

REGIONAL SMART GROWTH | TRANSIT-ORIENTED DEVELOPMENT PLAN



REGIONAL SMART GROWTH | TRANSIT-ORIENTED DEVELOPMENT PLAN

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1 INTRODUCTION

A. Plan Background

Local jurisdictions in San Joaquin County expect a significant amount of growth to occur over the next 20 years. Many of these jurisdictions (shown in Figure 1-1) have large amounts of land available for development of all types, including residential, commercial, industrial, and mixed use. The location, character, and density of this development have the power to put the region on a path toward environmental sustainability. However, this will occur only if each jurisdiction plans wisely for its own future.

To help shape future growth throughout the region, the San Joaquin Council of Governments (SJCOG) has prepared this Regional Smart Growth | Transit-Oriented Development (TOD) Plan. This Plan provides key background information that serves as context for smart growth development in the county, including summarizing existing local and regional policies, existing and forecasted greenhouse gas emissions, and economic and demographic trend information. SJCOG expects to use the Plan extensively over the years to come, including in the following key ways:

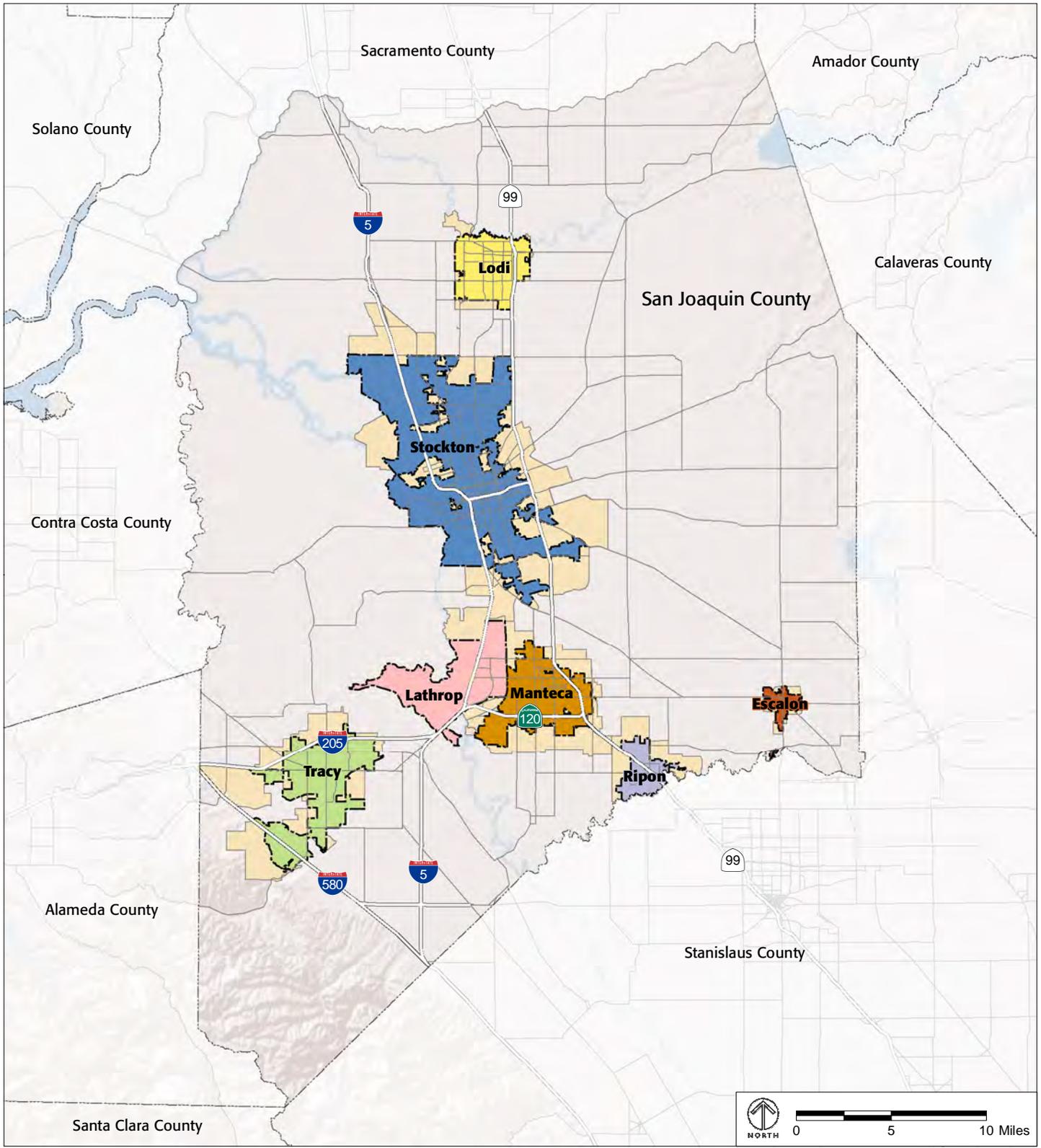
1. The Plan defines and provides examples showing what smart growth means in San Joaquin County.
2. The Plan will serve as a tool for SJCOG as it continues to implement the Measure K Smart Growth Incentive Program, described further in Chapter 2.
3. The Plan will help local agencies in promoting infill development and evaluating potential development proposals by providing them with tools such as the Smart Growth Scorecard as well as the recommendations in Chapter 11.
4. The Plan will help developers seeking to expand smart growth development in the County by providing them with pre-identified sites to look at for development potential and pro forma analyses identifying the financial feasibility of prototypical projects.



Lodi



Stockton



- City Limits
- Sphere of Influence

FIGURE 1-1
 SAN JOAQUIN COUNTY

Through an extensive process involving member jurisdictions, community members, and decisionmakers, SJCOG developed an inventory of sites throughout the County that are appropriate for infill development over the coming years. A sample subset of these sites was evaluated using an infill evaluation model developed as part of the project. The process of identifying potential infill sites, along with policy recommendations included in the Plan will inform SJCOG's ongoing efforts to develop a Sustainable Communities Strategy (SCS) for the region.

Smart growth, as discussed in this Plan, means growth that revitalizes central cities and older suburbs; supports and enhances public transit; promotes walking and bicycling; preserves open spaces and agricultural lands; and is sensitive to the context and communities in which it is found. Chapter 2 describes key principles of smart growth. SJCOG has an ongoing focus on supporting smart growth development among its member jurisdictions, primarily through the Smart Growth Incentive Program, which is described in Chapter 2.

B. Community and Stakeholder Input

The process of developing this plan involved extensive outreach and input from stakeholders, decisionmakers, and the community. The SJCOG Board of Directors provided project oversight, and the Plan was reviewed through a series of Board subcommittees. SJCOG's Smart Growth Committee served as a steering committee for staff and consultants. The committee includes representatives from each city, the County, the transit agencies, environmental organizations, and the development community. The committee met at regular intervals to provide input and direction on outreach and draft products. In addition, SJCOG held community workshops in September and October, 2011 in Stockton, Tracy, Ripon, and Lodi, and a series of stakeholder interviews with individuals representing environmental organizations, transit providers, and the development community. An additional round of workshops in the four locations listed above will be held to review a draft of this Regional Smart Growth | TOD Plan.

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2 SMART GROWTH, TRANSIT-ORIENTED DEVELOPMENT, AND INFILL

To understand this Plan, it helps to be familiar with the concept of “smart growth” and how it relates to transit-oriented development (TOD) and infill development, within the context of San Joaquin County. In addition to further clarifying key terms, this chapter discusses other factors related to the success of development in San Joaquin County, as well as the Measure K Smart Growth Incentive Program managed by the San Joaquin Council of Governments

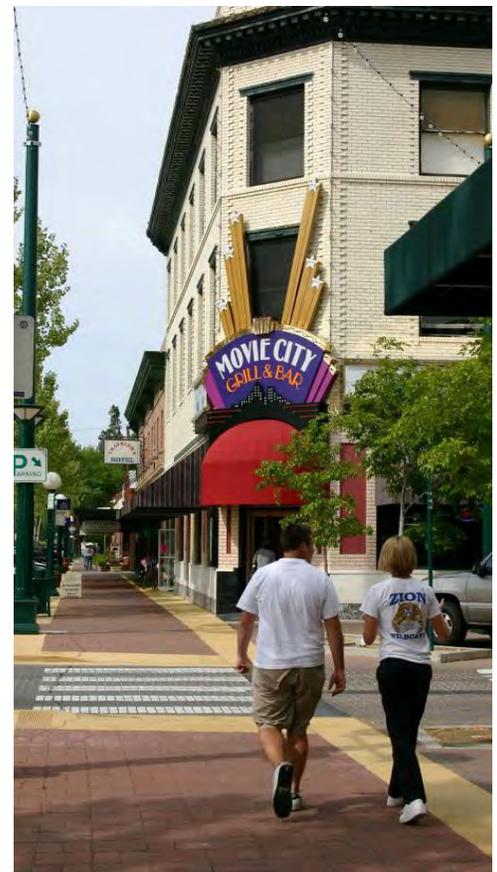
A. Key Terms for the Smart Growth | Transit-Oriented Development Plan

1. Smart Growth

Smart Growth in San Joaquin County can take a variety of forms, all of which focus on creating vibrant, walkable communities, with appropriate employment and housing options for all. It is a universal concept that can be tailored to small hamlets, medium-sized towns, and large cities. Smart growth in San Joaquin County, where Stockton is the largest city, will not resemble downtown San Francisco. Instead it will be designed to fit into the existing local context, which is different in the Central Valley than it is in coastal areas of California.

Smart growth is development that:

- ◆ **Revitalizes central cities and older suburbs.** Smart growth focuses on utilizing existing infrastructure such as roads, schools, and water and sewer lines to support development in areas that have already seen some development and may have room for more. This approach supports re-use of aging buildings in downtowns, as well as development on sites that may have been passed over in suburban neighborhoods. Downtown Lodi, pictured to the right, is an example of a place with smart growth focusing on retaining historic structures and finding new uses that meet current community needs.
- ◆ **Promotes economic development.** Smart growth creates jobs through actual development of new structures, but over the long term it has a deeper role in economic development. It supports the creation of inno-



Downtown Lodi

vative job centers in downtowns by bringing a variety of land uses together. And, it supports the re-use of industrial areas that would otherwise host low-intensity employment.



Ripon, Historic Mixed-Use Buildings

- ◆ **Supports and enhances public transit.** By bringing all types of development, including housing, retail, and office uses, into proximity with one another smart growth concentrates development in places that are then more readily served by public transit. This allows the transit agencies to use their limited funds more efficiently, making transit service more regular and convenient in smart growth centers.
- ◆ **Promotes walking and bicycling.** Smart growth development locates a variety of land uses in close proximity to one another, so pedestrians and bicyclists are close to their destinations. In addition, it provides sidewalks, bike lanes, a pleasant pedestrian environment, and a neighborhood structure that make it easier to bicycle or walk for transportation. The neighborhood structure includes streets on a grid or modified grid pattern, as is the case for many historic Valley towns, so pedestrians and bicyclists can readily connect to their destinations. Main Street in Ripon, pictured to the left, exemplifies a mix of uses in close proximity, allowing residents, employees, and visitors to meet daily needs easily, sometimes in the same building.
- ◆ **Preserves open spaces and agricultural lands.** Through the priority that smart growth places on development in currently-developed areas, there is reduced pressure to develop open spaces and agricultural lands.

2. Transit-Oriented Development

As described above, part of smart growth is that it supports the use of public transit. The State of California describes Transit-Oriented Development (TOD) as development that:

- ◆ Is located within one-half-mile of a transit station, with a direct path to the station no more than one-half mile long.
- ◆ Is located within one-half mile of convenience retail uses, including food sales.

- ◆ Provides a minimal number of parking spaces.

This type of development supports efficient transit service by ensuring that both the beginning and end of a transit rider's trip has services for them, making the use of public transportation more convenient. Convenience is key to enhancing ridership, which in turn supports expanded transit service. In some cases convenience would be improved upon by reducing the travel distance from ½ to ¼ mile. Both distances are used in this Plan, with a preference for the ¼-mile distance when it appears practical. Some destinations are so attractive that they will readily draw people over a ½-mile distance, or even further. These include regional transit service that can replace otherwise lengthy commutes and park or recreational facilities.

Based on existing development patterns and the availability of funding, most public transit in San Joaquin County in the years to come will be in the form of buses. These will expand existing bus transit service, particularly along key corridors. The Altamont Commuter Express (ACE) trains that serve commuters to the San Francisco Bay Area may expand their service over time, and these stations will serve as the core of TOD areas. Finally, California's High Speed Rail network would serve Downtown Stockton, providing connections, along with Amtrak, to the rest of the State.

3. Infill Development

Smart growth, through its focus on revitalizing central cities and older neighborhoods, focuses on 'infill development.' This is a pattern of development that prioritizes re-use of vacant structures, new construction on vacant properties that might have been passed-over for development, and redevelopment on properties where the buildings are beyond their useful life. This takes place within urban, suburban, or small towns, in areas that are already developed, so it is appropriate for cities and towns of all sizes in San Joaquin County. This pattern strengthens existing communities by building upon their strengths: bringing people together so they can socialize, do business with one another, and take advantage of educational opportunities. The Mercy Hous-



Stockton



Stockton's Mercy Housing project in
Gleason Park

ing affordable housing project in the Gleason Park neighborhood of Stockton is an example of recent infill development. It is pictured to the left.

B. Other Factors Related to Smart Growth Development

While smart growth, transit-oriented development, and infill development are very important in meeting San Joaquin County's regional sustainability goals, there are aspects of development that neither SJCOG nor its member agencies have direct control over. These topics are not any less important than the ones covered in the Plan, but this Plan cannot address all issues potentially related to the success of development. The two main topics that have arisen are community safety and schools.

As this Plan has been developed, discussion has frequently returned to the importance of community safety in determining the success of development. No matter how attractive a home, office, or storefront, potential occupants will think twice if they fear for their safety there. Local agencies provide patrol services in collaboration with one another and the County Sheriff's Department. However, these efforts take place within a larger historical context of opportunity, and inequity, along with limited resources, that make them very difficult to address. SJCOG and its member agencies continue to be very supportive of regional and local efforts to improve community safety.

In the context of development, there are steps that local agencies can undertake to support community safety, including encouraging eyes on the street and implementing the concepts included in Crime Prevention through Environmental Design (CPTED). CPTED is a crime prevention philosophy based on the theory that the proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime, as well as an improvement in the quality of life. CPTED emphasizes understanding and changing the physical environment in an effort to reduce crime at particular locations.

Schools have also been a frequent topic of discussion in relation to successful development in San Joaquin County. The structure of local government in California ensures that cities, the County, and SJCOG have even less influence over schools than they do over safety. In some cases, perceptions about schools may limit the viability of development for sale or rent to families, and this is a real barrier. However, infill development, in particular, can provide real increases in property tax revenues that directly benefits school funding. Development in some places may need to start with housing that is focused on households without school-aged children, using that as the basis for neighborhood improvements that ultimately support the schools.

In addition to concerns about community safety and schools, participants in conversations related to this Plan raised concerns about construction liability and financing. The regional coordination recommendations included in Chapter 11 of this Plan will support efforts by regional and State agencies to work together on such issues, but they are otherwise beyond the scope of this Plan.

C. Measure K Smart Growth Incentive Program

The purpose of SJCOG’s Smart Growth Incentive Program (SGIP) is to provide funding for improvements to transportation infrastructure, as well as grants to support local planning efforts. This funding is meant to help local agencies to better integrate transportation and land use with one another.

The SGIP is funded by Measure K, a countywide half-cent sales tax that is dedicated to transportation improvements throughout the region, in addition to a variety of State and federal funding sources. In 2006, voters approved the extension of this sales tax to the year 2041. The SGIP is expected to award \$65 million over the life of the renewed program, including \$60 million for infrastructure projects and \$5 million for planning projects.

A variety of transportation improvements and planning projects can be supported by this program, provided that they incorporate smart growth princi-



Tracy Transit Station



Lodi Avenue Streetscape

ples and result in benefits for the community. These community benefits could include:

- ◆ **Transit amenities** that attract transit riders and improve the ridership experience.
- ◆ **Street design** enhancements that encourage pedestrian, bicycle, and transit trips.
- ◆ **Traffic calming** improvements that help to reduce vehicle speeds, improving safety for all modes of travel.
- ◆ **High-frequency transit services** that encourage infill development.
- ◆ **Transit hubs** that provide service to several geographic areas from one location.
- ◆ **Walkable streets** that encourage residents and visitors to travel by foot.
- ◆ **Livable communities** that are designed for pedestrians as much as automobiles, and where people can meet daily needs by walking or bicycling.
- ◆ **Neighborhood revitalization** that enhances a neighborhood's safety, appearance, or livability.
- ◆ **Infill development** within an existing urban center.
- ◆ **Affordable housing** that costs no more than 30 percent of a household's monthly income.

Local jurisdictions receive SGIP grants by applying for funding in a competitive process. Applications must identify the potential benefits of the proposed project, including the number of jobs and homes that are expected to result from the project. Chapter 8 of this Plan describes the Smart Growth Scorecard that resulted from the Smart Growth | TOD project and will form part of the evaluation process for future SGIP funding.

3 REGIONAL POLICY FRAMEWORK

This chapter provides brief background information on the regional context in which San Joaquin Council of Governments (SJCOG) is working, including local and State policies that affect its work at the regional level. This context will influence the implementation of this Plan. It is described in greater detail in a companion document prepared for the project in its early phases: the *Regional Smart Growth | Transit-Oriented Development Plan Policy Review*. This document is available from SJCOG upon request.

A. *Assembly Bill 32: California Global Warming Solutions Act*

Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, was passed by the California legislature and signed into law by Governor Arnold Schwarzenegger. AB 32 is California's first major commitment to addressing global warming, and sets a timeline for reducing California's greenhouse gas (GHG) emissions to 1990 levels by the year 2020. AB 32 identifies the California Air Resources Board (CARB) as the lead agency responsible for implementing the bill, and in 2008, CARB published the Climate Change Proposed Scoping Plan (Scoping Plan). The Scoping Plan is an analysis of the best approach to achieve the 2020 reduction target, citing local governments as an essential partner. The Scoping Plan states that local governments have "...broad influence and, in some cases, exclusive authority over significant emission sources through their planning and permitting processes, local ordinances, outreach and education efforts and municipal operations."¹

B. *Senate Bill 375 and Sustainable Communities Strategy*

Senate Bill (SB) 375, passed by the State Assembly and Senate in August 2008, is another significant component of California's commitment to GHG reduction. In essence, SB 375 coordinates transportation funding and land use planning on a regional level as a means to achieve AB 32's goals.

¹ California Air Resources Board, October 2008, *Climate Change Proposed Scoping Plan*, pages C-49 through C-54.

The goal of SB 375 is to reduce emissions from cars and light trucks by incentivizing compact development. The first step outlined in SB 375 calls for metropolitan planning organizations (MPOs) and CARB to establish a region's GHG reduction target. Then, the MPO must develop a sustainable community's strategy (SCS), a plan for a compact development pattern that will enable the region to meet its GHG reduction target. SB 375 requires the GHG reduction target and the SCS to be incorporated into the Regional Transportation Plan (RTP). SJCOG is the MPO for San Joaquin County, and it is anticipated that SJCOG will be working to develop its SCS during 2012 and 2013.

CARB approved final GHG reduction targets for the San Joaquin Valley in February 2011. Using a 2005 baseline year, CARB calls for a 5 percent reduction in per capita GHG emissions from cars and light trucks in the San Joaquin Valley by 2020 and a 15 percent reduction by 2035. These are the targets that SJCOG will be working toward in developing its SCS. The law established by SB 375 has provisions for MPOs that are not able to meet their reduction targets through development of the SCS. Such MPOs are required to prepare an "alternative planning strategy (APS)" to meet the target. The APS, however, would not be an adopted component of the RTP.

Transportation and development projects consistent with the SCS will be given priority for State and regional funding. Additionally, SB 375 grants SCS-consistent residential development projects streamlined environmental review processes. SB 375 also changes Housing Element law, extending the planning period for the Housing Element to eight years, and linking Housing Element timelines to RTP timelines for increased consistency.

This Plan includes an identification of infill development sites. These sites, described in Chapter 6 are examples of locations where existing land use patterns and transportation infrastructure, now or in the future, could be supportive of housing and other development that would reduce per capita greenhouse gas emissions. The infill sites will be one source of information

contributing to the extensive efforts that SJCOG will be undertaking to prepare its SCS.

C. Regional Transportation Planning

SJCOG and its local and regional partners undertake a wide range of important transportation planning projects at the County level. These include the following documents and initiatives:

- ◆ Regional Transportation Plan
- ◆ Regional Congestion Management Program
- ◆ Regional Transit Systems Plan
- ◆ San Joaquin Regional Transit District Short Range Transit Plan
- ◆ Regional Rail Commission Short Range Transit Plan
- ◆ Altamont Corridor Rail Project Preliminary Alternatives Analysis Report
- ◆ Service Expansion Analysis of the Regional Rail Commission

Together, the transportation planning efforts serve to establish short- and long-term transportation plans and policies provide the basis for funding requests, and create the transportation network that development in the County relies upon. Currently, transportation planning at the regional level is very closely related to SJCOG's efforts to prepare a Sustainable Communities Strategy, as described in Section D.

D. San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (JMSCP), adopted in 2000, is a 50-year plan for the management of plant, fish, and wildlife species, as well as the preservation and maintenance of open space areas within the region. The JMSCP encompasses all 900,000 acres of San Joaquin County, except for federally owned lands and projects

not covered by the Plan, such as agricultural activities, dredging, and water diversion.

The SJMSCP focuses on species that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). In addition, the Plan is intended to ensure compensation for impacts to recreational, agricultural, and other open space uses resulting from the conversion of open space.

E. Local Policies

Transportation and land use policies in San Joaquin County vary in their level of support for smart growth and transit-oriented development (TOD). For example, some jurisdictions have developed extensive TOD plans around existing and planned stations, but other jurisdictions do not provide land use designations that allow any development dense enough to support TOD. Some jurisdictions, such as Tracy, Stockton, and Lodi, have identified their downtowns as primary focus areas for mixed-use buildings and denser development than surrounding neighborhoods. In contrast, other jurisdictions do not allow mixed-use buildings downtown without undertaking special planning processes. In addition, the design of new development is highly regulated by some jurisdictions, such as Lodi and Stockton, so that new development is at a human scale and encourages pedestrian activity. In contrast, other jurisdictions do not have any design guidelines.

The Policy Review document prepared for this plan provides more detailed review. Recommendations for City and County land use regulations to make them more supportive of smart growth are presented in Chapter 11 of this Plan.

4 GREENHOUSE GAS INVENTORY AND BUSINESS AS USUAL FORECAST

It is widely known in the scientific community that as the world's population increases, human activities are releasing more greenhouse gases than can be absorbed back into nature. While there are some greenhouse gases (GHGs) that are produced naturally, the principal greenhouse gas emissions, which are a result of human activities, are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and Fluorinated Gases. Known as the greenhouse effect or global climate change, models show that this phenomenon will lead to a 2°F to 10°F temperature increase over the next 100 years. Already the Intergovernmental Panel on Climate Change warns that most of the warming observed over the last 50 years is attributable to human activities.

Because tracking emissions of GHGs is key to measuring progress toward the State goals outlined in Assembly Bill 32 and Senate Bill 375 and described in Chapter 3 of this Plan, SJCOG has undertaken two important calculations: a baseline greenhouse gas emissions and a forecasted 'business as usual' emissions, assuming that current conditions carry forward through the years 2020 and 2035. Appendix A includes further detail on the calculations that went into the baseline and forecasted emissions.

A. 2005 Baseline Greenhouse Gas Inventory

The purpose of the 2005 baseline emissions inventory is to determine the levels of GHG emissions that were emitted in San Joaquin County in the 2005 base year. GHG emissions inventory data were collected statewide in 2005 because it is the baseline for GHG emissions as specified in the California Air Resources Board (CARB) Climate Change Scoping Plan, pursuant to Assembly Bill 32. This inventory was conducted using the California Statewide Energy Efficiency Collaborative (CalSEEC) community inventory methodology, which allows local governments to systematically estimate and track greenhouse gas emissions from energy and waste related activities at the community-wide scale. The methodology used for the inventory is described in Appendix A to this Plan.

The inventory, described below, includes emissions from activities taking place within the County limits. The sectors included in this inventory are energy, transportation, solid waste, wastewater, and agriculture.

San Joaquin County's 2005 GHG emissions were 6,563,888 metric tons of CO₂e (MTCO₂e) from the energy, transportation and land use, solid waste, wastewater, and agriculture sectors, as shown in Table 4-1, below. With a total population of 654,541, per capita GHG emissions in San Joaquin County in 2005 were 10.03 MTCO₂e.¹ The neighboring County of Sacramento reported very similar per capita emissions, at 10 MTCO₂e in 2005. Both of these counties report lower per capita emissions than the Statewide per capita emissions, which decreased from 13.4 MTCO₂e to 12.5 MTCO₂e between 2000 and 2008.²

1. Energy

Stationary energy consumption includes electricity and natural gas used for the residential and commercial/industrial sectors. Energy consumption in San Joaquin County in 2005 resulted in a total of 2,428,790 MTCO₂e, or approximately 37 percent of total emissions.

San Joaquin County residences consumed approximately 1.5 billion kilowatt hours (kWh) of electricity and 88 million therms of natural gas, resulting in 847,951 MTCO₂e GHG emissions. Major residential energy uses include heating, refrigeration, lighting and water heating.

Commercial and industrial buildings consumed approximately 2.2 billion kWh of electricity and 154 million therms of natural gas, which produced a total of 1,580,839 MTCO₂e GHG emissions. Natural gas is typically used in the commercial/industrial sector to heat buildings, fire boilers and generate

¹ ICF Jones & Stokes, (June 2009), *Greenhouse Gas Emissions Inventory for Sacramento County*, Sacramento, CA, page ES-11.

² California Air Resources Board, (May 2008), *Trends in California Greenhouse Gas Emissions for 2000 to 2008 – by Category as Defined in the Scoping Plan*, page 1.

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 GREENHOUSE GAS INVENTORY AND
 BUSINESS AS USUAL FORECAST

TABLE 4-1 *EMISSIONS INVENTORY 2005*

Sector	MTCO ₂ e	Percentage of Total
Residential Energy	847,951	12.9%
Commercial/Industrial Energy	1,580,839	24.1%
Transportation	2,935,472	44.7%
Solid Waste	214,727	3.3%
Wastewater	147,023	2.2%
Agriculture	837,876	12.8%
Total	6,563,888	100.0%

Source: CalSEEC Tool; The Planning Center | DC&E, 2011.

electricity, while electricity is used for lighting, heating, and to power appliances and equipment.

2. Transportation

Transportation emissions were calculated for both on- and off-road vehicles and equipment in San Joaquin County. On-road transportation emissions were calculated using the EMFAC2007 model based on vehicle miles traveled (VMT) data and regional vehicle and travel characteristics consistent with the SJCOG Regional Transportation Plan (RTP). VMT is calculated such that all trips traveling between origins and destinations fully within San Joaquin County are included, as are 50 percent of the VMT for trips traveling between San Joaquin County and other destinations. Trips that pass through the County (regional or through trips) are not included in the VMT inventory. Off-road transportation emissions were obtained from the Air Resources Board OFFROAD2007 model for San Joaquin County. All off-road vehicles are included in the Transportation sector, with the exception of agricultural equipment, which is included in the Agriculture sector. Off-road emissions include those from construction and mining equipment, industrial equipment, lawn and garden equipment, and light commercial equipment.

