SIERRA AVENUE/ VALLEY BOULEVARD LAND USE STUDY

Final Report

Prepared by Community Design + Architecture with Economic & Planning Systems and Fehr & Peers for the City of Fontana and the Southern California Association of Governments

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

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COMPASS BLUEPRINT

building partnerships. serving communities

This is a project for the City of Fontana with funding provided by the Southern California Association of Governments' (SCAG) Compass Blueprint Program. Compass Blueprint assists Southern California cities and other organizations in evaluating planning options and stimulating development consistent with the region's goals. Compass Blueprint tools support visioning efforts, infill analyses, economic and policy analyses, and marketing and communication programs.

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EXECUTIVE SUMMARY

Background

The Sierra Avenue Valley Boulevard Land Use Study is a Southern California Association of Governments (SCAG) Compass Blueprint-sponsored project that seeks to address several interrelated goals in the area centering on the intersection of Sierra Avenue and Valley Boulevard in Fontana, California.

Sierra-Valley area is a unique and diverse part of Fontana: it contains the City's largest employer, sees some of its largest volumes of traffic, includes one of its largest concentrations of shopping, and contains residential neighborhoods with a mix of relatively affordable housing types. In addition, Kaiser Permanente recently completed an approximately $1 billion expansion to its Fontana medical center at Sierra and Valley.

However, the area is the most congested in the city, and there are few convenient transportation alternatives in the area. It is unclear to what degree the surrounding area can capitalize on the medical center's activity. And because of the congestion and visual condition of the streetscape and surrounding uses, the area surrounding the Sierra Avenue and Valley Boulevard intersection currently does not convey a message that Fontana is great place to live, work, and conduct business.

To address these challenges, the City applied for and won a Compass Blueprint Grant from SCAG for the Sierra Avenue Valley Boulevard Land Use Study.

Project Process

The Sierra Avenue Valley Boulevard Land Use Study process was designed to allow the Project Team to understand the study area and how the project goals could best be achieved by the City of Fontana and its potential partners, as well as to allow the Team to engage in a dialogue with stakeholders and the public. It included a diverse array of methods to illuminate the existing land use and transportation conditions and the desires of the community. The end result of the process was intended to be a set of recommendations informed by comprehensive community outreach, intensive research and analysis, and creative thinking.

The project had the following steps:

- Kickoff meeting and Site Tour
- Data and Policy Analysis and Field Research
- Stakeholder Interviews
- Medical Center Survey
- Pedestrian and Bicycle Counts
- Analysis Report and Opportunities
- Public Outreach: Analysis Phase
- Development of Objectives and Recommendations
- Public Outreach: Recommendations Phase

Recommendations

The Project Team's recommendations are the primary outcome of the Sierra Avenue Valley Boulevard Land Use Study. These recommendations are designed to address the project's six goals:

- Reduce traffic congestion at Sierra/Valley intersection
- Maximize walkability between land uses
- Anticipate future mass transit opportunities
- Identify land uses synergistic with Kaiser Permanente
- Identify opportunities for new housing
- Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

Nine key Planning Objectives that will achieve the study goals. They are:

1: Create a vision for the Sierra-Valley area

2: Shape transit hub in Sierra-Valley area

3: Improve Sierra Avenue to emphasize transit, walking, gateway, place, and revitalization

4: Connect and improve the bicycling network

5: Integrate Kaiser Permanente Medical Center with surrounding community

6: Lay foundation for pedestrian-oriented zoning

7: Complete the basic pedestrian network

8: Create a transition on Valley Boulevard to walkable area

9: Explore opportunities for creating and revitalizing housing in Sierra-Valley area

Each objective includes a series of initiatives – potential projects, policies, or programs that will achieve the given objective. Each initiative is formatted roughly the same way: It includes an introduction, a location map if the initiative focuses on a specific location, and a brief implementation summary.

Objective 1: Create a vision for the Sierra corridor

A vision for the Sierra Avenue corridor in the core of Fontana will create a direction for the center of the city and specify how other core districts connect and relate to Downtown Fontana. The Sierra-Valley area is a unique, exciting part of the city whose uniqueness and excitement is not readily visible either in city policy or on the ground. This objective seeks to change that by recommending the creation of a vision.

Initiative 1.1: Create vision concepts for core Sierra corridor and centers in the General Plan

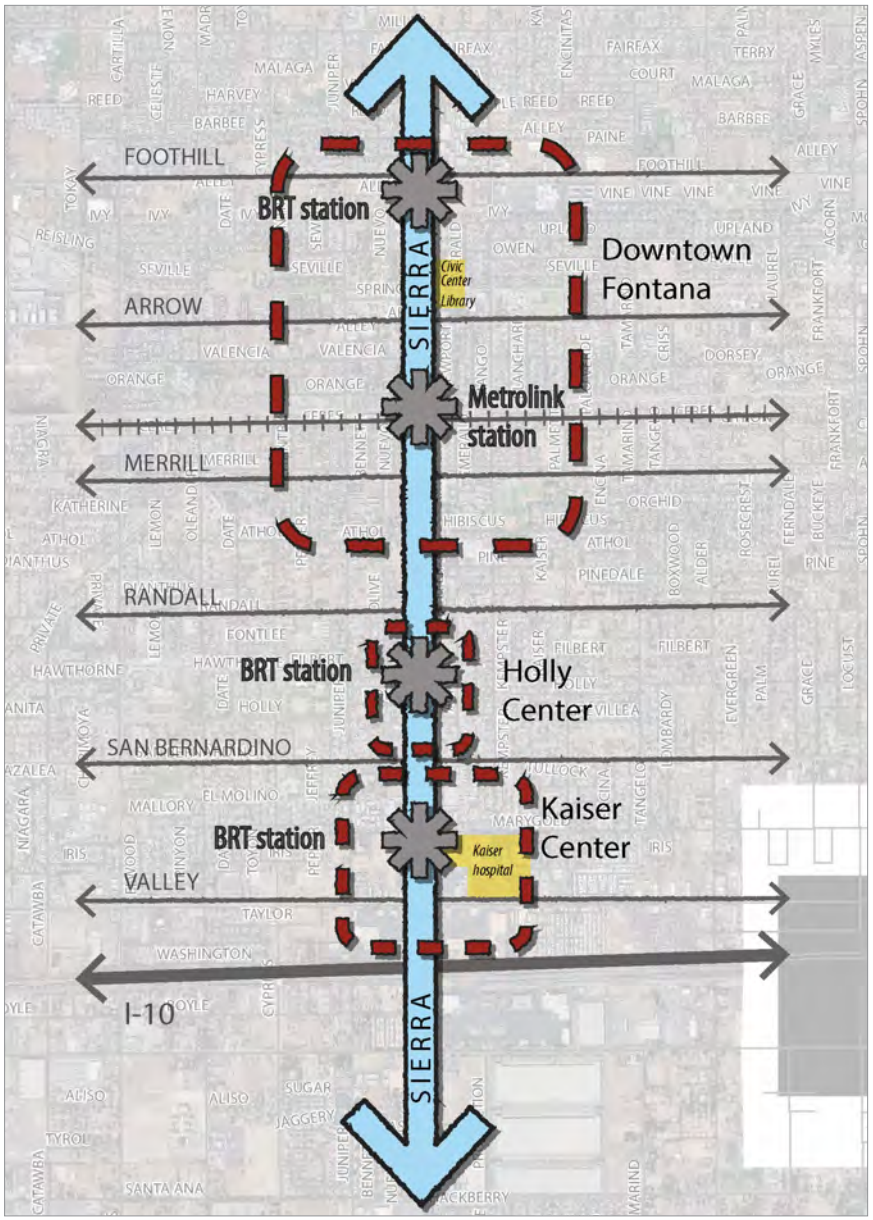
Defining graphic and written vision concepts for the Sierra corridor and the districts along it will provide a foundation for future, more detailed land use policy as well as communicate the City of Fontana's vision to the range of community stakeholders. The Project Team developed some concepts to be used as inspiration for an eventual vision for the Sierra corridor.

Initiative 1.2: Create a multi-modal transportation network to support the Sierra corridor

This initiative presents concept for a network of multi-modal transportation improvements in the Sierra-Valley area. It ties together the multi-modal improvements presented in other recommendations into one network.

Initiative 1.3: Re-brand the Sierra-Valley area

Sierra-Valley is a unique, active, and history-rich area whose uniqueness and history are not currently visible. Public realm, pedestrian, transit, and bicycle improvements will be a foundation for bringing out the area's identity through placemaking, but the City and its partners can also actively re-brand the area.



Potential Draft Vision diagram for Sierra corridor.

Objective 2: Shape transit hub in Sierra-Valley area

A new transit hub is one of the largest opportunities for achieving project goals. A transit hub would combine the existing Omnitrans transfer center at Marygold Avenue with a new Bus Rapid Transit station serving a planned Omnitrans BRT line. If located and designed correctly, such a hub could dramatically increase transit ridership and accessibility; increase walkability; improve public space and public safety; help lure private development; and become part of a welcoming gateway to Fontana. Focusing on a transit hub also leverages the likely investment of Omnitrans as well as the potential investment of Kaiser Permanente.

