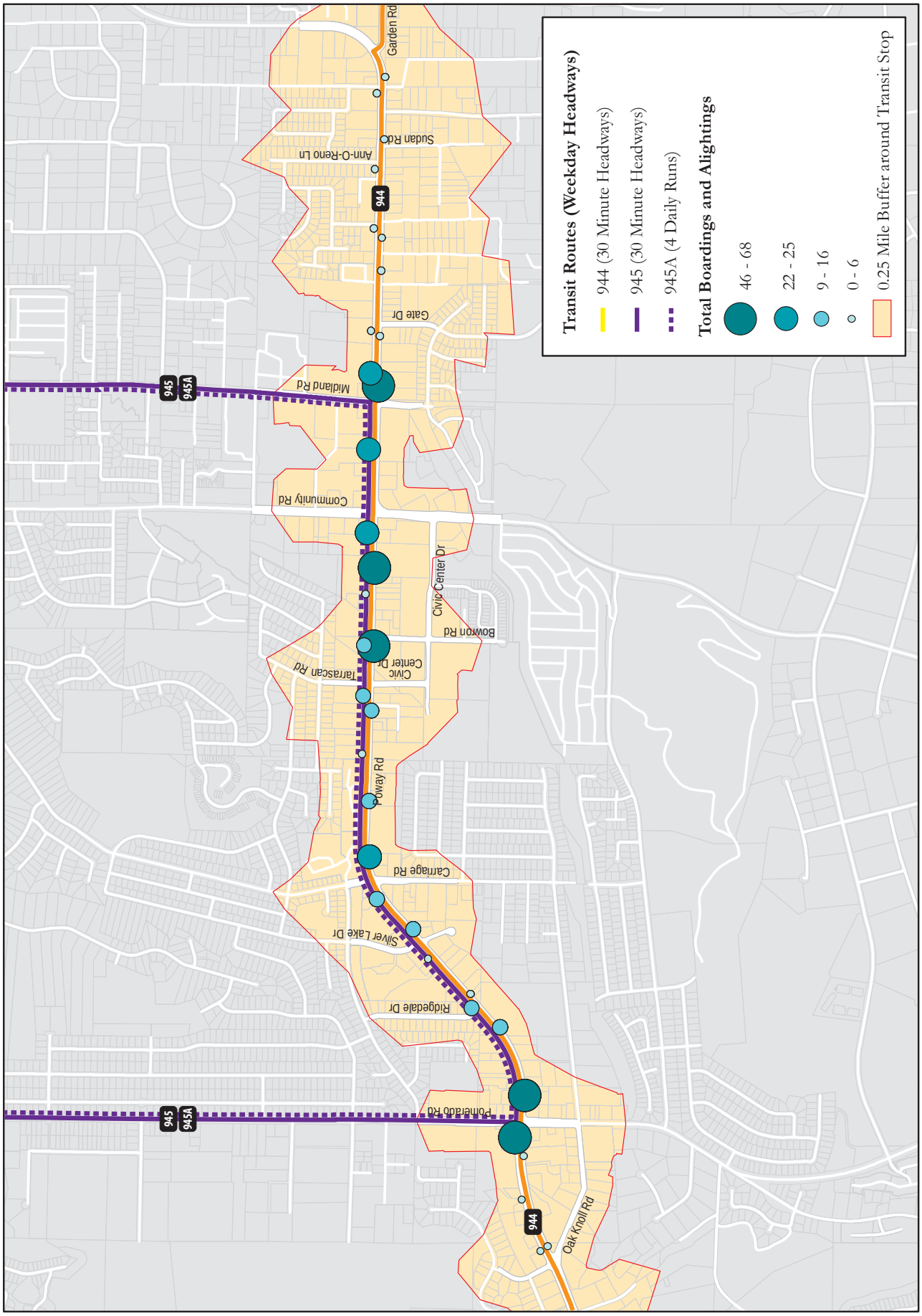


Figure 3-10
Existing Public Transportation Routes, Stops and Boardings/Alightings