As with many California counties, transportation within San Joaquin County's geographical boundary constitutes the greatest percentage of GHG emissions with a total of 2,935,472 MTCO_{2e}. Ninety-five percent of these emissions came from on-road travel on highways and local roads. The remaining 5 percent came from off-road vehicle use.

3. Solid Waste

Emissions from the solid waste sector are an estimate of methane generation from the decomposition of solid waste and alternative daily cover sent to the landfill in the base year (2005). These emissions are not generated in the base year, but will result from the decomposition of 2005 waste over the full 100+ year cycle of its decomposition.

In 2005, the solid waste sector constituted 3.3 percent of the total GHG emissions for San Joaquin County, producing an estimated 214,727 MTCO_{2e} emissions.

4. Wastewater

Emissions from the wastewater sector are an estimate of methane and nitrous oxide generated in the process of wastewater treatment. These emissions occur at treatment facilities within each of the seven jurisdictions in San Joaquin County.

The wastewater sector contributed 147,023 MTCO_{2e} emissions, constituting 2.2 percent of the total GHG emissions for San Joaquin County in 2005.

5. Agriculture

Emissions from the agriculture sector are attributed to crop production, livestock, and agricultural equipment. All of these activities are prevalent throughout San Joaquin County and contribute to the overall GHG emissions generated in the County.

The agriculture sector contributed 837,876 MTCO_{2e} emissions, constituting 12.8 percent of the total GHG emissions for San Joaquin County in 2005.

B. Business as Usual Greenhouse Gas Forecast for 2020 and 2035

The 2020 and 2035 BAU forecasts are shown in Table 4-2. The 2020 forecast is 7,486,640 metric tons of carbon dioxide equivalent (MTCO_{2e}), an increase of approximately 14 percent over the 2005 baseline inventory. Annual per capita emissions in San Joaquin County in 2020 are projected to be 9.47 MTCO_{2e}. The 2035 BAU emissions forecast is 8,786,882 MTCO_{2e}, an increase of approximately 34 percent over the 2005 baseline inventory. The per capita emissions in San Joaquin County in 2035 are projected to be 8.8 MTCO_{2e}. The breakdown of emissions by sector is provided below.

1. Energy

Projected future energy consumption in 2020 and 2035 includes electricity and natural gas consumption associated with residential buildings, commercial buildings, and industrial facilities. Residential energy consumption is projected to produce 1,023,046 MTCO_{2e} in 2020 and 1,242,806 MTCO_{2e} in 2035. Commercial and industrial energy use is projected to produce 1,837,260 MTCO_{2e} in 2020 and 2,024,966 MTCO_{2e} in 2035.

2. Transportation

As was described above in Section A.2, the transportation forecast was completed by SJCOG using the EMFAC 2007 model. This forecast is consistent with the VMT and related forecasting being completed for the County's RTP. Growth in transportation emissions over the forecast period is closely related to planned transportation infrastructure investments and the associated vehicle activity, as measured in VMT. The 2020 BAU forecast for transportation-related emissions is 3,354,270 MTCO_{2e}, an increase of approximately 14 percent from 2005 emissions levels. This forecast exceeds the SJCOG target of reducing GHG emissions from light cars and trucks by 5 percent from 2005 levels by 2020.

The 2035 BAU forecast for transportation-related emissions is 4,178,765 MTCO_{2e}, an increase of approximately 42 percent from 2005 emissions levels. This forecast exceeds the SJCOG target of reducing GHG emissions from light cars and trucks by 10 percent from 2005 levels by 2035.

TABLE 4-2 *EMISSIONS INVENTORY AND FORECAST BY SECTOR*

Sector	2005 (MTCO _{2e})	2020 (MTCO _{2e})	2035 (MTCO _{2e})
Residential Energy	847,951	1,023,046	1,242,806
Commercial/Industrial Energy	1,580,839	1,837,260	2,024,966
Transportation	2,935,472	3,354,270	4,178,765
Solid Waste	214,727	272,437	345,673
Wastewater	147,023	186,538	236,682
Agriculture	837,876	813,089	757,990
Total	6,563,888	7,486,640	8,786,882

Source: CalSEEC, 2011; The Planning Center | DC&E, 2011.

3. Solid Waste

Emissions associated with solid waste generation and subsequent burial in landfills are projected to grow in proportion to population. The waste sector is forecast to produce 272,437 MTCO_{2e} in 2020 and 345,673 MTCO_{2e} in 2035.

4. Wastewater

Population is the primary determinant for growth in emissions pertaining to wastewater generation. The wastewater sector is forecast to produce 186,538 MTCO_{2e} in 2020 and 236,682 MTCO_{2e} in 2035.

5. Agriculture

Urban development, converting farmland into urbanized uses, is the primary factor in agricultural emissions. With urban areas projected to continue growing in San Joaquin County, the agriculture sector is expected to produce reduced emissions over the coming years: Dropping from 837,876 MTCO_{2e} in 2005 to 813,089 in 2020 and 757,990 in 2035.

5 ECONOMIC AND DEMOGRAPHIC TRENDS

This chapter provides a brief review of economic and demographic trends in San Joaquin County. These trends are described in greater detail in a companion document prepared for the project in its early phases: the *Demographic Profile Report*. This document is available from the San Joaquin Council of Governments (SJCOG) upon request.

San Joaquin County is a hub at the convergence of the San Francisco Bay Area, the Sacramento Region, and the San Joaquin Valley. The following represent key trends related to economics and demographics in San Joaquin County:

- ◆ Despite the current economic slowdown, countywide demand for new housing units is anticipated at an average of approximately 5,000 units per year for the next 25 years. Once economic recovery is fully under way, this strong demand should absorb excess vacancies from the housing crash within three to four years.
- ◆ San Joaquin County has a severe jobs/employed residents imbalance with 0.80 jobs per employed resident. This means many employees need to commute to other areas – particularly the Bay Area and Stanislaus and Sacramento Counties for work. Unless significant policy changes and investments occur, this imbalance is likely to persist over the next 25 years and a significant portion of County residents will likely continue to commute to jobs in other counties.
- ◆ New housing that provides enhanced mobility options should appeal particularly to the County’s large commuter population, and can help to reduce the impacts of commuter travel.
- ◆ Sites along the major transportation corridors that link San Joaquin County to the Bay Area will be logical sites for new development in San Joaquin County in the future.
- ◆ The majority of new jobs that are created in San Joaquin County are likely to be in lower-paid occupations. However, the County’s existing housing stock is overwhelmingly single-family detached housing, which tends to be less affordable than attached housing or multifamily housing.

Therefore, policies and programs to encourage construction of multiple-family housing may be appropriate.

- ◆ San Joaquin County has a high proportion of households with children, so plans for infill/smart growth development should take into account the needs of families.
- ◆ Despite the prevalence of households with children, San Joaquin County has an unmet need for a substantial number of smaller housing units, which could include higher density mixed use or infill units, and which would serve seniors, singles, and couples without children.
- ◆ While travel patterns of the working population will remain an important factor affecting land use and infrastructure decisions and vice-versa, attention to the mobility needs of the younger and older segments of the population, which will grow most rapidly, will also be important.
- ◆ Fee programs are currently structured to create a disincentive to build smaller units. Changing the fee structure might encourage construction of smaller units and help to diversify the housing stock.
- ◆ Job attraction efforts should be focused on sectors in which San Joaquin County is a net exporter of workers. This will help reduce the need for residents to commute out of the county for work.

6 *INFILL SITES INVENTORY*

As part of the process of developing this Plan, San Joaquin Council of Governments (SJCOG) worked closely with its member jurisdictions to identify locations appropriate for new infill development, meaning growth within areas of the county that are already developed. These locations are found in each of the incorporated cities in the County, as well as the unincorporated Mountain House community.

A. Infill Sites Purpose and Application

The purpose of this effort was to demonstrate the potential for infill development to accommodate a significant portion of the development expected in San Joaquin County over the upcoming years. In addition, the sites provide valuable information to local agencies and developers seeking to identify appropriate locations for infill development. It is not, however, expected that all development in the County will be of this type. Some communities, such as Manteca, Lathrop, and Mountain House, will experience more of their growth in greenfield locations at the edge of the community. Others, such as Stockton and Lodi, are likely to focus more development in already-developed areas of the community because their downtowns have substantial opportunities for revitalization in walkable, locations with a higher level of transit service than the County as a whole.

Part of the reason for identifying locations for infill development is to support two related efforts being undertaken by SJCOG: Grant funding under SJCOG's Smart Growth Incentive Program (SGIP) and development of the county's Sustainable Communities Strategy (SCS). These are described in Chapters 1 and 2 of this Plan, respectively.

1. Relationship to SGIP

In the case of the SGIP, SJCOG will fund infrastructure and planning projects that support smart growth development. The sites identified in this inventory can help applicants identify the types of locations that would be successful in applying for SGIP funding. However, some sites that could be successful may not be included in the inventory, as discussed below. And, inclu-

sion in the inventory does not guarantee success in SGIP funding competitions.

2. Comprehensiveness

This inventory should not be viewed as a comprehensive list of all possible locations where infill development might take place in the County. Although SJCOG, with significant input from a wide range of organizations and individuals, has attempted to be as comprehensive as possible, it is not possible to find every single parcel that could experience infill development in the coming years.

B. Infill Sites Inventory Process

The infill sites were identified through an extensive process that evolved as it was completed in response to comments from jurisdictions, workshop participants, stakeholders, and the Smart Growth Committee. An initial list was developed using sites identified as currently vacant on Geographic Information Systems (GIS) mapping provided by SJCOG as well as sites identified on recent Housing Elements or other planning documents. These were then narrowed down to locations that were within ½ mile of a downtown, an existing or proposed regional transit station, or a proposed transit corridor or BRT route. Then, they were further narrowed to exclude sites that were less than ½-acre in size, sites that did not have development on at least three sides, and sites designated for an open space use. While these criteria remain at the heart of the inventory, they were refined through the input process:

- ◆ **Jurisdictions:** City representatives were the first to review the infill sites. They suggested additional sites not on the initial list that could be appropriate. Some of these were sites that could be redeveloped, so they had not been initially included. Some were sites that were vacant but had not been included on the SJCOG inventory, which is not completely comprehensive. They also suggested some sites for removal based on local knowledge about ownership. There was a suggestion to exclude sites designated for industrial use unless a City staff person believed they were

likely to transition over the next 20 years or so. Finally, City staff were asked to identify and remove any sites that had pending development projects ('pipeline') because those were unlikely to be available for infill development in the future.

- ◆ **Site Reconnaissance:** Consultants reviewed the sites through a 'wind-shield' survey, driving past potential infill sites, removing those that did not appear appropriate, and adding ones that could be appropriate for additional review. Added sites included vacant sites not included on the SJCOG inventory and sites with potential for redevelopment.
- ◆ **Smart Growth Committee Members:** Committee members reiterated the need to review existing City documents for potential sites, and this was done, adding sites in several communities.
- ◆ **Workshop participants:** Participants suggested specific sites, which were added to the inventory so long as they met the other criteria.
- ◆ **Stakeholders:** Stakeholder meeting participants suggested that all sites within a ¼-mile radius of the most major transit station should be included, regardless of whether they were designated for industrial use. This is because the stations are expected to transform those areas over the next 20 or more years and the designations will likely be reconsidered.

C. Infill Sites Criteria

At the conclusion of the process described in Section B, the final set of criteria to identify the infill sites is as follows:

Sites are defined as adjacent parcels that could be developed as one project

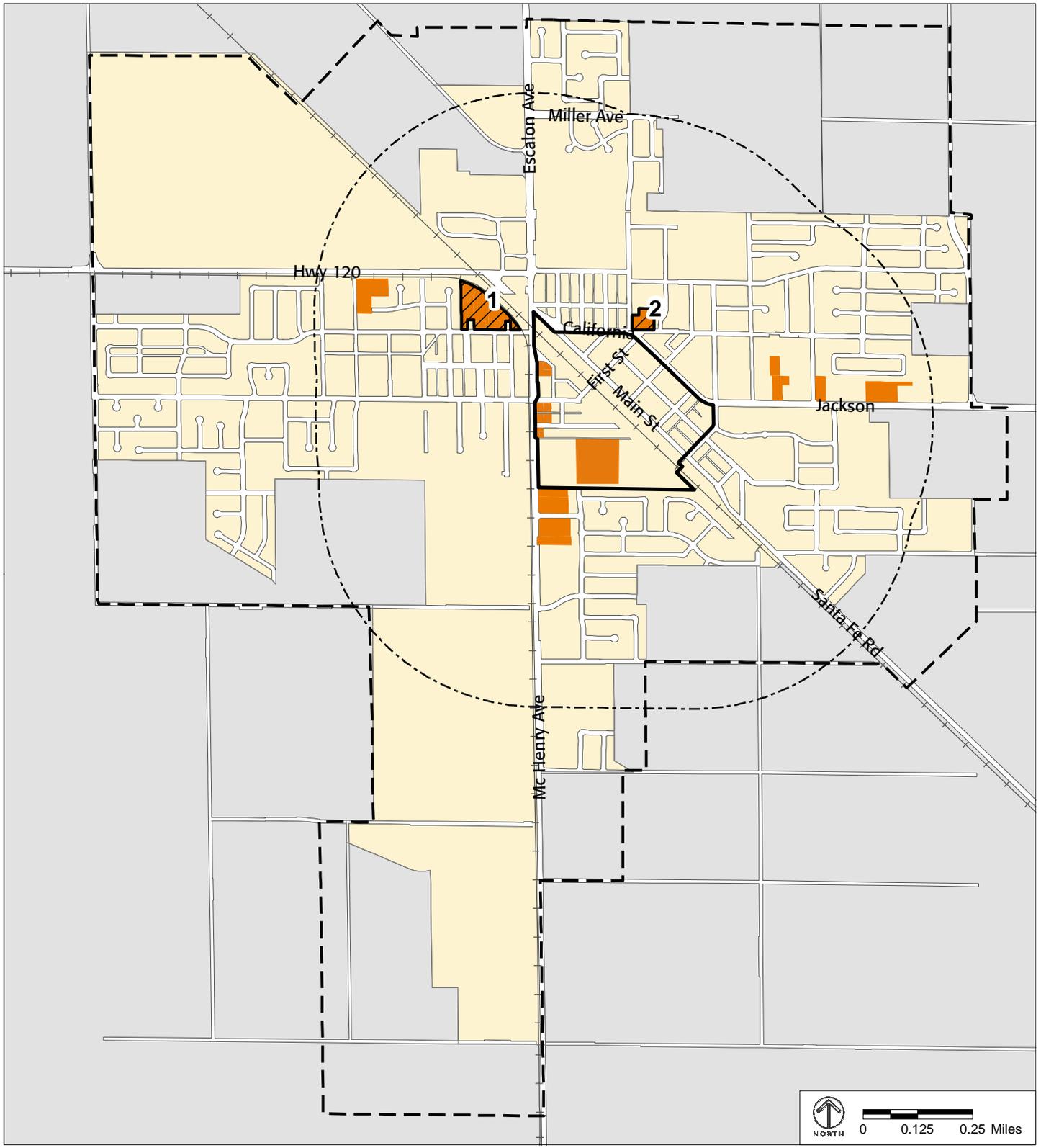
1. The site must be identified within GIS layers provided by SJCOG as
 - having an existing vacant land use **and/or**
 - identified as a potential site by City Staff **and/or**
 - identified as vacant or underutilized within the Housing Element **and/or**
 - identified on a City prepared document **and/or**

- identified via site reconnaissance **and/or**
 - identified by workshop participants.
2. Land use designations meet one of the following:
 - Not designated as industrial or open space **or**
Designated industrial but City staff believe land use could change **or**
 - Designated industrial but within ¼-mile radius of Stockton ACE (Central) Station, Manteca ACE station, Lodi Transit Center, or Downtown Stockton.
 3. Within a ½-mile of an existing or proposed regional transit station **and/or**
within a ½-mile walking distance of a potential transit corridor or BRT route **and/or**
within ½-mile of a downtown.
 4. The site must be at least ½-acre **or** located in a downtown.
 5. The site must be surrounded on three sides by existing urban (not rural residential) development.
 6. No pipeline projects or approved projects.

D. Summary of Infill Sites

Based on the criteria listed in Section C, a total of 263 sites have been identified in San Joaquin County. Note, as described in Section A, that these are not a comprehensive list of all infill sites that could be found in the County. Other sites certainly exist and could be extremely appropriate for infill development. The sites that have been identified are shown in Table 6-1 and are shown in Figures 6-1 through 6-9. A listing of all sites by Assessors Parcel Number is included in Appendix B.

The sites are located throughout the County, but the largest concentration of sites is found in Stockton. Stockton is by far the County's largest city, in



- Infill Opportunity Sites
- 50 Test Sites
- 1/2 Mile Area Around Downtown
- Downtown Boundary

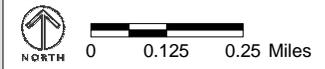
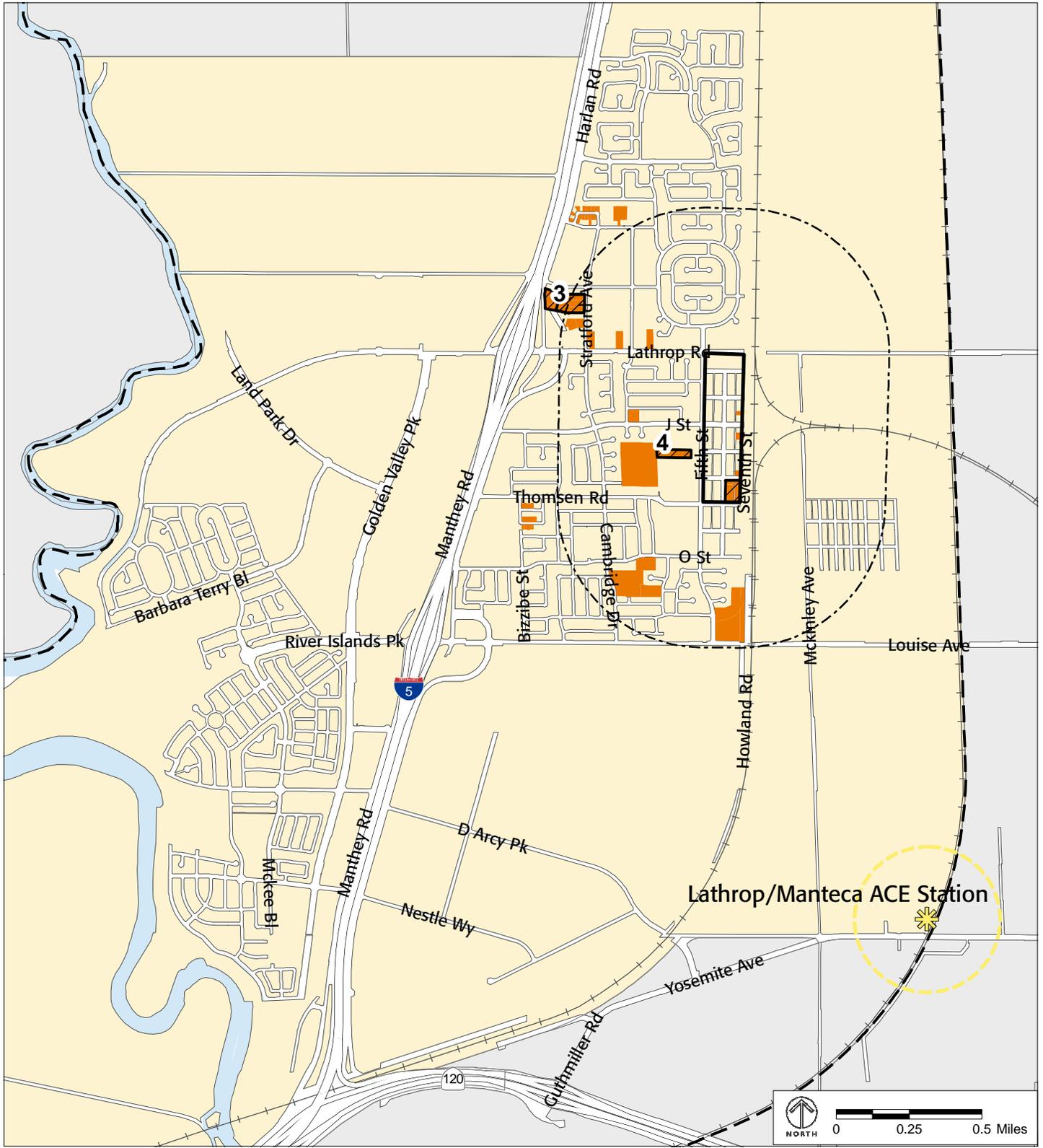


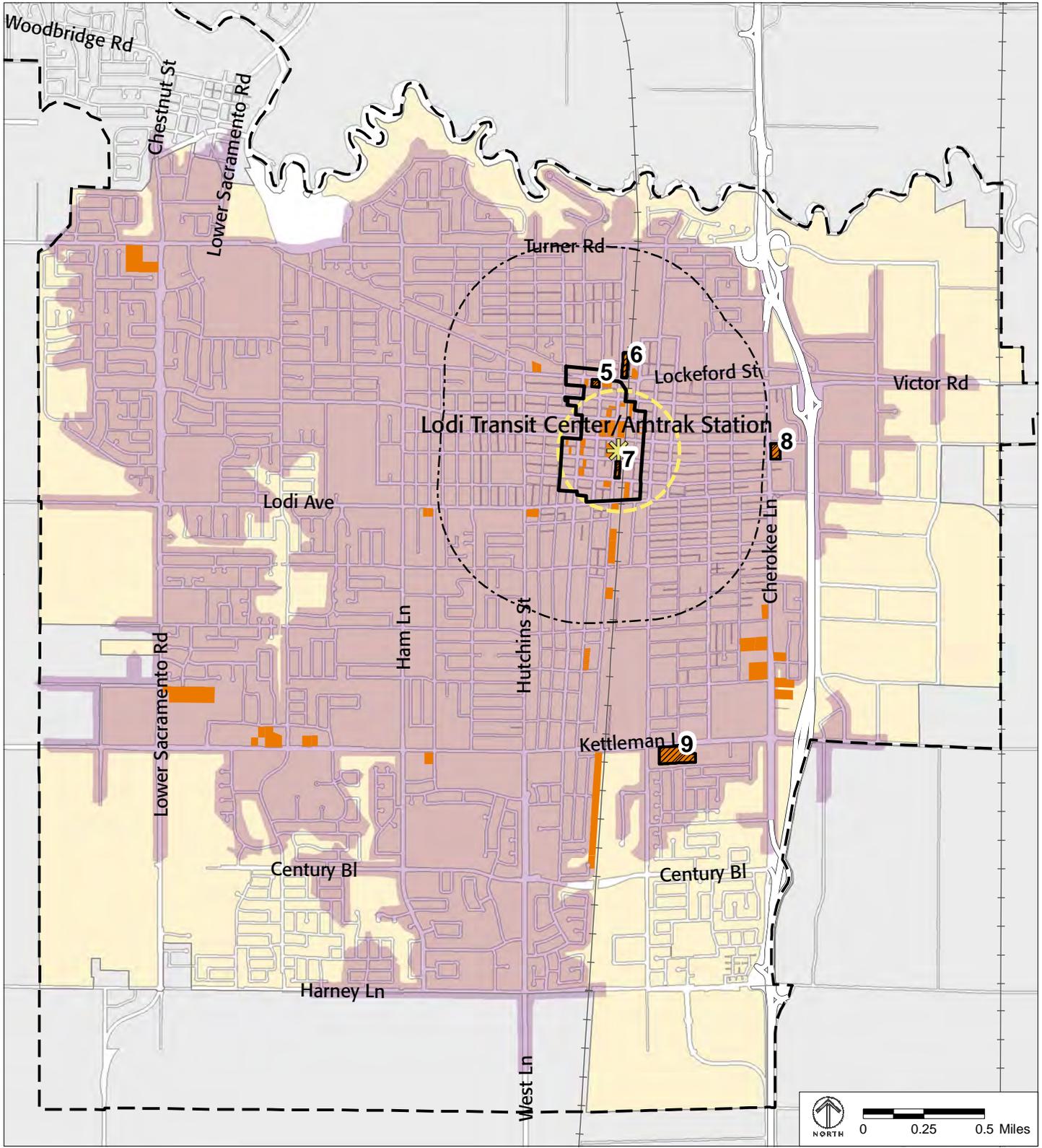
FIGURE 6-1
 CITY OF ESCALON INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- Downtown Boundary
- 50 Test Sites
- 1/2 Mile Area Around Existing Transit Station
- 1/2 Mile Area Around Downtown
- Existing Regional Transit Station

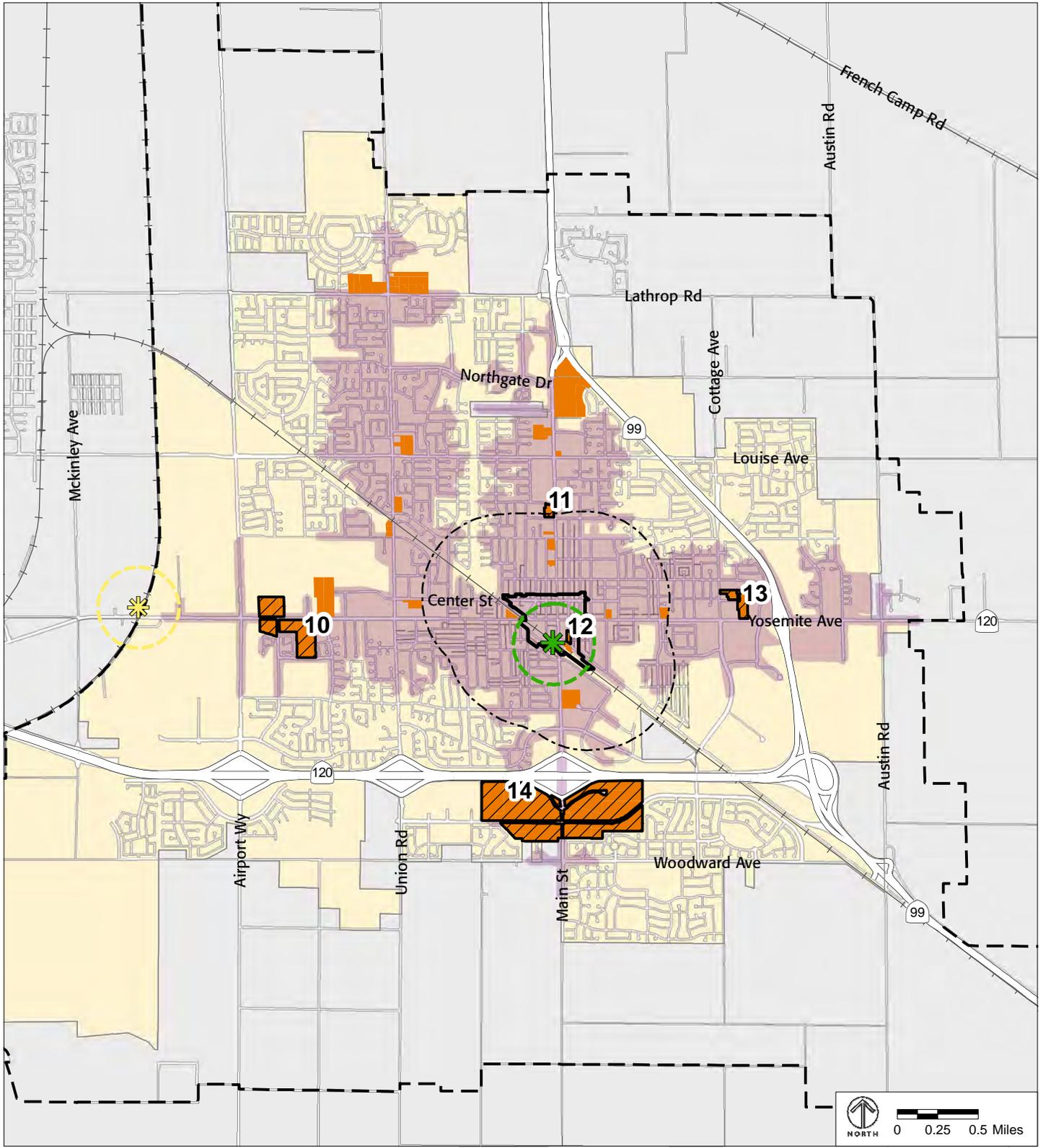
FIGURE 6-2

CITY OF LATHROP INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- 50 Test Sites Final
- 1/2 Mile Area Around Downtown
- Downtown Boundary
- 1/2 Mile Walking Distance from Transit Corridor
- 1/2 Mile Area Around Existing Transit Station
- Existing Regional Transit Station