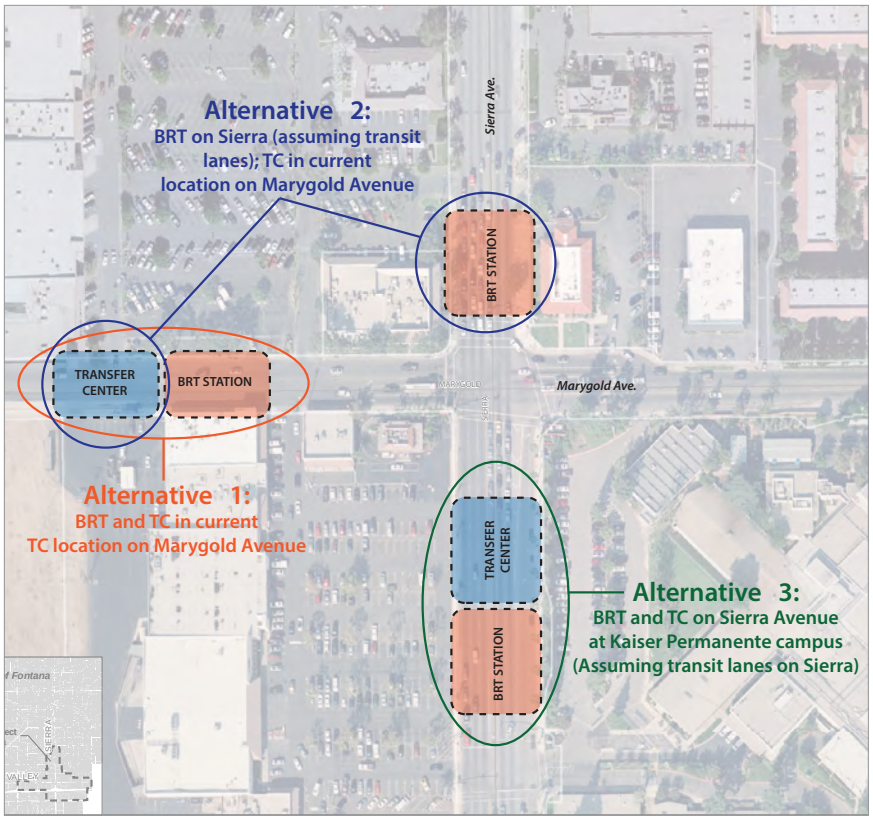
Initiative 2.1: Recommend a location for a transit hub that combines a transfer center and bus rapid transit station

One of the first steps to shaping a transit hub in the Sierra-Valley area is picking a location. The Project Team recommends that a combined Marygold Transfer Center and bus rapid transit (BRT) station be located on Sierra Avenue just south of Marygold Avenue. This location:

- leverages the proximity of the Kaiser Permanente campus and Kaiser Permanente community as potential riders;
- ties into potential transit-only lanes on Sierra Avenue (see Objective 3);
- makes the transit hub visible to potential riders and makes the investment of a transit hub more visible as a part of a Fontana gateway; and
- creates an important piece of the public realm.

Initiative 2.2: Redesign Marygold Avenue

A side effect of the re-location of the Marygold Transfer Center would be the opportunity to re-design Marygold Avenue. Marygold currently appears to have excess capacity that could be re-allocated for pedestrians, bikes, and/or transit. However, the needs of the street will be partially determined by the location of the transit hub. A potential benefit of choosing the recommended Alternative 3 transit hub location is that Marygold would no longer need to serve as a transfer point for buses and could likely narrow its space given to vehicular traffic. However, if either Alternative 1 or 2 is chosen, more of Marygold will need to be used for transit operations.



Transit hub location alternatives; the team recommends Alternative 3..

Concept design for Marygold Avenue under transit hub Alternative 3.

Objective 3: Improve Sierra Avenue to emphasize transit, walking, gateway, place, and revitalization

Sierra Avenue is the spine of Fontana, linking its different areas and running through its downtown. The Project Team found that the land uses along Sierra – shopping, civic center, residential, office, education, and the Kaiser Permanente medical center – are ideal for a vital, urban walkable core. However, the way the Sierra corridor has been designed, fronted largely by parking lots, with a minimal, inconsistent pedestrian environment, does not create a good environment for walking, transit or enjoyable public space. By redesigning Sierra Avenue to be more walkable and multi-modal, the Team believes that the street could then leverage the land uses and activity centers along it to become a revitalized, connective spine of the city.

Initiative 3.1: Transit priority on Sierra Avenue

The Project Team believes that the largest near-term opportunity for optimizing the Sierra right-of-way is bus transit. Specifically, the increasing ridership on Omnitrans and the agency's plans for a Bus Rapid Transit (BRT) line on Sierra constitute an outside investment that the city should attempt to leverage. Consequently, the Team recommends that the City consider and study the incorporation of bus-only lanes that could serve the planned BRT as well as local buses and shuttles between destinations such as Metrolink and the Kaiser campus.

Initiative 3.2: Pedestrian Promenade along western edge of Kaiser campus

A wide pedestrian promenade along the eastern side of Sierra Avenue can be a centerpiece that plays a major role in creating an identity for the district and gateway for the city. At the western edge of the Kaiser Permanente campus, the promenade concept responds to many current demands in the area: for open space, exercise space, and walking routes by the Kaiser community, for a positive public face for the campus and the city; a venue to celebrate the Sierra-Valley area's history; and for a place to integrate a transit hub into the public realm and the Kaiser campus.

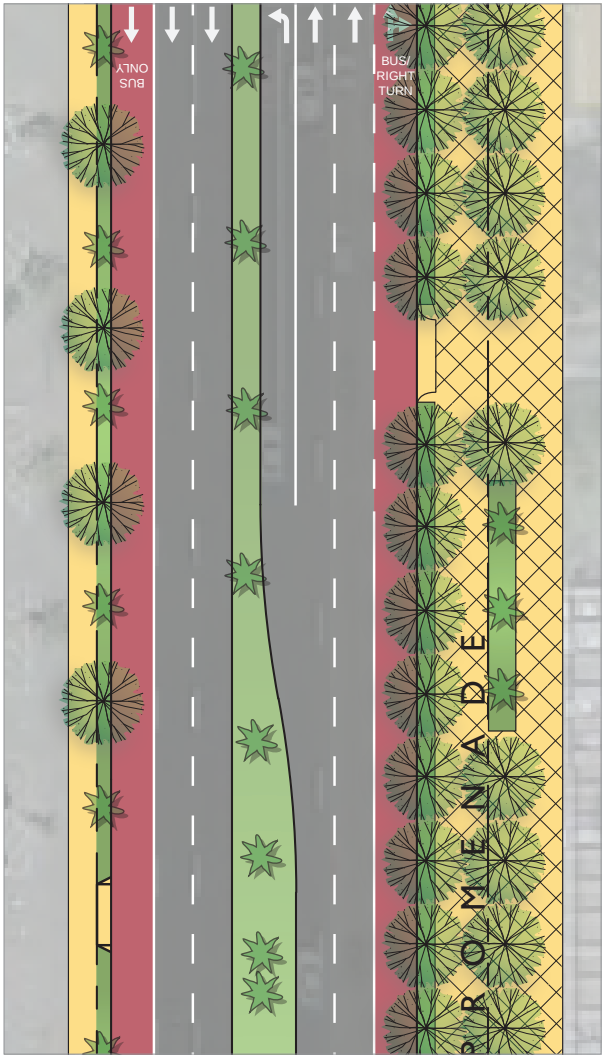


Illustration of Pedestrian Promenade and transit lanes concepts on Sierra Avenue between Valley and Marygold.

Initiative 3.3: Emphasized "gateway" midblock crossing at Permanente Way

Closely complementing the Pedestrian Promenade concept is a "Gateway Crossing" concept for the intersection of Sierra Avenue and Permanente Drive, which is essentially a driveway into the Kaiser campus. The existing "mid-block" pedestrian crossing at Permanente Drive is an opportunity to create a pedestrian-scale node on a critical segment of Sierra Avenue. Emphasizing this crossing can create a focal point for the western edge of the Kaiser campus, create a gateway element for the city, and make the popular crossing of Sierra Avenue safer, easier, and more pleasant.

Initiative 3.4: Improved pedestrian facilities at Sierra-Valley

The intersection of Sierra Avenue and Valley Boulevard is the genesis of this project and poses some of the largest challenges to project goals of reducing congestion, improving walking, and creating a positive gateway for the city. The Team concluded that the land uses at the intersection will not likely change in the near term and continued traffic demands will challenge any dramatic transformation. However, the Team recommends smaller changes to this intersection that will improve the pedestrian crossing experience, untangle traffic bound for different destinations, and mitigate any congestion for the sbX BRT line if it does travel through the Sierra-Valley intersection.

Initiative 3.5: Improved pedestrian facilities at Sierra-Marygold

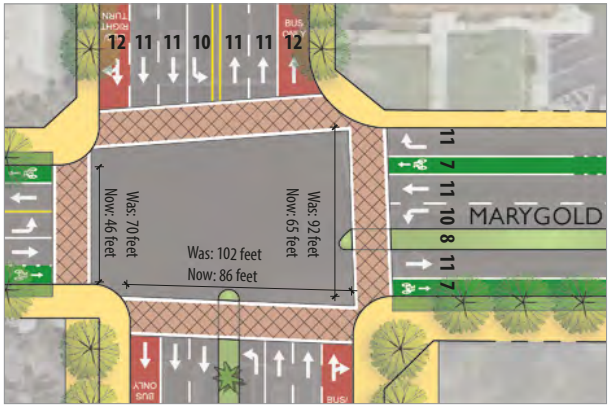
The team believes the intersection of Sierra Avenue and Marygold Avenue has the opportunity to become the center of a walkable, mixed-use district focused on the Kaiser campus, a future BRT station, and commercial and residential land uses (see Objective 1). Improving the intersection to serve pedestrians would be a solid first step toward this vision.

Initiative 3.6: Streetscape scheme to unify Sierra Avenue and strengthen walkability and character

Additional streetscape infrastructure – trees, landscape, street furniture, and lighting – can build on Sierra Avenue's assets of wide sidewalks, relatively regular street trees, and shopping. Targeted investment along the Sierra corridor can make walking safer and more pleasant for current pedestrians and set the stage for a future walkable, mixed-use street connecting the core districts of the city.

Initiative 3.7: Signalized pedestrian crossing(s) added between San Bernardino and Randall

For the ¼ mile between San Bernardino and Randall Avenues, there is no designated place for pedestrians to cross Sierra Avenue. Because of the severity of this distance, as well as the amount of shopping, new land uses (such as Westech College), and transit on this stretch of Sierra, the Team recommends the city install at least one, and likely more, pedestrian crossings between San Bernardino and Randall.



Concept for Gateway Crossing and Pedestrian Promenade at Sierra Avenue and Permanente Drive (top); and Pedestrian improvements to Marygold Avenue (bottom).

Objective 4: Connect and improve the bicycling network

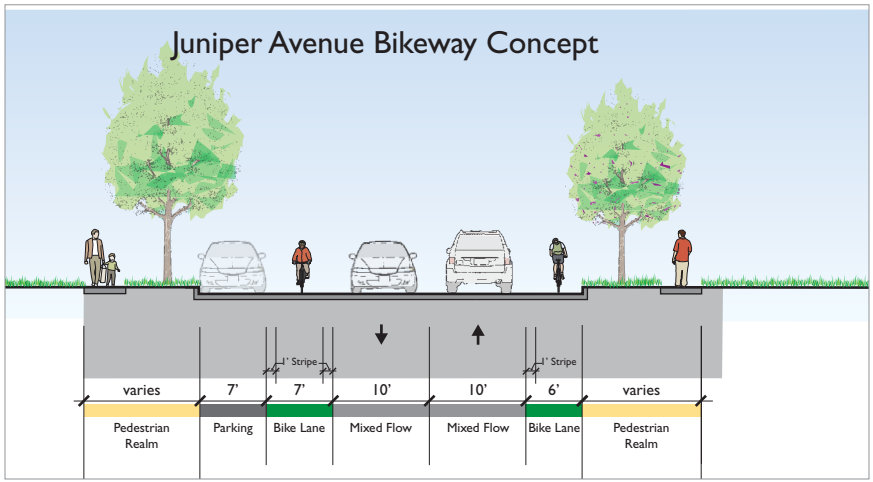
Bicycles are an important part of any transportation network. In the core of Fontana, the Project Team believes bicycles are an underutilized way to connect between many destinations, such as homes, places of employment, schools, the Kaiser campus and the Metrolink station. Currently, the core area of Fontana has minimal bike infrastructure, with some bike lanes planned. This objective makes recommendations for a new bike network that connects the area's destinations, balances the needs of bike mobility with a cyclist's sense of comfort and safety, and complements other recommended street improvements.