Poway Road Corridor Study

CHEN RYAN

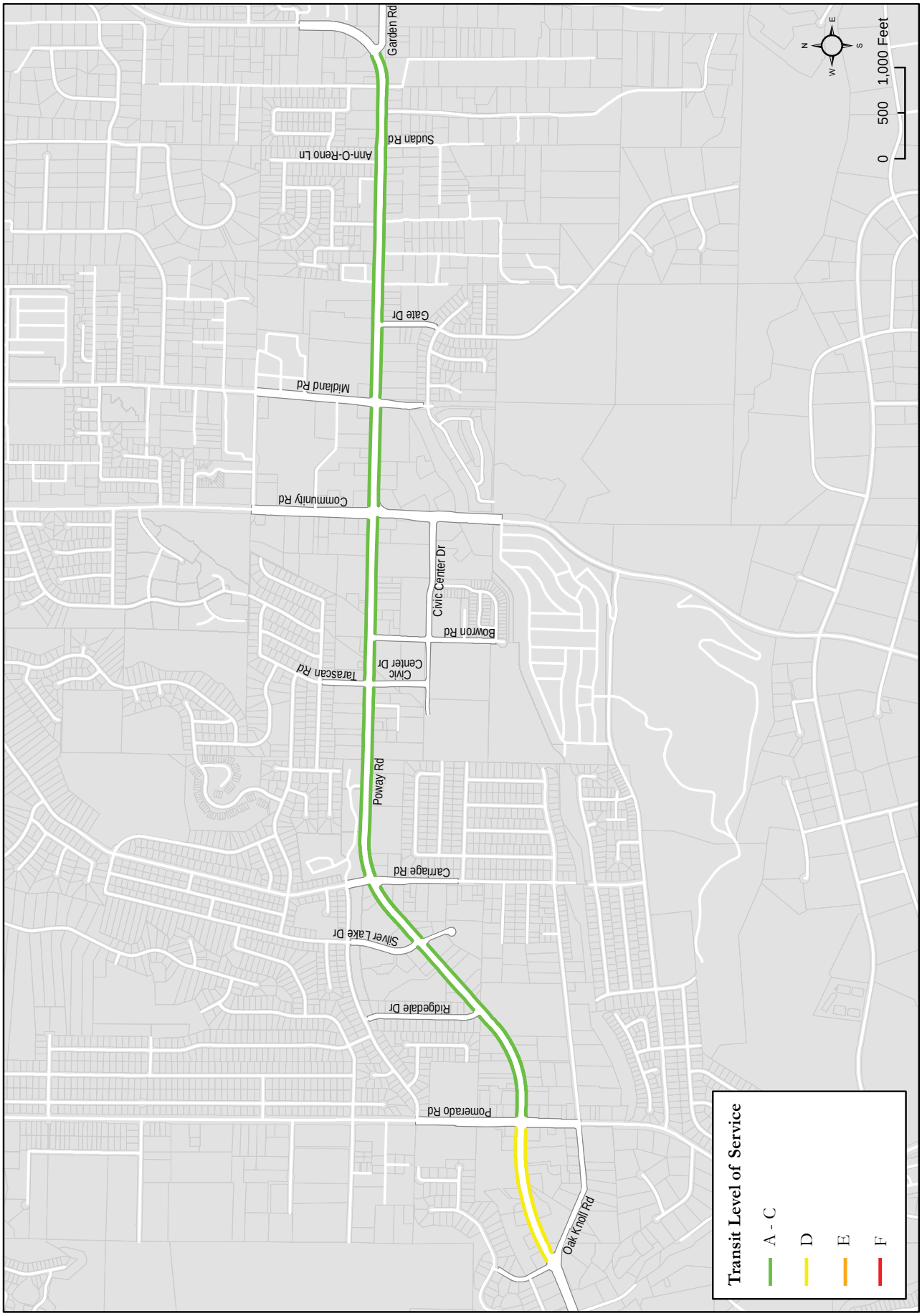


Figure 3-11a
AM Peak Hour Transit Level of Service

Poway Road Corridor Study

CHEN RYAN

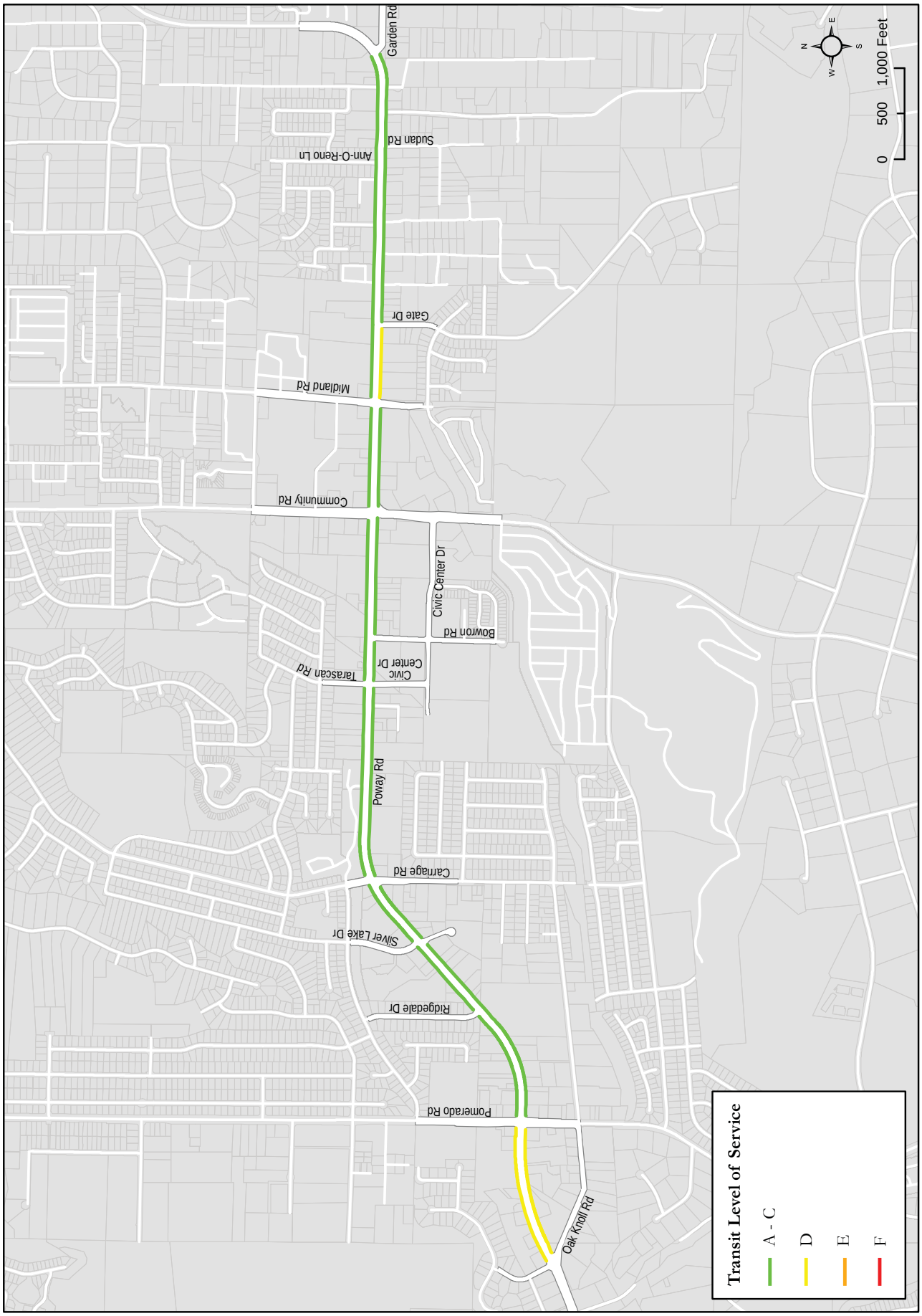


Figure 3-11b
PM Peak Hour Transit Level of Service

Poway Road Corridor Study

CHEN RYAN

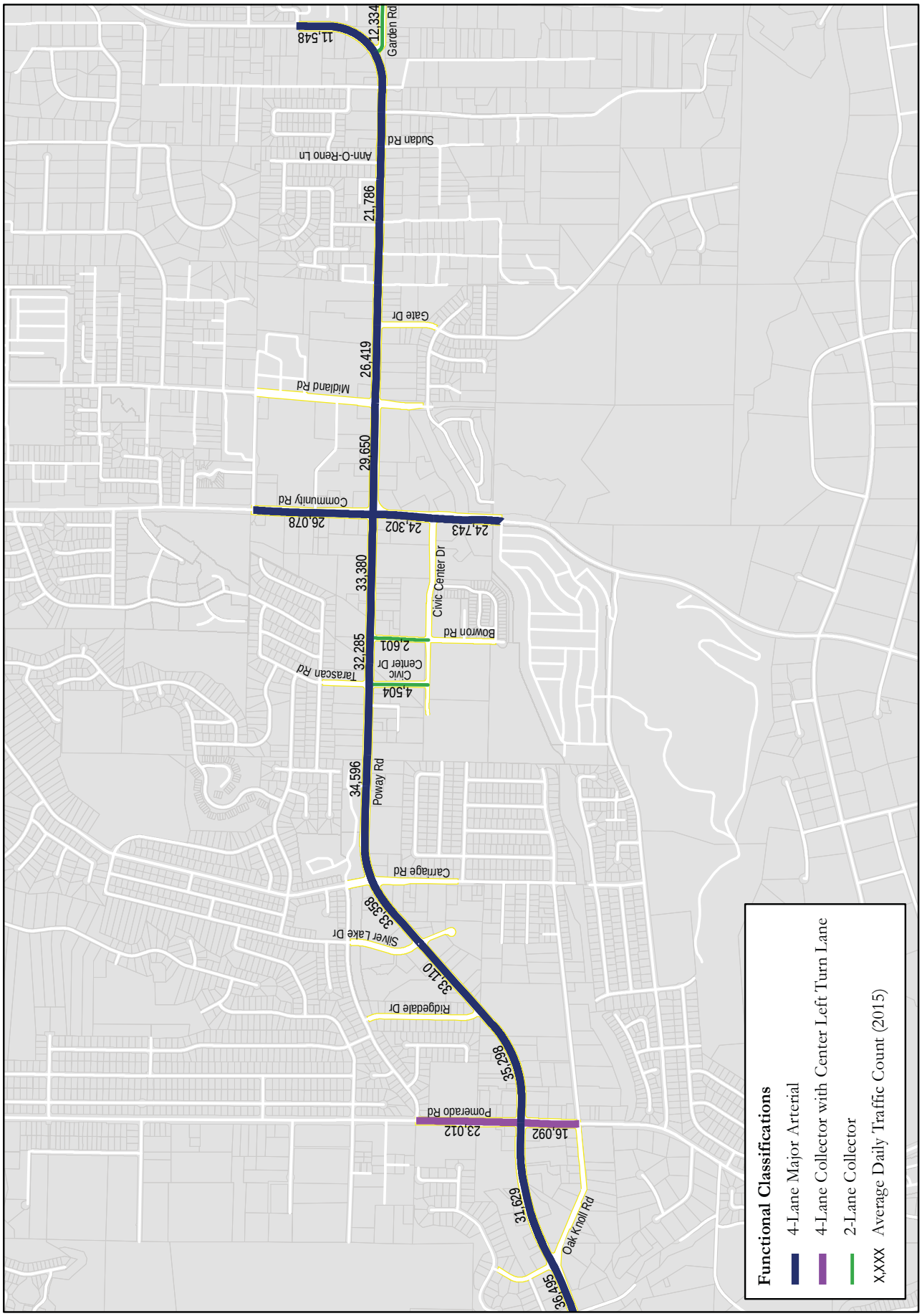
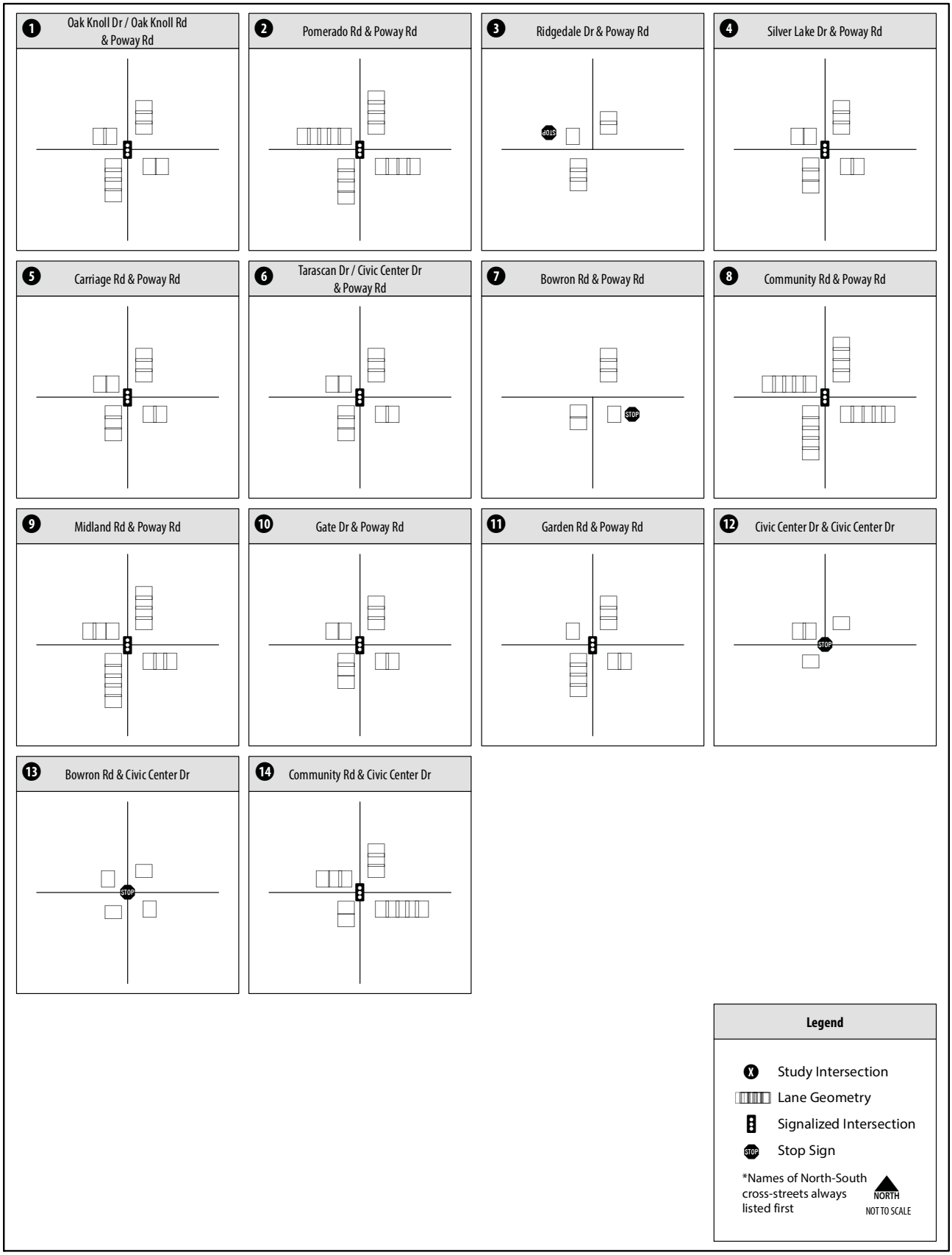


Figure 3-12
Existing Roadway Functional Classifications and Daily Traffic Counts

Poway Road Corridor Study

CHEN RYAN



Poway Road Corridor Study

Figure 3-13

Intersection Geometrics (Intersections 1-14)

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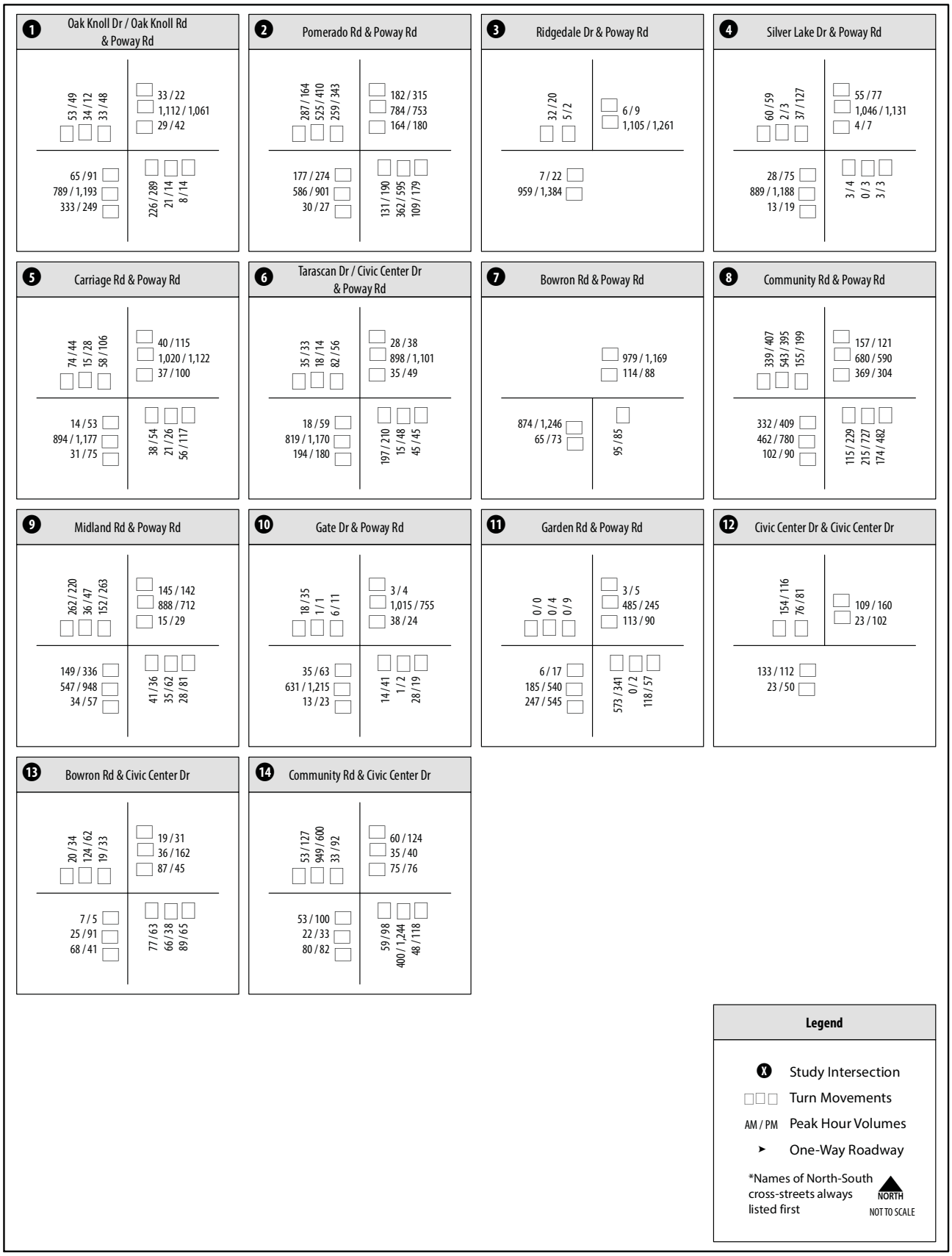

Poway Road Corridor Study

Figure 3-14

AM/PM Peak Hour Intersection Traffic Counts (Intersections 1-14)

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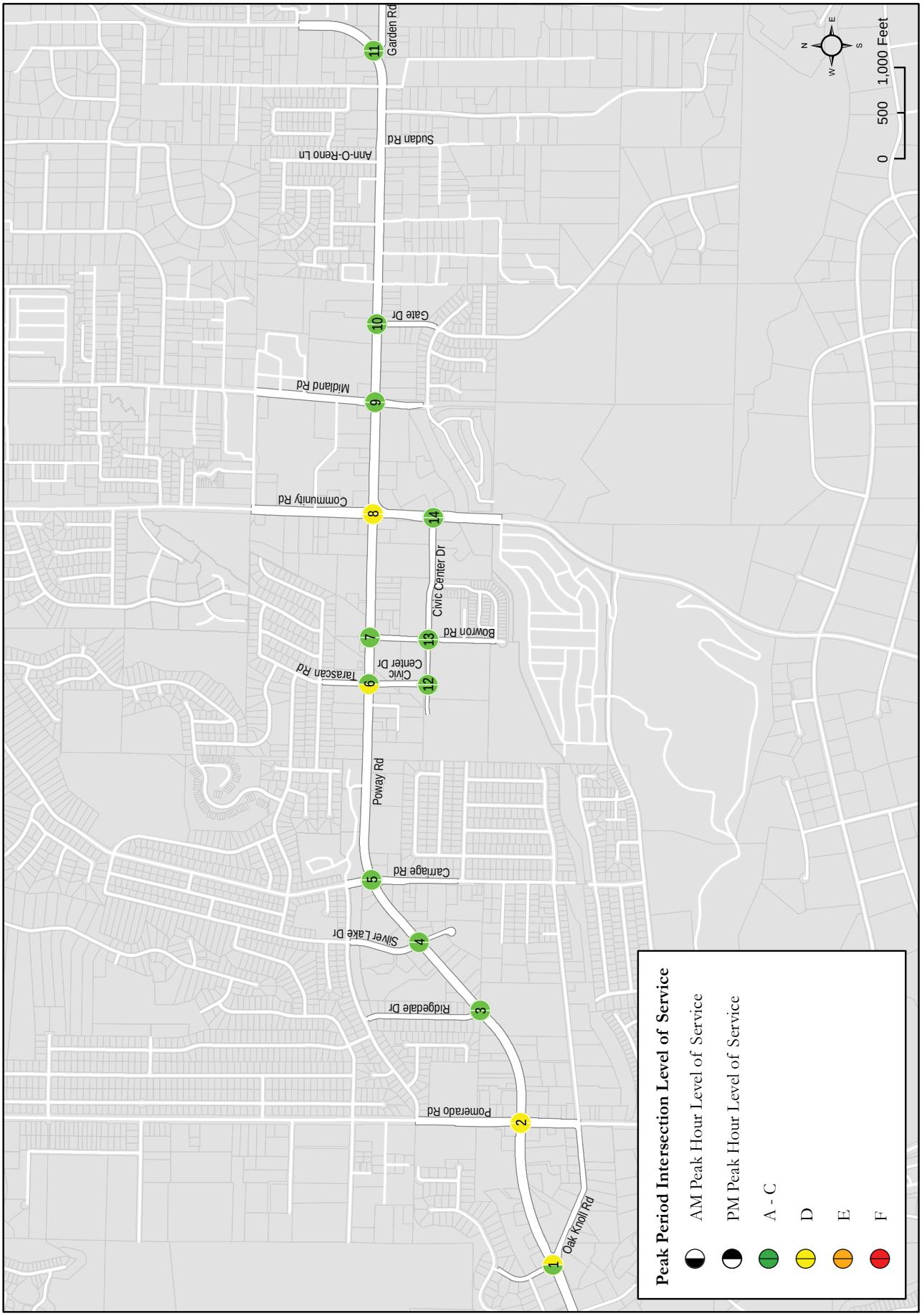