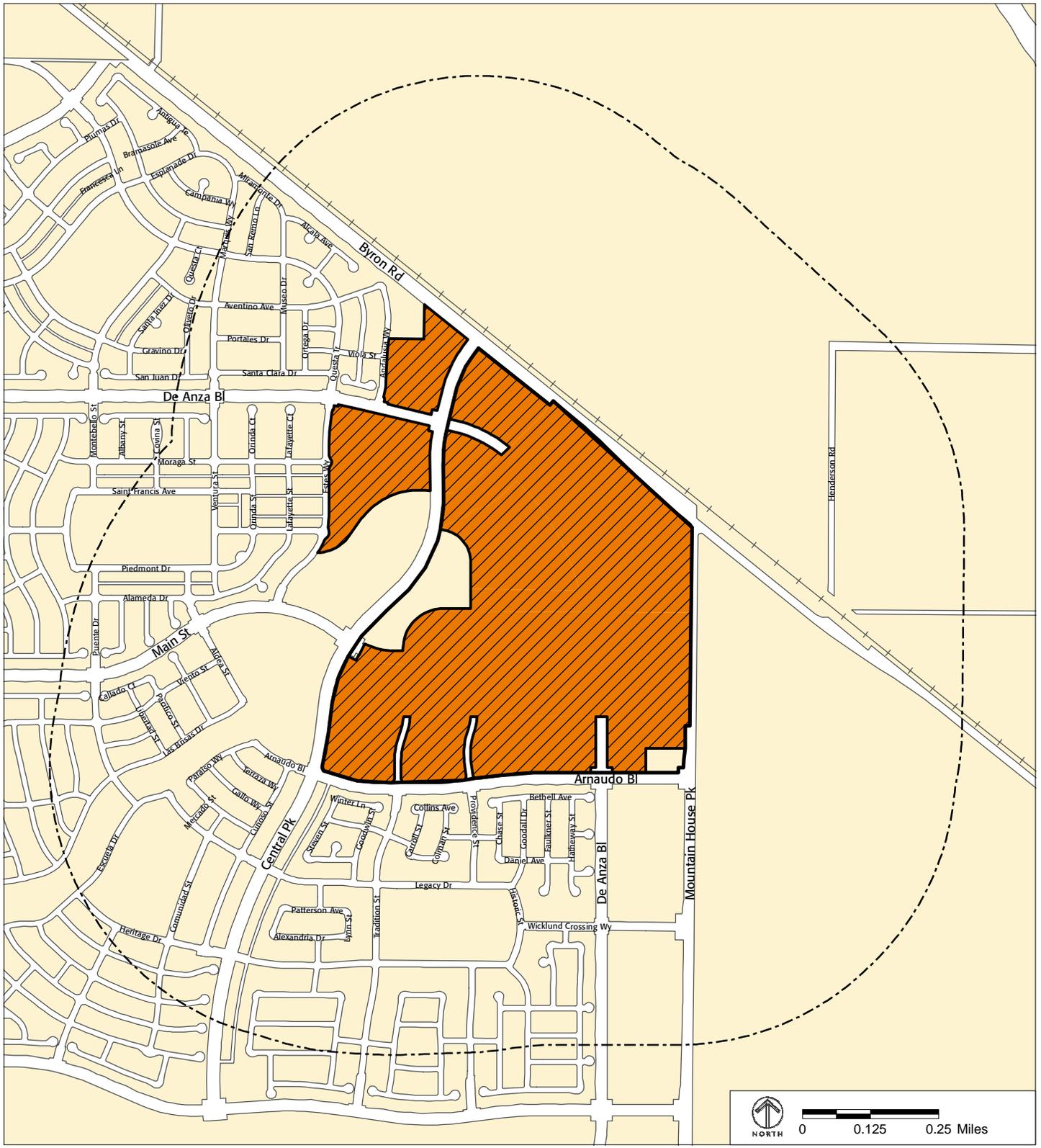
FIGURE 6-3
 CITY OF LODI INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- Downtown Boundary
- 1/2 Mile Area Around Downtown
- 50 Test Sites
- 1/2 Mile Walking Distance from Transit Corridor
- ✱ Future Regional Transit Station
- ✱ Existing Regional Transit Station

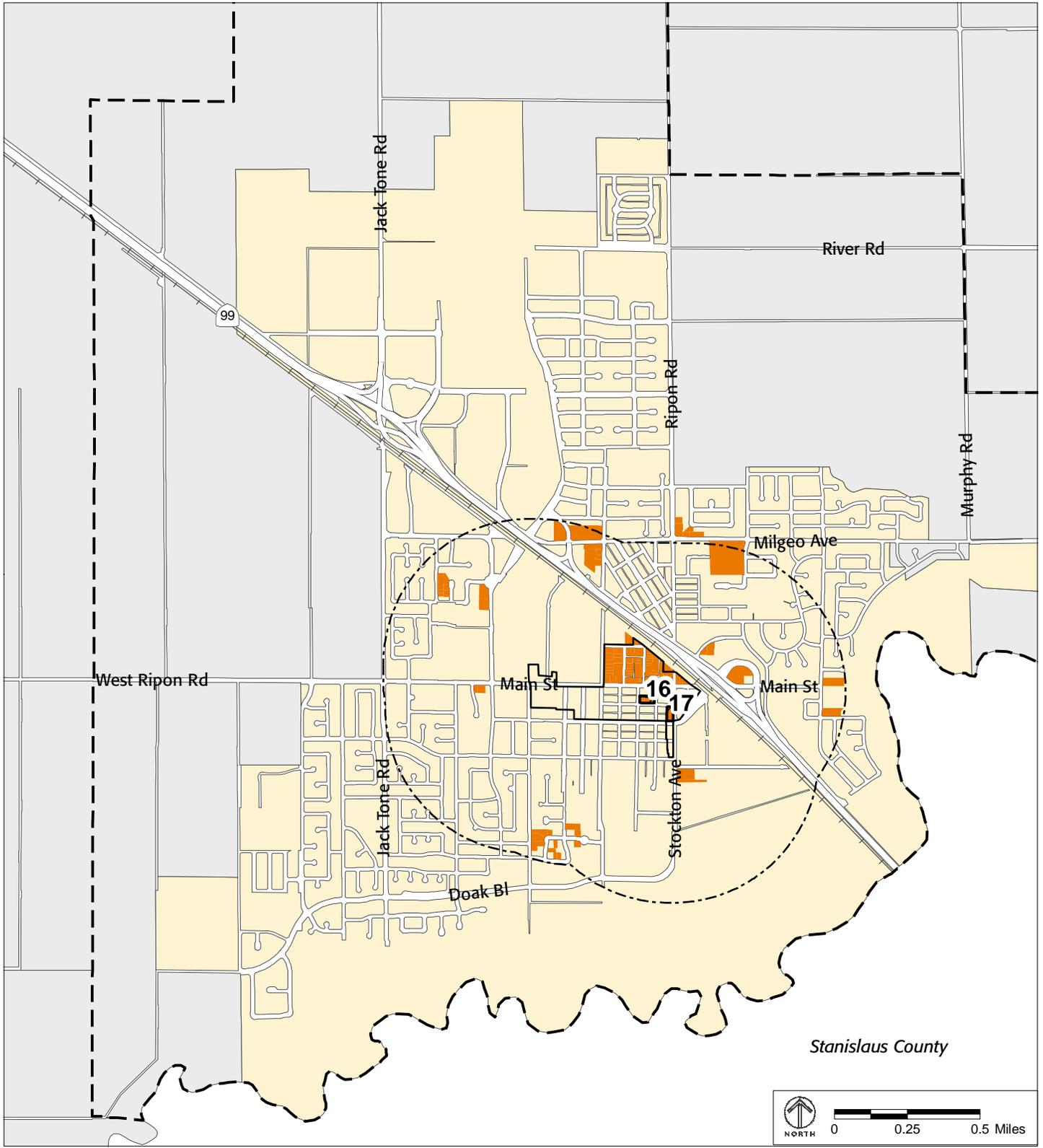
FIGURE 6-4

CITY OF MANTECA INFILL OPPORTUNITY SITES



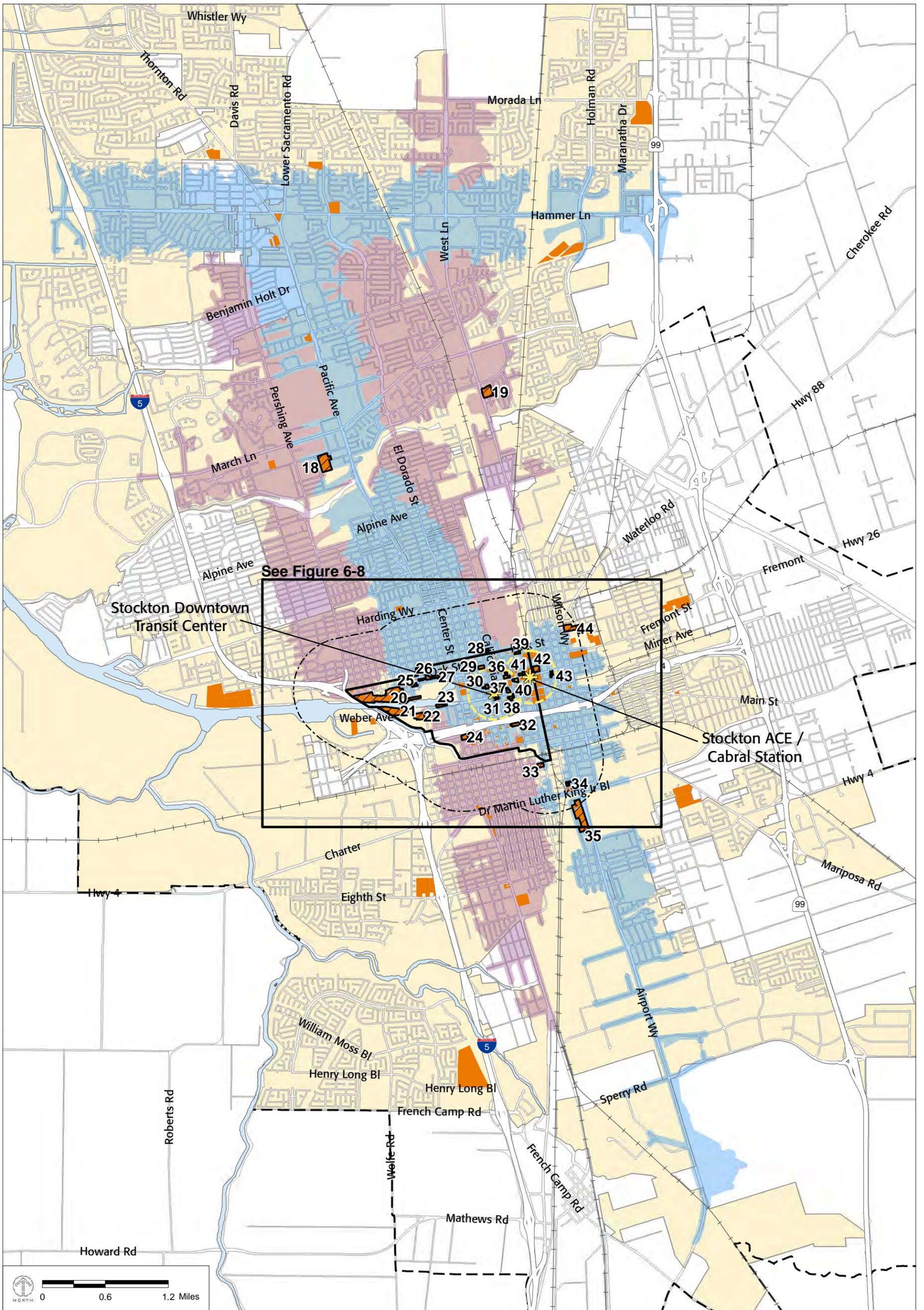
- Infill Opportunity Sites
- 50 Test Sites
- 1/2 Mile Area Around Downtown
- Downtown Boundary

FIGURE 6-5
MOUNTAIN HOUSE INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- 50 Test Sites
- 1/2 Mile Area Around Downtown
- Downtown Boundary

FIGURE 6-6
 CITY OF RIPON INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- 1/2 Mile Walking Distance from BRT Route
- 1/2 Mile Walking Distance from Transit Corridor
- 1/2 Mile Area Around Existing Transit Station
- Existing Regional Transit Station
- 50 Test Sites
- 1/2 Mile Area Around Downtown
- Downtown Boundary

FIGURE 6-7

CITY OF STOCKTON INFILL OPPORTUNITY SITES

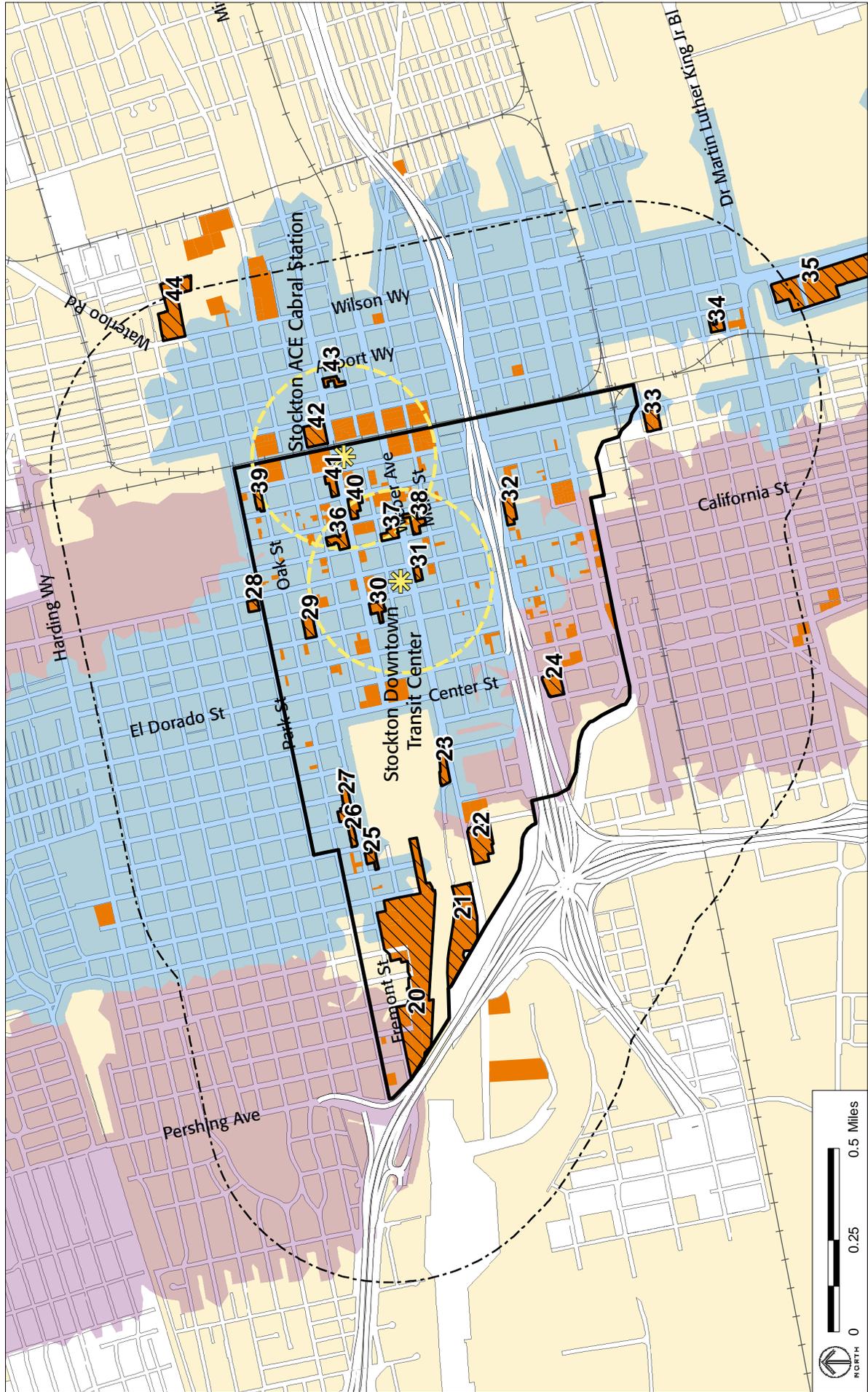
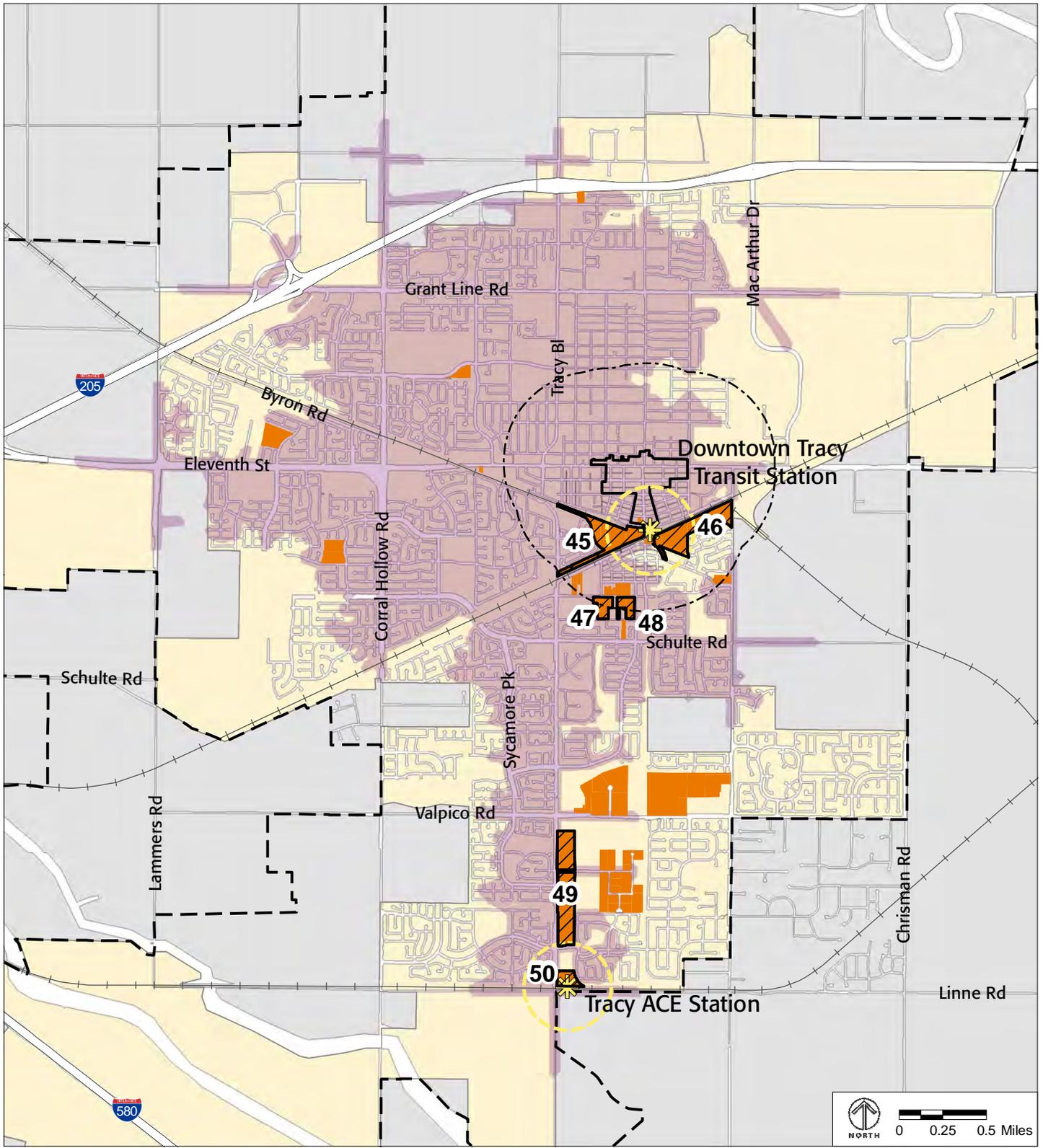


FIGURE 6-8
 DOWNTOWN STOCKTON INFILL OPPORTUNITY SITES



- Infill Opportunity Sites
- 50 Test Sites
- 1/2 Mile Area Around Downtown
- Downtown Boundary
- 1/2 Mile Walking Distance from Transit Corridor
- 1/2 Mile Area Around Existing Transit Station
- Existing Regional Transit Station

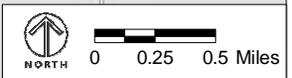


FIGURE 6-9

CITY OF TRACY INFILL OPPORTUNITY SITES

TABLE 6-1 *INFILL SITES SUMMARY*

Community*	Number of Infill Opportunity Sites
Escalon	11
Lathrop	12
Lodi	41
Manteca	21
Mountain House	1
Ripon	18
Stockton	141
Downtown Stockton	81
Tracy	18
Total	263

* Community indicates incorporated city plus sphere of influence, except in the case of Mountain House, which is an unincorporated community in San Joaquin County.

terms of both geographic area and population, and has a wealth of opportunities for infill development. It has extensive public transportation that is planned to grow over the coming years, and it has numerous vacant sites, as well as sites with existing development that could be reused for another type of development.

Overall, the sites range in size from 0.03 to 241 acres. Some sites are ready for development right now, meaning that they are generally unconstrained by contamination, structure, or ownership issues, and that they are designated for a development type that is appropriate to their neighborhood, downtown, or transit-oriented location. At the other end of the spectrum are sites that have historic structures, require parcel assembly from a range of property-

owners, or require redesignation prior to development. Development on such sites may need to be supported by their local jurisdiction through redesignation, assistance with infrastructure or property assembly, or other measures. Finally, some sites depend on transportation infrastructure that does not yet exist. Planned expansions include bus rapid transit (BRT) in Stockton, expanded bus service or transit centers, and regional rail service expansion. These expansions are dependent on a variety of funding sources and may take quite a while to develop due to the current economic climate.

E. Updates to the Sites Inventory

Over time, the sites inventory will become outdated, as development takes place, as planned transportation routes change, and as existing uses become obsolete. For this reason, SJCOG will need to review this list on a regular basis. It is expected that such updates will take place approximately every five years. However, their exact timing will depend on the availability of funding and staff time.

7 INFILL SITES EVALUATION MODEL

The Infill Evaluation Model is a tool developed to compare the outcomes associated with infill development projects on sites throughout San Joaquin County. As inputs, the tool uses specific infill sites with regard to the savings in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions associated with development on these sites as compared to “business-as-usual” development. The model has five main components: place types, development prototypes, VMT reduction estimation, and GHGs emissions calculations, and a “business-as-usual” comparison. The model and results from 50 sample infill sites are described in detail in Appendix C of this Plan.

A. Key Aspects of the Model

This section provides a basic description of how the model works. For further detail, consult Appendix B of this Plan.

1. Place Types

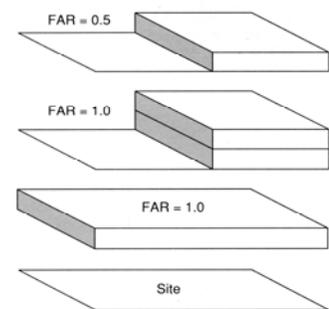
San Joaquin County was divided into 15 representative place types. These place types are the basis of the input location into the Infill Evaluation Model, contributing to the VMT reduction estimation described in the next section.

2. Development Prototypes

For each potential infill site, there are five potential development prototypes. These prototypes could be developed in many different place types found throughout San Joaquin County. FAR is used below as an abbreviation for Floor Area Ratio.

- ◆ **Compact Residential.** This prototype includes compact single-family residential development along a traditional street grid pattern. All site acreage is used for residential development at a density of 10 units per acre.
- ◆ **Urban Residential.** This prototype includes condominiums and other types of multi-family housing. All site acreage is used for residential development at a density of 24 units per acre.

Diagrammatic Examples of Floor Area Ratios



Source: Naphtali H. Knox & Associates, Inc.

- ◆ **Mixed-Use Retail/Residential.** This prototype includes retail uses on the ground floor with residential uses on the second and potentially third and fourth floors. Retail development has an FAR of 0.3, and residential development has a density of 24 units per acre.
- ◆ **Mixed Use Office/Commercial.** This prototype includes retail uses on the ground floor and office space on the second and potentially third and fourth floors. Retail development has an FAR of 0.3, and office development has an FAR of 0.9, for a total FAR of 1.2.
- ◆ **Commercial Center.** This prototype includes a concentration of retail and other commercial uses. All site acreage is commercially developed with an FAR of 0.5.

3. Vehicle Miles Traveled Reduction Estimation

VMT calculations are based on standard Institute of Transportation Engineers (ITE) trip generation rates, but lowered to account for internal trips, pedestrian trips, and transit trips associated with infill projects.

4. GHG Emission Calculations

Average GHG emissions associated with infill projects are calculated using VMT and the electricity, natural gas, wastewater, and solid waste associated with buildings. GHG emissions were estimated using the California Statewide Energy Efficiency Collaborative (SEEC) website and EMFAC, based on data gathered for the GHG Inventory and Forecast described in Chapter 3 of this Plan. They are reported as carbon dioxide equivalent (CO₂e). This measure converts the various GHG emissions that can result from the sources listed above into the equivalent amount of carbon dioxide based on the global warming potential of each type of GHG.

5. Business-As-Usual Comparison

For each site that is evaluated using the model, an equivalent “business-as-usual” comparison is established. Business-as-usual development is assumed to have the same number of units and square footages of retail and office space as the infill project. It differs in that it is located in an established neighborhood in a small town, with all housing being single-family at the regional average

density of 4.3 units per acre,¹ and all commercial uses being developed with an FAR of 0.3, which is a reasonable approximation of typical commercial development occurring in the region.