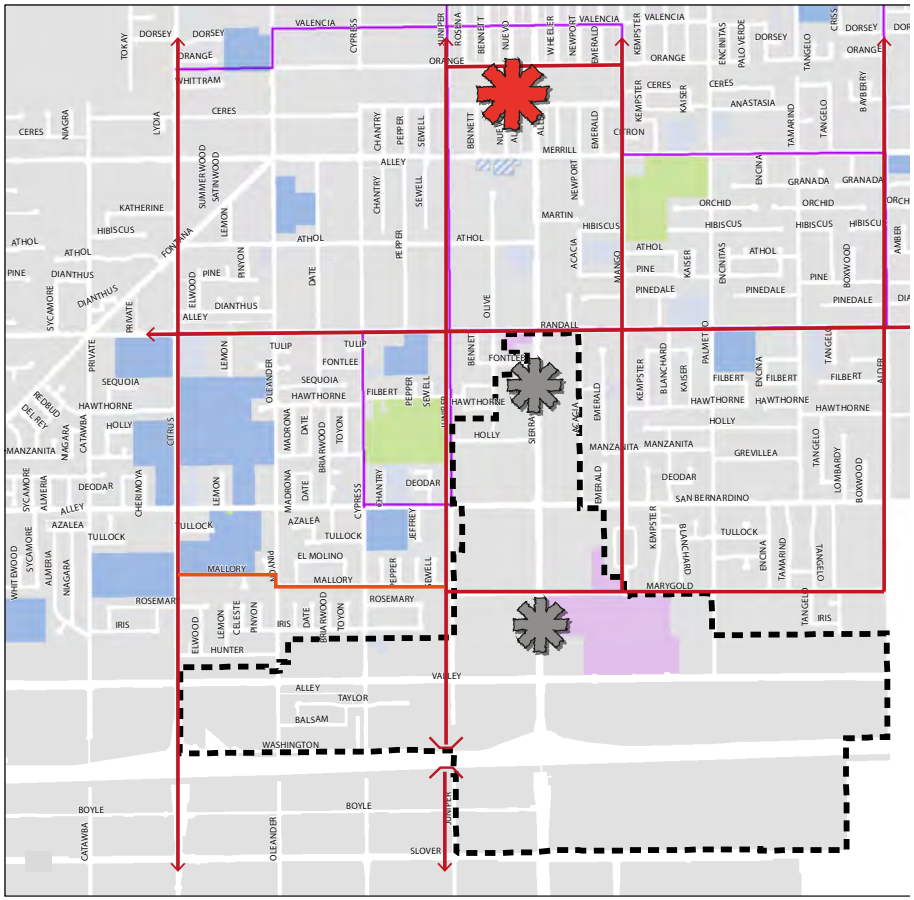
Initiative 4.1: Refine the City of Fontana bicycle network in Fontana's core

The Team proposes a refined bicycle network in Fontana's "core" area – which includes downtown and the Sierra corridor as far south as I-10, as well as Fontana neighborhoods on either side of Sierra.

Initiative 4.2: Design and build new Fontana core bikeways

The bikeways in the recommended bike network would primarily be bike lanes fit into existing streets. The streets selected for recommended bikeways are of two types: "larger" streets such as Randall, Citrus, and Alder; and "smaller" streets such as Juniper, Mango and Marygold. These concept designs do not propose to re-build the streets, simply re-allocate right-of-way within the existing curbs.





Concept for bike network in Fontana core (above) and concept for Juniper Avenue bikeway (left).

Objective 5: Integrate Kaiser Permanente Medical Center with surrounding community

The activity of Kaiser Permanente provides major potential for achieving many of the study's goals. The varied activity that takes place at the Kaiser campus could be the basis of a vital district, supporting complementary commercial uses and synergizing with residences and offices. The travel and shopping patterns of the Kaiser community indicate demand for better walking routes, connections to transit, more shopping options, and the potential to reduce frequent short auto trips that contribute to congestion. This objective makes recommendations that will leverage this demand into outcomes that can benefit both the City of Fontana and Kaiser Permanente.

Initiative 5.1: Coordinate mutually beneficial transportation demand management policies with Kaiser Permanente

This initiative proposes that the City of Fontana coordinate with the Kaiser Permanente Fontana Medical Center to expand and coordinate its Transportation Demand Management (TDM) program to leverage city infrastructure and ongoing multimodal transportation projects. The core of this initiative is likely communication between key City of Fontana departments and Kaiser Permanente and development and coordination of mutually beneficial strategies to use TDM to achieve this study's goals of reducing congestion, improving transit, and improving walkability.

Initiative 5.2: Create strategies for attracting key complementary uses such as office and retail

The area surrounding the Kaiser Permanente campus contains many of the types of land uses that serve its employees, members and visitors, such as places to eat and shopping. However, much of this retail is not geared toward the Kaiser community. This initiative seeks to broaden and upgrade the mix of retail tenants in the shopping centers surrounding the Kaiser campus. It also identifies office as a near-term complementary use. The Implementation section of this report contains more information on specific strategies for accomplishing this initiative.

Initiative 5.3: Develop mutually beneficial marketing and infrastructure initiatives with Kaiser Permanente

A collaborative approach between the City of Fontana and Kaiser Hospital, which aligns the interests of both parties to improve the pedestrian infrastructure and streetscape along the edges of the Kaiser property, could yield both better public spaces and strong marketing benefits for Kaiser.

Initiative 5.4: Create a food truck pod for Sierra Avenue

One way to create more food options in the near term for the Kaiser community while also enlivening the street environment of Sierra Avenue is a "pod" of food trucks. While these could be independent taco trucks, they could also include a "health options" truck aligning with the mission of Kaiser Permanente and the City's Healthy Fontana program.

Objective 6: Lay foundation for pedestrian-oriented zoning

While there is little development pressure in the Sierra-Valley area now, it is important that when interest from the development community materializes, the City of Fontana be ready with vision, planning, and zoning that supports the City's desired outcomes. This objective seeks to provide a road map to implement a new pedestrian-supportive zoning for the Sierra corridor through a form-based code approach.

Initiative 6.1: Understand current code's obstacles to transit- and pedestrian-oriented development

The City of Fontana's current land use policy presents several obstacles to the creation of development that supports walkable places in the Sierra-Valley area. The following are aspects of the General Plan and Zoning code that create specific challenges to achieving walkability.

Initiative 6.2: Pursue a form-based code approach

One effective way to address the obstacles to walkable and transit-supportive development along the Sierra Avenue corridor is a form-based code. A form-based code is an alternative type of zoning that focuses more on the form and character of buildings and sites from the public realm while allowing more flexibility in terms of land use and other aspects of development programs. This initiative makes the case for the employment of a form-based code for the Sierra Avenue corridor in Fontana.

Simulations of walkable development under a form-based code in Tucson, Arizona.

Objective 7: Complete the basic pedestrian network

While other planning objectives recommend special pedestrian features and targeted investment along the Sierra corridor, the Project Team also recognizes that all streets need to be walkable and universally accessible at a basic level. This is currently not the case; the Project Team found missing sidewalks, instances of noncompliance with the Americans with Disabilities Act (ADA), and other deficiencies. This objective identifies those deficiencies and recommends addressing them.

Initiative 7.1: Fill in Gaps in Existing Sidewalks (Priority #1)

Completing the sidewalk network through the study area should be the City's first priority in this objective. Completing the sidewalk network will ensure that residents, shoppers, and employees can walk safely.

Initiative 7.2: Stripe missing crosswalks and add other pedestrian crossing facilities (Priority #2)

Provide striped crosswalks at all intersections. These crosswalks will ensure that pedestrians are able to cross the streets more easily. Additionally, the striped crosswalks will serve to provide advance warning to drivers of potential pedestrians in the crosswalks.

Initiative 7.3: Improve Sidewalk Quality (Priority #3)

Similar to the other pedestrian improvements, the City should identify ways to improve the pedestrian environment. One potential approach is to develop detailed streetscape guidelines or templates which can be applied by new development as that development occurs. Alternatively, the City could develop a more detailed Streetscape Master Plan to implement improvements to address the conditions identified above.

Initiative 7.4: Address ADA Compliance (Priority #4)

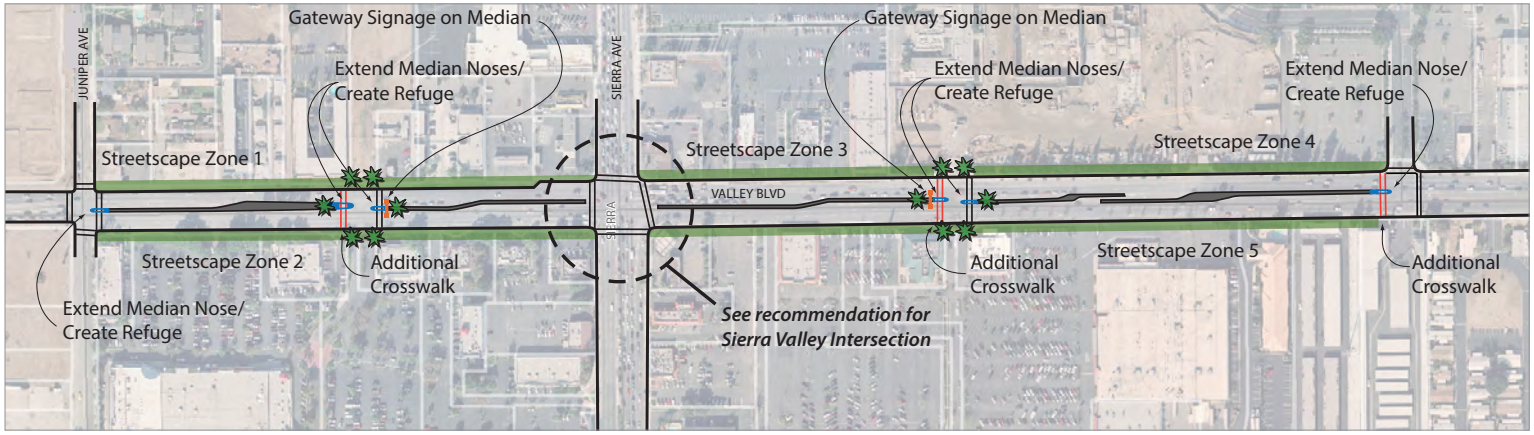
Similar to other issue areas, this one should be best addressed through an incremental approach, whereby various issues are addressed in an opportunistic fashion concurrently with other projects. For example, the lack of pedestrian push-buttons might be remedied when a traffic signal is replaced at an intersection. This issue could also be addressed through the preparation of a Streetscape Master Plan, as discussed in Priority #3.