Figure 3-15
Peak Period Intersection Level of Service

Poway Road Corridor Study

CHEN RYAN

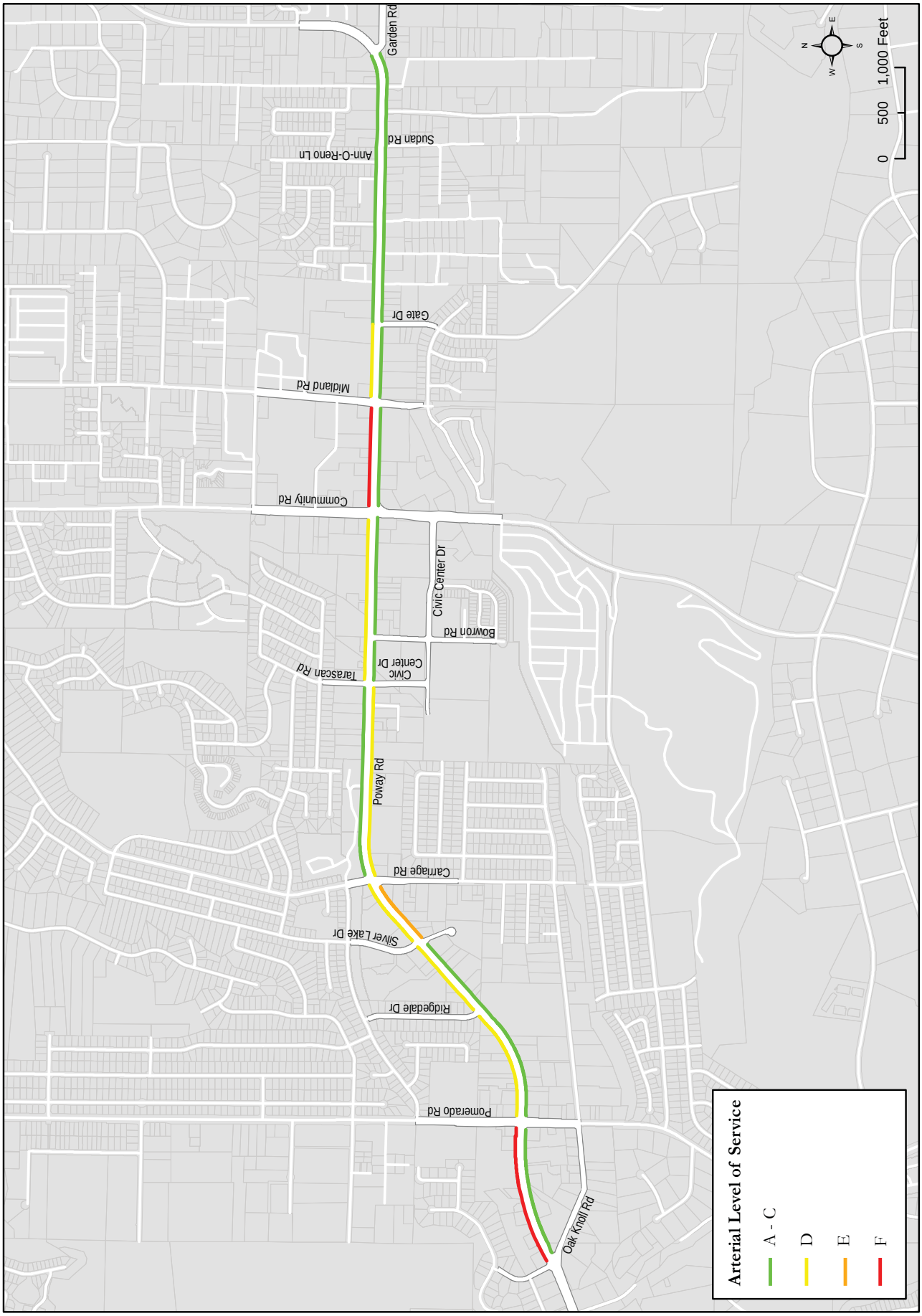


Figure 3-16a
AM Peak Hour Arterial Level of Service

Poway Road Corridor Study

CHEN RYAN

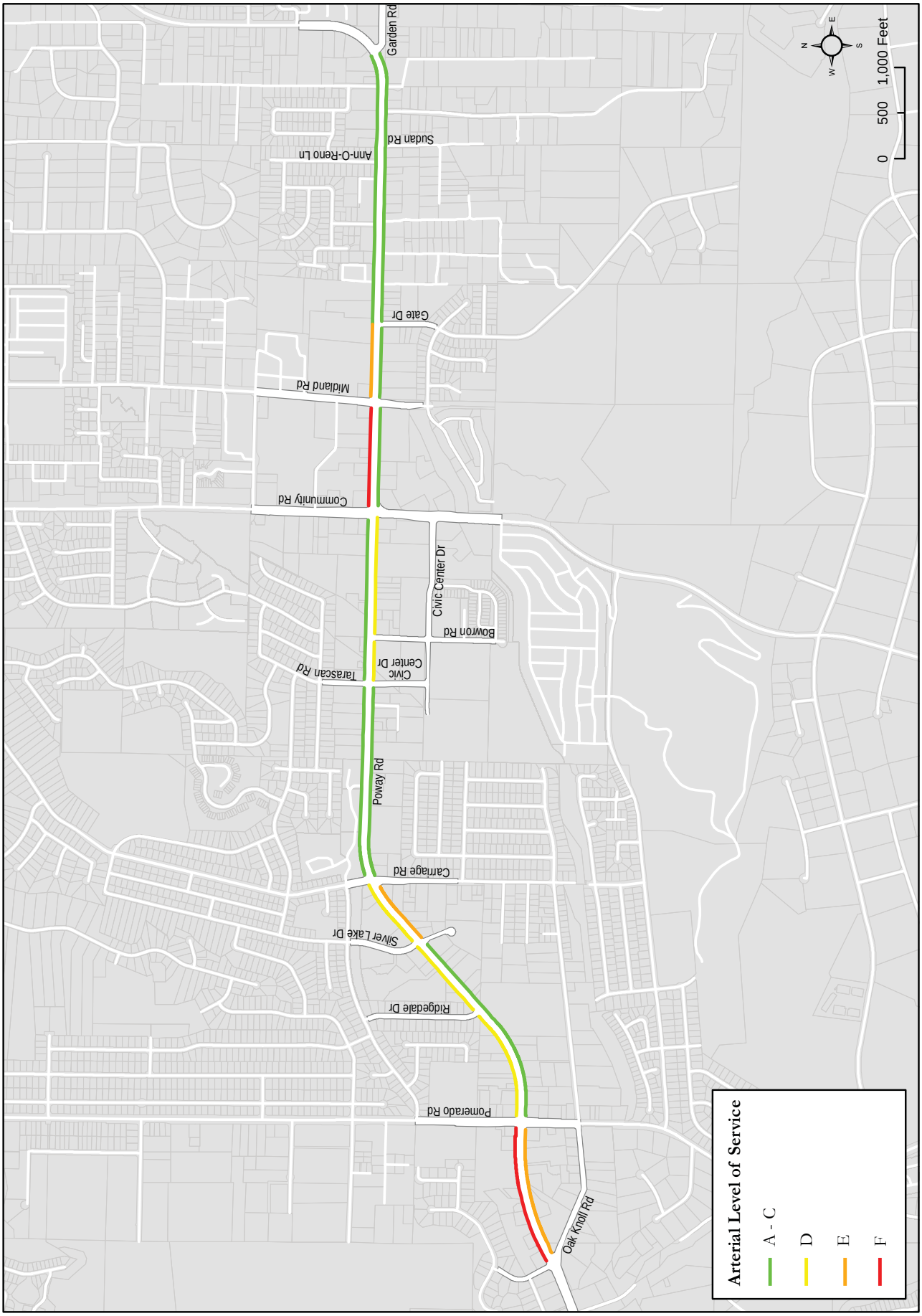


Figure 3-16b
PM Peak Hour Arterial Level of Service

Poway Road Corridor Study

CHEN RYAN

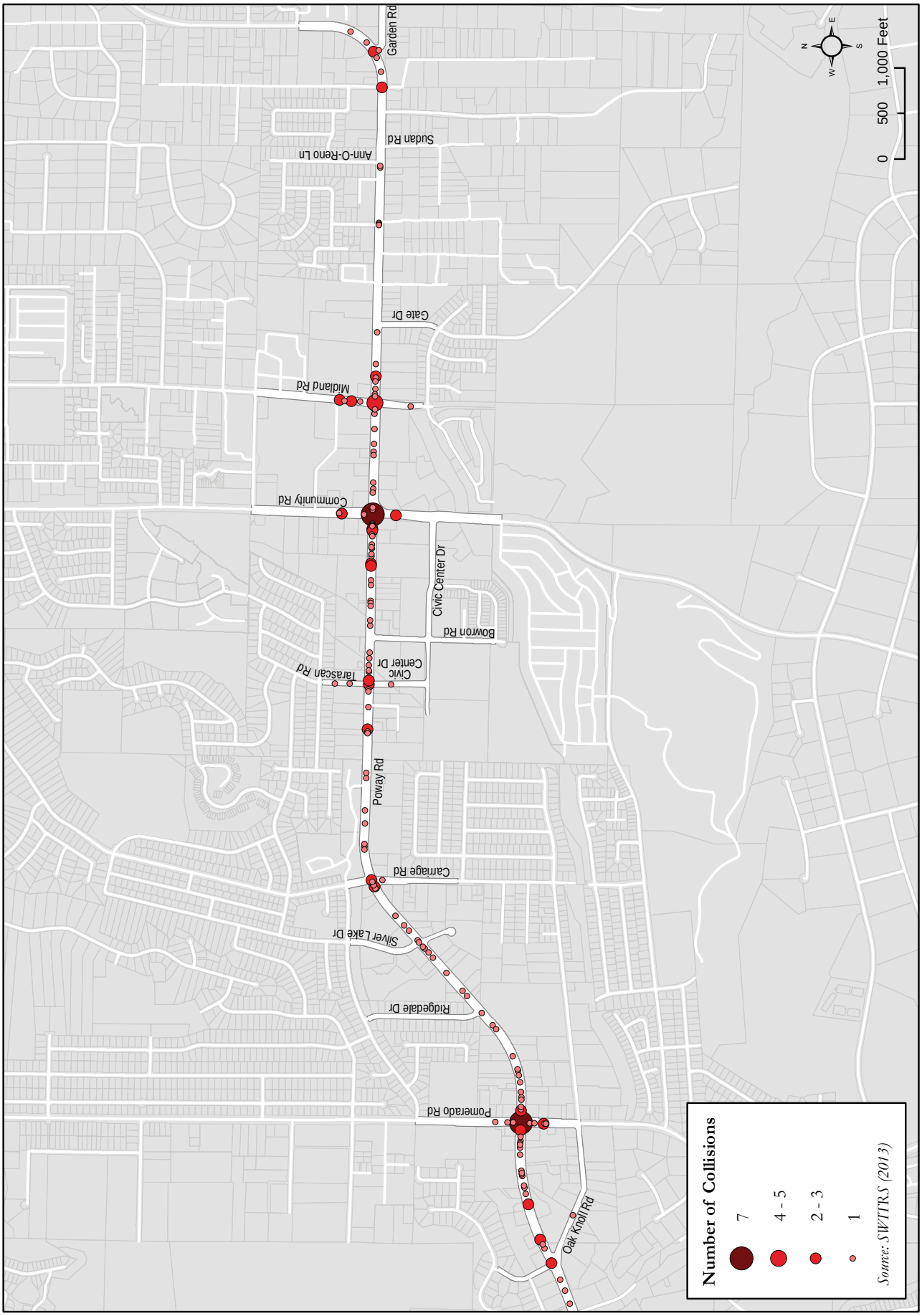


Figure 3-17
Vehicle Collisions (2009-2013)