B. Sample Site Evaluations

As part of the development of this Plan, San Joaquin Council of Governments (SJCOG) has worked with member agencies and the community to identify potential infill sites throughout the County. This process was described in Chapter 6. A subset of those sites was selected for the purpose of testing the model described in this chapter. None of the projects shown for these sample sites is proposed to be either planned or developed at this time. They are simply being used to show how the Infill Evaluation Model works. These 50 sites were selected according to the following criteria:

- ◆ Based upon the proportion of the total population found within each location.
- ◆ Minimum of two sites for each location.
- ◆ County has one site in Mountain House.
- ◆ Priority to most transit-oriented sites, largest sites, and/or most developable sites. Sites closer to transit stations and potential transit corridors were given priority. Larger sites were given priority over smaller sites. Sites that were vacant were given priority over sites with existing uses, assuming that they would be more likely to develop.

The sites are shown in Figure 7-1. The results for each site are included in Appendix B and summarized in Table 7-1. These results compare a sample smart growth project on the site with a business-as-usual project as described

¹ The average residential density in the San Joaquin Valley is 4.3 units per acre, according to Edward Thompson, Jr, California State Director, the American Farmland Trust, “San Joaquin Valley Blueprint Council Votes to Grow (Somewhat) More Efficiently,” 2009.

TABLE 7-1 *SUMMARY RESULTS FOR 50 TEST SITES: PERCENT CHANGE FROM BUSINESS-AS-USUAL TO SMART GROWTH PROJECT*

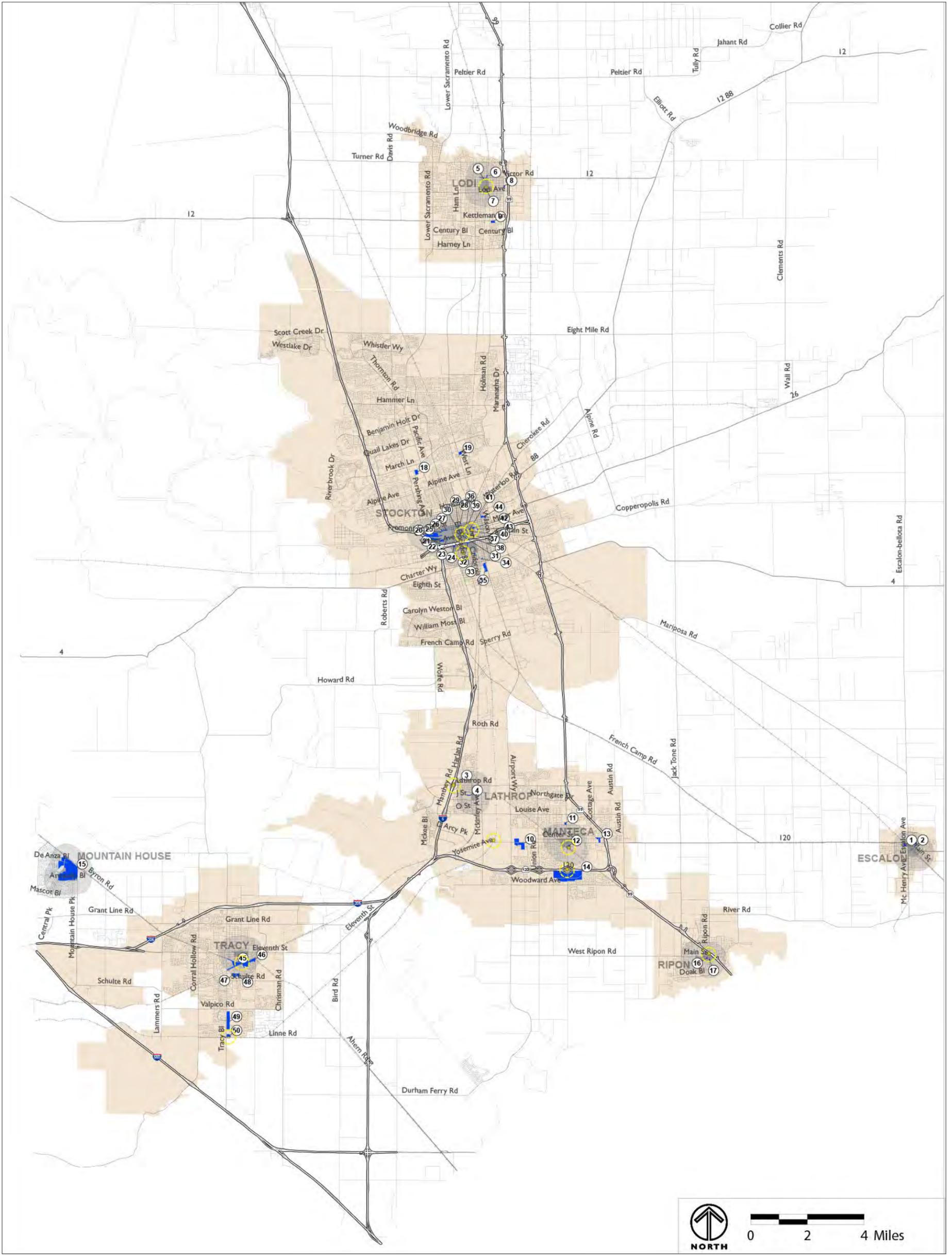
	VMT/yr	CO2e From VMT	CO2e From Buildings	Total CO2e
Average	-50%	-50%	-30%	-48%
Maximum	-80%	-80%	-49%	-72%
Minimum	-1%	-1%	0%	-6%

Note: CO2e = Carbon dioxide equivalent.

above in the introduction to this chapter. The results are reported as VMT and as carbon dioxide equivalent (CO2e). As shown in Table 7-1, the smart growth projects tested averaged 50 percent fewer VMT, and a total of 48 percent less CO2e. There is a wide range in the percent change between business-as-usual and the smart growth projects, from as little as a 1 percent reduction in VMT and 6 percent in CO2e, to 80 percent and 72 percent respectively.

The difference in CO2e associated with the buildings portion of each project was less dramatic than that associated with VMT, 30 percent versus 50 percent. In addition, the total amounts of CO2e associated with buildings is also substantially less than that associated with VMT, representing 19 percent of the total in smart growth projects and 16 percent in business-as-usual projects.

This test of the model shows how projects proposed in San Joaquin County in the future might differ from one another in terms of the resulting vehicle travel and GHG emissions. They show the potential for real savings, even at a small scale. For example, a project on Site 5 in Lodi, with development of the Urban Residential type, on a parcel of only 0.58 acres could accommodate 13 multi-family units. The same number of units in a business-as-usual project would require just over 3 acres and would have more than double the number of GHG emissions, 322 metric tons per year versus 150. While this is



*See Figures 6-1 through 6-9 for close-up views of the site boundaries

- 50 Test Sites
- 1/2 Mile Area Around Existing Transit Station
- 1/2 Mile Area Around Downtown
- Downtown Boundary
- Existing Regional Transit Station

FIGURE 7-1
 50 TEST SITES

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DEVELOPMENT PLAN
INFILL SITES EVALUATION MODEL

a small fraction of the savings that SJCOG and its member agencies will be seeking over the years to come, it represents a concrete step toward meeting GHG reduction targets.

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8 *SMART GROWTH SCORECARD*

As part of this Plan, the San Joaquin Council of Governments (SJCOG) has prepared a Smart Growth Scorecard. The full scorecard is available in Appendix D. The purpose of the scorecard is to provide a means for evaluating smart growth-related projects proposed for funding under SJCOG's Smart Growth Incentive Program (SGIP), described in Chapter 3 of this Plan. Infrastructure improvements funded by the SGIP include pedestrian, bicycle, and transit infrastructure, access to transit, and streetscape and traffic calming. Plans that are funded include early-phase efforts for infill and smart growth projects that support walking, bicycling, and transit use.

The scorecard is intended to be used in conjunction with other criteria established by SJCOG to evaluate smart growth projects that could be supported under the SGIP. The SGIP specifically prohibits funding to support projects on greenfield sites, so those sites are not included as part of this evaluation.

The scorecard evaluates projects in three key ways:

1. Smart Growth Characteristics
2. Financial Efficiency
3. Project Readiness and Matching Funds

Each of these components of the scorecard is described in the sections that follow. In addition, a sample set of projects is scored in Chapter 9. This illustrates the use of the Smart Growth Characteristics portion of the Scorecard.

A. Smart Growth Characteristics

This section evaluates the smart growth characteristics of projects. It is designed to be used for transportation infrastructure projects that are eligible for SGIP funding, so projects on greenfields cannot be scored. Some projects will reinforce existing smart growth neighborhoods, while others will support new smart growth development, and still others that will do both. Due to duplicate questions, scoring gives bonus points to projects that do both.

The scorecard assigns a potential score to each question. Once points are assigned for each question, the scoring sheet on the final smart growth characteristics page provides a weighting system that allows the user to arrive at a final number of points. This weighting reflects the priority given to the different topics. The total number of unweighted points is 97, but after the weighting is applied the total is 204. The breakdown of points is shown in Table 8-1, with numbers indicating the maximum score that can be achieved for each topic after weighting is applied.

B. Financial Efficiency

The financial efficiency section compares projects applying for SGIP funds in terms of their expected outcomes, including jobs, housing units, vehicle miles traveled, and greenhouse gas emissions. The program is intended to support smart growth projects that contribute to San Joaquin County's economy. These numbers, as measured per project dollar funded, together form an important measure of financial efficiency that will contribute to review of projects submitted for SGIP funding.

C. Project Readiness and Matching Funds

The project readiness and matching funds section will be added by SJCOG staff as they prepare the full application package for SGIP funding. In general, this section will ask applicants to indicate how close their project is to being ready to construct, for infrastructure projects, and how close their project is to being ready to get under way, for planning projects. Similarly, the section will review matching funds to be provided by the applicant.

D. Relationship to 2008 Application Process

As was described in Chapter 2, the SGIP is funded in part by Measure K. An initial round of Measure K-funded SGIP monies was disbursed in 2008, using scoring criteria that covered many of the same topics listed above.

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 REGIONAL SMART GROWTH | TRANSIT-ORIENTED
 DEVELOPMENT PLAN
 SMART GROWTH SCORECARD

TABLE 8-1 *SMART GROWTH SCORECARD POINTS*

Development Category	Points
1. Mixed Land Uses	18
2. Project Density	18
3. Transit Access	18
4. Employment Potential	18
5. Everyday Destinations	12
6. Housing Diversity	12
7. Street Connectivity	12
8. Pedestrian and Bicycle Infrastructure	12
9. Access to Parks and Open Space	12
10. Community Involvement and Public Outreach	12
11. Housing Affordability	9
12. Project Location	9
13. Sustainable Design	9
14. Consistent Street Edge	6
15. Street Frontages	6
16. Historic Features	6
17. Vehicle and Bicycle Parking	6
18. Stormwater	3
19. Natural Features	3
20. Universal Access	3
Total Points Possible	204

As part of the scorecard development process, SJCOG staff has ensured that the issues covered in the 2008 process are also covered in the new scorecard. Table 8-2 is a comparison of the topics.

TABLE 8-2 *TOPIC COMPARISON: MEASURE K 2008 AND SMART GROWTH SCORECARD*

Measure K 2008 Topic	Smart Growth Scorecard Topic
1. Percent of Project Matching funds provided by applicant, co-applicant, and/or project partners	Project Readiness and Matching Funds
2. Project Location	1. Mixed Land Uses 5. Everyday Destinations 6. Housing Diversity 12. Project Location
2a. Transit-Oriented Development	3. Transit Access
3. Project Readiness	Project Readiness and Matching Funds
4. Benefits of the Proposed Project	All topics except for 10. Community Involvement and Public Outreach
5. Community Involvement	10. Community Involvement and Public Outreach
6. Proximity to the Transit Station	3. Transit Access
7. Density of the Development	2. Project Density and Financial Efficiency
8. Permanent Jobs	4. Employment Potential and Financial Efficiency
9. Affordable Housing	4. Housing Diversity 5. Housing Affordability and a separate section following Scorecard entitled Project Jobs and Housing Units

Note: Measure K 2008 Topics are from the Infrastructure Projects Criteria, which were very similar to those used for Planning Projects.

9 *SAMPLE SMART GROWTH PROJECTS*

As part of the development of this Plan, the San Joaquin Council of Governments (SJCOG) has worked with member agencies and the community to identify potential infill sites throughout the County, as described in Chapter 6. Of the 50 sites evaluated using the Infill Evaluation Model described in Chapter 7, a sample subset were selected for scoring using the Smart Growth Scorecard, described in Chapter 8. However, because the Scorecard focuses on the transportation infrastructure and planning projects that can be funded through the SGIP program, the focus was on the public infrastructure which might be constructed to support projects on the sites. In addition to ten projects of this type, five sample larger-scale infrastructure projects were created to represent the range of projects that could be evaluated using the SGIP. None of these projects is proposed to be either planned or developed at this time. They are simply being used to show how the Scorecard should work during future rounds of SGIP funding. Of these 15 scored projects, four were further reviewed for their financial feasibility to give SJCOG and other readers of this Plan an idea of what would be required financially to construct smart growth projects.

A. Scored Prototypical Projects

In order to demonstrate the use of the Smart Growth Scorecard, 15 projects were scored in locations throughout San Joaquin County, as shown in Table 9-1. They were scored according to the smart growth characteristics section of the scorecard because financial efficiency or readiness information on the hypothetical projects is not available. The projects illustrate the range of potential approaches to infill development that could take place, from small town locations, to central areas in Stockton. In all cases, what is actually scored is the transportation infrastructure, not the private development. Please see Chapter 8 for further discussion of that distinction.

The first ten projects received scores ranging from 100 to 138 points out of a possible 204 points. These projects were scored assuming that a streetscape project was constructed adjacent to the prototypical infill development shown on the site, so the projects would support private development. As

TABLE 9-1 *SCORED PROTOTYPICAL PROJECTS*

Project Location/Description	Smart Growth Characteristics Score
Lodi Downtown (Site 6)	138
Manteca Yosemite Avenue and Fishback Road (Site 10)	109
Ripon Main Street mixed-use and residential (Site 17)	105
Stockton Fremont Street Waterfront mixed-use (Site 20)	123
Stockton Weber Street Waterfront mixed-use (Site 21)	101
Stockton Fremont Street mixed-use (Site 27)	134
Stockton 4-story mixed-use (Site 29)	124
Stockton mixed-use office (Site 39)	104
Stockton Miner Avenue housing (Site 41)	102
Tracy mixed-use across from ACE Station (Site 49)	100
Lathrop Streetscape 7 th Street at O Street	78
Escalon Streetscape Main Street at 1 st Street	88
Tracy multi-use trail	53
Stockton Streetscape Pacific Avenue at March Lane	60
Stockton Streetscape El Dorado and Center Streets	114

was described in Chapter 8, projects that support private development that exhibits smart growth characteristics do well on the scorecard;

projects that are located in an area that already exhibits smart growth characteristics score even more highly. This is because points are available for both of these aspects of a project, and in some places they are added together to form the total score for one topic. See Appendix D for the complete scorecard. See Figures 9-1 through 9-20 for illustrations of the projects, each of which is preceded by an aerial photo showing existing conditions on the site and surrounding areas. The figure names reference their site numbers, which correspond to the numbers on the map in Chapter 7.



FIGURE 9-1
LODI DOWNTOWN (SITE 6) - EXISTING CONDITIONS

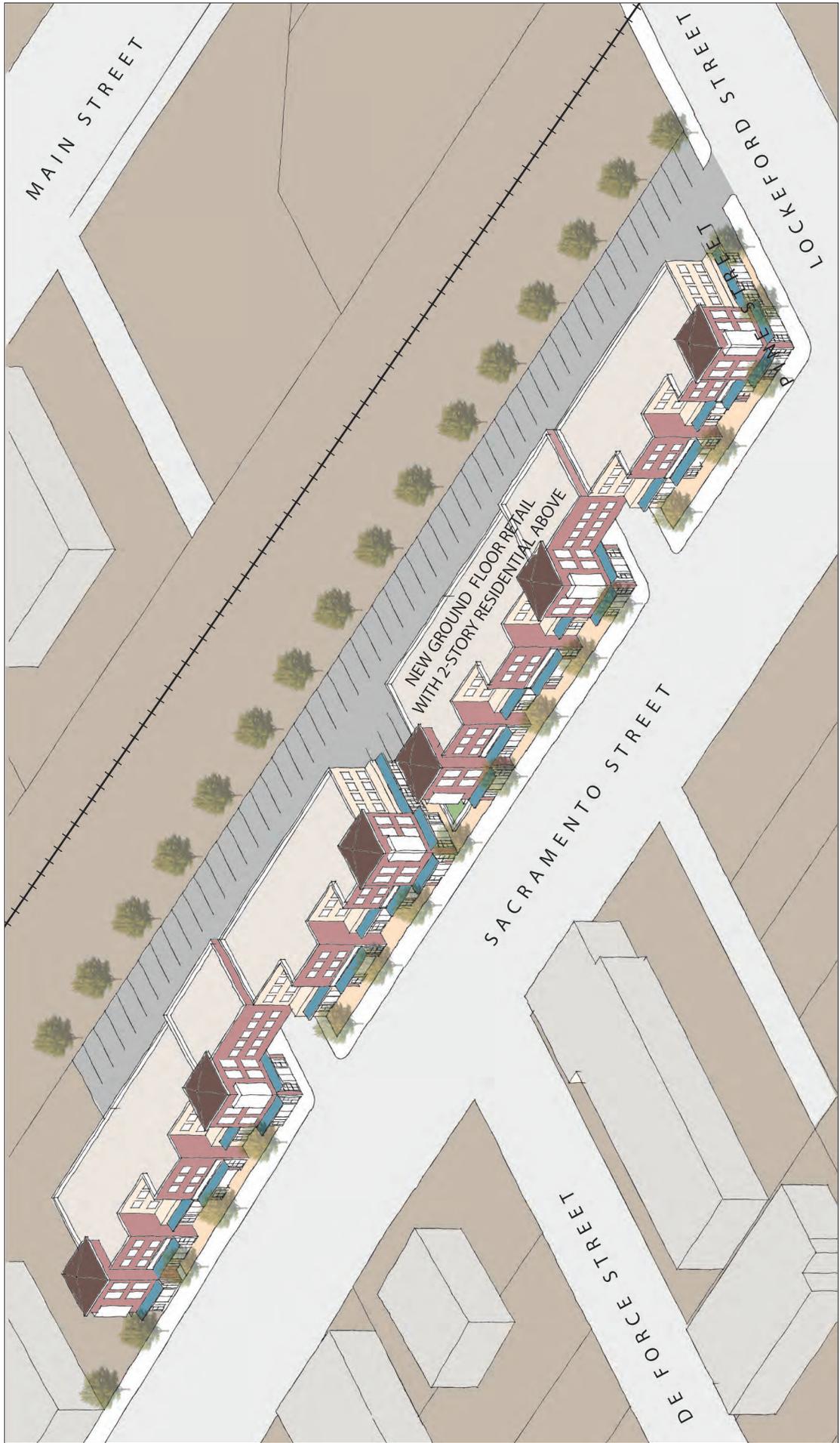


FIGURE 9-2
LODI DOWNTOWN (SITE 6)



FIGURE 9 - 3

MANTECA YOSEMITE AVENUE AND FISHBACK ROAD (SITE 10) - EXISTING CONDITIONS



NEW COMPACT
SINGLE-FAMILY
RESIDENTIAL

NEW GROUND FLOOR RETAIL
WITH 1- AND 2-STORY
OFFICE ABOVE

FIGURE 9-4
MANTECA YOSEMITE AVENUE AND FISHBACK ROAD (SITE 10)



FIGURE 9-5
RIPON DOWNTOWN (SITE 17) - EXISTING CONDITIONS

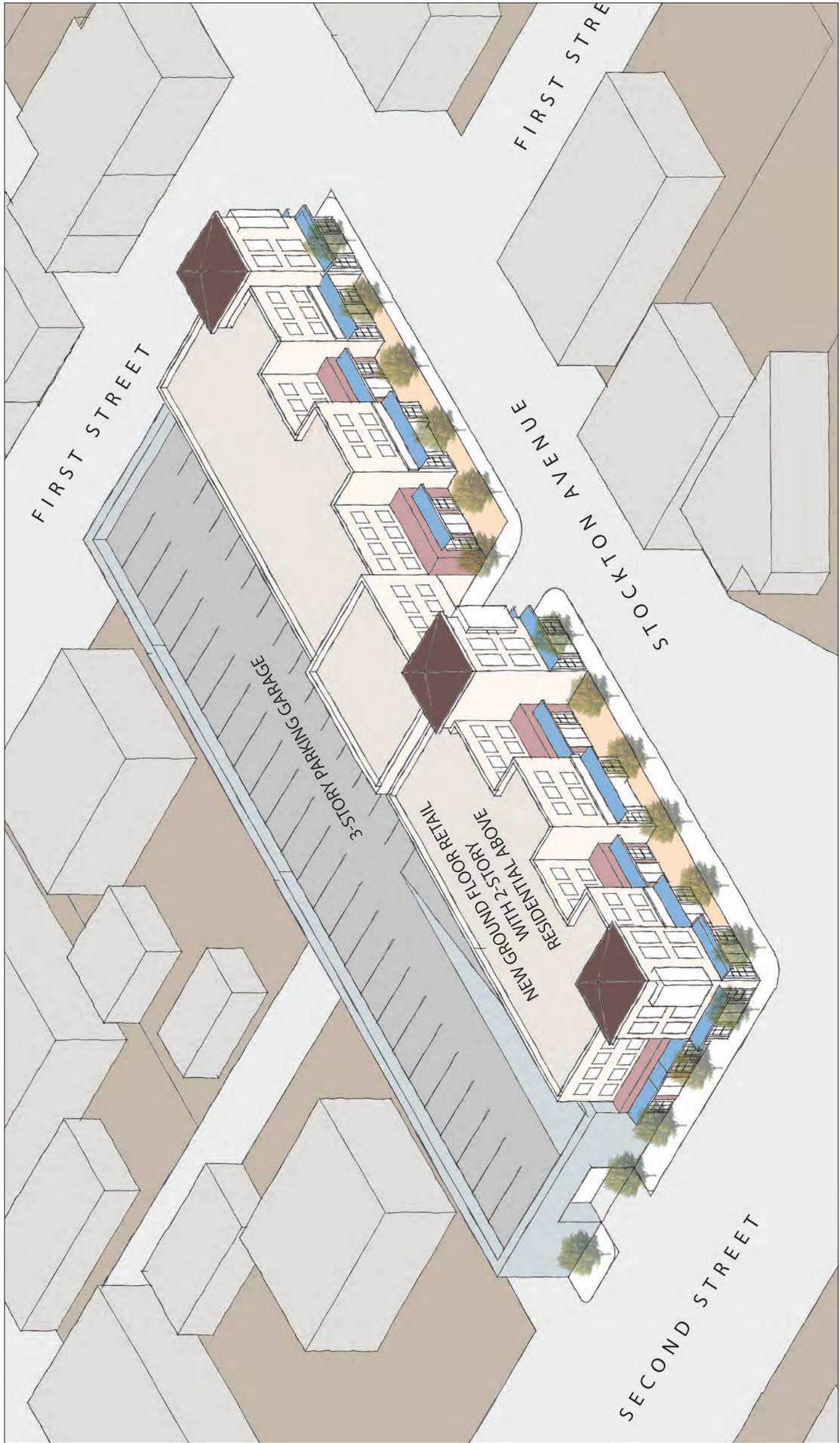


FIGURE 9-6

RIPON MAIN STREET MIXED-USE AND RESIDENTIAL (SITE 17)