Objective 8: Create a transition on Valley Boulevard to walkable area

The Sierra-Valley area is defined by two contrasting transportation corridors, Sierra Avenue and Valley Boulevard. While Sierra connects the City of Fontana and largely includes land uses serving neighborhoods and the city, Valley connects the larger region and is largely defined by land uses serving the freeway such as trucking, warehousing and auto sales and repair. Many of the planning objectives focus on Sierra Avenue because it is more likely to achieve project goals, but the section of Valley that intersects with the Sierra corridor should communicate to travelers that they are entering an area with frequent pedestrians and should support the concept of a gateway into Fontana.

Initiative 8.1: Build pedestrian and streetscape features on Valley around Sierra

A series of streetscape features along Valley Boulevard, focused on Valley's intersection with Sierra, can accomplish three things: It can improve the pedestrian environment on the segment of Valley that intersects the pedestrian-heavy area around the shopping centers and Kaiser campus. Second, it can communicate to motorists driving on Valley that they are entering an area with more pedestrians. Third, it can reinforce the idea of a gateway for Fontana and the Sierra-Valley area as a place within the city.



Concept for improvements to Valley Boulevard

Objective 9: Explore opportunities for creating and revitalizing housing in Sierra-Valley area

Adding more housing to the Sierra-Valley area could complement other land uses and help achieve many of the study's goals for walkability, transit, and complementary land uses to Kaiser. The area's existing housing provides high levels of pedestrian activity and connection between the commercial areas at Sierra-Valley and the neighborhoods around it. While few Kaiser workers currently live in the Sierra-Valley area, over half of Kaiser Permanente employee survey participants indicated they would be interested in living within walking distance from the medical campus if the right type of housing were available. While the area is not currently competitive for the type of new market-rate housing that will likely attract Kaiser employees, it has been home to new affordable and senior projects.

Initiative 9.1: Encourage New Residential Construction and Housing Diversity

The Sierra-Valley market area does not currently support rents that justify new market-rate housing construction, nor does it offer large land parcels of the sort that helped feed suburban residential development in the northern parts of Fontana. Existing zoning, specifically the Boulevard Overlay Zone, already permits multifamily uses, but there may be additional incentives or regulatory changes that could encourage market-rate residential development. The City should seek further input from the development community on this issue.

In addition, affordable and senior housing development, which the area has recently hosted, can help establish a residential neighborhood and transition it market-rate housing. Affordable and senior housing typically incorporate financing subsidies, which permit high-quality design and construction (as evidenced by Paseo Verde). Such development can help establish a residential land use pattern and raise the perceived quality of the neighborhood, and with it rents capable of supporting market-rate construction.

Implementation

This section proposes a range of methods to implement the recommendations. These include actions taken by the City of Fontana as well as working with partners in the public and private sectors. One or more of these methods is referenced in the Recommendations section as a possible implementation tool for each initiative. These objectives and their initiatives can be implemented through three general categories of methods: Public Policy; Private Sector Outreach; and Public-Private Financing.

Public Policy

The City can create land use and transportation policies that enable the objectives and their initiatives. This is often the first step for implementing many of the recommendations. Objectives generally falling under this category include Objective 1, Objective 6, and aspects of the other objectives.

Public policy tools available to the City to implement this study's objectives include:

- General Plan elements (including land use, circulation, community design)
- Specific plan
- Area plan
- Street standards
- Zoning and development standards, including overlays
- Capital Improvement Program

Private Sector Outreach

Private Sector Outreach lays the foundation for the revitalization of the Sierra-Valley area with outreach initiatives to land owners and developers that promote a common vision, solicit active participation in the process, and help stimulate improvement in market conditions. Objectives generally falling under this category include Objective 5, Objective 9, and aspects of Objective 3.

Private sector outreach tools available to the City to implement this study's objectives include:

- Business Improvement Districts
- Marketing and Business Recruitment for Retail and Office Tenants

Public-Private Financing

The City can explore opportunities to pursue and implement financing mechanisms to support the planning, design, and construction of multi-modal infrastructure and public realm projects. Objectives generally falling under this category include Objective 2, Objective 3, Objective 4, Objective 7, and Objective 8.

Public-private financing tools available to the City to implement this study's objectives include:

Area-Specific Fees, Dedications, and Exactions

- Special Assessment Districts (1911, 1913, 1915 Acts)
- Mello-Roos Community Facilities Districts
- Dedications and Exactions
- Development Agreements

City Sources and Mechanisms

- Development Impact Fees
- Infrastructure Financing District
- "Redevelopment 2.0" Agency Financing
- General Fund Revenues
- Local Bond Measures

Federal and State Funding Sources

A variety of State and federal funding sources that may be applicable to the Sierra-Valley Objectives and Initiatives. Most of the funding programs that fall into this category are competitive and may require preparation of extensive applications.

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INTRODUCTION

Introduction

This is the final report of the Sierra Avenue Valley Boulevard Land Use Study, which addresses the area around the intersection of Sierra Avenue and Valley Boulevard in Fontana, California. The main purpose of this report is to summarize and detail the Project Team's recommendations for how the project goals can best be achieved. This is the second major report of this project; the first report, the *Land Use and Transportation Analysis*, is included as an Appendix of this report. This report builds off the *Land Use and Transportation Analysis* as well as the project's public outreach process to develop recommendations for the City of Fontana to achieve the goals of the project.

This report is organized in three parts: Introduction; Recommendations; and Implementation.

Project background

The Sierra Avenue Valley Boulevard Land Use Study is a Southern California Association of Governments (SCAG) Compass Blueprint-sponsored project that seeks to address several interrelated goals in the area centering on the intersection of Sierra Avenue and Valley Boulevard in Fontana, California.

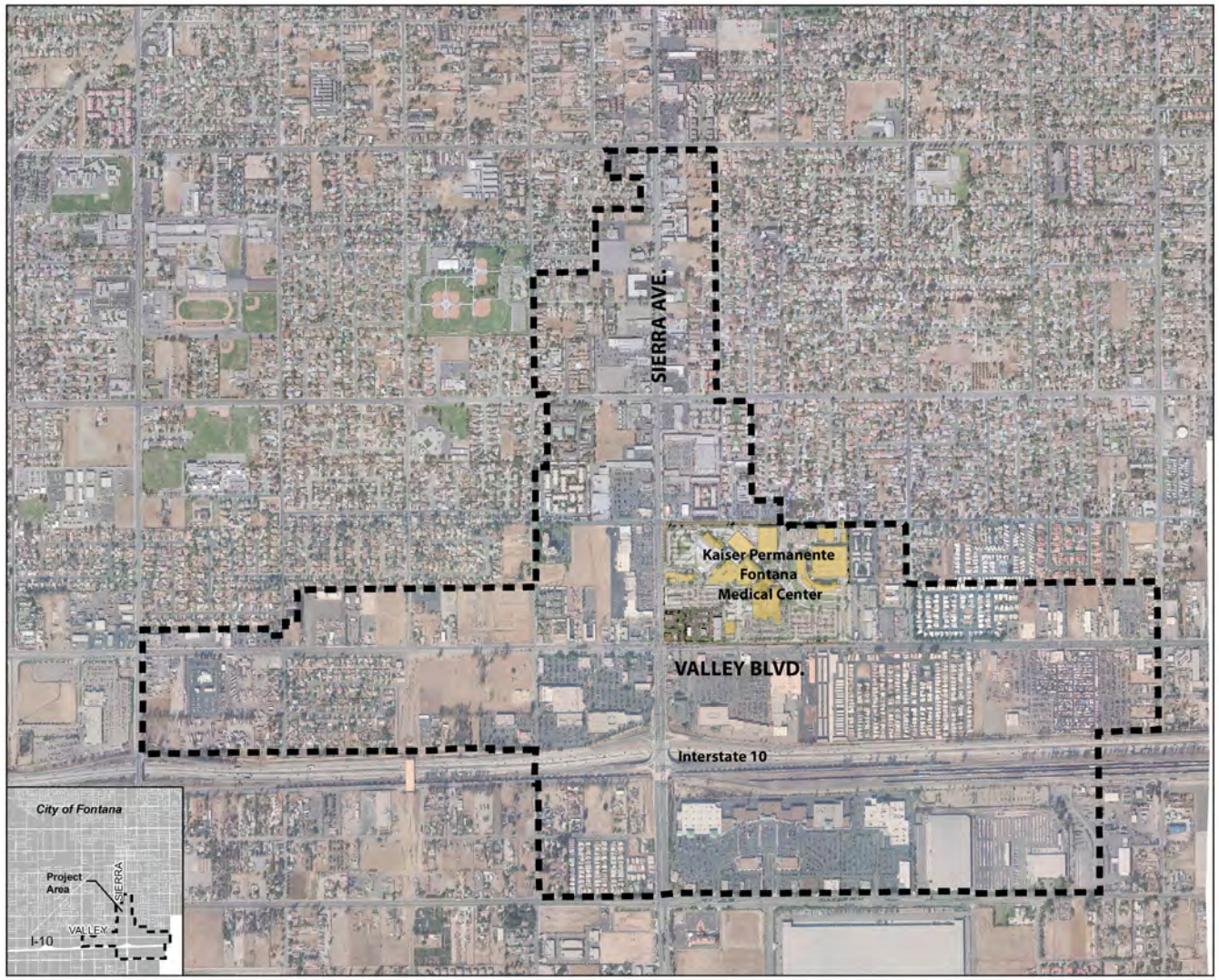
The Sierra Avenue-Valley Boulevard intersection is the busiest in the City of Fontana. Approximately 70,000 vehicles travel through this intersection every day. Its proximity to the I-10 Freeway, connection to major commercial, residential, and industrial areas, and location adjacent to the Kaiser Permanente Fontana Medical Center (the City's largest employer and the largest Kaiser facility in California), attracts both passenger vehicle and commercial truck traffic in overwhelming volumes. This high volume of traffic leads to congestion and long idling times for cars and trucks waiting to travel through this intersection. It is estimated that the traffic passing through the intersection contributes significantly to Carbon Dioxide greenhouse gas emissions going into the atmosphere.