Poway Road Corridor Study

CHEN RYAN

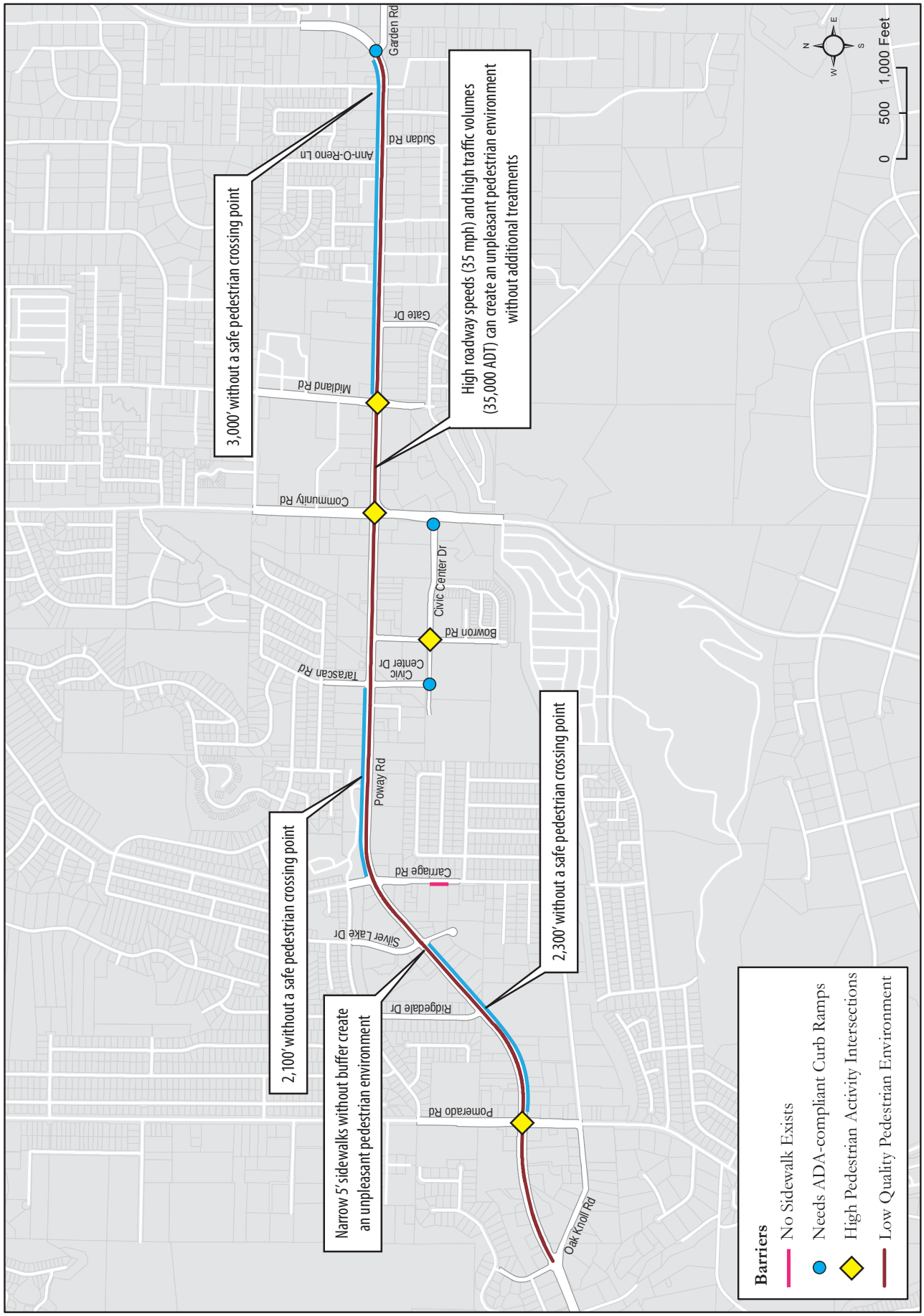


Figure 3-18
Pedestrian Needs

Poway Road Corridor Study

CHEN RYAN

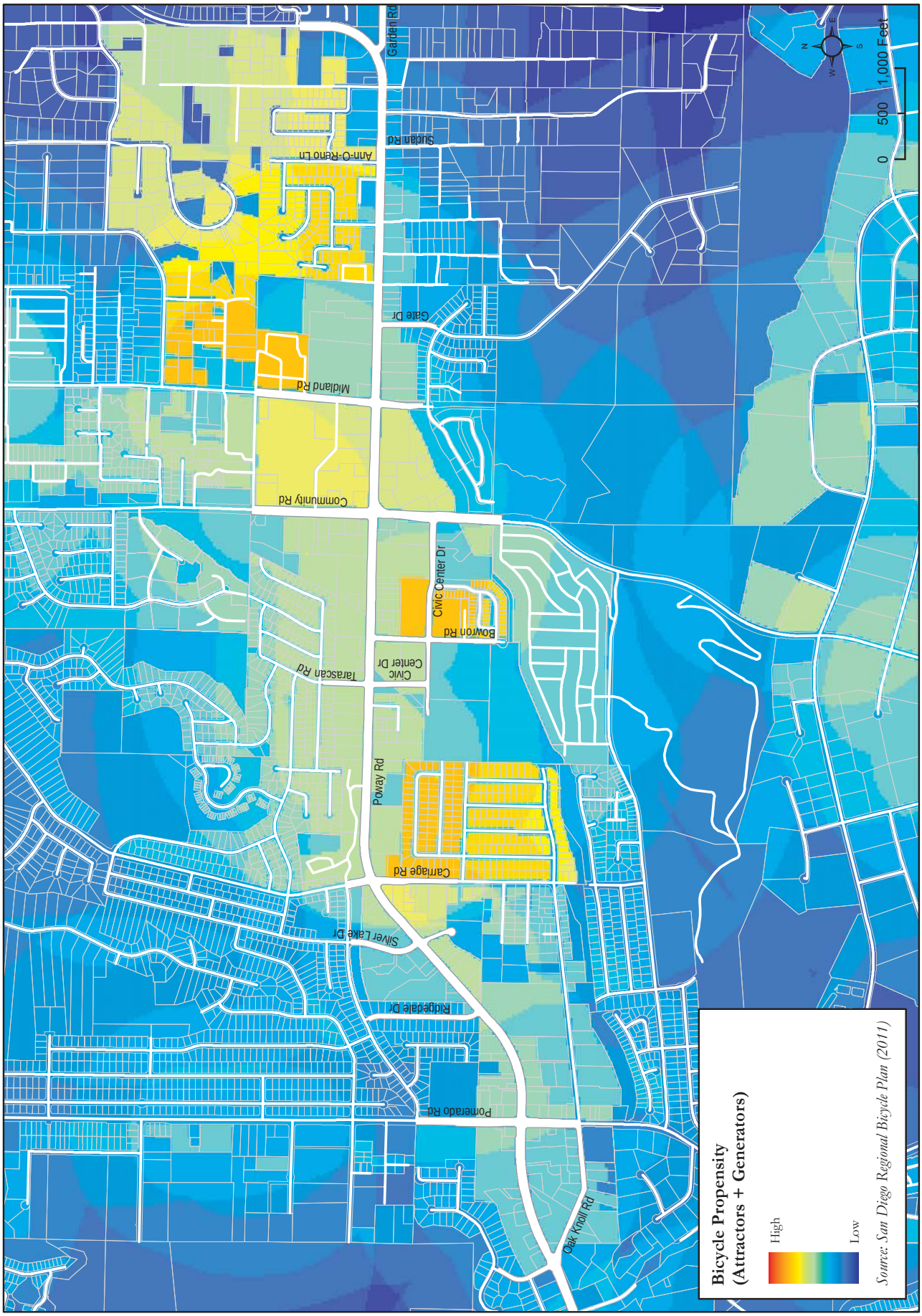


Figure 3-19
SANDAG Regional Bicycle Propensity Model

Poway Road Corridor Study

CHEN RYAN

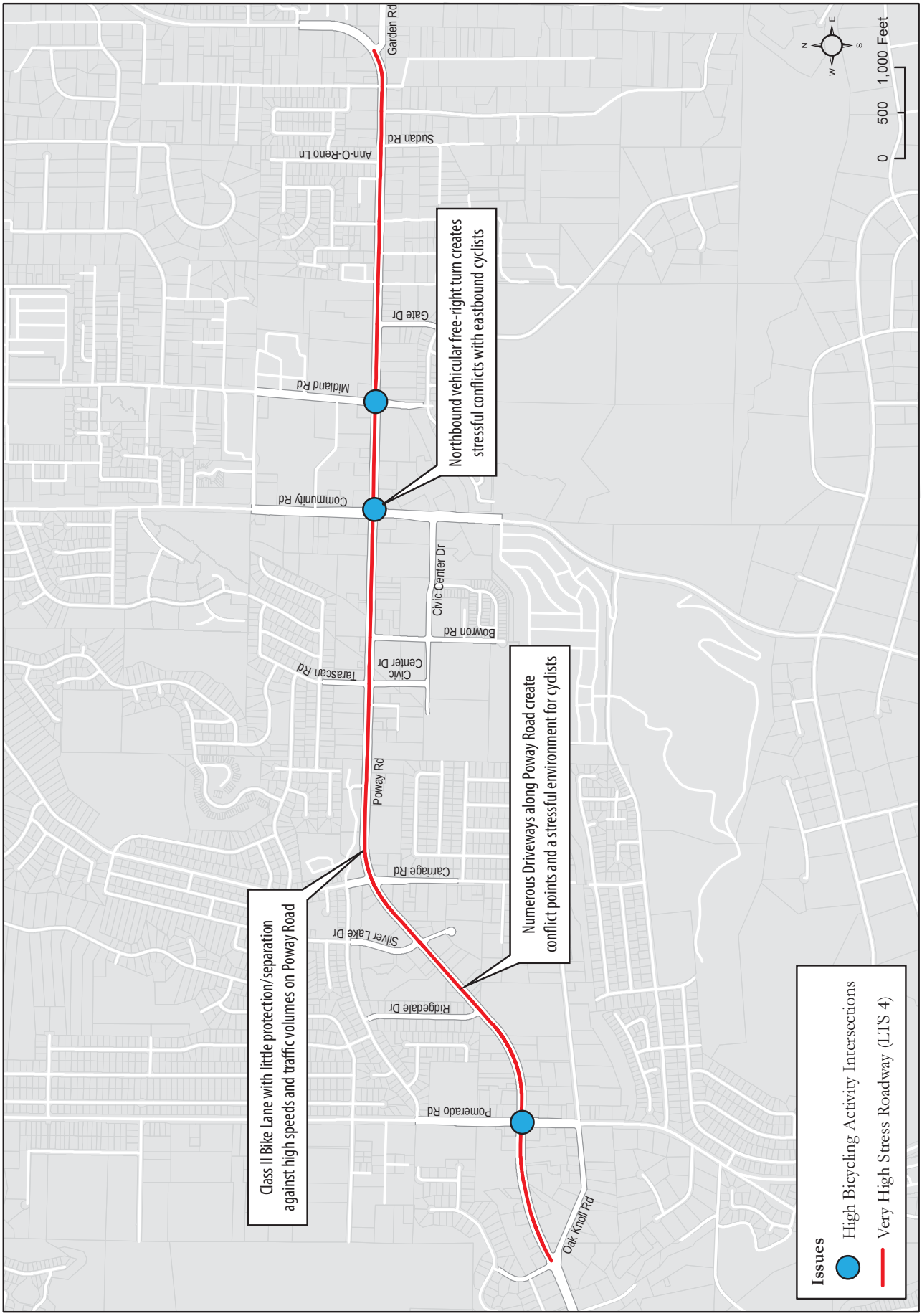


Figure 3-20
Bicycle Needs

Poway Road Corridor Study

CHEN RYAN

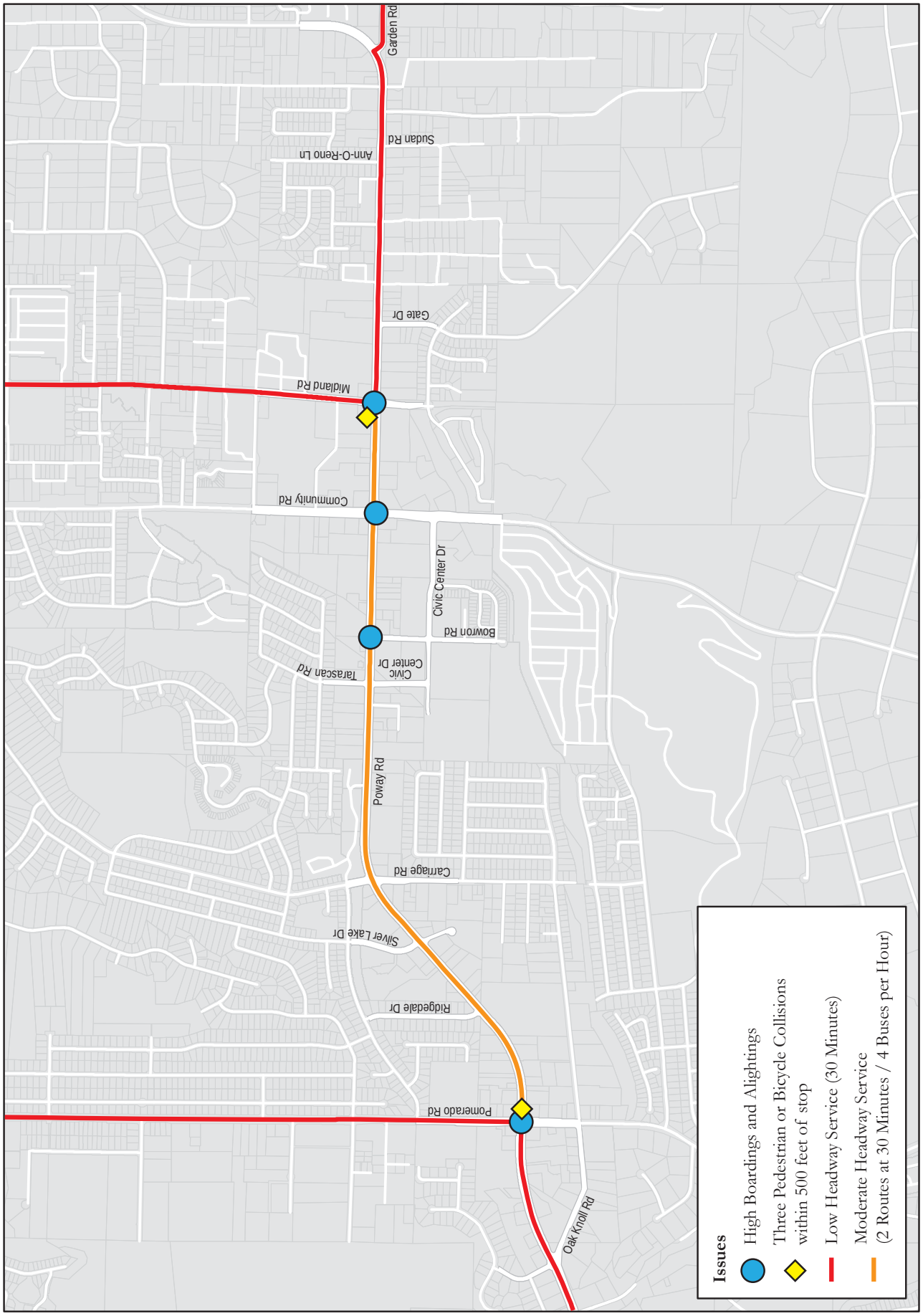


Figure 3-21
Transit Needs

Poway Road Corridor Study

CHEN RYAN

CITY OF POWAY

poway road

CORRIDOR STUDY

Existing Conditions Assessment

Chapter 4. Market Potential Overview

Market Potential Findings

The following market overview provides an assessment of the development potential for office, hotel, residential, and retail/restaurant land uses along the Poway Road Corridor (Study Area). The overview relied upon readily available third party demographic and market data sources. The market overview included an evaluation of the strength of the demand for the various land uses, an assessment of key assets and constraints affecting development and redevelopment in the Study Area, and recommended development opportunities (see Table 4-1 and Figure 4-1, pages 4-3 – 4-5).