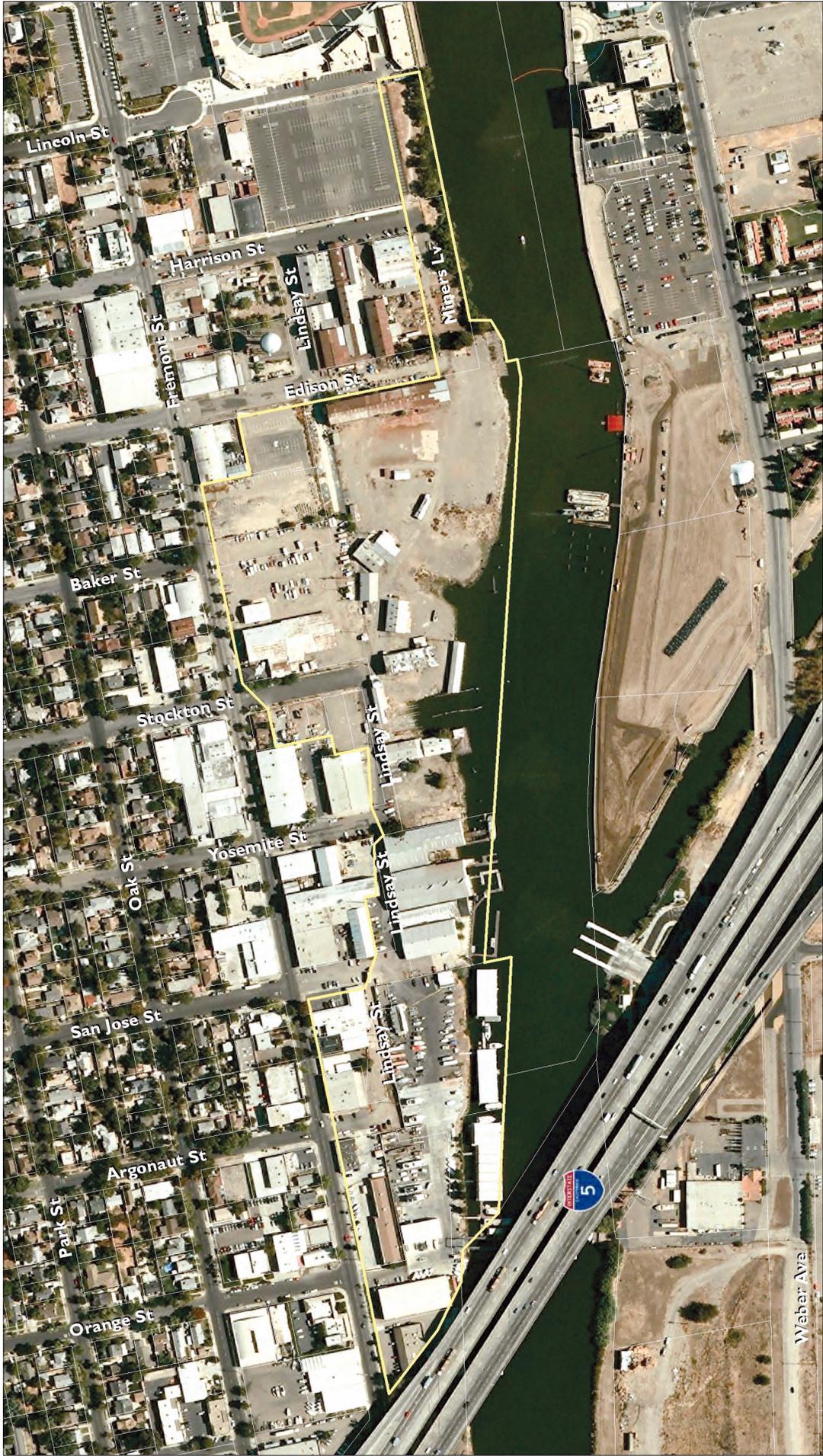


FIGURE 9-7

STOCKTON FREMONT STREET WATERFRONT MIXED-USE (SITE 20) - EXISTING CONDITIONS

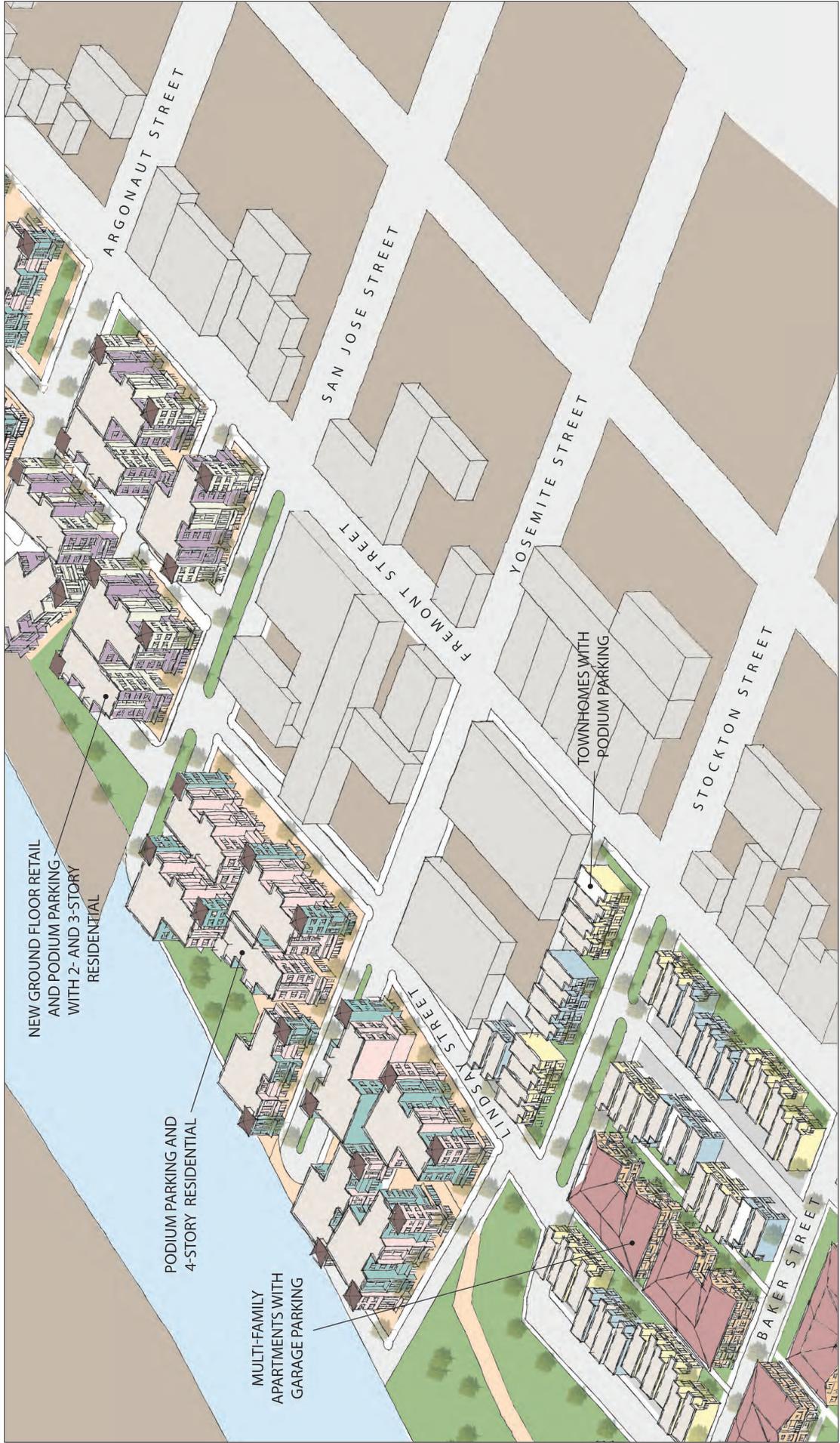


FIGURE 9-8
STOCKTON FREMONT STREET WATERFRONT MIXED-USE (SITE 20)

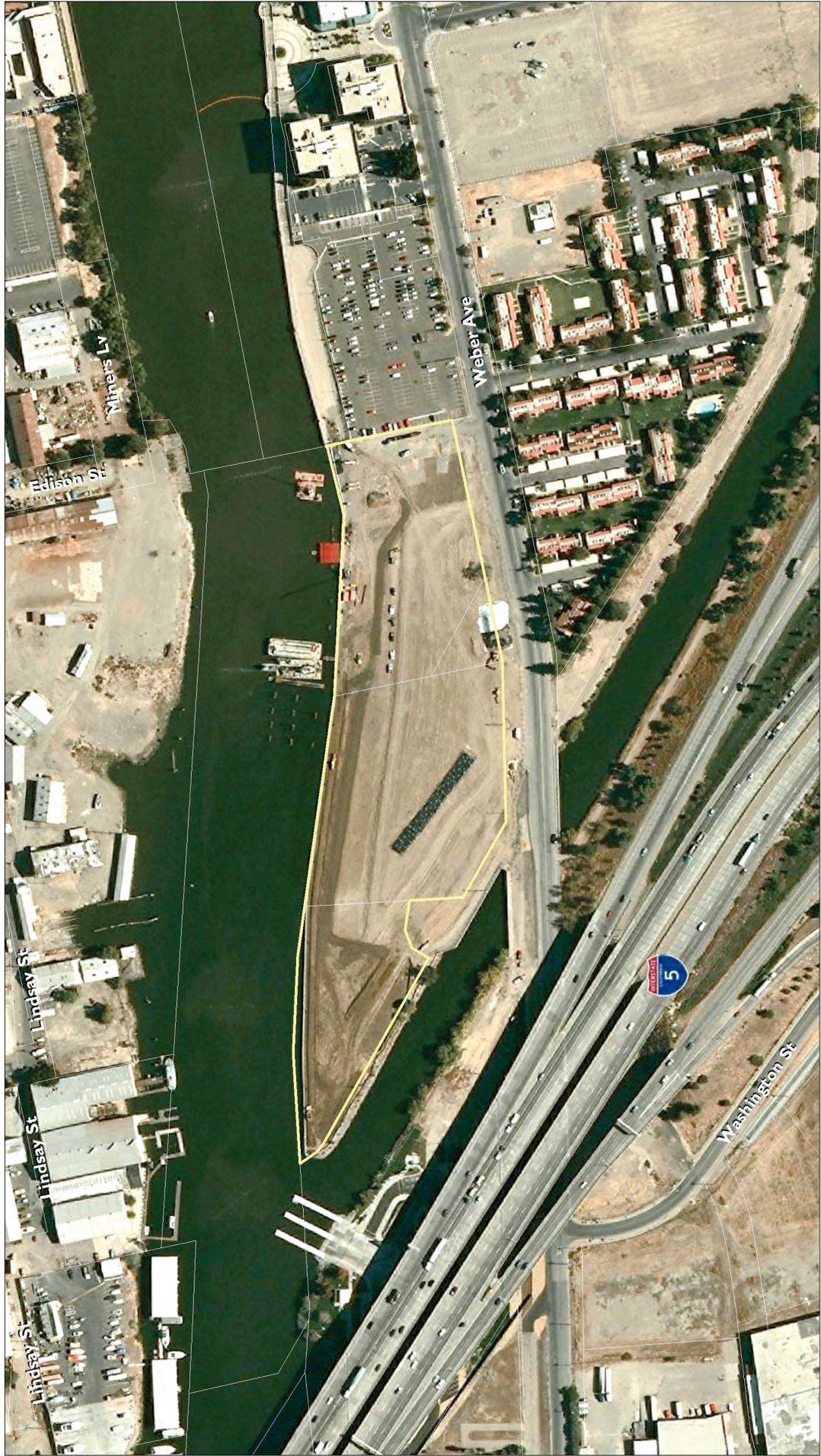


FIGURE 9-9
STOCKTON WEBER AVENUE WATERFRONT MIXED-USE (SITE 21) - EXISTING CONDITIONS

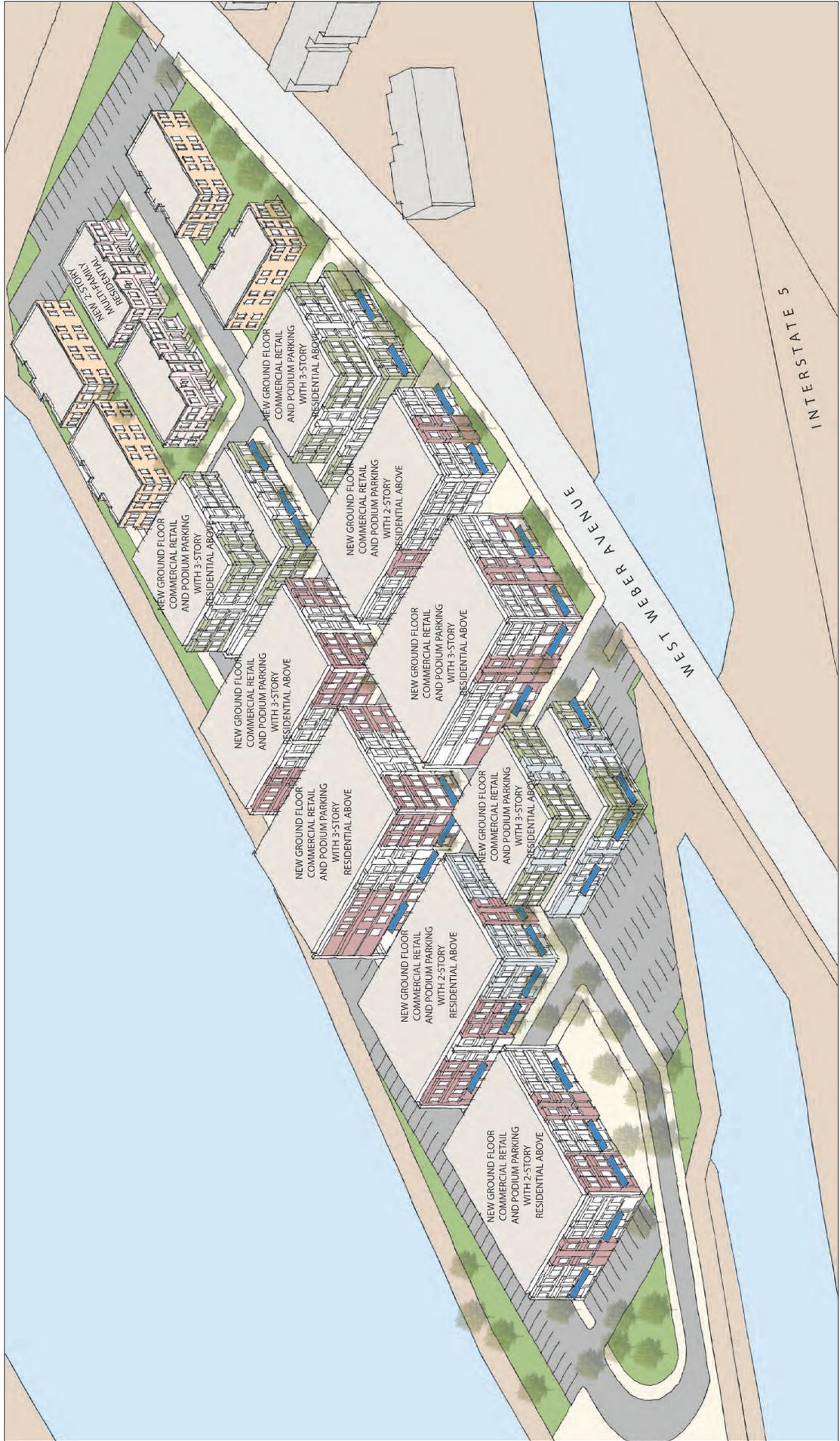


FIGURE 9-10
STOCKTON WATERFRONT MIXED-USE (SITE 21)

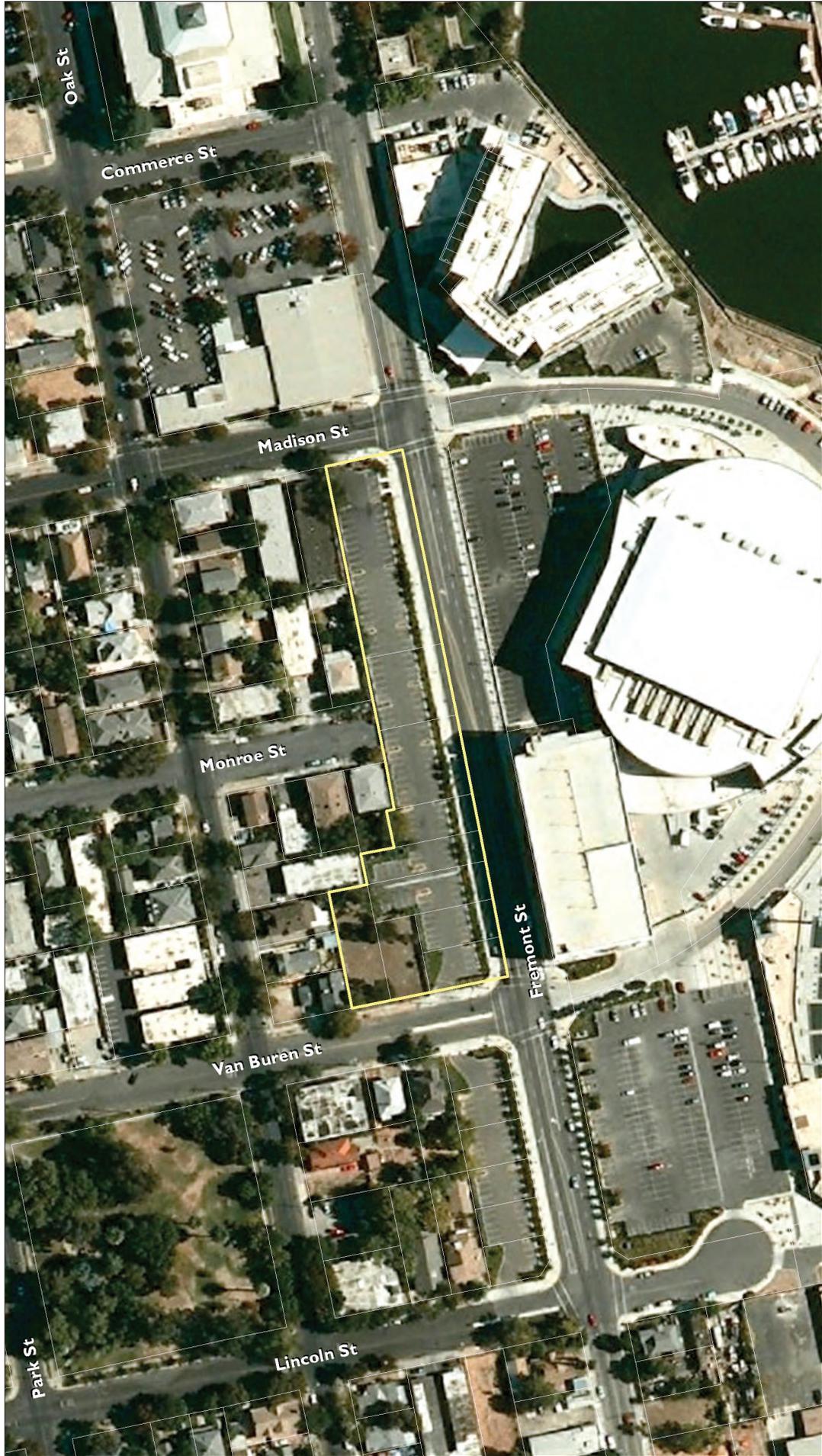


FIGURE 9-11

STOCKTON FREMONT STREET MIXED-USE (SITE 27) - EXISTING CONDITIONS



FIGURE 9-12
STOCKTON FREMONT STREET MIXED-USE (SITE 27)

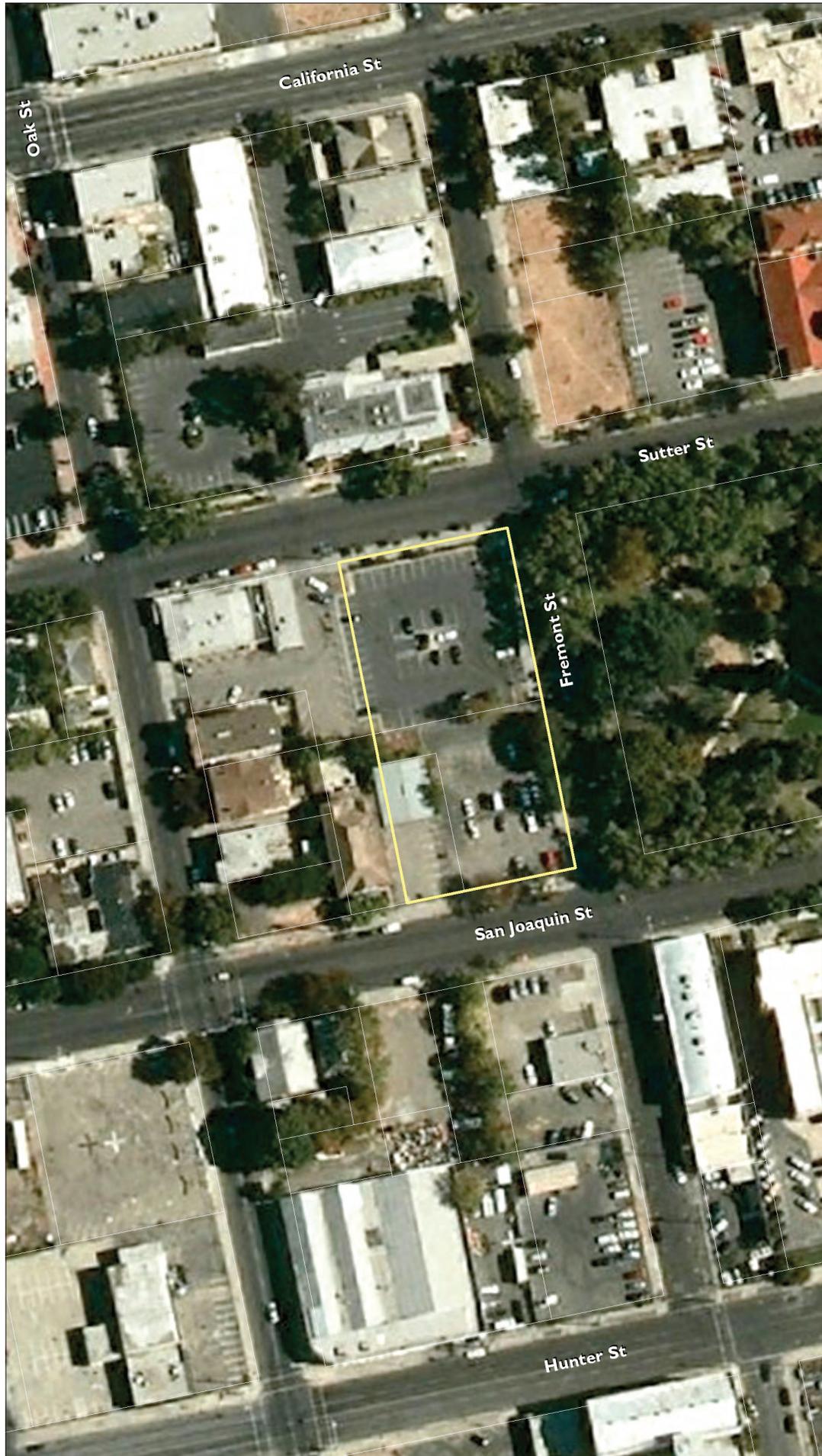


FIGURE 9-13
STOCKTON 4-STORY MIXED-USE (SITE 31) - EXISTING CONDITIONS



FIGURE 9-14
STOCKTON 4-STORY MIXED-USE (SITE 29)

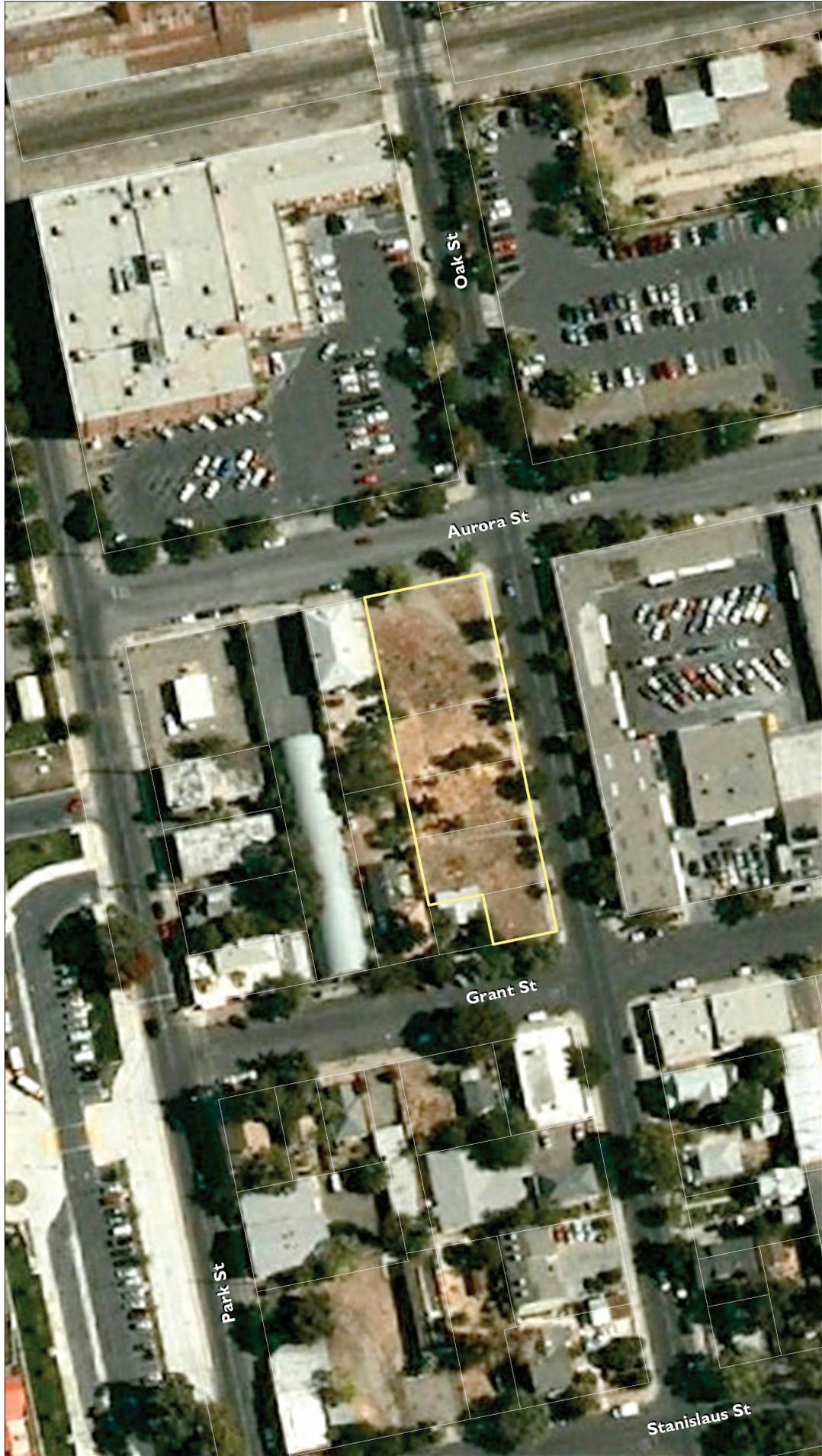


FIGURE 9-15
STOCKTON MIXED-USE OFFICE (SITE 39) - EXISTING CONDITIONS

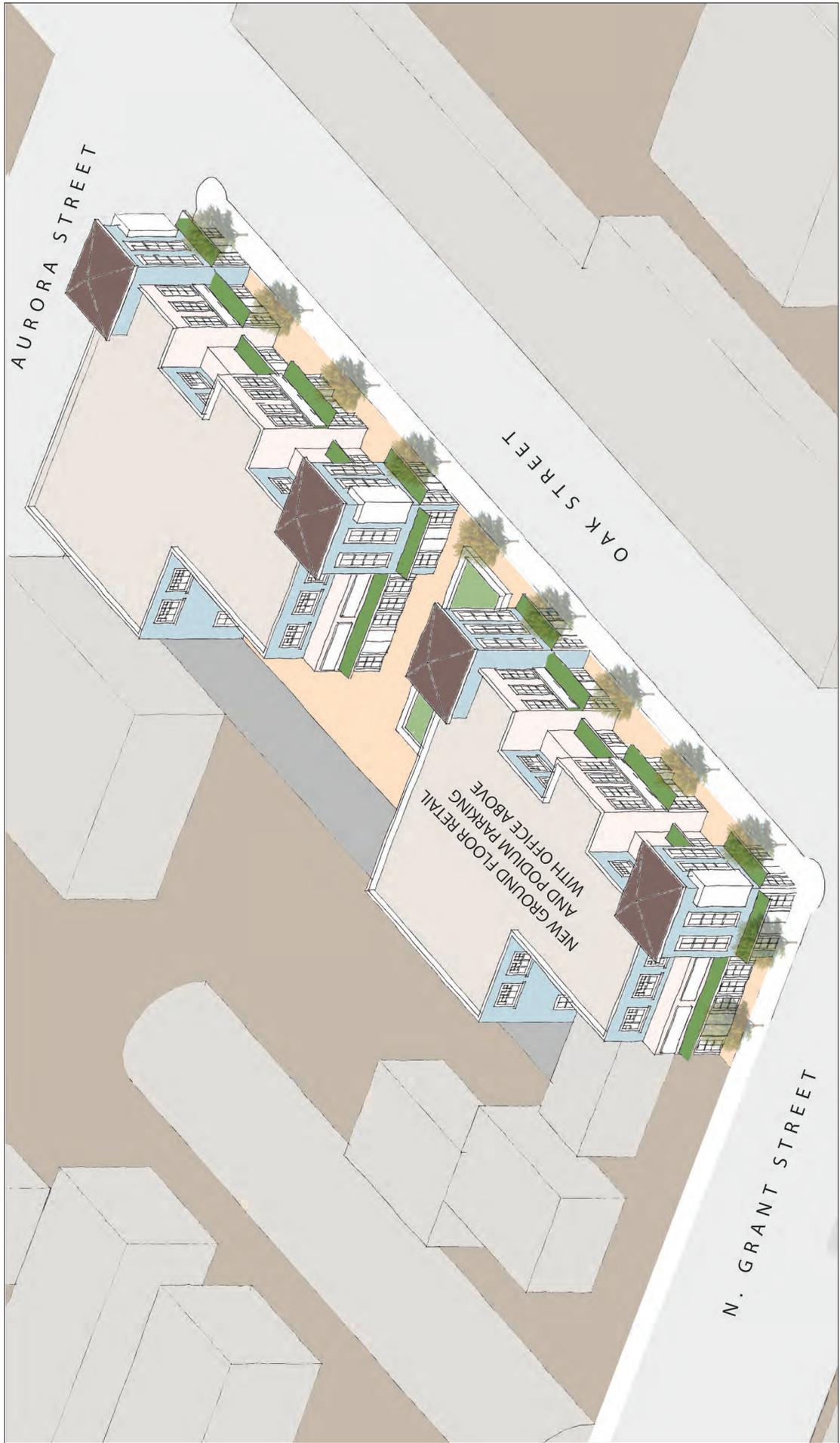


FIGURE 9-16
STOCKTON MIXED-USE OFFICE (SITE 39)