Meanwhile, there are few convenient transportation alternatives in the area. Currently, the only mode of mass transit that serves the area is Omnitrans buses. Even though the Study Area includes the largest employer in the city, it is not easily accessible to the Metrolink Station which is over two miles away along a street, Sierra Avenue, that is not pedestrian-friendly. The surrounding street network is also not particularly supportive of bicycling.

The Sierra-Valley area is a unique and diverse part of Fontana: it contains the City's largest employer, sees some of its largest volumes of traffic, contains one of its largest concentrations of shopping, and contains residential neighborhoods with a mix of relatively affordable housing types. There is potential to build on this mix: Kaiser Permanente completed an approximately $1 billion expansion to the facility, but it is unclear to what degree the surrounding area can capitalize on the medical center's activity. Meanwhile, several vacant and underutilized parcels sit in the Study Area providing potential opportunities for new uses that could help to invigorate the area.

The area surrounding the Sierra Avenue and Valley Boulevard intersection is often the first impression people have of Fontana and is a key to communicating that Fontana is great place to live, work, and conduct business. This area currently does not convey this message because of the congestion and visual condition of the streetscape and surrounding uses.

For these reasons, the City applied for and won a Compass Blueprint Grant from SCAG for the Sierra Avenue Valley Boulevard Land Use Study.



SIERRA AVENUE VALLEY BOULEVARD LAND USE STUDY — City of Fontana

Study Area Overview

Study Area Boundary

September, 2012

0 1,000 2,000 Feet

Sources: City of Fontana, San Bernardino County, SANBAG, 2012

Produced by Community Design + Architecture in association with Economic & Planning Systems and Fehr & Peers

Project goals

The goals for the Sierra Avenue Valley Boulevard Land Use Study are a foundation for the project. They are an important way to focus the efforts of the Study and were used to make decisions and evaluate potential solutions at all steps of the project.

The project's goals were initially created through the City's development of the Request for Proposals (RFP) and included the following:

- Reduce traffic congestion at Sierra/Valley intersection
- Maximize walkability between land uses
- Anticipate future mass transit opportunities
- Identify land uses synergistic with Kaiser Permanente
- Identify opportunities for new housing

These goals were refined during the project's kick-off meeting held on June 12, 2012. The meeting was attended by members of the consultant Team including Community Design + Architecture (CD+A), Economic and Planning Systems (EPS), and Fehr & Peers; SCAG staff; and staff from the City of Fontana from a range of departments such as Community Development, Engineering, Economic Development, Housing, and Healthy Fontana. A major part of the kick-off meeting was devoted to discussion of the project goals, detailed objectives or "sub-goals," and potential additional goals. The inter-disciplinary range of viewpoints in the room enabled a full fleshing-out of the cross-cutting issues of the project.

Based on the kick-off meeting discussion, the Team developed the following final project goals, which included one new goal (Goal 6).

Goal 1 – Reduce traffic congestion at Sierra/Valley intersection

- Understand the origins of the congestion along Sierra Avenue and Valley Boulevard
- Reduce conflicts between local and regional auto traffic in the Study Area
- Improve driving times to Kaiser Medical Center within the Study Area along major access routes
- Improve access for residents in and around the Study Area to citywide and regional destinations
- Determine possibilities for reducing truck traffic at the Sierra-Valley intersection
- Reduce conflict points and potential for collisions at the Sierra-Valley intersection
- Reduce idling in the Study Area and resulting greenhouse gas emissions

Goal 2 – Maximize walkability between land uses

- Enable people currently walking in the Study Area to do so safely and comfortably
- Remove barriers for walking between existing and emerging pedestrian origins and destinations
- Convert more local vehicle trips to pedestrian trips
- In the long term, take steps toward creating more pedestrian destinations and origins in the Study Area
- Expand the focus on walkability to also support bicycle access in and through the Study Area

Goal 3 – Anticipate future mass transit opportunities

- Maximize use of current bus service
- Create a better connection between the Study Area and the Fontana Metrolink station
- Explore potential for a more substantial transit hub in the Study Area
- Explore potential for circulators/shuttles
- Improve access to transit via walking and bicycling

Goal 4 – Identify land uses synergistic with Kaiser Permanente

- Explore what medical industry uses would complement and/or support the Kaiser Medical Center
- Explore what goods and services Kaiser Permanente employees, members, and patient visitors might need and/or desire in the Study Area
- Understand what barriers have prevented synergistic land uses desired by the market from manifesting
- Create strategies to support implementation of land uses found to synergize with the Kaiser Medical Center

Goal 5 – Identify opportunities for new housing

- Determine opportunities within the Study Area for housing to meet citywide housing, economic development, and community development goals
- Determine opportunities for new housing to provide pedestrian origins
- Determine demand for temporary or long-term housing by Kaiser medical center employees, members, and/or patient visitors

Goal 6 – Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

- Determine the opportunities for creating a sense of place in the Sierra-Valley area
- Create a gateway to Fontana from the south that leaves a positive image
- Create a gateway to the Kaiser Medical Center that communicates the vitality of the medical center
- Convey a positive image to freeway motorists at and around the Sierra interchange
- Communicate the transition from the auto-oriented freeway and Valley environments to walkable and multimodal places along Sierra, surrounding developments and neighborhoods.
- Accomplish other project goals in a way that builds identifiable and enjoyable places in the Study Area

Project Process

The Sierra Avenue Valley Boulevard Land Use Study process was designed to allow the Project Team to understand the study area and how the project goals could best be achieved by the City of Fontana and its potential partners, as well as to allow the Team to engage in a dialogue with stakeholders and the public. It included a diverse array of methods to illuminate the existing land use and transportation conditions and the desires of the community. The end result of the process was intended to be a set of recommendations informed by comprehensive community outreach, intensive research and analysis, and creative thinking.

Kickoff meeting and Site Tour

The project began with a kickoff meeting in June, 2012, that included the consultant Team of Community Design + Architecture, Economic and Planning Systems, and Fehr & Peers; the City of Fontana's project management Team in the Planning Department; and representatives of other City of Fontana departments. The meeting accomplished two main goals: refining the set of project goals and taking a tour of the study area. The tour included both driving and walking around the Sierra-Valley area as well as a discussion of the Kaiser Permanente hospital expansion project led by the project's architect.

Data and Policy Analysis and Field Research

After defining the project goals, the Project Team set out to understand the Sierra-Valley area. The project goals addressed a wide range of aspects of the area: land use, transportation, urban design, and the market, so the Team needed to understand all of these aspects of the area.

The Team undertook an analysis that included examining demographic data, land use data, and market data. The Team looked at past studies and cataloged past planning efforts and current Fontana and regional land use and transportation policy.

The Team also walked much of the area and documented existing conditions with photographs.

Stakeholder Interviews

A major piece of the Project Team's analysis of the Sierra-Valley area was a series of interviews undertaken in June 2012. The Team interviewed a range of stakeholders that included residents, business owners, community leaders, and leaders at the Kaiser Permanente Fontana Medical Center. These interviews provided the Team with a number of benefits, including a history of the area and the illumination of key issues in the area.

A summary of the stakeholder interviews is included in the Appendix of this document, in the *Land Use and Transportation Analysis.*

Medical Center Survey

Another key piece of the analysis phase was a survey undertaken by the Project Team at the Kaiser campus. The survey queried members of the Kaiser community on their travel behavior and preferences for land uses around the medical center. The Team developed two different surveys for Kaiser employees and Kaiser members/visitors and administered the surveys at three Kaiser campus farmers markets. The Team compiled the survey results using Survey Monkey and summarized them for the analysis report.

The survey's communication of the habits, preferences, and desires of the Kaiser community was critical in informing the Team's recommendations. The survey results and a summary are included in the *Land Use and Transportation Analysis*, in the Appendix of this document.

Pedestrian and Bicycle Counts

Due to a lack of existing data on pedestrian and bicycle activity in the study area, the Project Team undertook a series of pedestrian and bicycle counts over the course of a day. The Team counted pedestrians and bicyclists at six key intersections in the study area, during two hour windows in the morning, midday, and evening. The pedestrian counts in particular helped illustrate the high pedestrian demand around the Kaiser campus. The pedestrian count information is included in the *Land Use and Transportation Analysis*, in the Appendix of this document.

Analysis Report and Opportunities

The Team took its findings from data and policy analysis, field research, stakeholder interviews, the medical center survey, and the pedestrian and bicycle counts, and developed a *Land Use and Transportation Analysis*. The *Analysis* concluded with a series of opportunities that the Team believed would achieve the six project goals.

The *Land Use and Transportation Analysis* is included as an Appendix in this document.