Based on these findings, a series of recommendations were developed for consideration by the City, as discussed below:

Distinct Identity

- New investment in the Study Area in both private development and public infrastructure should strive to foster distinct images or brands within the Study Area. For example:
    - *Mixed-Use Multi-Family:* On the western portion of the Study Area, generally between Oak Knoll Road and Carriage Road, guide development toward mixed-use developments focused primarily on multi-family residential uses potentially integrated either with office or retail uses.
    - *Main Street Poway:* In the mid-section of the corridor, generally between Carriage Road and Midland Road, establish a "Main Street Poway" brand focused on: (1) local-serving shops and services, and (2) dining and entertainment venues.
    - *Heavy Commercial:* In the Study Area's eastern segment, generally between Midland Road and Olive Tree Lane, strengthen the existing presence of general merchandise and automotive uses by rehabilitating and/or replacing existing underutilized properties with viable compatible commercial uses.
- Implement monumentation, signage, and way finding consistent with each area's identity.

Private Development

- Encourage residential developments with walkable environments; easy access to retail services, and amenities; and connections to parks, trails, and public facilities.
- Target retail/restaurant development toward themed uses such as local-serving shopping services and farm-to-table dining and markets.

Public Investment and Amenities

- Invest in infrastructure, public parking, and/or public facilities as a means towards providing strong catalysts for private development.
- Encourage place-making amenities such as outdoor public seating areas, enhanced landscaping, and bike and pedestrian circulation.

Table 4-1: Market Potential Overview Findings

	Retail/Restaurant	Office	Hotel	Residential
Key Assets	• Major new anchors such as Lowe's, Michael's, Grocery Outlet, and the new/expanded Toyota dealership. • High household incomes in trade area. • Well established critical mass of retail stores. • Strong local and subregional draw. • Low retail vacancy rates. • Plentiful parking supply.	• Proximity to skilled workforce/desirable bedroom communities. • Desirable proximity to public facilities including Civic Center and public library.	• Rising transient occupancy tax revenues in recent years indicate growing demand. • Proximity to Ramona wineries may provide a draw to the Study Area, particularly on weekends.	• Desirable community image, as evidenced by strong home values. • Rising market rents and prices in City and trade area. • Growing regional demand for alternative multi-family housing types resulting from scarcity of land, rising housing costs, and the increase in non-family households. • Increasing life expectancy and changing lifestyle patterns support a range of multi-family and mixed-use development types.
Key Constraints	• Large presence of price-sensitive "mom and pop" tenants. • Significant amount of older and/or unanchored centers requiring reinvestment/ reconfiguration. • Unsightly land uses may be incompatible with potential new development. • Competition from Carmel Mountain Ranch, Interstate 15, and regional malls.	• Distance from freeway. • No significant demand generators. • Established employment centers are clustered in other areas of the City or adjacent jurisdictions. • Few office buildings in Study Area, with no particular concentration of office uses in any one location.	• Existing hotels in the Study Area are outdated with limited service facilities. • Lack of demand generators. • Lack of visitor-serving amenities such as restaurants, entertainment, and specialty stores.	• Limited amount of housing in Study Area. • Innovative construction types precluded by existing density and height limits. • Limited amenities, public facilities, and walkable environment to support residential development. • High traffic volume and lack of pedestrian-friendly infrastructure ill-suited to create walkable environment for prospective residents.

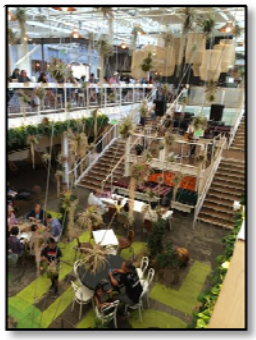
Table 4-1: Market Potential Overview Findings (Cont'd.)

	Retail/Restaurant	Office	Hotel	Residential
Overall Potential				
Near Term (0-5 Years)	Moderate	Weak	Weak	Moderate
Mid Term (5-10 Years)	Strong	Moderate	Weak	Strong
Long Term (10+ Years)	Strong	Moderate	Moderate	Strong
Recommended Product Type	• "Main Street" shopping and services • Sit-down restaurants, fast casual, and other eating and drinking uses • Fine dining / farm-to-table restaurants tied to local agriculture industry	• Local-serving businesses such as finance, insurance, and real estate (FIRE) • Medical and dental services • Legal services	• Limited service/extended stay hotels • Tourist accommodations oriented to families	• Multi-family rentals • For-sale townhomes • Mixed-use developments
Pre-Conditions for New Development	• Site assembly • New housing development • Gateway improvements	• Can be combined in retail and mixed-use developments	• Site assembly • Gateway improvements • Can be combined in retail and mixed-use developments	• Site assembly • Supporting amenities and public facilities

Figure 4-1: Poway Road Dining District Brand Examples

Key Attributes:

- Inviting modern-rustic architectural features and reconstitution of uses
- Farm-to-table principles
- Vibrant and communal gathering spaces
- Market hall atmosphere with a



4.1 Introduction

The City of Poway (City) is located in the northeastern portion of San Diego County. The City encompasses a total of 39.4 square miles, with over half dedicated as open space. The City is adjacent to the jurisdictions of San Diego to the west and south, Escondido to the north, and unincorporated areas of San Diego County to the east. The City's official nickname is "The City in the Country" due to its roots as a rural community.

The Poway Road corridor serves as the gateway to the City and is the primary commercial area of the City. The Study Area stretches 2.65 miles from the intersection of Oak Knoll Road on the west to Garden Road on the east. The Study Area is largely built out; however, numerous opportunities exist for public and privately owned land to be redeveloped with new buildings and uses that are better suited for current and future market conditions.

As shown in Table 4-2, land use designations within the Study Area allow for a broad mix of land uses, including office, lodging, residential, and specialty and service retail.

Table 4-2: Existing Land Use Mix by City Land Use Designation

	Acres	Units	Hotel Rooms	SF	Allowable Uses
Residential Land Use Designation					
Residential Apartment	15.6	316	---	191,659	Residential apartments at a maximum density of 20 units per net acre
Residential Condominium	8.0	71	---	83,202	Residential condominiums at maximum density of 12 units per net acre
Total Residential	23.6	387		274,861	
Non-Residential Land Use Designation					
Community Business	72.5	---	47	775,555	Local and communitywide commercial centers
Automotive General Commercial	53.7	---	43	477,813	Roadway-oriented retail, service, and wholesale commercial activities
Town Center	63.2	---	---	678,761	General and specialty retail, dining and entertainment establishments, and civic uses
Mixed Use	19.2	---	---	100,179	Mix of commercial and residential uses that exist separately or in combination on the same site
Commercial General	9.5	---	---	144,085	Broad range of major retail and service businesses
Total Non-Residential	218.1		90	2,176,393	
Total Poway Road Corridor	**241.7**	**387**	**90**	**2,451,254**	

Source: City of Poway

4.2 Demographic and Economic Overview

This section reviews demographic and economic trends for the Study Area, the City, and the County of San Diego (County). Data were obtained through The Nielsen Company, U.S. Census, and San Diego Association of Governments (SANDAG). Key demographic factors are discussed below.

- Residents of the City represent 1.5% of the County of San Diego (County) total population.
- As shown in Table 4-3, residents of the City are older, have larger household sizes, and earn significantly higher incomes compared to residents of the County.

Table 4-3: Demographic Factors, 2015

Estimated Population / Income Characteristics	City of Poway	County of San Diego
Population	48,698	3,250,417
Number of Households	16,579	1,141,245
Average Household Size	2.91	2.76
Median Age (Years)	41.8	35.7
Median Household Income	$91,098	$61,766

Source: The Nielsen Company

- According to SANDAG, between 2000 and 2014, the City grew at an average annual rate of 0.14%. This growth trend is expected to increase slightly over the next 20 years.
- As shown in Table 4-4, by 2035, population growth in the City is projected to increase at a faster pace compared to the neighboring jurisdictions of Escondido and San Marcos, but slower than the cities of San Diego and Santee, as well as the County as a whole.

Table 4-4: San Diego County Projected Population Growth, 2015-2035

	2015 (1)	2020 (2)	2035 (2)	Average Annual Growth (2015-2035)
Escondido	150,688	154,635	168,505	0.56%
Poway	48,698	54,054	58,466	0.92%
San Diego	1,364,334	1,542,324	1,759,260	1.28%
San Marcos	91,746	90,794	103,238	0.59%
Santee	56,518	64,551	72,521	1.25%
County of San Diego	3,250,417	3,535,000	4,026,131	1.08%

(1) Source: The Nielsen Company
(2) Source: SANDAG

- According to the U.S. Census Bureau, there are approximately 24,450 persons who work within the City. Professional, Scientific, and Technical Services is the largest employment industry (19.1%), followed by Manufacturing (15.9%), Retail Trade (11.8%), and Construction (8.3%). Wholesale Trade, Accommodation and Food Services, Finance and Insurance, Health Care and Social Assistance, Agriculture, Forestry, Fishing, and Hunting, Transportation and Warehousing, Information, Real Estate and Rental and Leasing, Management of Companies, Administration & Support, Waste Management and Remediation, Educational Services, Arts, Entertainment, and Recreation, Other Services (excluding Public Administration, and Public Administration make up the remaining employment industry sectors in the City (44.9%).

4.3 Projects in Planning

Completed, Under Construction, and Planned Projects

The City's Planning Department indicates that there are a number of major commercial and multi-family development projects recently completed or currently under construction or planned within the City, as summarized in Table 4-5.

Table 4-5: Projects in Planning

Project	Address	Description	Status
• Target Expansion	14823 Pomerado Road	Entryway of existing 109,973 SF Target store expanded by 2,459 SF	Completed 2012
• Poway Plaza Remodel – Michael's / Grocery Outlet	13345 Poway Road	Repositioning of former 44,000 SF Dixieline into two separate tenant-ready spaces for Michael's and Grocery Outlet	Completed 2013
• Toyota of Poway Relocation	13631 Poway Road	Relocation and expansion of Toyota of Poway dealership to a 5.5 acre site	Completed 2013
• Walmart Expansion	13425 Community Road	Addition of 36,996 SF retail space to allow for a full-service grocery department	Completed 2014
• Lowe's Home Improvement Warehouse	13750 Poway Road	New construction of 121,000 SF and attached 31,500 SF Garden Center on a 11.5 acre site formerly occupied by the Toyota and Chevrolet car dealerships	Completed 2014
• New Retail, Professional/ Medical Space	12411 Poway Road	Renovation of former RE/MAX office building	Under construction
• Perry Ford Expansion	12740 Poway Road	Construction of new 17,500 SF sales and administrative building within the boundary of the existing dealership	Under construction
• Affordable Housing Project	Monte Vista Road & Pomerado Road	41-unit project on two acres	Proposed

Table 4-5: Projects in Planning (Cont'd.)			
Project	Address	Description	Status
• Habitat for Heroes Project	14135 Twin Peaks Road	New construction of 26 low income homes for veterans on a 2.15-acre City-owned lot	Proposed
• Town Center Project	Tarascan Road & Poway Road	Mixed-use development featuring restaurants and residential uses	Proposed
Source: City of Poway			

Long Range Property Management Plan

Following the dissolution of the former Poway Redevelopment Agency, the City identified 49 properties that were owned by the former Redevelopment Agency. Pursuant to Assembly Bill (AB) 1484, the City's Successor Agency to the former Redevelopment Agency is required to develop a Long Range Property Management Plan (LRPMP) that governs the disposition and use of the former Redevelopment Agency properties. As required by AB 1484, for each property the LRPMP must identify if the property will be: (1) retained for governmental use; (2) retained for future development; (3) sold; or (4) used to fulfill an enforceable obligation.