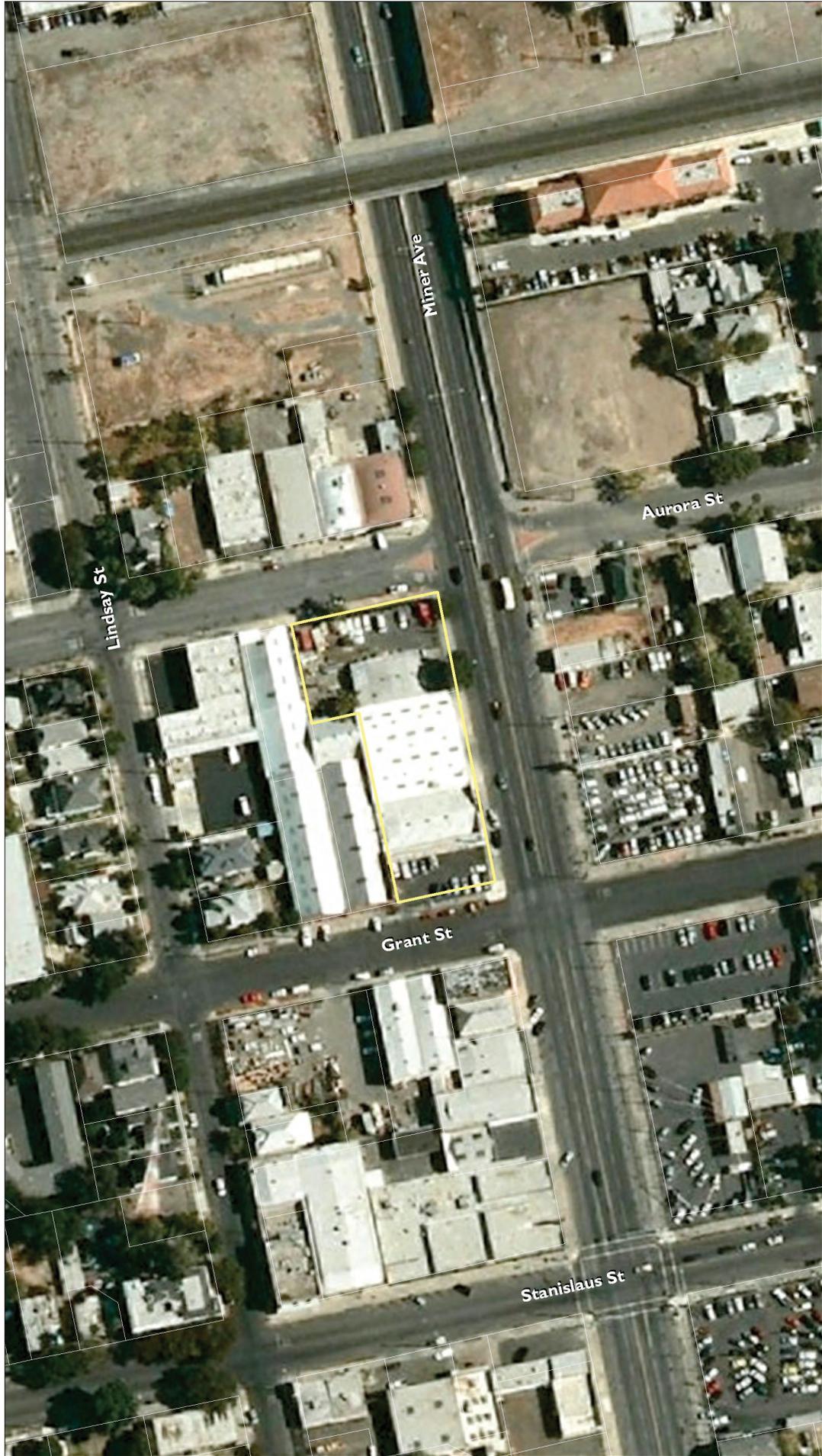


FIGURE 9-17
STOCKTON MINER AVENUE HOUSING (SITE 41) - EXISTING CONDITIONS



FIGURE 9-18
STOCKTON MINER AVENUE HOUSING (SITE 41)



FIGURE 9-19

TRACY MIXED-USE (SITE 46) - EXISTING CONDITIONS



NEW 2-STORY
TOWNHOMES

NEW GROUND FLOOR
COMMERCIAL RETAIL
AND PODIUM PARKING
WITH 2-STORY
RESIDENTIAL ABOVE

FIGURE 9-20
TRACY MIXED-USE ACROSS FROM ACE STATION (SITE 49)

The final five projects depict larger-scale transportation infrastructure efforts, which received scores ranging from 53 to 114 points out of a possible 204 points. In general, these projects did not score as highly as the prior ten because they did not support private development. The exception to this is the Stockton streetscape project on the one-way couplet including El Dorado and Center Streets, which is in an area with significant existing smart growth characteristics. See Figures 9-21 through 9-30 for depictions of the projects, each of which is preceded by an aerial photograph depicting existing conditions on and around the transportation corridor.