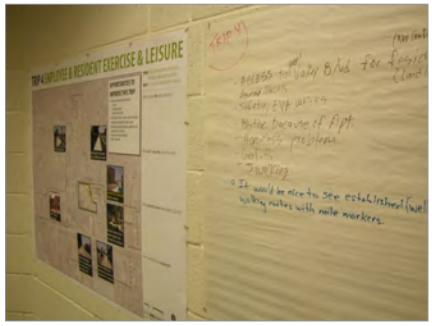
Public Outreach: Analysis Phase

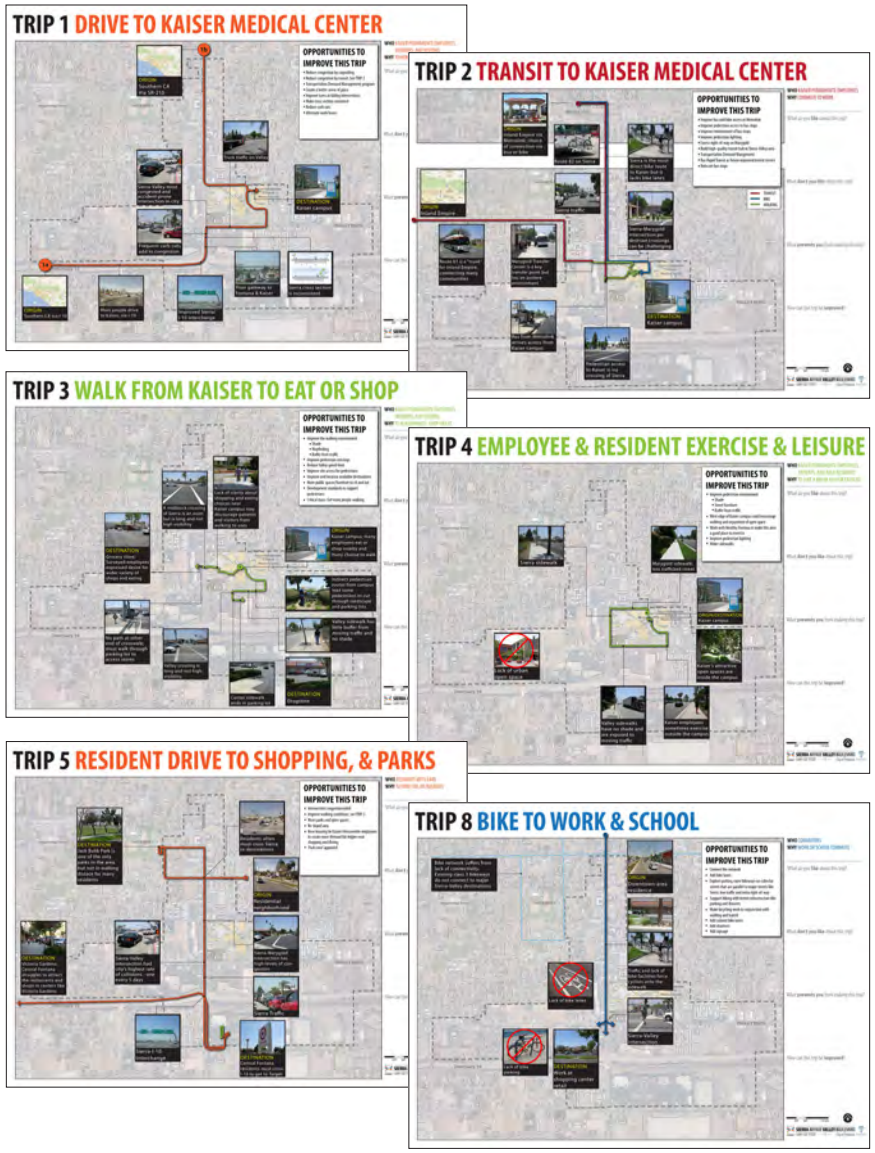
The Project Team presented its analysis findings to the public at a meeting held in October, 2012, at Jurupa Hills High School in Fontana. The Team promoted the event through contact with stakeholders, the City of Fontana website, flyers at businesses in the study area, and KFON TV.

The meeting consisted of a presentation of conclusions about land use, transportation, and the market, followed by an interactive open house exercise. The exercise presented the Team's analysis of the "key trips" in the area undertaken by car, transit, foot and bike, and invited attendees to give their comments on the trips being shown. The meeting was attended by 12 people.

In addition, during this time, the Team held meetings with key stakeholders Kaiser Permanente and Omnitrans to present and discuss its findings.

A summary of the meeting comments are in the Appendix.





Display boards used at the analysis phase public meeting (above) described popular trips in the study area on foot, bike, transit and in vehicles, and asked attendees to comment (left).

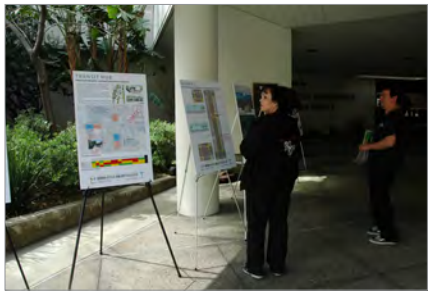
Development of Objectives and Recommendations

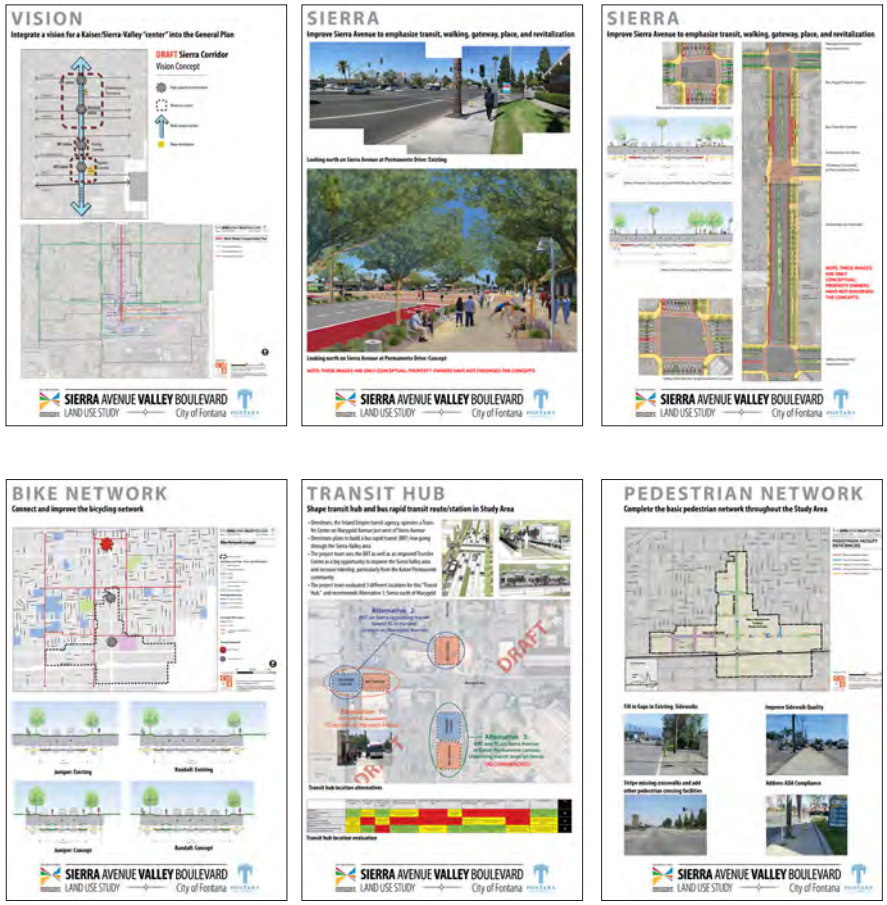
After the first public meeting, the Project Team met with various City of Fontana departments to review the opportunities in the Analysis Report and the input received from the public. The Team settled on some key opportunities to pursue in its recommendations. The Team then drafted a set of Planning Objectives that framed its recommendations. For each objective the Team created a series of initiatives that would accomplish the objective.

Many of the initiatives were public realm improvements that the Team fleshed out into planning and design concepts. Others were policy and program recommendations.

Public Outreach: Recommendations Phase

The Project Team presented these preliminary recommendations at a series of public outreach events in March 2012. The Team held an informal open house at the Kaiser campus; made a presentation at the Dino Papavero Senior Centre; and made a presentation to the City of Fontana Planning Commission. The Team was successful in reaching more people than the first round of outreach. Approximately 50 people participated in the Kaiser open house; 12 people attended the senior center presentation; and the planning commission presentation was aired on KFON TV. A summary of the events and feedback are in the Appendix.





Display boards used at the Kaiser Permanente open house described the project's recommendations (above); The team presented at Dino Papavero Senior Centre (left) and held an open house at Kaiser Permanente (far left).

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RECOMMENDATIONS

The Project Team's recommendations are the primary outcome of the Sierra Avenue Valley Boulevard Land Use Study. These recommendations are structured around ways that the Team believes will most effectively address the project's six goals:

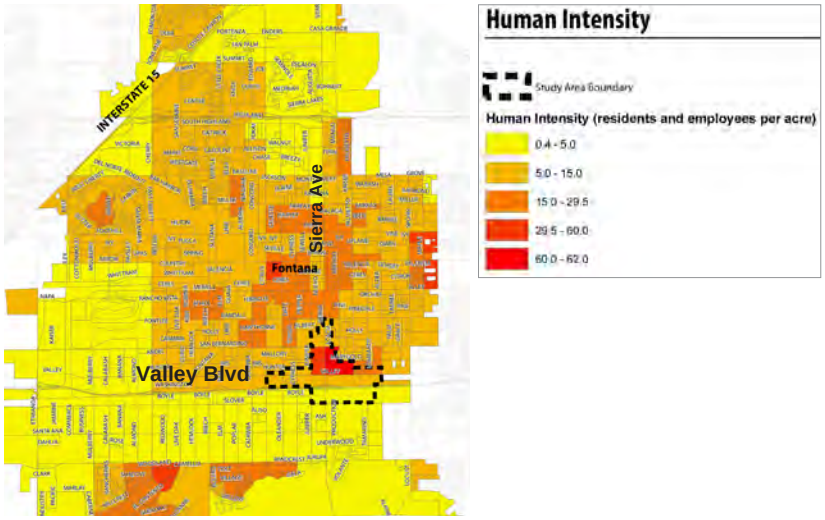
- Reduce traffic congestion at Sierra/Valley intersection
- Maximize walkability between land uses
- Anticipate future mass transit opportunities
- Identify land uses synergistic with Kaiser Permanente
- Identify opportunities for new housing
- Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

The objectives, and the initiatives within them, were generated as the ways to most effectively achieve the project goals.

The Big Picture

As the *Land Use and Transportation Analysis* concluded, the Sierra-Valley area possesses several assets. Chief among them is the collection of rich, active land uses clustered along Sierra Avenue. The area includes the 24-hour activity of the Kaiser Permanente medical campus with its over 5,000 employees and visitors coming and going; almost a third of the city's shopping square feet; and a diversity of residential areas including senior communities, apartments, and single family neighborhoods. These are all land uses conducive to the study goals in that they are "people" land uses that cater to human activities such as living, eating, shopping, working, and health care. Indeed, the Sierra-Valley area has some of the highest densities of combined residents and employees per acre in the city. It also has a relatively even mix of residential and non-residential land uses unique in Fontana. These qualities, of density and diversity, are two of the "D"s that are critical to walkable, transit-supportive districts.

Additionally, the Sierra-Valley area is important historically, both for Fontana and Kaiser Permanente. The Fontana hospital was Kaiser's first, and Kaiser Steel put its imprint throughout the area, including the building of the Dino Papavero Senior Centre. It will also be important in the future, as Kaiser plans to make its Fontana medical center a specialized "tertiary" facility. These land use, demographic, and historic aspects of the area combine to make Sierra-Valley one of the most unique and important areas of Fontana.