As presented in **Table 4-6**, of the 49 properties in the former Agency's portfolio, 11 are located along Poway Road, as follows:

Table 4-6: Long Range Property Management Plan – Study Areas Properties				
Address	Description	Purpose for Acquisition	Current Zoning	Lot Size (acres)
Retained for Government Use				
• 13100 Bowron Road	Sheriff's Substation/ Skate Park	Municipal facilities	TC	3.77
• Vista View Drive	Poway Valley Community Garden	Municipal facility	RS-1	1.01
Properties to be Sold				
Properties Sold for Future Town Center Project				
• 13100 Poway Road	Vacant lot	Future Town Center project	MU	1.54
• 13123-13125 Poway Road	Vacant lot adjacent to library	Future Town Center project	TC	0.35

Table 4-6: Long Range Property Management Plan – Study Areas Properties				
Address	Description	Purpose for Acquisition	Current Zoning	Lot Size (acres)
• 13033 Poway Road	Storage facility	Future Town Center project	MU	1.83
• 13123-13125 Poway Road	Vacant lot	Future Town Center project	MU	0.61
• 13053 Poway Road	Commercial building	Future Town Center project	MU	0.33
• 13029½ Poway Road	Commercial building	Future Town Center project	MU	0.25
Subtotal Future Town Center Project				*4.91*
Other Properties Sold				
• 12430 Poway Road	Landscape and parking area next to Ramada Inn	Removal and remediation of former Tune Craft	CB	0.14
Retained to Fulfill Enforceable Obligation				
• 13655 Poway Road	Toyota of Poway	New Toyota site	AGC	1.86
• 13655 Poway Road	Toyota of Poway	New Toyota site	AGC	0.90

As shown above, the former Redevelopment Agency assembled nearly five acres of land in the Town Center area for potential development of a mixed-use district. The LRPMP must be approved by the State of California Department of Finance (DOF) before the City can move forward with the sale of properties noted above. The LRPMP is currently under review by the DOF.

4.4 Office Market Overview

The national residential market downturn beginning in late 2007 contributed to decreased office space demand from related users, e.g., mortgage, title, and escrow companies; lenders and investors; and homebuilders. As businesses downsized or closed, the inventory of sublease space put additional downward pressure on rental rates for Class A and B office space. Since 2010, the national office market has continued to recover with the outlook for 2015 the strongest since the recession. Current information on office market conditions is available from DTZ Commercial Real Estate Services (formerly Cassidy Turley), one of the top three global commercial real estate services firm, with 1,320 borkers and 120 offices throughout the United States, Canada, and Mexico. According to DTZ, in 2014 the U.S. office market had an average vacancy factor of 14.9%, a difference of -0.40% from the previous year, and a difference of -2.4% from the recessionary peak of 17.3%. Average asking rates in the U.S. in 2014 were $22.44 per year, or $1.87 per SF per month, a 2.0% increase from the previous year.

The following presents a summary of the key market factors affecting the development of office space in the City and the Study Area.

Regional Market Conditions

- San Diego's office market continues to show signs of recovery, driven by the County achieving a record high Gross Domestic Product (GDP) of $206.4 billion in 2014 and unemployment rates that continue to decline since their peak in 2010.

- The recovery of the region's office market has reached the point where new office developments are currently under construction.

- According to real estate estate professionals, Voit Real Estate Services, vacancy rates in San Diego during 4th quarter 2014 were at 11.7%, a difference of -0.60% from the previous year. This information is consistent with other third-party sources such as Cushman & Wakefield, Colliers International, DTZ, and CBRE Research, prominent real estate brokerage firms, who also report decreasing vacancy rates in San Diego.

- During this same period, average lease rates in the County were at $2.40 per SF per month, an 8.1% increase from the previous year.

Local Market Conditions

- The City contains approximately 1.3 million SF of office space, or 1.3% of the County total.

- Office space within the City has a vacancy rate of 5.7%, significantly lower than the County average vacancy rate of 11.7%.

- The average asking lease rate for office space in the City is $1.85 per SF Full Service Gross (FSG). A FSG lease reflects a rent that is all-inclusive. The landlord pays all or most expenses including property taxes, insurance, and maintenance out of rents received by tenants. The $1.85 per SF rent rate for office space in the City is

comparable to the average office lease rate in neighboring Escondido ($1.85), higher than Ranch Bernardo ($1.70), but lower than Scripps Ranch ($2.18), the I-15 Corridor submarket ($2.09), and the County as a whole ($2.40).

- A survey by the real estate market data firm CoStar indicated that only eight office buildings have been sold in the City since 2013, with only one located in the Study Area. The former 8,066-SF RE/MAX office building located on the corner of Poway and Pomerado Roads was sold for $1.3 million ($161 per SF of building area) in December 2013. The building is currently undergoing renovation to allow for retail spaces on the ground floor and professional or medical offices on the second floor.

- According to an office space listing survey from LoopNet, the nation's largest commercial real estate listing service, the Study Area has an average rental rate of approximately $1.50 per SF per month. By comparison, average rental rates for office space located along Pomerado Road or in the Poway Business Park are approximately $2.00 per SF per month. Terms vary widely with respect to distribution of operating expenses between landlords and tenants

It is anticipated that demand for new office space in the Study Area will primarily be driven by small, local-serving professional firms such as finance, insurance, and real estate professionals, as well as medical/dental and legal firms. However, as the amount of office space per employee declines and the desire to incorporate amenities and quality of life features within workplaces increases, office users are shifting toward non-traditional office space. High-tech companies are looking for unusual spaces and supporting amenities that are reflective of their corporate culture. Additionally, knowledge-based firms are redeveloping established neighborhoods by adapting and designing buildings to be more ecologically sustainable.

4.5 Residential Market Overview

Escalating land values, rising housing costs, and the increase in non-family households are expected to generate demand for townhomes, condominiums, and apartments. Additionally, studies show that higher-density residential developed as part of walkable, amenitized, mixed-use districts demonstrates value premiums. The improving demand and lower surplus inventory of housing nationally is also evident in the San Diego region. Demand from first-time homebuyers and investors has reduced inventory -- especially for lower-priced properties below $500,000 -- to all time lows where multiple offers and aggressive bidding are now commonplace in certain areas. If interest rates remain low and unemployment continues to decrease, this trend could continue for the foreseeable future.

The following presents a discussion of key market factors impacting the potential for multi-family and mixed-use residential development within the City and Study Area.

Regional Market Conditions

- According to CoreLogic (formerly DataQuick), the largest provider of property information and related financial databases in the U.S., in February 2015 the median sales price for single-family home resales in San Diego County was $480,000, a 6.7% increase from the previous year.

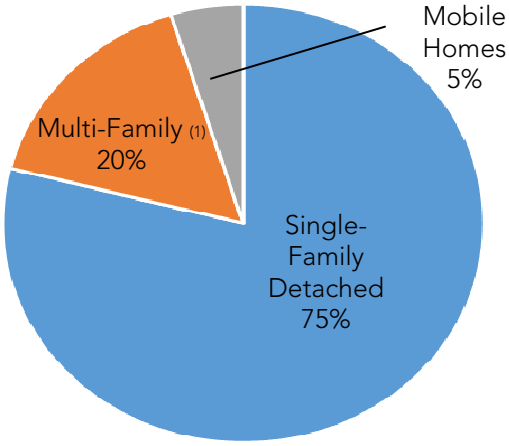
- CoreLogic also reports that the median sales price for condominium resales in San Diego County was $341,000 in February 2015, a 13.7% increase from the previous year.

- The apartment market in the San Diego region is expected to remain strong, as evidenced by increasing rents and a number of apartment developments under construction or planned. Marcus & Millichap, the nation's largest real estate brokerage firm, reports that in 2014 vacancy rates remained low at 3.2%, a decrease of -0.40% from the previous year.

Local Market Conditions

There are a total of 16,840 housing units in the City, distributed as shown in **Figure 4-2.**

Figure 4-2: Existing Mix of Housing, City of Poway



(1) Includes dwelling units sharing adjoining walls including townhomes, apartments, and stacked-flat condominiums.

- As shown in **Table 4-7**, by 2035, the City is projected to add an additional 1,379 housing units, resulting in a nominal rate of growth over the next 20 years. The City's projected growth rate is slower compared to the neighboring jurisdictions of Escondido, San Diego, San Marcos, and Santee, as well as the County as a whole.

Table 4-7: Projected Number of Housing Units, San Diego County, 2015-2035

	2014 (1)	2020 (2)	2035 (2)	Average Annual Growth (2014-2035)
Escondido	48,295	50,370	53,164	0.46%
Poway	16,840	17,233	18,219	0.38%
San Diego	522,214	577,416	654,750	1.08%
San Marcos	30,128	30,065	33,444	0.50%
Santee	20,525	22,312	24,494	0.85%
County of San Diego	1,180,875	1,262,488	1,417,520	0.87%

(1) Source: California Department of Finance
(2) Source: SANDAG

- According to CoreLogic, in February 2015, the median sales price for single-family home resales in the City (zip code 92064) was $585,000, an increase of 18.2% from the previous year.

- CoreLogic also reports that in February 2015 the median sales price for condominium resales in the City (zip code 92064) was $379,000, an increase of 37.8% from the previous year.
- The median sales price for homes resold within a two-mile radius of the Study Area (corner of Poway Road and Community Road) since July 2014 was $650,000 according to Sandicor, San Diego's Multiple Listing Service for residential properties.
- National real estate database provider Redfin reports current apartment rents in areas adjacent to the Study Area average about $1,400 per month, or $1.75 per SF.

4.6 Hotel Market Overview

After experiencing one of the deepest and longest recessions in the history of the lodging industry, the lodging market began to see increases in demand for hotel rooms in 2010. Increases in hotel room demand are projected to continue both nationally and in Southern California, due to its favorable climate, beaches, and ample entertainment, dining, and shopping opportunities.

This section presents an evaluation of key market supply and demand factors impacting the development of hotels within the City.

Regional Market Conditions

- Information on the local and regional hotel market is available from PKF Hotel Consulting, an industry expert on hotel, tourism, and leisure. PKF groups the City within the I-15/Kearny Mesa submarket, which encompasses hotels located along I-15 in the inland, northern, and central portions of the County including the cities/communities of Escondido, Fallbrook, Kearny Mesa, Miramar, Rancho Bernardo, Rancho Penasquitos, Poway, San Marcos, and Vista. Separate market data for Poway hotel properties are not available due to confidentiality reasons.

- According to PKF, in 2014, the I-15/Kearny Mesa submarket experienced a relatively healthy occupancy rate of 73.0%, a 2.1% increase from the previous year.

- The Average Daily Rate (ADR) in the I-15/Kearny Mesa submarket is $123 per room, a 5.5% increase from 2013.

- The PKF survey of occupancy rates and ADRs in the County indicates occupancy rates ranging between 69% and 82% and ADRs ranging between $95 and $209 per room (2014). As presented in **Table 4-8**, the I-15/Kearny Mesa submarket achieves occupancy rates and ADRs at the low end of the range when compared to other submarkets in the County.

Table 4-8: Hotel Market Performance, County of San Diego Submarkets

	Occupancy (2014)	Average Daily Rate	
		2014 (estimate)	2015 (forecast)
San Diego Downtown	81.6%	$190	$203
San Diego Bay	75.5%	$204	$216
La Jolla	76.7%	$209	$221
Mission Bay	75.2%	$189	$200
Mission Valley-Old Town	70.8%	$121	$127
North City-UTC	78.1%	$157	$165

Table 4-8: Hotel Market Performance, County of San Diego Submarkets			
	Occupancy (2014)	Average Daily Rate	
		2014 (estimate)	2015 (forecast)
North Coastal	72.2%	$172	$180
I-15/Kearny Mesa	73.0%	$123	$129
South Bay	69.3%	$95	$100
County of San Diego	76.0%	$169	$179
Source: PKF Consulting USA			

- According to PKF, there are no new hotel rooms anticipated to be built within the I-15/Kearny Mesa submarket in 2015.

Local Market Conditions

- There are one limited service and two economy hotels in the City, consisting of a total 198 rooms.
- As presented in **Table 4-9**, of the three hotels in the City, two are located in the Study Area.
- Hotel rooms in the Study Area offer room rates below $100 per night. The rack rates shown in Table 4-9 reflect the price for a hotel room before any discounts or promotional rates. By comparison, the Average Daily Rate (ADR) (see Table 4-8) reflects a calculated figure estimated as the total hotel room revenues divided by the total number of occupied rooms.

Table 4-9: City of Poway Hotels (1)				
Hotel	Address	Stars (1)	Rack Rate	Rooms
Best Western	13485 Poway Road	★★½	$94	43
Hampton Inn and Suites	14068 Stowe Drive	★★½	$127	108
Ramada	12448 Poway Road	★★	$87	47
Total Rooms				198
(1) Source: On-line travel resources including Tripadvisor.com, Hotels.com, Kayak.com, etc.				

- As presented in **Table 4-10**, since 2010, Transient Occupancy Tax (TOT) revenues within the City increased at a very high average rate of 9.3% per year, resulting in a rate of growth that is higher compared to the neighboring jurisdictions of Escondido, San Diego, and the County as a whole. By comparison, the nearby jurisdictions of San Marcos and Santee experienced higher annual growth rates as a result of adding additional hotel rooms over the past four years.