FIGURE 9-21

LATHROP STREETSCAPE 7TH STREET - EXISTING CONDITIONS

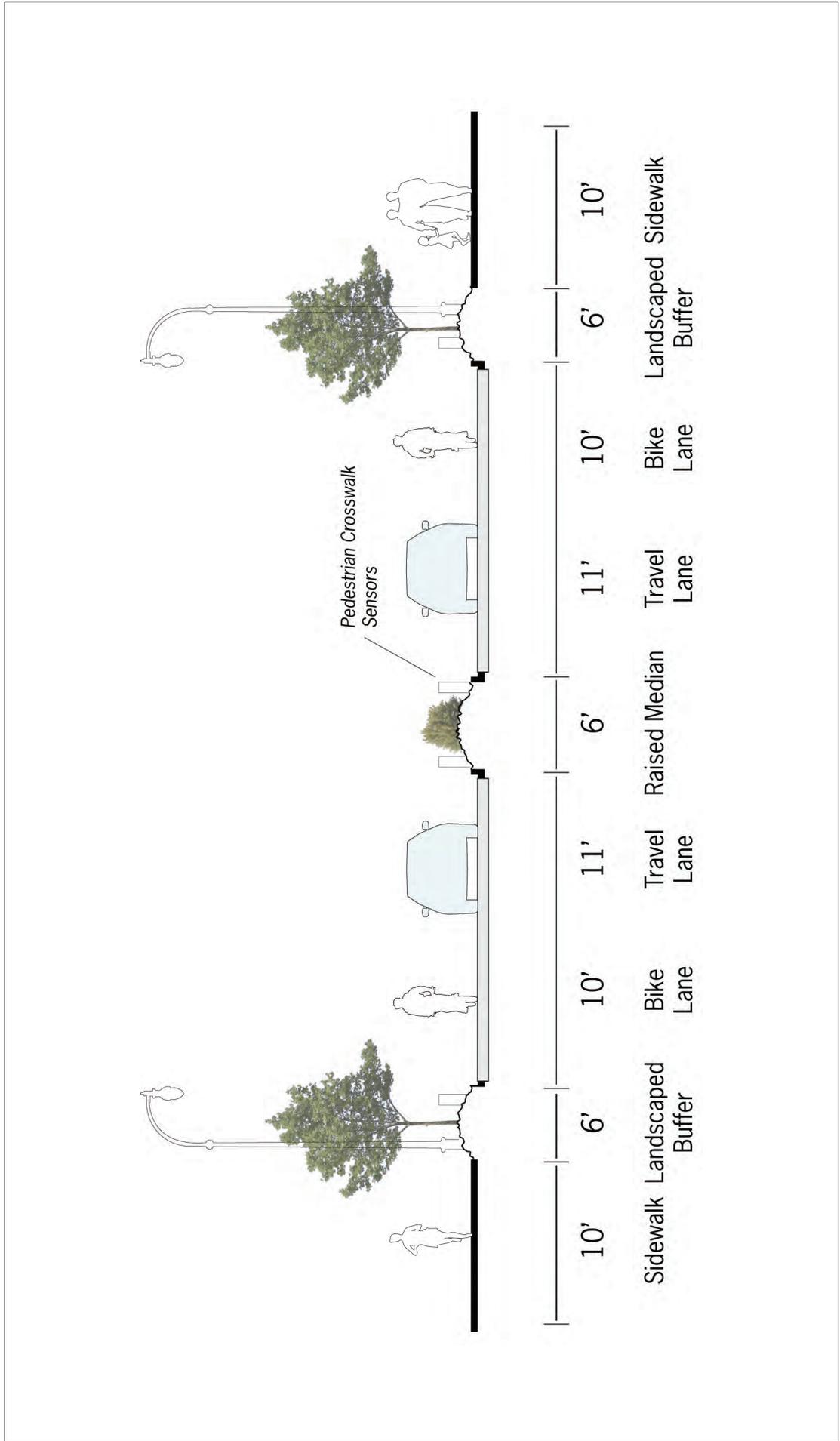


FIGURE 9-22
 LATHROP STREETSCAPE 7TH STREET AT O STREET FACING NORTH

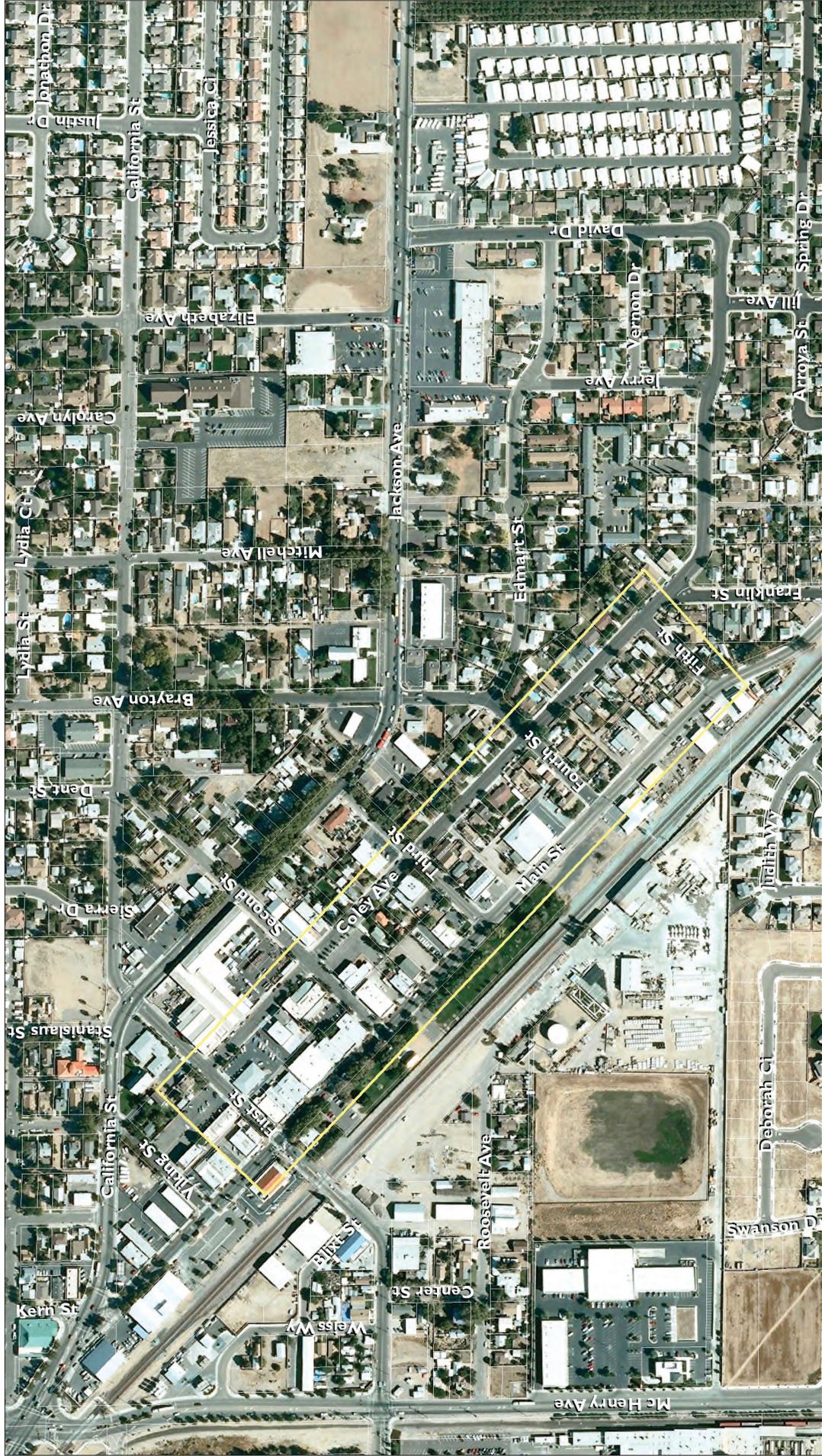


FIGURE 9 - 23

ESCALON STREETSCAPE MAIN STREET - EXISTING CONDITIONS

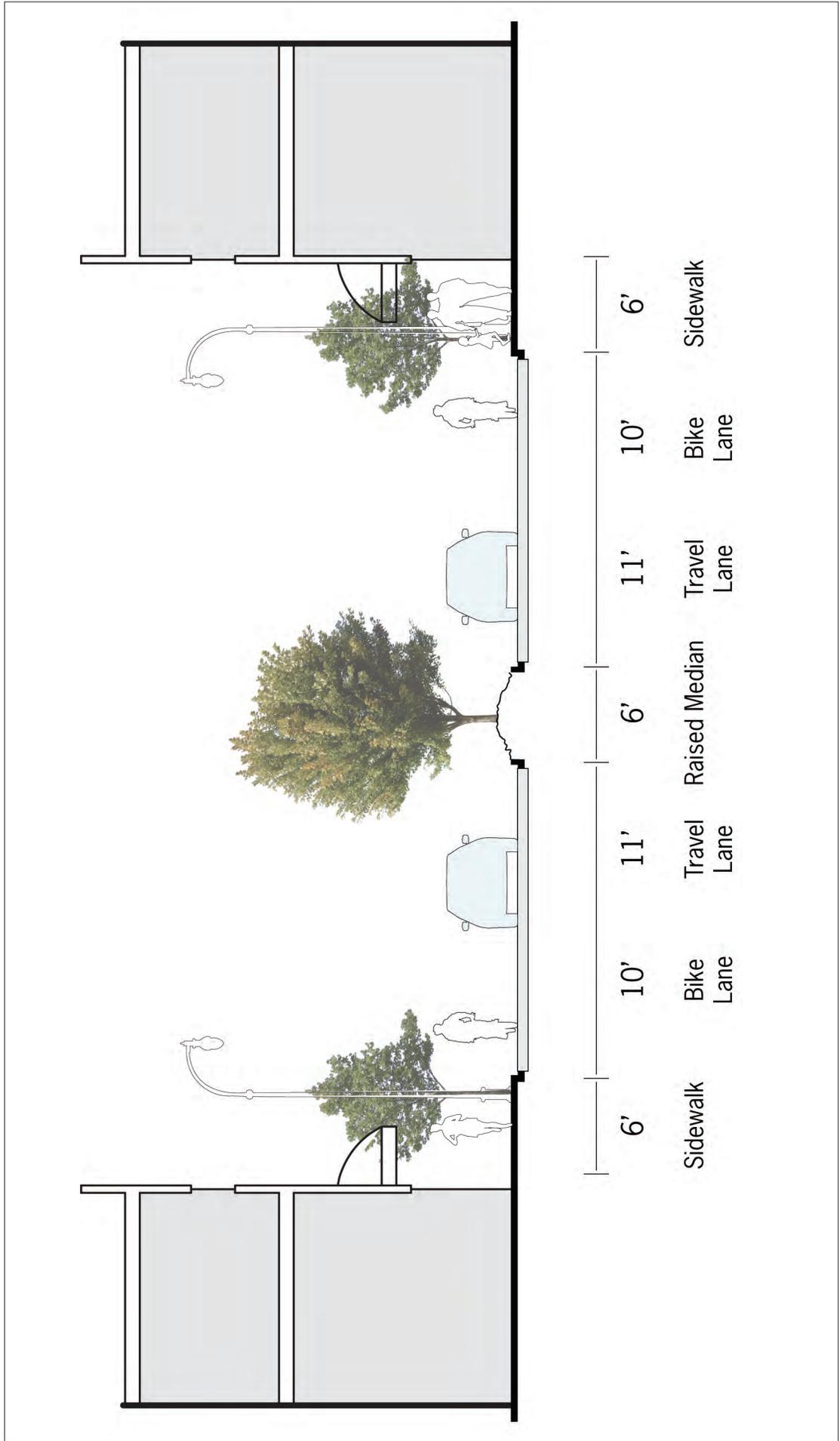


FIGURE 9-24
 ESCALON STREETSCAPE MAIN STREET AT 1ST STREET FACING SOUTHEAST

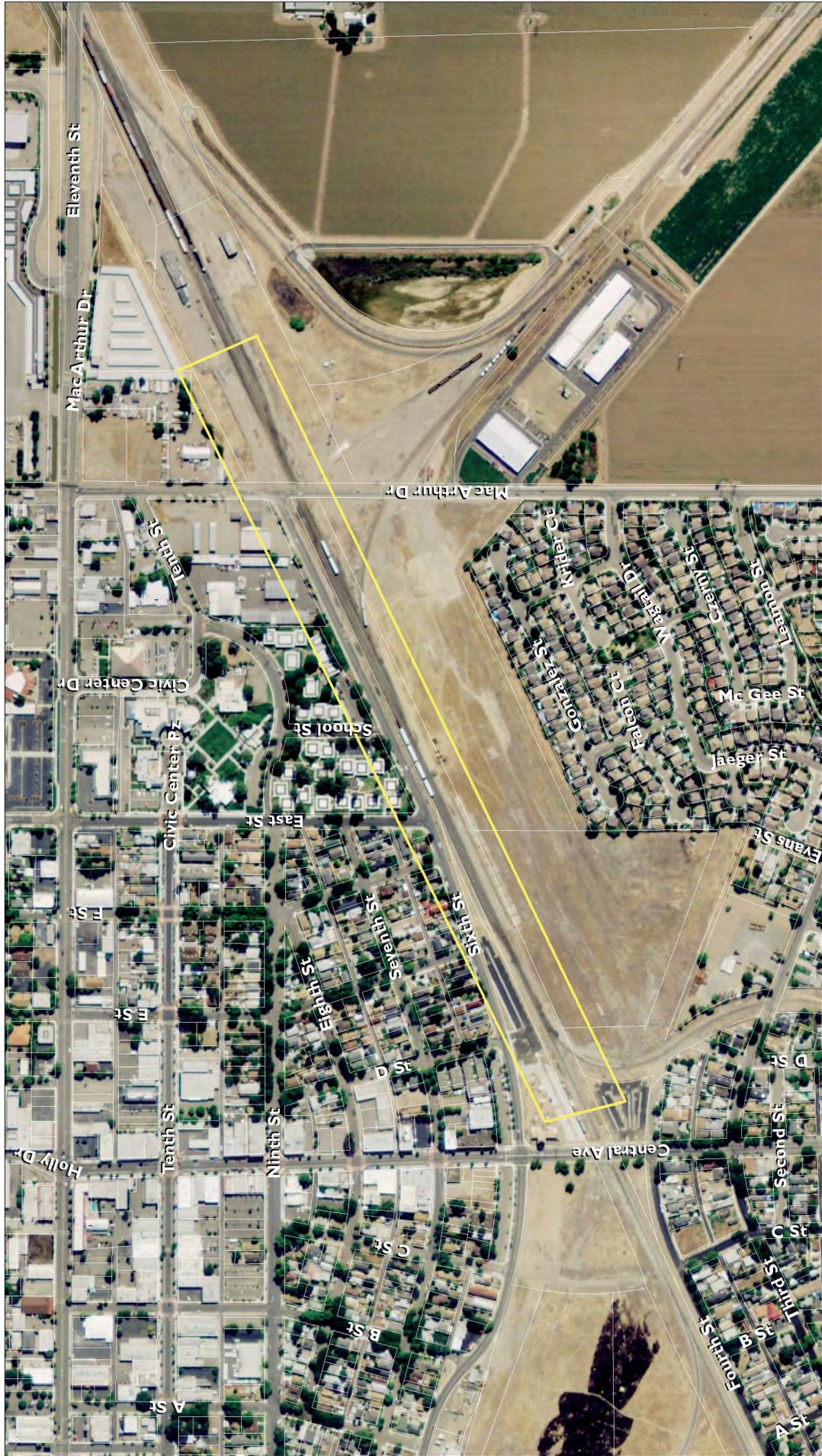


FIGURE 9 - 25
TRACY MULTI-USE TRAIL - EXISTING CONDITIONS

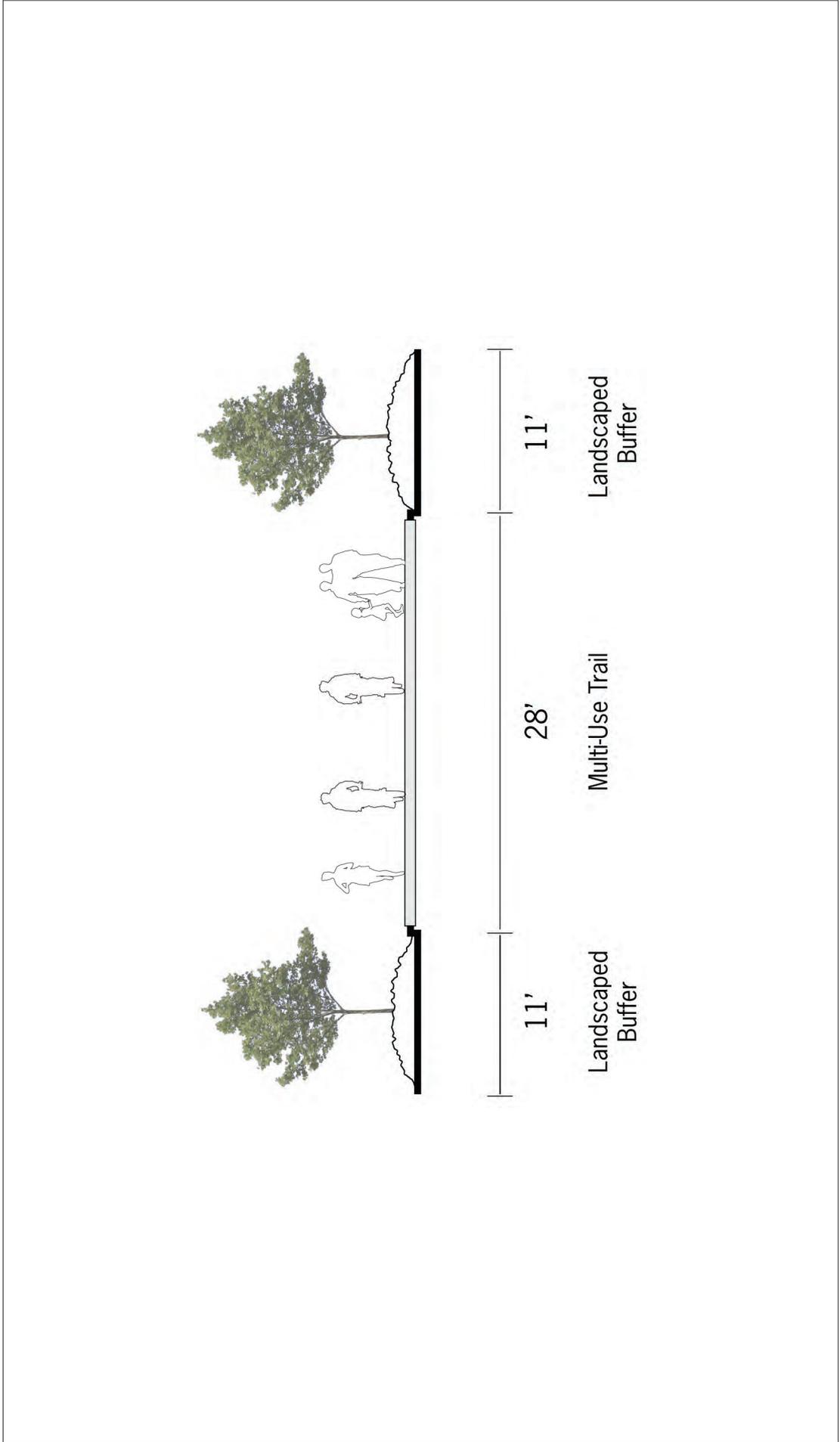


FIGURE 9-26
TRACY MULTI-USE TRAIL



FIGURE 9-27

STOCKTON STREETScape PACIFIC AVENUE - EXISTING CONDITIONS

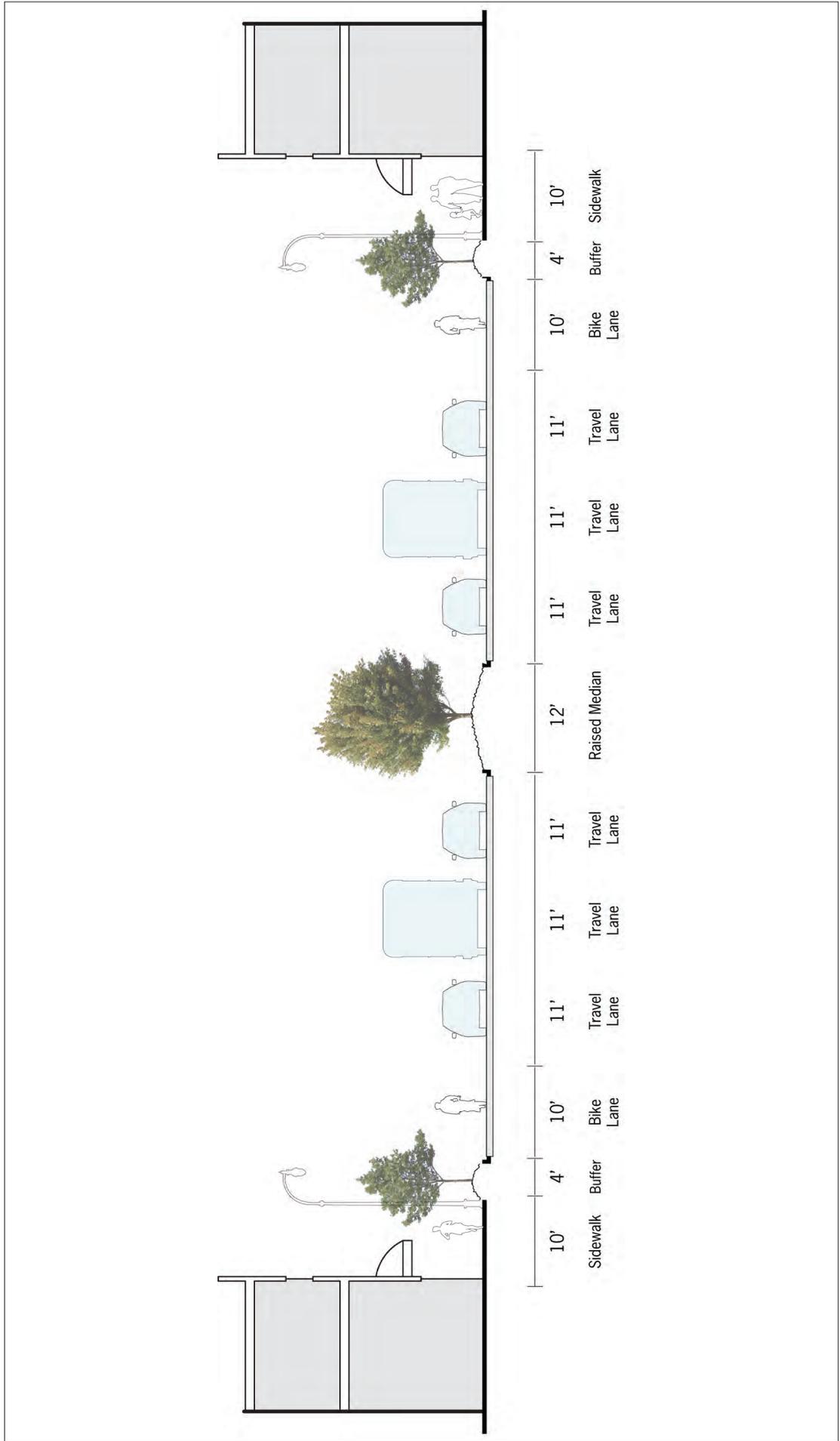


FIGURE 9-28
 STOCKTON STREETSCAPE PACIFIC AVENUE AT MARCH LANE FACING NORTH

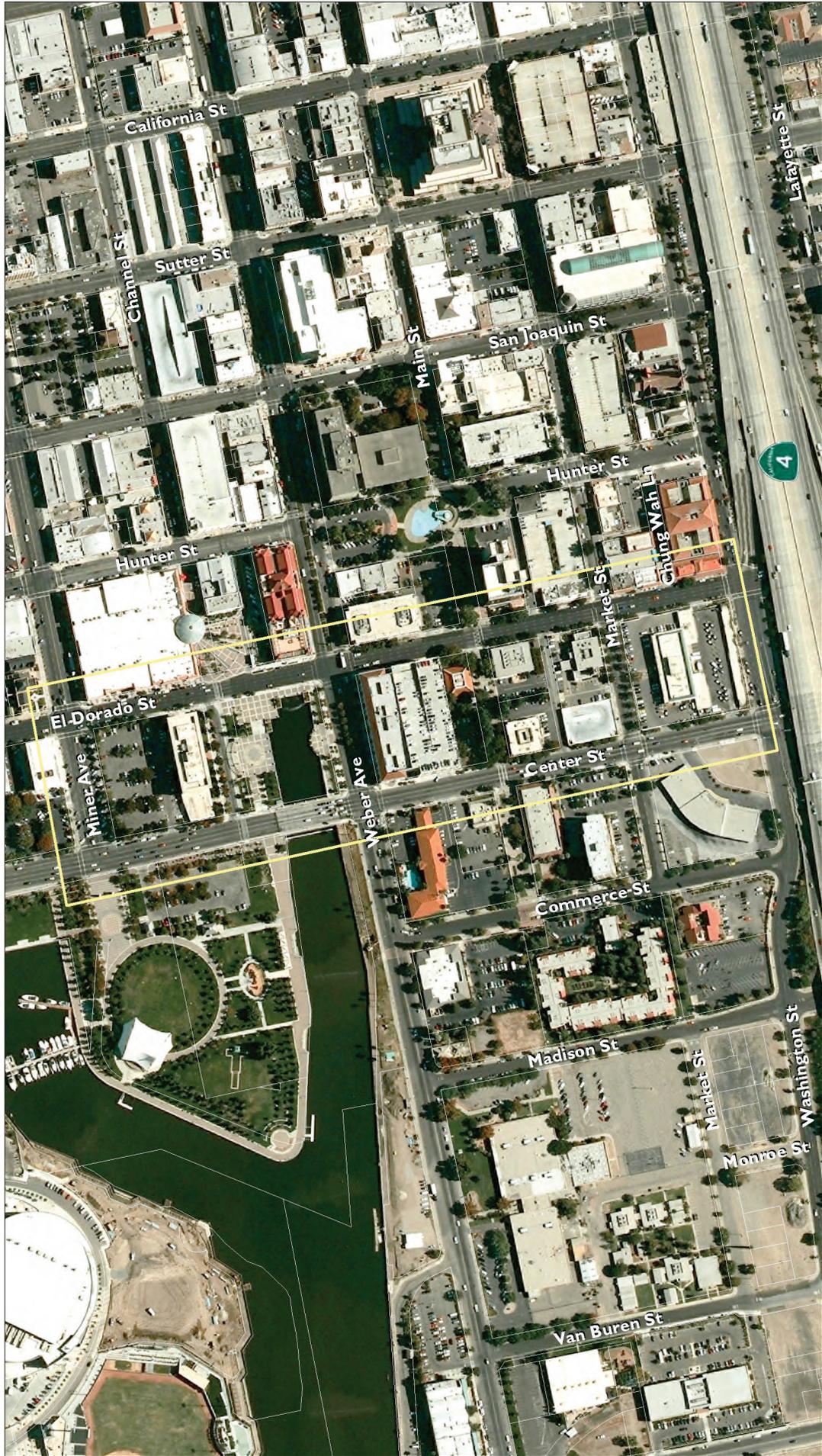


FIGURE 9 - 29

STOCKTON STREETScape EL DORADO AND CENTER STREETS - EXISTING CONDITIONS

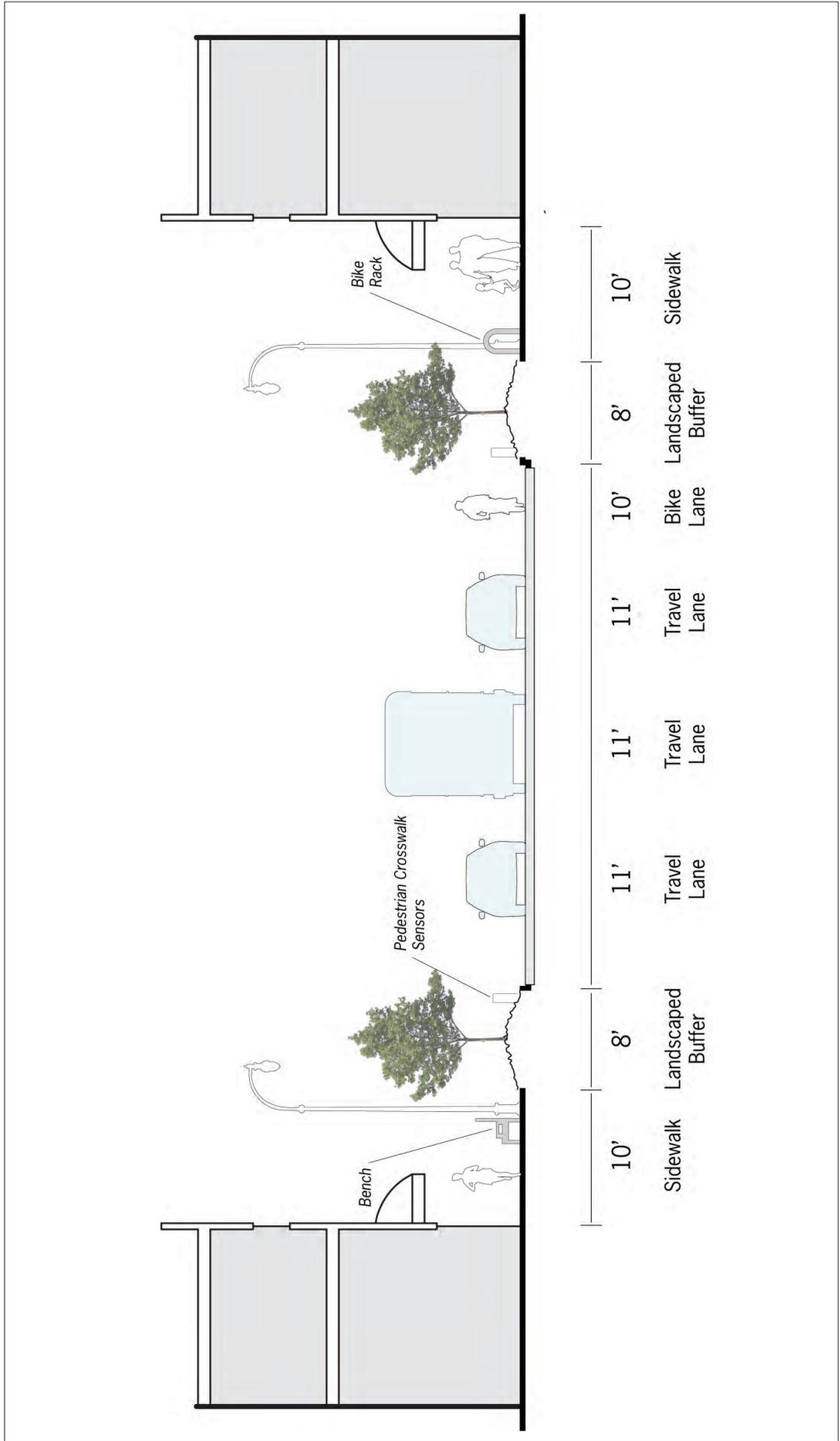


FIGURE 9-30
 STOCKTON STREETSCAPE EL DORADO AT MINER STREET FACING SOUTH
 NORTH / CENTER STREET AT MINER STREET FACING SOUTH

B. Development Feasibility of Prototypical Projects

Of the 15 projects score above, four were selected for financial feasibility analysis. The purpose of this analysis is to understand what a private developer would need to do in order to fund the development of the prototypical projects, and whether a public subsidy would be required to make it feasible.

The financial feasibility of a possible development is analyzed using a development pro forma. A pro forma calculates the costs of development and the revenue flow generated by the final development, adjusting these for the time value of money and the costs to borrow money. The pro forma determines the amount of equity investment (i.e. actual cash) required of the developer and the rate of return on that investment. The pro forma then estimates the financial feasibility of a development project, indicating whether or not the rate of return is sufficiently high to attract a developer to invest in that project.

1. Lease Rates

The rents paid by office, retail, and residential tenants are the income source that repays the development costs. Business tenants are willing to pay some base level of rent just for the building space, and then some premium rent if the location will generate more revenues for their business. Similarly, residential tenants pay some base level of rent just for the building space, and then pay some premium if the housing units provide amenities and location advantages.

During the recession, and even as the economy has started to recover, market conditions have continued to put downward pressure on retail and office lease rates. As the regional and national economies continue to slowly improve, it is possible that lease rates will start to rise. Construction costs, however, will also likely rise somewhat as economic growth returns and the real estate development industry recovers. Thus any benefits of rising lease rates would be offset by rising construction cost.

In contrast, market conditions have put upward pressure on residential lease rates, especially for multi-family housing, since the recession. These market conditions include the conversion of millions of households across the country from owners to renters. Equally as important though, the expected impact of the echo boom generation moving out of their parents' homes and into their first housing has and will continue to drive demand for multi-family housing construction. However, the current multi-family housing construction boom will not likely put upward pressure on residential construction costs until the single-family housing market returns to historical levels.

2. Return on Investment

In a typical development processes, the development firm puts up some of its own money, bringing in an outside investor for the majority of the required equity investment. The developer obtains a construction loan, which might cover most of the development costs and some of the land acquisition costs (with the equity investment covering the remainder of the costs). Upon completion of the project, the developer takes out permanent financing and pays off the construction loan. Typically, the developer would then hold the property for a short period, maybe three to five years, and, with a leasing track record, sell the property. Upon the sale of the property the developer pays off the permanent loan. What is left over after that final payment represents the developer's final return on the initial investment.

Developers and investors most often use the internal rate of return (IRR) to measure the expected return on their investments and to decide whether or not to invest in a particular project. Under current market conditions – namely the economic recession and its slow recovery, the 2008 collapse of the financial services sector and its slow recovery, the loss of wealth from the stock market crash and the 25 to 30 percent decline in real estate values, and the increased investor aversion to risk brought on by these events – there is less money available for investment in development. Conversations with developers, brokers, and investors suggest that an IRR of 20 percent is needed to attract equity investment in development projects today. The pro forma analysis assumes a financial feasibility goal of a 20 percent IRR over the short term,

as the economy and financial markets continue to recover slowly. This might decline to 15 percent in three to five years, if market conditions continue to improve, but the pro forma analysis uses the more conservative 20 percent IRR so as to not oversell the potential for smart growth.

3. Residual Land Value

Residual land value is the amount the developer can afford to pay to acquire the land, given the IRR goal and the amount of development the site can accommodate with its size, shape, and zoning requirements. Because the equity required for a development is directly related to the cost to acquire land and because this cost occurs at the beginning of the project, the land acquisition cost is the one factor that most immediately influences the rate of return.

With an IRR target of 20 percent, the pro forma analysis calculates the remaining variable, the residual land value. A feasibility gap—the difference between the residual land value and the estimated land acquisition cost for each opportunity site—exists when the residual land value is less than the cost to acquire the site. A gap represents the level of subsidy required for redevelopment to occur under near-term market conditions. The feasibility gap percentage, the residual land value expressed as a percentage of the estimated market value, indicates how far off the proposed development is from being feasible under market conditions. In contrast, a feasibility surplus exists when the residual land value exceeds the cost to acquire the site. A surplus would represent the additional return the developer can expect, the ability to provide additional investment in the project for public benefit, or the additional payment for land acquisition that might be necessary to induce a hesitant seller to part with their property.

4. Pro Forma Summaries

The development pro forma is summarized for each opportunity site in the following four sections. A sample pro forma summary is presented and explained below. Full pro forma results are provided in Appendix E.

Development Cost Summary

(1) Total Development Cost

(2) Amount Financed

(3) Equity Required

Financial Feasibility Summary

(4) IRR without subsidy

(5) Residual Land Value @ 20% IRR

(6) Site's Estimated Market Value

(7) Excess Value/(Subsidy Required)

a. **Development Cost Summary**

This section describes the cost to develop the project. If the project is for sale, then these costs reflect total cost through sale of units. If the project is developed for lease, these costs reflect total cost through the lease up of units. Costs of ongoing operations and maintenance until the project is sold, assumed to be five years after construction, are not included in the development cost summary but are reflected in the overall financial feasibility. All costs are detailed in the full pro forma results in the Appendix E.

- ◆ **Total Development Cost.** The total cost to develop the project, including land acquisition, design and engineering, site preparation, construction, and financing.
- ◆ **Amount Financed.** The portion of the total development cost that would likely be financed through a construction loan.
- ◆ **Equity Required.** The difference between the total development cost and the amount financed is the equity investment required of the developer. The project's financial feasibility, measured by the internal rate of return (IRR), is based on this level of equity investment.

b. Financial Feasibility Summary

This section describes the project's financial feasibility. If the project is for sale, the analysis calculates the return based on the ultimate sales price of the project, including taxes and sales commission. If the project is developed for lease, the analysis assumes that the project would be sold after five years of operation and the financial analysis includes the return from the project's ultimate sale price plus the profits over five years of operations.

- ◆ **IRR without Subsidy.** The development cost summary reflects the subsidy necessary to make the project financially feasible. The subsidy is usually in the form of a write-down on the land acquisition cost. In contrast, this datum reflects the IRR the project would generate without any subsidy.
- ◆ **Residual Land Value.** Indicates the amount that a developer could afford to pay for the land, excluding sales commission, due diligence, etc., and earn a 20 percent IRR.
- ◆ **Site's Estimated Market Value.** Reflects the market value at which the site might be purchased, excluding any sales commissions, due diligence, etc. Market value was estimated based on an assessment of other property sales in the area. This estimate does not reflect an appraisal of the site and it should not be used for making investment and other decisions. This estimate is intended solely to illustrate the relative feasibility of a conceptual development scenario for the site.
- ◆ **Excess Value/(Subsidy Required).** The difference between the site's estimated market value and the residual land value. In some cases, the feasibility gap is greater than the site's estimated market value, indicating that the project, to be financially feasible, would require a subsidy, such as a write down of the land acquisition cost and possibly an additional subsidy.

5. Opportunity Site: Ripon #17

This is a 0.7-acre site that is vacant except for one 3,100-square foot building at the north end of the site. The prototypical scenario would redevelop the site with one vertical mixed-use building and structured parking. The mixed use

building would include 8,000 square feet of retail space on the front portion of the property. It would have two stories of residential units above the retail, with 18 units averaging about 1,030 square feet. The parking structure would provide 80 spaces, with 1 space per 1,000 square feet of retail and 2.7 spaces per residential unit. The overall development would have a 0.9 FAR, with 3,100 square feet of landscaped open space.

The pro forma analysis, summarized in Table 9-2, estimates the site's current value at \$196,000. However, to achieve an IRR of 20%, the analysis finds that the project would require a subsidy of \$1.7 million: a complete write-down of the site's estimated market value plus an additional \$1.5 million. With this subsidy, the total cost to develop the site is \$4.7 million. Of this, 85.7 percent would likely be financed, requiring an equity investment of \$673,000 from the developer.

The parking required for this development under existing zoning is a barrier to development feasibility. If the City could reduce the amount of parking required, the project could be developed without structured parking. Without the structure, the site could accommodate 50 surface parking spaces. This would result in 1.8 spaces per residential unit and 2 spaces per 1,000 square feet of retail building space. Developed with surface parking only, the project would generate an IRR of 29.1 percent, or an excess value of \$334,000, which could perhaps be used to purchase additional off-site parking.

TABLE 9-2 **OPPORTUNITY SITE: RIPON #17 DEVELOPMENT PRO FORMA SUMMARY**

Development Cost Summary	
Total Development Cost	\$ 4,719,000
Amount Financed	\$ 4,046,000
Equity Required	\$ 673,000
Financial Feasibility Summary	
IRR Without Subsidy	5.5%
Residual Land Value @ 20% IRR	\$ (1,505,000)
Site's Estimated Market Value	\$ 196,000
Subsidy Required for 20% IRR	\$ (1,700,900)

Source: The Planning Center | DC&E, 2011.

6. Opportunity Site: Tracy #49

This is a 6.5-acre vacant site, covering the southern portion of Site 49. The development scenario would have the site developed with five vertical mixed-use buildings and ten residential buildings. The mixed-use buildings would have podium parking structures, with a total 27,200 square feet of office or retail space on the ground floor and two levels of residences on top. The ten residential buildings would all be two-story multi-family residences. The project would provide 85 total residential units, averaging about 800 square feet each, 152 spaces in the parking structures, and 90 uncovered surface parking spaces. The overall development would have 76,250 square feet of landscaped open space, 27 percent of the site area.

The pro forma analysis, summarized in Table 9-3, estimates the site's current value at \$2.3 million. However, to achieve an IRR of 20 percent, the analysis finds that the project would require a subsidy of \$3.8 million: a complete

TABLE 9-3 **OPPORTUNITY SITE: TRACY #49 DEVELOPMENT PRO FORMA SUMMARY**

Development Cost Summary	
Total Development Cost	\$18,883,000
Amount Financed	\$16,191,000
Equity Required	\$ 2,692,000
Financial Feasibility Summary	
IRR without subsidy	6.7%
Residual Land Value @ 20% IRR	\$ (1,573,000)
Site's Estimated Market Value	\$ 2,272,000
Subsidy Required for 20% IRR	\$ (3,845,000)

Source: The Planning Center | DC&E, 2011.

write-down of the site's estimated market value plus an additional \$1.6 million. With this subsidy, the total cost to develop the site is \$18.9 million. Of this, 85.7 percent would likely be financed, requiring an equity investment of \$2.7 million from the developer.

The total feasibility gap for this development scenario is about \$3.8 million. The pro forma estimates the cost of the parking structures at \$3.3 million. If this development were completely surface-parked, the project would still require a subsidy to be financially feasible. However, if another level of residential units were added to each of the buildings, the feasibility gap would be reduced to only the estimated value of the land, although this would reduce the amount of parking provided per unit.

7. Opportunity Site: Stockton #21

This is a 9.1-acre vacant site. The development scenario would have the site developed with six vertical mixed-use buildings and nine residential buildings.

Several of the residential-only buildings could be developed with ground floor retail or office uses. The mixed-use buildings would have podium parking structures, with a total 54,200 square feet of office or retail space on the ground floor and two or three levels of residences on top. The residential buildings would be 2- to 4-story multi-family residences. The project would provide 194 residential units, averaging about 1,200 square feet each, 328 spaces in the parking structures, and 132 uncovered surface parking spaces. The overall development would have a 0.7 FAR, with 103,550 square feet of landscaped open space, 26 percent of the site area.

TABLE 9-4 *OPPORTUNITY SITE: STOCKTON #21 DEVELOPMENT PRO FORMA SUMMARY*

Development Cost Summary	
Total Development Cost	\$57,270,000
Amount Financed	\$48,090,000
Equity Required	\$ 9,180,000
Financial Feasibility Summary	
IRR without subsidy	18.2%
Residual Land Value @ 20% IRR	\$ 2,813,000
Site's Estimated Market Value	\$ 3,644,000
Subsidy Required for 20% IRR	\$ (831,000)

Source: The Planning Center | DC&E, 2011.

The pro forma analysis, summarized in Table 9-4, estimates the site's current value at \$3.6 million, and finds that the total cost to develop the site is \$57.3 million. Of this, 84.0 percent would likely be financed, requiring an equity investment of \$9.2 million from the developer. The pro forma analysis finds the development scenario would create a residual land value of \$2.8 million, about 68 percent of the estimated market value of the land.

Without a subsidy, the development scenario would achieve a 15.7 percent IRR. To achieve a 20 percent IRR, the development scenario produces a feasibility gap of \$831,000. However, adding 20 more residential units would eliminate the feasibility gap.

8. Opportunity Site: Stockton #29

This is a 0.9-acre site with an existing 2,450-square foot building. The development scenario would redevelop the site with a vertical mixed use building, with podium parking, wrapped with 10,600 square feet of ground-floor retail facing the street, and three levels of residential above. The project would provide 50 residential units, averaging about 1,010 square feet. The development would include 54 uncovered parking spaces and 28 covered parking spaces. The overall development would have a 1.6 FAR, with about 1,000 square feet of landscaped open space.

The pro forma analysis, summarized in Table 9-5, estimates the site's current value at \$716,300, and finds that the total cost to develop the site is \$11.8 million. Of this, 83.4 percent would likely be financed, requiring an equity investment of \$1.9 million from the developer. The pro forma analysis finds the development scenario would create a residual land value of \$779,000 about 8.8 percent higher than the estimated market value of the land.

Without a subsidy, the development scenario would achieve a 20.7 percent IRR. At a 20% IRR, the development scenario produces an excess value of \$62,700 above the estimated market value. This excess value could be used by the developer to provide a slightly higher payment for the site, which might help induce the current property owner to sell. It could also be used to enhance the landscaping, architectural features, or amenities of the project. Either way, the financial feasibility analysis indicates that this site could be redeveloped to achieve smart growth principles without a public subsidy.

TABLE 9-5 *OPPORTUNITY SITE: STOCKTON #29 DEVELOPMENT
 PRO FORMA SUMMARY*

Development Cost Summary	
Total Development Cost	\$ 11,810,000
Amount Financed	\$ 9,866,000
Equity Required	\$ 1,944,000
Financial Feasibility Summary	
IRR without subsidy	20.7%
Residual Land Value @ 20% IRR	\$ 779,000
Site's Estimated Market Value	\$ 716,300
Excess Value	\$ 62,700

Source: The Planning Center | DC&E, 2011.

C. Financial Feasibility of Smart Growth in San Joaquin County

The pro forma analyses described in this chapter suggests that under current market conditions, smart growth development would likely require some level of subsidy. The analysis did not consider conventional low-rise development, and it may be the case that such development would also not be financially feasible under current market conditions.

The Ripon and Tracy sites show that higher density development, which requires structured parking, may not be financially feasible in smaller communities where lease rates and land values are not high enough to warrant the added cost of such parking. However, both pro forma analyses show that the development scenarios were feasible with a subsidy. In contrast, both development scenarios in Stockton are nearly feasible without a subsidy. This finding suggests that further exploration of development standards, especially density and parking, might elicit ways that smart growth would be financially

feasible without any subsidy. Some recommendations for policies that would support such standards are included in Chapter 11.

10 SMART GROWTH FUNDING MECHANISMS

As was described in Chapter 9, the sample projects reviewed for financial feasibility all had a funding gap. In some cases, it is possible to reduce or eliminate this gap by increasing the allowable density and intensity of development and by reducing development standards for parking and open space. Such approaches may not be feasible due to community desires or market feasibility. For example, in communities without effective public transit, developers often stay away from projects that can provide limited parking.

Public subsidies may be required to overcome feasibility gaps. Until 2012, redevelopment agency funding was often used to write-down land costs and to subsidize parking. However, redevelopment agencies no longer exist in the form they have in recent decades. Although future legislation may recreate some form of redevelopment, it is unlikely that the funding will be as available or as straightforward to utilize.

In the absence of redevelopment agency financing, municipalities have three basic sources to provide a financial subsidy as an incentive to make smart growth development financial feasible:

- ◆ **General Fund.** Local governments always have been and will continue to be able to provide cash subsidies from their general funds, either directly or through general obligation bonds. In this era of highly constrained municipal budgets, however, most if not all San Joaquin County municipalities will not have spare money available. We do not explore this option further in this report, but it does remain a viable, if unlikely, source of funding to offset feasibility gaps.
- ◆ **Financing Districts.** State law authorizes local governments to establish a variety of special financing districts. These districts can provide many different types of improvements and services which can create some level of financial subsidy for smart growth development. While it is unlikely that these districts would provide the same level of subsidy that redevelopment agencies were able to provide, they can be used creatively to generate financing for smart growth.

- ◆ **Grant Funding.** Federal and state grants can provide financial resources for smart growth development. While free money can be attractive, it can also be difficult to time the application and award of grants to coincide with proposed developments.

This chapter describes several special financing districts that may be used to provide some level of subsidy for desired smart-growth development. This chapter also identifies some grant programs that local governments can use to fund infrastructure and other physical improvements, independently or in concert with an individual redevelopment project. There are many State grant programs that are not currently funded, and it is not clear if and when those programs may again be funded. Such unfunded programs are not identified in this report.

A. Special Funding District Basics

A funding district is a group of parcels upon which a city levies a special assessment to pay the cost of public improvements from which the parcels receive a special benefit. There are four key elements within this definition.

1. District Boundaries

A funding district is a geographical area, a set of specific, defined parcels. The city identifies and maps the parcels prior to establishing the funding district. Funding districts can be quite large, with no statutory maximum size, except that a city cannot include parcels that are not part of the city. At the same time, districts can be as small as a single parcel. Some types of districts can be enlarged in subsequent years. Districts are not necessarily uniform. Districts can have zones such that not all parcels are assessed the same amount or even assessed for the same improvements.

2. Public Improvements

Even though the various forms of funding districts pay for or provide different sets of improvements and services, they are all generally authorized only to provide public improvements and services. The sections describing the

forms of funding districts list the types of improvements and services each provides. With the elimination of redevelopment agencies, some local governments will likely, over time, push the envelope of what constitutes a public improvement.