The Study Area contains some of the most intense areas of Fontana in terms of residents and employees per acre.

However, on the ground, the area does not appear or feel unique or important. There is no indication of the rich history and little sense of the human activity of the area. There is little sense of gateway to Fontana or the Kaiser campus. Most of what people experience is a lot of traffic. Despite the people-oriented land uses here, the public realm has few people spaces.

Another key "D" is design, and the character of the area is shaped by its design for automobiles. Most of the reasons for the lack of sense of place in the area can be traced back to the dominance of cars in the design of the area. Parking lots are usually in front of buildings, streets are difficult to cross and unpleasant to walk alongside. Land uses are largely focused inward.

Another factor that prevents the Kaiser campus from being integrated with the rest of the Sierra-Valley area is that the surrounding shopping centers do not focus on Kaiser community but to I-10 travelers and largely working class residents of the surrounding neighborhoods. There is nothing inherently wrong with this; the shopping is meeting the needs of these markets, but the Kaiser community comprises what is likely a significant market demand for shopping and services.

It is also important to note that this study's recommendations focus on Sierra Avenue more than Valley Boulevard. The Project Team found Sierra to have existing land uses and connections to downtown Fontana that align more closely with the study goals than Valley Boulevard. While Sierra has direct "people-serving" land uses like shopping and residences, Valley tends to have more vehicle-serving land uses like storage, warehousing, car sales, and industry that serve people less directly.

So, while the land uses in the Sierra-Valley area are supportive of the study goals, especially along Sierra Avenue, the urban form and market present challenges. This study's recommendations largely aim to transform these two aspects of the Sierra corridor.

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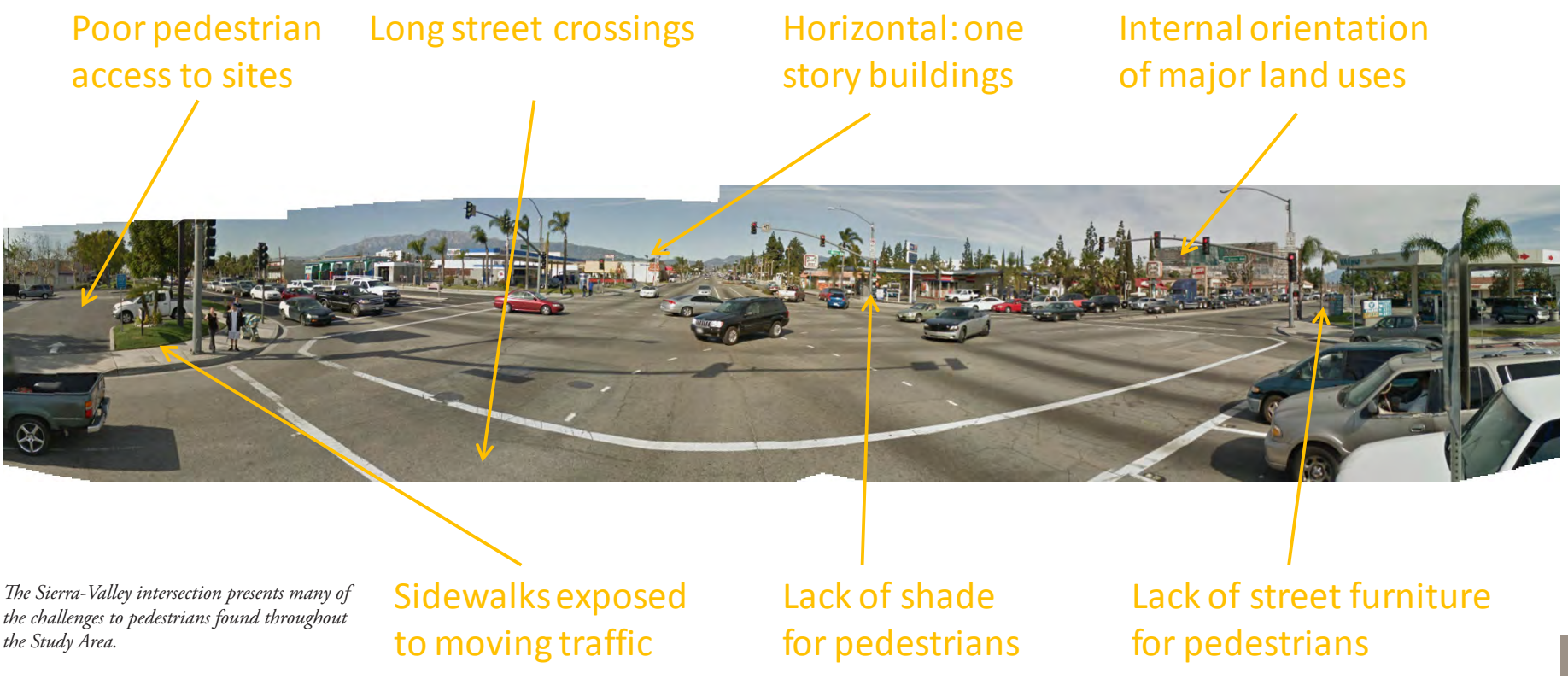

The Sierra-Valley intersection presents many of the challenges to pedestrians found throughout the Study Area.

Transitioning the Sierra-Valley area into a district that embodies the goals of this study will not occur quickly or as the result of a single transformational project. The area is fully built-out, and land use patterns are dominated by commercial operators catering primarily to customers accessing the area from the Sierra interchange off the 10 Freeway. Furthermore, the real estate market currently favors new development opportunities in other parts of the City of Fontana (see Market section of the *Land Use and Transportation Analysis*).

Rather, the existing condition suggests that a series of incremental steps, involving planning and outreach initiatives to codify a common vision, targeted public infrastructure investment, public-private partnerships, and cultivation of market opportunities, can create conditions to transform the urban form and market conditions of the area. This strategy is based on the idea that a common vision shared by public and private stakeholders coupled with selected infrastructure investment and improvements to the public realm, can help create a sense of place, catalyze private investment, and stimulate additional market-based development.

Specifically, pedestrian and bicycle infrastructure improvements in and around the Sierra-Valley intersection and the expansion of transit options can increase pedestrian activity and circulation between residences, retail sites, and job locations such as the Kaiser Hospital and future Westech campus. Office developers may be drawn to expand the medical services core, and the growth of area users will create incentives for more diverse retail options. Furthermore, a more walkable environment often results in an improved "sense of place," and leads to improved land values, higher rents, and a stronger foundation for market-based residential development.

In this scheme, catalytic actions are provided by public investment in pedestrian and bicycle infrastructure, investment by Omnitrans to add bus rapid transit routes to the area, continued infill with low-to-moderate income housing developments, and potentially by joint-venture infrastructure initiatives between the City, Kaiser Permanente, and other private property owners. The resulting market response, in turn, supports office development, encourages construction of market-rate multifamily units, and helps diversify the retail tenant mix.

For example, improved pedestrian and bicycle infrastructure could help reduce the number of short-distance vehicle trips and encourage non-motorized vehicle and pedestrian activity. Because the Sierra-Valley area features a relatively high density of commercial and residential uses, there is strong potential to convert short driving trips to walking or biking trips. Furthermore, a survey of work-day shopping and dining habits of Kaiser employees revealed that to some degree, the uninviting pedestrian environment and traffic congestion impede short off-campus trips. Improved non-motorized vehicle infrastructure could free up considerable demand among Kaiser employees and patients for shopping in the Sierra-Valley area. There is historical evidence that bicycle and pedestrian infrastructure investment can stimulate economic value by making a community more livable. This includes increases in residential property value resulting from improved connectivity and visual appeal, direct real estate investment following the establishment of a walkable retail or entertainment destination, and fiscal and economic benefits from new construction projects and increased economic activity.

In this way, these small, incremental public actions can accumulate and have long-term impact both on the character of the public realm and the area's market-based revitalization.

Planning Objectives and Initiatives

This narrative arc can be broken down into nine key Planning Objectives that will achieve the study goals. They are:

1: Create a vision for the Sierra-Valley area

2: Shape transit hub in Sierra-Valley area

3: Improve Sierra Avenue to emphasize transit, walking, gateway, place, and revitalization

4: Connect and improve the bicycling network

5: Integrate Kaiser Permanente Medical Center with surrounding community

6: Lay foundation for pedestrian-oriented zoning

7: Complete the basic pedestrian network

8: Create a transition on Valley Boulevard to walkable area

9: Explore opportunities for creating and revitalizing housing in Sierra-Valley area

Each objective includes a series of initiatives – potential projects, policies, or programs that will achieve the given objective. Each initiative is formatted roughly the same way: It includes an introduction, a location map if focuses on a specific location, and a brief implementation summary. The implementation summary contains the following:

City role is what the City of Fontana's role would be in the initiative, what aspect of City business the initiative would involve, and which departments might be involved.

Partner Engagement specifies what other entities might be involved, whether in the public or private sectors.

Potential implementation strategies provides broad direction on what kind of action would likely be used to implement the initiative, whether Public Policy, Public-Private Financing, or Private Sector Outreach. The Implementation section provides a more in-depth discussion of these implementation strategies.

Additionally, each initiative displays the icons relating to the goals which it can most directly accomplish:

Reduce traffic congestion at Sierra/Valley intersection

Maximize walkability between land uses

Anticipate future mass transit opportunities

Identify land uses synergistic with Kaiser Permanente

Identify opportunities for new housing

Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

OBJECTIVE 1

Create a vision for the Sierra corridor in the Fontana core

A vision for the Sierra Avenue corridor in the core of Fontana will create a direction for the center of the city and how other core districts connect and relate to Downtown Fontana. Currently, the Fontana General Plan lacks specific guidance and vision as to the identity and priorities for the Sierra-Valley area. In addition, the trove of history present in the area is not apparent; the complex activity of the Kaiser Hospital is seen primarily through traffic; and the Sierra-Valley area has no name. Put simply, the Sierra-Valley area is a unique, exciting part of the city whose uniqueness and excitement is not readily visible either in city policy or on the ground. This objective seeks to change that by recommending the creation of a vision.

- 1.1 Create vision concepts for core Sierra corridor and centers in the General Plan
- 1.2 Create a multi-modal transportation network to support the Sierra corridor
- 1.3 Re-brand the Sierra-Valley area

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Corridor and centers

Initiative 1.1: Create vision concepts for core Sierra corridor and centers in the General Plan

Defining graphic and written vision concepts for the Sierra corridor and the districts along it will provide a foundation for future, more detailed land use policy as well as communicate the City of Fontana's vision to the range of community stakeholders. The Project Team developed some concepts to be used as inspiration for an eventual vision for the Sierra corridor.