Table 4-10: Transient Occupancy Tax, 2010-2014 (1)

City	TOT Rate	FY 2010	FY 2012	FY 2014	Average Annual Growth (2010-2014)
Escondido	10.0%	$986,000	$1,146,000	$1,322,000	7.6%
Poway	10.0%	$367,000	$463,000	$523,000	9.3%
San Diego	10.5%	$128,113,000	$150,819,000	$170,171,000	7.4%
San Marcos	10.0%	$298,000	$714,000	$795,000	27.8%
Santee	10.0%	$100,000	$115,000	$386,000	40.2%
County of San Diego		$162,893,000	$191,608,000	$223,333,000	8.2%

(1) Source: San Diego Tourism Authority

4.7 Retail/Restaurant Market Overview

Commercial real estate markets are still recovering from the national recession and prolonged economic downturn. However, many regional economists already are seeing the beginning of a market turnaround especially in Southern California. Continuing improvement in the national and local retail market will depend on the employment markets as well. Over the last year, the U.S. has added approximately 2.4 million jobs, resulting in a decrease in the unemployment rate to 6.2%.

This section presents an evaluation of key market supply and demand factors impacting the development of retail/restaurant space within the Study Area.

Regional Market Conditions

- Overall, the San Diego region is experiencing an improving retail market with higher occupancy rates and increasing leasing activity. As with the national retail market, San Diego's retail market depends on improvements in the employment market. From February 2014 to 2015, the region gained 39,700 jobs. The unemployment rate for the County was 5.3% as of February 2015, the lowest in nearly seven years.

- Current information on retail/restaurant market conditions are available from real estate estate professionals, Voit Real Estate Services (Voit). According to Voit, the San Diego County retail market contains a total of 137.6 million SF. At the end of 4th quarter 2014 the County had an average asking rental rate of $1.79 per SF triple net lease (NNN), a 2.3% increase from 2013. A triple net lease, the most common type of lease for retail space, reflects a lease where the tenant pays all or part of property tax, insurance, and common area maintenance, on top of a base monthly rent.

- During 4th quarter 2014, vacancy rates for retail space in the County measured 3.9%, a -0.5% difference from the previous year vacancy rate of 4.4%.

- Voit also tracks retail spaces within the I-15 Corridor submarket, containing Carmel Mountain Ranch, Poway, Rancho Bernardo, and Rancho Penasquitos. Voit estimates that the I-15 Corridor contains approximately 6.3 million SF, with an additional 226,000 SF planned.

- During 4th quarter 2014, the vacancy rate in the I-15 Corridor was 2.6% and the average asking rental rate was $2.42 per SF NNN.

Local Market Conditions

- The Study Area serves as the primary retail area of the City, offering a variety of retail stores including general merchandise, home improvement, specialty retail, grocery and drug stores, health and beauty shops, fitness centers, thrift stores, automotive sales and repair centers, a multiplex cinema, and fast food and sit-down restaurants.

- The Study Area is also home to Poway's Auto Row. Situated on the eastern portion the Study Area between Midland Road and Olive Tree Lane, Poway's Auto Row offers

a large selection of major brands including Chrysler, Dodge, Ford, Honda, Hyundai, Mitsubishi, Nissan, Scion, and Toyota.

- There are eight anchored shopping centers in the Study Area or in close proximity. These centers are profiled in Table 4-11 based on data from Cushman & Wakefield, for the first quarter of 2015.

Table 4-11: Study Area Shopping Centers (1)

Shopping Center	Address	Anchors	Size	Occupancy	Asking Lease Rate
Creekside Plaza	13409-13589 Poway Road	Stater Brothers, Digiplex Cinemas	158,661 SF	99.1%	$2.50 - $3.50
Wal-Mart Plaza	13429-13471 Community Road	Super Walmart, DMV	127,254 SF	100.0%	$2.00 - $2.25
Poway City Centre	13644 Poway Road	Stein Mart, HomeGoods	121,977 SF	76.2%	$1.75 - $2.50
Poway Town & Country	13438 Poway Road	Vons, Sprouts	115,327 SF	100.0%	$2.25 - $3.00
Poway Crossings	12622 Poway Road	Rite Aid, LA Fitness	114,627 SF	92.0%	$2.00 - $2.50
Big Lots / CVS Center	12336-12380 Poway Road	Big Lots, CVS	108,963 SF	98.7%	$2.00 - $2.25
Poway Plaza	13345 Poway Road	Michaels, Grocery Outlet	94,020 SF	92.1%	$2.00 - $3.00
Poway Promenade	12309 Poway Road	JoAnn Fabrics, Smart & Final	75,000 SF	94.6%	$1.75 - $2.00
Total / Average			**915,829**		

(1) Source: Cushman & Wakefield, 1st quarter 2015

- Rental rates in the Study Area are higher than the average lease rate for retail space in the County as a whole, and equivalent to lease rates along the I-15 Corridor. As shown above, the average asking lease rate in the Study Area ranges between $1.75 and $3.25 per SF per month.

- In 2014, the City experienced the grand opening of Poway's Walmart into a Super Walmart and a brand new Lowe's Improvement Center. The Walmart, built in 1992, added approximately 37,000 SF for a total of 180,000 SF allowing for a new grocery area. The Lowe's was built on the site of the former Toyota and Chevrolet dealerships and includes a 121,000-SF store and an approximately 32,000-SF garden center.

- New retail developments are also occurring in areas adjacent to the Study Area. In the community of Scripps Ranch, a new 40,000-SF Whole Foods Market is planned at The Watermark, a mixed-use development located on the southeast corner of Scripps Poway Parkway and Interstate 15. Projected to break ground in mid to late summer 2015, The Watermark will also feature a 445,000-SF office building, a 125-room hotel, specialty retail shops, restaurants, and a movie theater. The Watermark represents potential competition to Poway Road retailers.

- Table 4-12 presents taxable sales data for the City provided by the State of California Board of Equalization (BOE) and The HdL Companies (HdL), which monitors sales and use tax receipts on behalf of the City. According to BOE and HdL, over the past nine years, sales at eating and drinking places in the Study Area experienced the highest rate of growth (6.4%), followed by food stores (4.1%), and other retail stores (3.7%). The sales of building materials were estimated to *decrease* by an average -13.5% per year and auto dealerships were estimated to experience only nominal growth (an average annual rate of 0.7%).

Table 4-12: Taxable Sales, City of Poway, 2004-2013

Retail Category	2004	2007	2013	Average Annual Growth (2004-2013)
General Merchandise	$54,344,000	$74,088,000	$70,562,000	3.2%
Other Retail Stores	$29,885,000	$38,511,000	$41,340,000	3.7%
Building Materials	$11,679,000	$13,034,000	$3,162,000	-13.5%
Food Stores	$9,715,000	$13,212,000	$13,927,000	4.1%
Eating and Drinking Places	$21,084,000	$34,533,000	$36,790,000	6.4%
Auto Dealers and Supplies	$214,023,000	$256,974,000	$227,697,000	0.7%
Total, Above Categories	**$339,730,000**	**$430,352,000**	**$393,478,000**	**1.6%**

Source: State of California Board of Equalization and The HdL Companies, the City's private contractor for sales tax data.

- Environmental Systems Research Institute (ESRI), provides data on existing household retail expenditures and retail outlet sales volumes. Using ESRI, retail sales surplus/(leakage) models were prepared for the 2.0-, 4.0- and 6.0-mile radii of the Study Area. The figures below reflect sales to consumers by retail establishments; sales to businesses are excluded. Gasoline stations, non-store retailiers, and motor vehicle parts and dealers have also been excluded. A positive retail surplus indicates a market where consumers are drawn in from outside of the trade ring. A *negative* value indicates that residents are traveling outside the trade ring for shopping and services.

    - As shown in Table 4-13, ESRI estimated the retail sales surplus/(leakage) occurring within a 2.0-mile radius of the Study Area. ESRI estimates total retail expenditure potential (demand) of $292.3 million, compared to total retail sales

(supply) of $484.8 million. This results in a retail sales surplus of approximately $192.4 million.

- Although the results indicate an overall retail sales surplus within 2.0 miles of the Study Area, the ESRI data shows retail sales leakage in certain categories. Specifically, ESRI estimates leakage totaling $63.2 million in areas such as food and beverage stores, health and personal care stores, clothing and clothing accessories, furniture and home furnishing stores, and sporting goods, hobby, and musical instrument stores.

Table 4-13: Retail Surplus/(Leakage) – 2.0-Mile Trade Ring (1)

	Demand (2) (Retail Expenditure)	Supply (3) (Retail Sales)	Retail Surplus / (Leakage) (4)
I. Retail Surplus			
General Merchandise Stores	$58,777,000	$241,741,000	$182,964,000
Miscellaneous Store Retailers	$12,411,000	$43,093,000	$30,682,000
Electronics & Appliance Stores	$10,021,000	$32,366,000	$22,345,000
Food Services & Drinking Places	$46,119,000	$56,370,000	$10,251,000
Building Materials, Garden Equipment	$13,850,000	$23,216,000	$9,366,000
Subtotal Retail Surplus	$141,178,000	$396,786,000	$255,608,000
II. Retail Leakage			
Food & Beverage Stores	$71,096,000	$40,052,000	($31,044,000)
Health & Personal Care Stores	$31,759,000	$15,812,000	($15,947,000)
Clothing & Clothing Accessories	$28,794,000	$17,783,000	($11,011,000)
Furniture & Home Furnishings	$10,100,000	$5,624,000	($4,476,000)
Sporting Goods, Hobby, Musical Instruments	$9,404,000	$8,721,000	($683,000)
Subtotal Retail Leakage	$151,153,000	$89,772,000	($63,161,000)
III. Total (5)	**$292,331,000**	**$484,778,000**	**$192,447,000**

(1) Assumes the centerpoint of radius is Poway Road and Community Road.
(2) Reflects the amount spent by consumers at retail establishments.
(3) Reflects sales to consumers by retail establishments. Sales to businesses are excluded.
(4) A negative value represents "leakage" of retail expenditures outside the trade area. A positive value represents a "surplus" of retail sales, a market where customers are drawn in from outside the trade area.
(5) Excludes gasoline stations, non-store retailers, and motor vehicle and parts dealers.

Source: ESRI, 2014

- Within a 4.0-mile radius of the Study Area, ESRI estimates total retail expenditure potential (demand) of $1.19 billion, compared to total retail sales (supply) of $1.14 billion. This results in a retail sales leakage of approximately $45.6 million, less than 4% of total retail demand. The relatively minor leakage is concentrated in the areas of food and beverage stores, health and personal care stores, furniture and home furnishing stores, and clothing and clothing accessory stores, as presented in Table 4-14. Retail leakage within the 4.0-mile trade ring indicates that residents are traveling outside the trade ring for shopping and services.

- The most significant leakage occurs in the categories of food and beverage stores, health and personal care stores, furniture and home furnishings, and clothing, and clothing accessories.

Table 4-14: Retail Surplus/(Leakage) – 4.0-Mile Trade Ring (1)

	Demand (2) (Retail Expenditure)	Supply (3) (Retail Sales)	Retail Surplus / (Leakage) (4)
I. Retail Surplus			
General Merchandise Stores	$238,849,000	$444,644,000	$205,795,000
Electronics & Appliance Stores	$40,791,000	$65,176,000	$24,385,000
Miscellaneous Store Retailers	$50,036,000	$66,918,000	$16,882,000
Subtotal Retail Surplus	$329,676,000	$576,738,000	$247,062,000
II. Retail Leakage			
Food & Beverage Stores	$287,351,000	$151,362,000	($135,989,000)
Health & Personal Care Stores	$127,774,000	$75,196,000	($52,578,000)
Furniture & Home Furnishings	$41,448,000	$9,760,000	($31,688,000)
Clothing & Clothing Accessories	$117,502,000	$93,401,000	($24,101,000)
Food Services & Drinking Places	$189,593,000	$169,666,000	($19,927,000)
Building Materials, Garden Equipment	$55,524,000	$36,278,000	($19,246,000)
Sporting Goods, Hobby, Musical Instruments	$38,475,000	$29,370,000	($9,105,000)
Subtotal Retail Leakage	$857,667,000	$565,033,000	($292,634,000)
III. Total (5)	$1,187,343,000	$1,141,771,000	($45,572,000)

(1) Assumes the centerpoint of radius is Poway Road and Community Road.
(2) Reflects the amount spent by consumers at retail establishments.
(3) Reflects sales to consumers by retail establishments. Sales to businesses are excluded.
(4) A negative value represents "leakage" of retail expenditures outside the trade area. A positive value represents a "surplus" of retail sales, a market where customers are drawn in from outside the trade area.
(5) Excludes gasoline stations, non-store retailers, and motor vehicle and parts dealers.

Source: ESRI, 2014

- Within a 6.0-mile radius of the Study Area, ESRI estimates total retail expenditure potential (demand) of $2.4 billion, compared to total retail sales (supply) of $1.7 billion. This results in a retail sales leakage of approximately $712.6 million, representing over 29% of total retail demand. As shown in **Table 4-15**, only one retail category, miscellaneous store retailers, was shown to have a retailer surplus. All other retail categories were estimated to experience retail leakage.

- This high level of retail leakage within the 6.0-mile trade ring indicates that consumers are seeking shopping and services from beyond the trade area. The only exception is the category of miscellaneous stores (includes florists, office supplies and stationery stores, gift stores, and second-hand stores).