3. Special Benefit

The most critical element to understand about funding districts is special benefit. When a local government makes a public improvement that benefits the general public, the general public must pay for that improvement. In contrast, when a group of property owners will receive a particular benefit from an improvement, a benefit that the public does not generally share in, then the cost of that improvement may be apportioned to those properties receiving the special benefit.

When establishing a funding district, the municipality must determine which improvements provide a special benefit and which provide a general benefit. The district may then recoup the cost of the special benefit from those properties receiving the benefit, while the municipality must pay for the cost of the general benefit.

4. Special Assessment

The assessment that cities levy on real property through an funding district is a property tax. But it is not an ad valorem tax. Ad valorem taxes are based on the value of the property, and, importantly, Proposition 13 limits ad valorem property taxes to no more than 1 percent of the property value unless a higher rate is approved by a two-thirds majority vote.

Because the assessment is not an ad valorem tax, it does not enter into the Proposition 13 calculations. That is, the assessment may cause the property owner to owe more than 1 percent of the property value in property tax. Funding districts must be approved by a vote of the district property owners, but that vote need only be a majority.

B. Special Funding District Types

State law authorizes numerous forms of funding districts to satisfy a variety of purposes. This section describes six types of districts that could be relevant to facilitating and incentivizing smart growth development:

1. Assessment Districts
2. Parking Districts
3. Contractual Assessments
4. Business Improvement Districts
5. Landscaping and Lighting Maintenance Districts
6. Community Facilities Districts

1. Assessment Districts

Assessment districts can finance the construction of public improvements on public property, public rights-of-way, and public easements. The public must pay for the portions of the improvements that provide general benefit to the public at large, but real property that receives a special benefit may be assessed for the costs, proportional to the level of benefit received.

Three different provisions of State law authorize assessment districts. In addition, many charter cities have established their own assessment bond authorizing procedures under their municipal affairs powers):

- ◆ Improvement Bond Act of 1915 (Streets and Highways Code Sections 8500 et seq.)
- ◆ Improvement Act of 1911 (Streets and Highways Code Sections 5000 et seq.)
- ◆ Municipal Improvement Act of 1913 (Streets and Highways Code Sections 10000 et seq.), which contains only provisions for establishing assessment districts

Assessment districts are intended to finance construction of physical improvements. They cannot pay for operations and maintenance, or additional

services. If additional improvements are desired after an assessment district is established, the entire process is required for those additional improvements. Generally, assessment districts can be used to finance the following improvements:

- ◆ Local streets
- ◆ Streetlights
- ◆ Parks
- ◆ Landscaping
- ◆ Sidewalks
- ◆ Sanitary sewers
- ◆ Water supply and distribution facilities
- ◆ Gas and electric power
- ◆ Flood control and drainage improvements
- ◆ Parking facilities

An assessment district can finance physical improvements, but not ongoing operation and maintenance costs.

2. Parking Districts

Parking districts are a limited form of an assessment district, used to fund the construction and operation of public parking spaces, lots, garages, and meters. In addition to assessments revenues, these districts can use ad valorem property tax revenues for operations and maintenance as well as acquisition and construction. These districts may also obtain revenue from parking meters for operations and maintenance.

Three different provisions of state law authorize parking districts:

- ◆ Vehicle Parking District Law of 1943 (Streets and Highways Code Sections 31500 et seq.)
- ◆ Parking Law of 1949 (Streets and Highways Code Sections 32500 et seq.)
- ◆ Parking District Law of 1951 (Streets and Highways Code Sections 35100 et seq.)

3. Contractual Assessments

Contractual assessments provide a limited alternative method to use assessment districts to pay for public improvements. A city can establish a contractual assessment program, creating guidelines that identify the types of improvements, costs, and locations. If and when a property owner in the identified area is interested in participating, that owner can voluntarily enter into a contractual assessment. Because the program is completely voluntary and because it applies to only one property at a time, there is no voting, balloting, or engineer's report. Typically the program authorizes the city manager or some other staff position to execute the contract on behalf of the city, thus eliminating the need for a public hearing.

These assessments are authorized by Contractual Assessments (part of the Improvement Act of 1911) (Streets and Highways Code Sections 5898.10 et seq.). Although this authority has existed for 100 years, this code section became better known with the passage of AB811, which amended the code to allow contractual assessments to pay for energy efficiency and renewable energy improvements, most commonly for residential solar energy retrofits. Because such improvements are different from the traditional public improvements, there is some question about the validity of using contractual assessments to pay for such improvements.

Contractual assessments are most commonly applied in areas that were developed as unincorporated county jurisdiction and lack complete sidewalks and curbs and gutters. As individual owners or groups of owners decide they want these improvements, they can enter into contractual assessments with the city, and pay for the improvements over time. However, cities usually provide the funds up front rather than issuing assessment bonds.

4. Business Improvement Districts

Business improvement districts (BIDs) are public-private partnerships to improve the attractiveness and functionality of a business district, improve the business climate, help existing businesses grow and prosper, attract new businesses, and attract more visitors and customers to the district.

There are two types of BIDs. Business-based BIDs (often denoted as B-BIDs) are funded through assessments levied on individual businesses, not properties, in the district, usually through the municipalities business license fee. Property-based BIDs (often denoted as P-BIDs) are funded through assessments on real property, similar to the standard assessment district. Generally, businesses are less willing to agree to significant levels of assessment and, thus, B-BIDs tend to be less effective and successful than P-BIDs, although they are appropriate for certain needs.

The two types of BIDs have separate authorizing legislation. The Parking and Business Improvement Area Law of 1989 (Streets and Highways Code section 36500 et seq.) allows for B-BIDs. The Parking and Business Improvement Area Law of 1989 (Streets and Highways Code section 36500 et seq.) provides for P-BIDs.

Authorized to provide a wide range of improvements and services, BIDs are more flexible and can accomplish much more than standard assessment districts. Table 10-1, on the following page, identifies the improvements and services the BIDs can undertake.

Establishing a BID follows a process similar to that used for standard assessment districts. A B-BID requires support of the majority of businesses in the district, and a P-BID requires support of a majority of the property owners. Unlike assessment districts, however, the P-BID must be initiated by a petition of a majority of the property owners rather than a resolution of the city council.

One other key difference is that a P-BID must have a non-profit property owners association (similar to a homeowners association). This non-profit operates the bid under a contract with the city. The association manages the BIDs programs and activities, and it proposes a work program each year.

TABLE 10-1 *IMPROVEMENTS AND SERVICES PROVIDED BY BUSINESS
 IMPROVEMENT DISTRICTS*

Business-Based	Property-Based
Physical Improvements	
Parking facilities: <ul style="list-style-type: none"> ◆ Benches ◆ Trash receptacles ◆ Street lighting ◆ Decorations ◆ Parks ◆ Fountains 	All B-BID improvements, plus: <ul style="list-style-type: none"> ◆ Closing, opening, widening, or narrowing of existing streets. ◆ Facilities and equipment to enhance security of persons and property within the area. ◆ Ramps, sidewalks, plazas, and pedestrian malls. ◆ Rehabilitation or removal of existing structures.
Ongoing Services and Activities	
<ul style="list-style-type: none"> ◆ Promotion of public events which take place on or in public places. ◆ Furnishing of music in any public place. ◆ Promotion of tourism. ◆ Activities which benefit businesses located and operating in the area. 	All B-BID activities, plus <ul style="list-style-type: none"> ◆ Marketing and economic development, including retail retention and recruitment. ◆ Supplemental security, sanitation, graffiti removal, street and sidewalk cleaning, and other municipal services. ◆ Activities which benefit businesses and real property located in the district.

Because BIDs provide services and activities, they require an annual public hearing, at which the city council approves the work program for the following year. There is no voting by affected businesses or property owners unless the program proposes an increase in the assessment. When an assessment

increase is proposed, the annual work program goes through a process similar to that for establishing a district.

5. Landscaping and Lighting Maintenance Districts

Landscaping and lighting maintenance districts (LLMD) can fund the construction of certain public improvements and the operation and maintenance of public improvements. LLMDs are authorized by the Landscaping and Lighting Act of 1972 (Streets and Highways Code section 22500 et seq.).

Similar to BIDs, an LLMD requires annual assessment process for any assessments other than previously approved assessments to pay previously approved and issued debt. The annual assessment process is similar to that used to establish assessment districts. But the majority protest only matters if the proposed assessment is an increase.

The improvements and services provided by LLMDs include:

- ◆ Landscaping.
- ◆ Statuary, fountains, and other ornamental structures.
- ◆ Public lighting, including traffic signals.
- ◆ Appurtenant facilities, including grading, clearing, removal of debris, the installation or construction of curbs, gutters, walls, sidewalks, or paving, or water, irrigation, drainage, or electrical facilities.
- ◆ Park or recreational improvements.
- ◆ Land preparation.
- ◆ Lights, playground equipment, play courts, and public restrooms.
- ◆ The maintenance or servicing, or both, of any of the foregoing.
- ◆ Acquisition of land for park, recreational, or open-space purposes.
- ◆ Acquisition of existing improvements.
- ◆ Acquisition or construction of any community center, municipal auditorium or hall, or similar public facility for the indoor presentation of per-

formances, shows, stage productions, fairs, conventions, exhibitions, pageants, meetings, parties, or other group events, activities, or functions, whether those events, activities, or functions are public or private.

6. Community Facilities Districts

Community facilities districts (CFDs) can fund the planning, design, purchase, construction, expansion, improvement, or rehabilitation of capital facilities, defined as having a useful life of five or more years. CFDs can also fund the provision of a variety of public services, such as public safety, parks and recreation, schools, library, and cultural facilities, landscape maintenance and lighting, flood control, and site remediation.

The Mello-Roos Community Facilities Act of 1982 (Government Code section 53311 et seq.) authorizes the establishment of CFDs. However, these districts are not assessment districts, as were the previous five districts, and differ in several important ways.

CFDs levy a special tax instead of a special assessment. This tax may be applied to the value of each property, rather than assessed based on the level of special benefit received. However, because it is a special tax, a two-thirds majority vote is required to approve the levy of the special tax. If the district has 12 or more registered voters, the election polls voters, with each having an equal vote. If there are less than 12 registered voters, the election polls property owners, with each vote weighted by acreage owned within the district boundary. Properties within the district need not necessarily be contiguous. Finally, establishing a CFD requires only a general description of the facilities, services, and costs associated with the district, not the detailed engineer's report required for assessment districts.

CFDs are often used in greenfield development, where one or a handful of property owners vote to approve the district in order to pay for the extension of infrastructure improvements. With the elimination of redevelopment agencies, we are likely to see greater experimentation with the use of CFDs for infill and redevelopment.

CFDs may fund the construction of the following types of facilities:

- ◆ Local park, recreation, parkway, and open-space facilities.
- ◆ Elementary and secondary school sites and structures.
- ◆ Libraries.
- ◆ Childcare facilities.
- ◆ Transmission/distribution facilities for water, natural gas, telephone, electrical energy, and cable television.
- ◆ Flood, storm protection, and storm drainage facilities.
- ◆ Other governmental facilities the legislative body creating the district is authorized by law to contribute revenue toward, construct, own, or operate.
- ◆ Work to bring public or private buildings or real property into compliance with seismic safety standards and regulations.

CFDs may also fund the following types of services:

- ◆ Police protection services.
- ◆ Fire protection and suppression services and ambulance and paramedic services.
- ◆ Recreation program services, library services, maintenance services for elementary and secondary school sites and structures, and the operation and maintenance of museums and cultural facilities.
- ◆ Maintenance of parks, parkways, and open space.
- ◆ Flood and storm protection services including, but not limited to, the operation and maintenance of storm drainage systems and sandstorm protection systems.
- ◆ Removal or remedial action services for the cleanup of any hazardous substance released or threatened to be released into the environment.

C. Grant and Loan Funding

In addition to funding mechanisms such as assessment districts, jurisdictions can take advantage of a range of grant funding options that could help bridge the funding gap for smart growth projects. A sample of current funding sources is described below. These will change over the years in response to shifting priorities from the granting agencies. They are in addition to the Smart Growth Incentive Program administered locally by SJCOG staff.

1. California Commerce and Trade Agency

The Rural Economic Development Infrastructure Program (REDIP) can provide financing for the construction, improvement, or expansion of public infrastructure with the intent of creating jobs in communities with an unemployment rate either equal to or above the State's average unemployment rate. The funds can be used for publicly owned infrastructure required for the construction or operation of a private development. Eligible infrastructure projects include the construction, rehabilitation, alteration, expansion, or improvement, including but not limited to: sewer and water facilities (including expansion of central plant capacity); street storm drains, bridges, railroad spurs, utility connections; wastewater treatment plants and collection lines; water treatment plants and distribution lines; roads, street, highways, and related improvements (e.g. curbs, gutters, sidewalks); other public facilities or other infrastructure improvements necessary for industrial or commercial activity. This program would not apply to infill housing development, but it could be used for the commercial and industrial development aspects of smart growth projects.

2. California Department of Housing and Community Development

The Department of Housing and Community Development (HCD) provides a wide variety of grant and loan assistance programs, many of which are applicable to smart growth development.

The Local Housing Trust Fund provides matching grants to new local housing trusts created on or after September 30, 2006. The local housing trust

fund can use the money to provide loans for affordable housing projects. However, as of now June 30, 2012 is the last date for submitting applications.

The Housing Related Parks Program provides grants to create new parks or to rehabilitate or improve existing parks in cities and counties that have had affordable housing constructed. This is an ongoing program in years in which state funds are available. This program can help finance the development and improvement of open space that can reduce the need to provide extensive on-site open space in smart growth projects and that can ameliorate perceived negative effects of higher density housing.

3. California Infrastructure and Economic Development Bank

The California Infrastructure and Economic Development Bank offers low-cost financing to local governments and agencies for a variety of infrastructure projects through the Infrastructure State Revolving Fund (ISRF). Most relevant to smart growth, these projects could include streets, water and sewer, and parks. Applications are continuously accepted throughout the year.

4. Proposition 84

In 2006, California voters approved Proposition 84. In addition to a variety water resource, park, and conservation measures, Proposition 84 provides \$580 million for sustainable communities and climate change reduction projects, in five categories: urban forestry, urban greening, park development and community revitalization, sustainable communities planning grants, and modeling incentives.

The urban greening and sustainable communities grants are applicable to smart growth in San Joaquin County. Proposals are being accepted in 2012 for the second of an anticipated three rounds of funding. The urban greening program can fund urban greening plans and projects that reduce energy consumption, conserve water, improve air and water quality, and provide other community benefits. In particular, urban green grants could be used for projects to improve the public realm in areas planned for intensified development. The sustainable communities grants are not intended for projects, but

they can be used to fund planning efforts. Of note for implementation of some of the recommendations listed in this Plan, these grants can fund planning to tailor local development regulations to support smart growth and can also fund water and sewer plans to ensure that local infrastructure can accommodate intensified development.

5. State Water Resources Control Board

The California State Water Resources Control Board provides financial assistance for construction of municipal sewage and water recycling facilities and remediation for underground storage tank releases. These programs include the Clean Water State Revolving Loan Fund, which can fund improvements to publicly-owned wastewater infrastructure, and the Water Recycling Funding Program, which can finance the planning and construction of water recycling infrastructure. The Board also funds two programs to assist in the cleanup of contaminated sites where there is no financially responsible party, the Cleanup and Abatement Account and the Orphan Site Cleanup Fund.

6. US Economic Development Administration

The Economic Development Administration (EDA) funds a variety of grant and loan programs. The primary program applicable to the communities of San Joaquin County is the Public Works and Development Facilities Program. This program can fund water and sewer infrastructure projects. EDA provides grants to help distressed communities attract new industry, encourage business expansion, diversify local economies, and generate long-term, private sector jobs. Thus, to be eligible, communities need to relate the proposed project to commercial and industrial development and employment generation, and they need to qualify based on distress measured by unemployment. Nevertheless, for qualifying communities, this program is, perhaps, the single largest source of funding for infrastructure improvements.

7. US Department of Agriculture

USDA's Rural Housing Service (RHS) can make and guarantee loans to develop essential community facilities in rural areas and municipalities of up to 50,000 in population. Loan funds may be used to construct, enlarge, or im-

prove community facilities for health care, public safety, and public services. This can include costs to acquire land needed for a facility, pay necessary professional fees, and purchase equipment required for its operation. Examples of essential community facilities include: health care; telecommunications; public safety; and public services.

*SAN JOAQUIN COUNCIL OF GOVERNMENTS
REGIONAL SMART GROWTH | TRANSIT-ORIENTED
DEVELOPMENT PLAN
SMART GROWTH FUNDING MECHANISMS*

11 RECOMMENDATIONS

This Smart Growth | Transit-Oriented Development (TOD) Plan will help SJCOG continue and expand upon the efforts of the Smart Growth Incentive Program (SGIP) to encourage its member agencies to adopt smart growth patterns of development. SJCOG will need to work even more closely with member agencies and other partners as the County’s Sustainable Communities Strategy (SCS) is prepared and incorporated into SJCOG’s Regional Transportation Plan (RTP).

At the same time, it is important to note that SJCOG has no direct control over land use or development policy. This authority rests with local jurisdictions, and SJCOG in no way seeks to change this situation. For this reason, regional cooperation and coordination are essential for achieving smart growth goals. The first section of this chapter describes recommendations that are applicable to SJCOG at the regional level. The second section describes policy recommendations for the individual jurisdictions to consider in thinking about ways to further encourage smart growth.

A. Regional Recommendations

Given these considerations, the following recommendations are intended to allow SJCOG and its member agencies to create a more sustainable pattern of development within the range of activities that SJCOG can undertake.

- ◆ **Prepare a Sustainable Communities Strategy.** State law mandates that SJCOG’s next step in sustainability planning will be the formulation and adoption of a Sustainable Communities Strategy (SCS). The SCS should identify a pattern of development that increases local employment, reduces vehicle miles traveled (VMT), provides support for expanded transit service, and locates services near where people live. The Infill Sites Inventory and greenhouse gas inventory prepared as part of this Plan will serve as important starting points for creating the SCS.
- ◆ **Create Smart Growth Indicators for San Joaquin County.** The San Joaquin Valley Blueprint project has already developed Smart Growth Principles that have been adopted by SJCOG. As part of the SCS pro-

cess, SJCOG could translate these principles into specific indicators with measureable outcomes to assess progress in achieving smart growth goals.

- ◆ **Invest in the Public Realm.** Smart growth and infill projects benefit greatly from the presence of public parks, open spaces, street trees, street furniture and sidewalks. Additionally, public shared parking facilities can support smart growth development by lessening on-site parking needs. SJCOG and its member agencies can use Measure K funds, state and federal grants and locally-collected fees to pay for and develop improvements in the public realm. The Smart Growth Scorecard developed as part of this Plan will help to score applications for project funding that will be administered by SJCOG.
- ◆ **Prioritize Non-Auto Transportation in the RTP and Other Transportation Planning Documents.** SJCOG's next Regional Transportation Plan (RTP) should put as much emphasis as possible on transit, pedestrian, and bicycle infrastructure, transit operating funds, and maintenance of existing roadways, rather than on new or expanded roadway infrastructure. SJCOG should also review its other regional transportation planning documents to ensure that they prioritize transit, pedestrian, and bicycle infrastructure.
- ◆ **Prioritize Roadway Maintenance over Roadway System Expansions.** Congestion Relief Project funds collected through the Measure K sales tax can be used for both maintenance of existing roadways and capacity expansions. SJCOG should prioritize the former over the latter so that limited funds continue to improve existing roadways and make travel on those roadways as smooth as possible. Capacity expansions, if any, should focus on expanding high occupancy vehicle infrastructure, rather than single-passenger vehicle lanes.
- ◆ **Collaborate within the Region.** SJCOG and its member agencies should continue to collaborate with the San Joaquin Valley Air Pollution Control District, the Smart Valley Places Partnership and other San Joaquin Valley Councils of Government to continue implementing the Valley Blueprint Preferred Growth Scenario and other visions for smart growth in the Valley.

- ◆ **Consider Updates To Local Development Standards.** As is discussed further below, many of the jurisdictions in San Joaquin County could make changes in their development standards to better accommodate smart growth. Permit streamlining and clearer standards can also help to accommodate smart growth by minimizing the risks involved in a development project. SJCOG could provide the technical expertise to assist in formulating appropriate changes to local regulations, but actual adoption of changed policies would be up to local governments.

B. Local Observations

In addition to the regional approaches to smart growth that could be undertaken by SJCOG, the member jurisdictions, including each City and San Joaquin County, could consider additional policies that support smart growth. They are observations only, as each jurisdiction can choose to change its policies as it sees fit, consistent with locally desired development patterns. The observations result from the policy review completed early in this project: *Regional Smart Growth | Transit-Oriented Development Plan Policy Review*. This document is available upon request from SJCOG staff.

1. Escalon

In order to encourage smart growth in San Joaquin County, Escalon could do more to encourage higher density, mixed-use development in Downtown and along key corridors. Allowing moderate-intensity mixed-use development in these areas would foster growth in the city that would be walkable and would complement existing neighborhoods. At the same time, increasing the amount of residential development Downtown and along key corridors could support the provision of increased transit service, such as a passenger rail connection to other parts of the county. In order to accomplish this, Escalon could update its General Plan to create mixed-use land use designations that can be applied Downtown and along key corridors.

Escalon could also adopt more stringent design guidelines to accomplish the community character objectives outlined in the General Plan. The City

could accomplish this by developing a design guidelines document with more specific requirements for building and neighborhood design. The City could also update its Community Character Element to include more specific and strict requirements to regulate neighborhood design.

2. Lathrop

To better support TOD in the future, Lathrop could reevaluate its land use and circulation plans around the existing ACE station. This station is not only an existing transit connection to the Bay Area, but also has been identified by the Altamont Corridor Rail Project as a stop for a potential streamlined inter-city rail connection serving as a feeder line for the California high-speed rail system.¹ This service would reduce travel times to the Bay Area by up to an hour, resulting in increased demand for the service. In order to support this service and connect the station to the rest of the city, Lathrop could consider the creation of a Specific Plan to evaluate the street network's connections to the existing station, as well as land uses that would be more supportive of the transit station. As an alternative approach, Lathrop could consider working with ACE to relocate the station to a more central location in the city

Lathrop could also consider adopting off-street parking design guidelines for commercial areas that require parking to be located behind buildings. This concept allows buildings to be closer to the street and to be oriented towards pedestrians rather than cars. Additionally, Lathrop could require more bicycle parking for new development and accelerate development of its bicycle network, both of which would encourage more bicycle ridership.

3. Lodi

Lodi could review its vehicle and bicycle parking requirements to ensure that the minimum requirements for vehicle parking are appropriately low to allow for TOD and infill development, and that the bicycle parking require-

¹ California High Speed Rail Authority, Altamont Corridor Rail Project, http://www.cahighspeedrail.ca.gov/Altamont_Corridor.aspx, accessed on May 24, 2011.

ments are high enough to encourage bicycle ridership. Making these changes would encourage people to use alternative modes of transportation and take advantage of the city's well-connected bicycle network.

4. Manteca

Manteca could update its Zoning Code to allow mixed-use development in areas that are designated for Commercial Mixed Use in the General Plan. This change would encourage mixed-use development by removing the regulatory hurdle of a conditional use permit.

The City could also reconsider its land use and circulation plan around the existing ACE station to potentially allow TOD, mixed-use, and denser residential development, along with better roadway connections to the surrounding city streets. This level of planning could be completed through the creation of a Specific Plan.

In addition, Manteca could supplement its existing growth controls with requirements for the overall form and character of new development in greenfield areas. For example, by requiring developers to create walkable neighborhood centers, Manteca could encourage people to use alternative modes of transportation.

Lastly, Manteca could adopt design guidelines for additional distinct areas within the city, particularly those where infill or other growth is expected. These design guidelines would need to require development to be pedestrian-oriented rather than vehicle-oriented.

5. Ripon

Ripon should immediately undertake a comprehensive update of its Housing Element and have it certified by the State Department of Housing and Community Development, so that it is in compliance with State law regarding Housing Elements. Completing this update would help to ensure that an appropriate supply of affordable housing continues to be available in Ripon in the future.

Ripon could also increase the allowed density and allow mixed-use development in its Downtown and along key corridors. Allowing mixed-use development at increased densities in these areas would strengthen Ripon's walkability and reinforce existing neighborhoods. At the same time, increasing the amount of residential development in these areas would support the provision of increased transit service, such as a passenger rail connection to other parts of the county. In order to accomplish this, Ripon could create a mixed-use land use designation for mixed commercial and residential development that can be applied downtown and along key corridors.

Pedestrian infrastructure is important to support mixed-use development and walkability in general. Ripon's existing pedestrian network includes sidewalks on about 95 percent of city streets, and the City standard for new streets includes a six-foot sidewalk on each side of the street. The City should actively pursue the completion of the sidewalk network.

Finally, Ripon could adopt design guidelines to maintain and enhance the character of the community. The City could accomplish this by developing a design guidelines document with specific requirements for building and neighborhood design. The city could also update the General Plan to include a Community Character Element with requirements to regulate neighborhood design.

6. Stockton

Stockton has taken a step towards implementing BRT by participating in the preparation of the Bus Rapid Transit Master Plan for San Joaquin County, and by including planned BRT routes in its General Plan. There is also currently BRT service along Pacific Avenue between the Downtown Transit Center and Hammer Lane, as well as connecting to the Stockton Airport.²

² San Joaquin Regional Transit District Short Range Transit Plan: Fiscal Year 2009-1013, page 1.

As the largest and most central city in San Joaquin County, Stockton is well positioned to expand BRT service.

To support the provision of expanded BRT service in Stockton, the City could reevaluate its land use designations along BRT corridors. To support significant transit infrastructure such as BRT, land uses along these corridors could be intensified to support ridership. The City could initiate this process through a corridor study for the first proposed BRT alignments.

The Cabral Station, which currently serves ACE and Amtrak and will include a high-speed rail station in the future, has been planned appropriately to support TOD on the west side of the station. The City could evaluate the industrial and commercial blocks to the east of the station area for TOD potential.

7. Tracy

Tracy's planned growth provides significant room for development on the outer edges of the community, which could potentially lessen the likelihood of infill development in already-developed areas. The Downtown Specific Plan, Growth Management Ordinance and specific policies supporting infill development will help to alleviate this concern but the City could consider ways to incentivize infill development in other areas as well.

Additionally, the City could work closely with the California Department of Housing and Community Development to obtain certification of its Draft Housing Element. Having a certified Housing Element would help to ensure that Tracy has adequate opportunities for housing that serves all levels of affordability.

Finally, Tracy could revise its design review process to include input from expert reviewers outside of the Community Development Department. For example, an advisory panel of design professionals could provide additional input on the quality of proposed development.

8. San Joaquin County

The County could create less stringent requirements for mixed-use development. Requiring a Specific Plan or Master Plan process for the development of mixed-use buildings ensures that mixed-use development will never occur on infill parcels. As a result, the existing standards preclude mixed-use infill development in town centers, where it may be in keeping with existing development.

In addition, the County could reevaluate its vehicle and bicycle parking requirements to ensure that they are appropriately supportive of smart growth principles. Any revised standards would need to strike a balance between the need to support infill development and the rural nature of much of the County. For example, the standards could allow reduced parking requirements in existing town centers but not elsewhere.

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