Table 4-15: Retail Surplus/(Leakage) – 6.0-Mile Trade Ring (1)

	Demand (2) (Retail Expenditure)	Supply (3) (Retail Sales)	Retail Surplus / (Leakage) (4)
I. Retail Surplus			
Miscellaneous Store Retailers	$102,388,000	$106,290,000	$3,902,000
Subtotal Retail Surplus	$102,388,000	$106,290,000	$3,902,000
II. Retail Leakage			
Food & Beverage Stores	$587,929,000	$318,665,000	($269,264,000)
Clothing & Clothing Accessories	$239,363,000	$127,301,000	($112,062,000)
Health & Personal Care Stores	$261,977,000	$170,640,000	($91,337,000)
Building Materials, Garden Equipment	$114,086,000	$48,248,000	($65,838,000)
Furniture & Home Furnishings	$84,453,000	$30,767,000	($53,686,000)
Food Services & Drinking Places	$387,855,000	$343,547,000	($44,308,000)
General Merchandise Stores	$488,604,000	$449,280,000	($39,324,000)
Sporting Goods, Hobby, Musical Instruments	$78,635,000	$42,007,000	($36,628,000)
Electronics & Appliance Stores	$83,519,000	$79,444,000	($4,075,000)
Subtotal Retail Leakage	$2,626,421,000	$1,609,889,000	($716,522,000)
III. Total (5)	$2,428,809,000	$1,716,189,000	($712,620,000)

(1) Assumes the centerpoint of radius is Poway Road and Community Road.
(2) Reflects the amount spent by consumers at retail establishments.
(3) Reflects sales to consumers by retail establishments. Sales to businesses are excluded.
(4) A negative value represents "leakage" of retail expenditures outside the trade area. A positive value represents a "surplus" of retail sales, a market where customers are drawn in from outside the trade area.
(5) Excludes gasoline stations, non-store retailers, and motor vehicle and parts dealers.

Source: ESRI, 2014

The review of retail sales surplus/(leakage) in the trade rings indicate that the Study Area serves as a commercial "main street" for inner ring households. However, for the larger trade areas, the Study Area does not provide many of the retail goods and services that residents need. Notable deficiencies -- and potential opportunities -- include new/expanded food and beverage stores, health and personal care stores, and clothing and clothing accessories, and furniture and home furnishings.

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CITY OF POWAY

poway road

CORRIDOR STUDY

Existing Conditions Assessment

Appendix – Oversized Graphic Exhibits

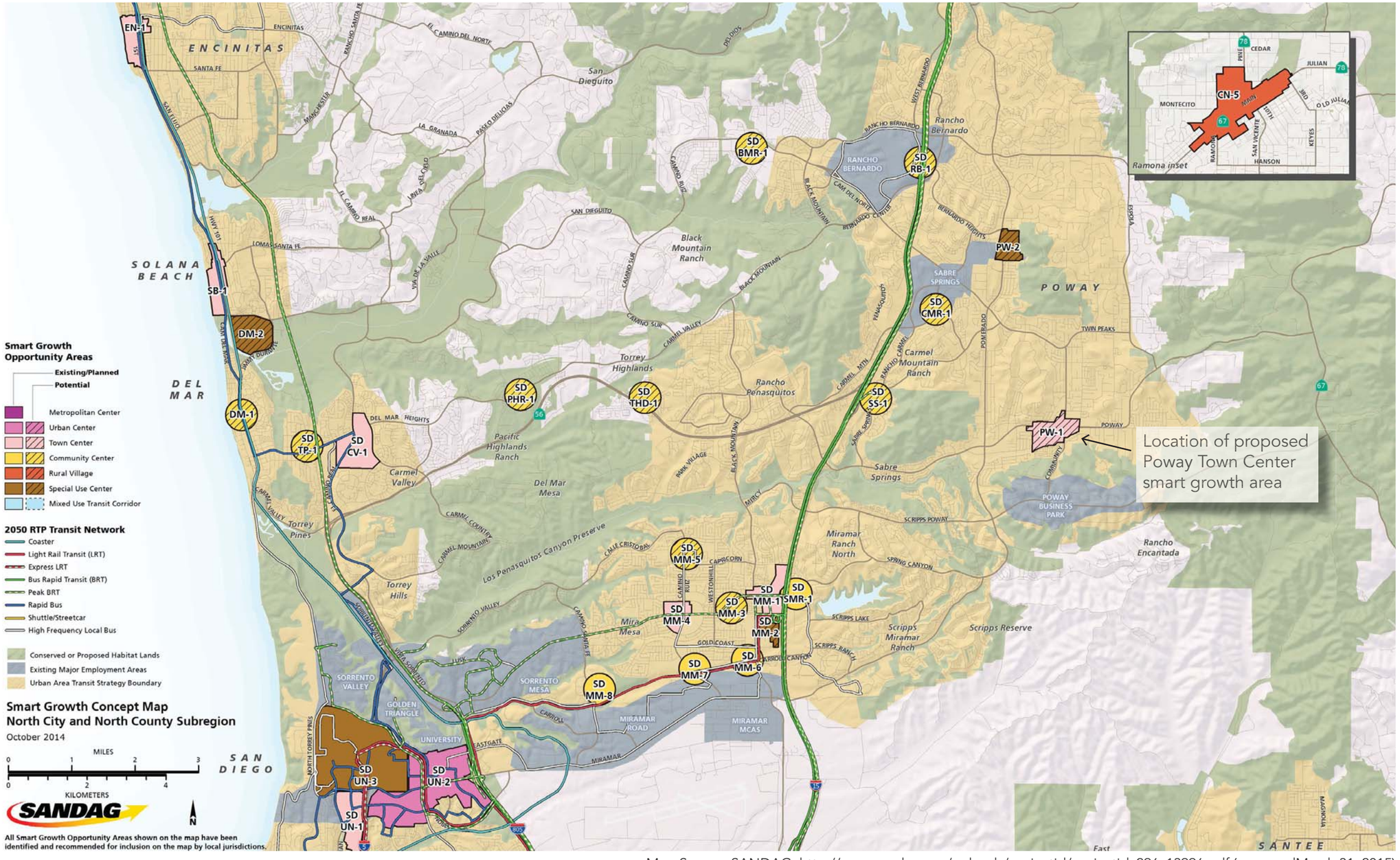
Exhibit 1-1: Poway Road Corridor Study Area

Corridor Study Boundary (approx.)

0 500 1,000 2,000 Feet

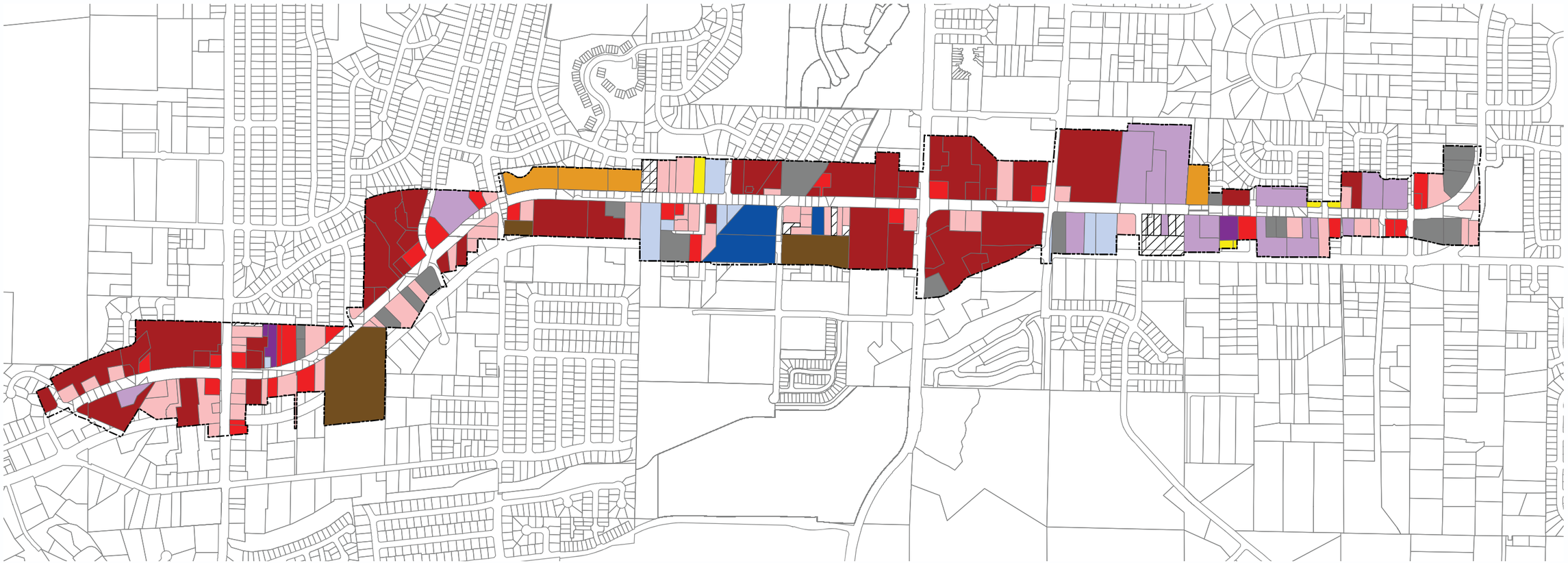
Aerial source: City of Poway

Exhibit 2-1: SANDAG Smart Growth Areas for North City and North County



Map Source: SANDAG, http://www.sandag.org/uploads/projectid/projectid_296_13996.pdf (accessedMarch 31, 2015)

Exhibit 2-2: Existing Land Use



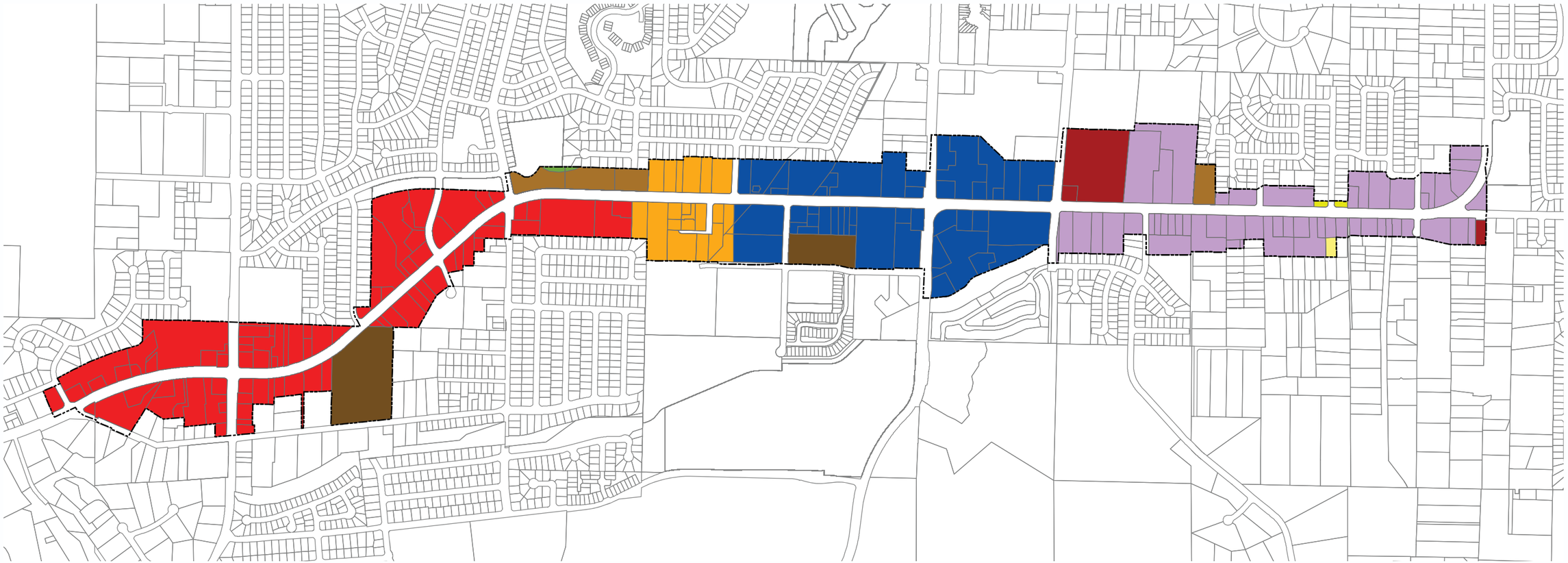
Legend

- Planning Area
- Parcel
- Residential: Single-Family
- Residential: Condominium
- Residential: Multi-Family
- General Commercial
- Retail/Restaurant/Entertainment
- Office
- Hotel/Motel
- Auto Sales + Specialty Service
- Industrial
- Community/Civic
- Undesignated Public Agency-Owned
- Vacant

0 1,000 2,000 4,000 Feet

NORTH

Exhibit 2-3: Existing Zoning Designation



Legend

- Planning Area
- Parcel
- RS-2: Residential Single-Family 2
- RS-7: Residential Single-Family 7
- RC: Residential Condominium
- RA: Residential Apartment
- OS-RM: Open Space Resource Management
- AGC: Automotive General Commercial
- CB: Community Business
- CG: Commercial General
- MU: Mixed Use
- TC: Town Center

0 1,000 2,000 4,000 Feet

NORTH

Exhibit 2-4: Issues and Opportunities Map

LEGEND

- Corridor Study Boundary (approx.)
- SANDAG Smart Growth Area for Town Center (approx.)
- Town Center Study Area (2007)
- Class II Bike Lanes
- Trail
- Creek Channel
- Park / Open Space
- School
- Major Node
- Gateway
- 1 Library
- 2 Sheriff
- 3 Senior Center
- 4 Boys & Girls Club
- 5 City Hall
- 6 Fire Dept

0 500 1,000 2,000 Feet

Aerial source: City of Poway