It is important to note two things: 1) The draft vision concepts created in this report are only drafts that are the product of research and public outreach for this project. They should, at the very least, be taken through a larger public process. 2) The draft vision concept for the Sierra corridor includes downtown Fontana because the Project Team believes the connections of the Sierra-Valley area with downtown Fontana are a crucial part of any vision for the area.

City role: Public process; Integrate into General Plan

Partner Engagement: Engage area stakeholders

Potential implementation strategies: Public policy

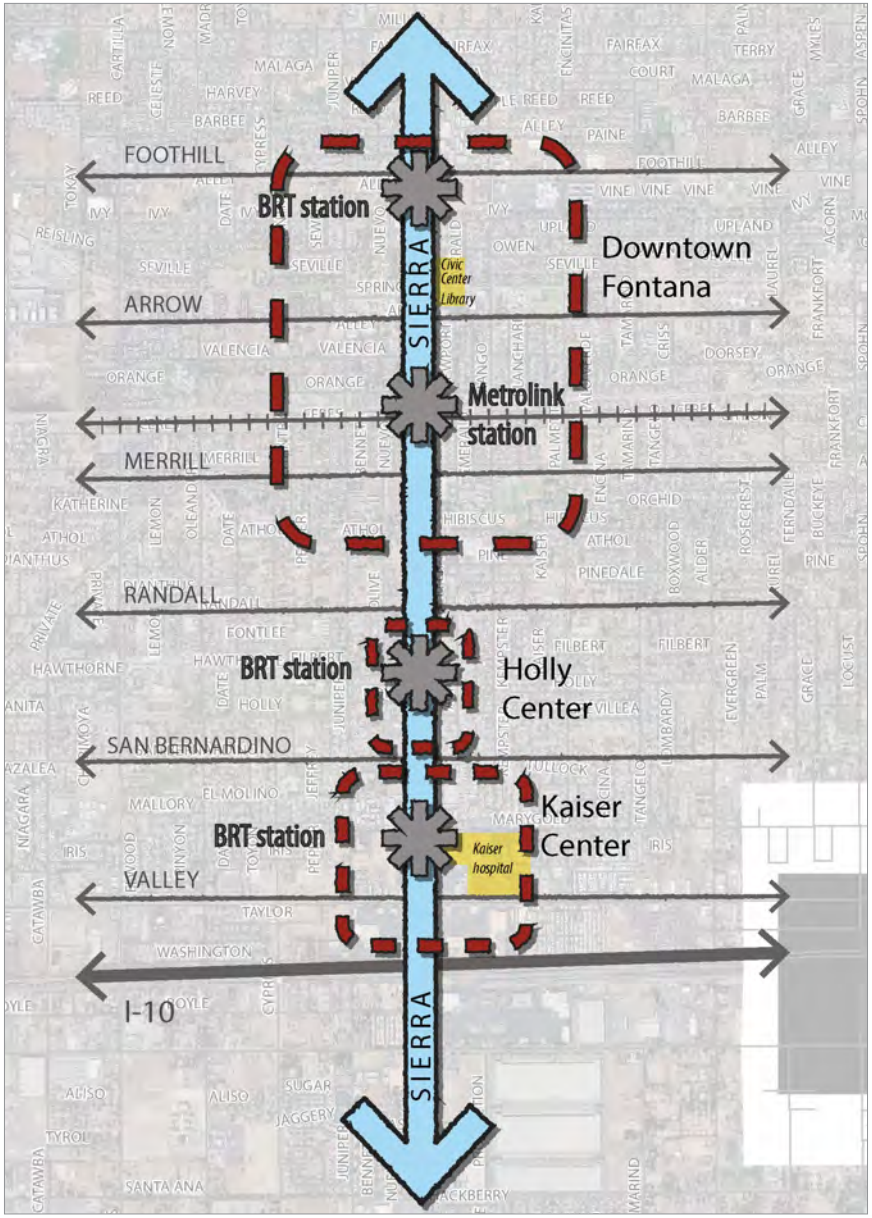


Figure 1-1: Potential Draft Vision diagram for Sierra corridor.

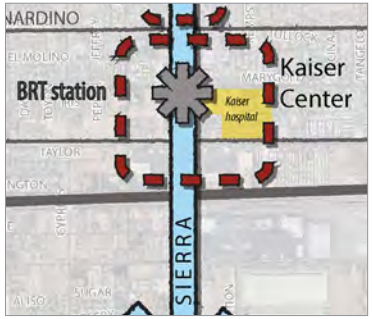
Fontana Core Sierra Corridor Draft Vision Concept

The segment of Sierra that runs through the core of Fontana should be considered one multi-modal corridor and the spine of the city's core. This stretch of Sierra connects the city's downtown with the Sierra-Valley area and other parts of Fontana. Treating this corridor as a whole will be fundamental to revitalization of the city's core.

Based on the Project Team's work studying the Sierra-Valley area, the following could be included in a draft vision concept for the Sierra Corridor:

- Create a spine for the Fontana core
- Improve multimodal mobility and access among key city destinations
- Accommodate all modes on the corridor, which can include parallel streets
- Connect downtown Fontana with other parts of the City
- Make new development along the core corridor walkable
- Focus development on centers
- Connect major transportation nodes, employment, shopping and cultural centers
- Provide a gateway into Fontana
- Nurture a mix of land uses that supports livability: residential, shopping, employment, education, civic venues
- Improve multimodal access to Sierra Avenue
- Develop new mixed-use centers at Kaiser Permanente Medical Center and between San Bernardino and Randall Avenues that will center on bus rapid transit stations

Kaiser Center Vision Concept



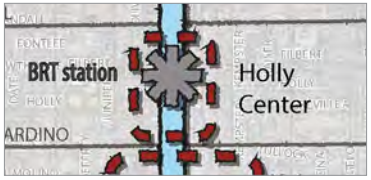
A vision for the area centering on Sierra-Marygold will legitimize the importance of one of Fontana's most important shopping and employment and residential areas, re-fashioned around a new Bus Rapid Transit station, better multi-modal connections to downtown Fontana, better integration of the Kaiser Medical center into the surrounding community and re-development of opportunity sites.

Based on the Project Team's work studying the Sierra-Valley area, the Team recommends defining a mixed-use center focused on the activity of the Kaiser Permanente medical campus and the proposed bus rapid transit (BRT) station near Sierra and Marygold (see Objective 2). The following could be included in a draft vision concept for a "Kaiser" Center:

- Develop identity as a very important non-downtown mixed use center of employment, shopping and residences.
- Keep current land use mix of medical center, residential, and shopping
- Maintain level of diverse activity but convert to pedestrian from vehicular
- Maintain balance of living and working in the area
- Orient to the rich land use of the medical center by adding complementary land uses of commercial, education, residential, and open space
- Integrate medical campus into surrounding center through better pedestrian connections, quality public space, and complementary land uses.
- Over time, create mixed-use developments
- Add more housing to the center
- Create quality urban open spaces in the center that appeal to multiple user groups such as families, seniors, employees and Kaiser members and visitors
- Orient new development to the street

- Improve senior access to shopping and services through pedestrian infrastructure and especially ADA compliance
- In the long term, create a finer-grained street network
- Focus on northeast corner of Sierra and Valley as a gateway opportunity for Kaiser campus
- Maintain the Valley corridor as vehicle-oriented but acknowledge transition through pedestrian and transit-focused Sierra corridor
- Orient new development and public improvements to BRT stop and bus transfer center
- Improve pedestrian infrastructure such as sidewalks, ramps, crosswalks, signals, shade, seating, landscape
- Imbue identity of center with Kaiser Steel and Kaiser Permanente history
- Create a pedestrian promenade at the west edge of Kaiser campus
- Create a special crossing at Permanente Way that will serve as a gateway to the Sierra corridor
- Implement multimodal improvements to Sierra/Marygold intersection and Sierra/Valley intersection

Holly Center Vision Concept



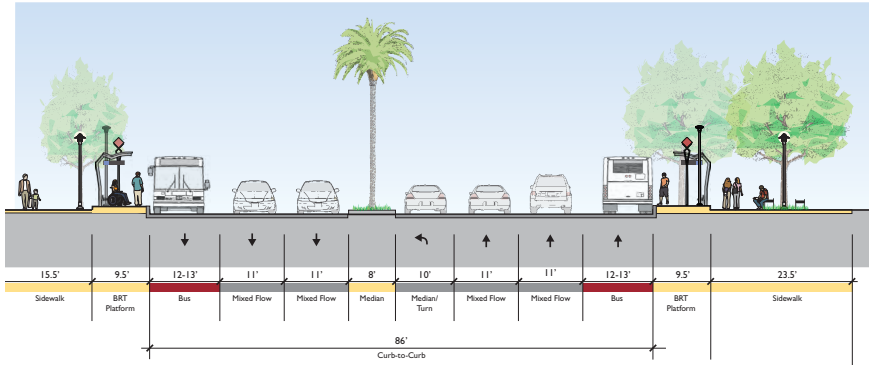
Based on its work studying the Sierra-Valley area, the Project Team recommends defining a mixed-use center focused on a mix of commercial, office, residential, and educational land uses and the proposed bus rapid transit (BRT) station on Sierra between Randall and San Bernardino. For the purposes of this report, this center has been named the "Holly" Center after Holly Street, in the middle of this stretch. The following could be included in a draft vision concept for a Holly Center:

- Transition away from auto uses and toward people-oriented land use mix of residential, education, shopping and employment
- Develop identity as secondary center of activity focused on education, employment, some support shopping and services and residential
- Grow Westech and other educational presence
- Attract office
- Prioritize quality development of Rock Honda site as key piece of the center
- Orient to multimodal nature of Sierra Avenue
- Add at least one or two pedestrian crossings of Sierra between Randall and San Bernardino
- Orient to Bus Rapid Transit station in middle of station
- Create placemaking element defining the middle of the center

Multi-modal transportation plan

Initiative 1.2: Create a multi-modal transportation network to support the Sierra corridor

This initiative presents concept for a network of multi-modal transportation improvements in the Sierra-Valley area. It ties together the multi-modal improvements presented in other recommendations into one network. These include re-design of streets such as Sierra and Marygold; a pedestrian promenade on Sierra edge of the Kaiser campus; improvements to the Sierra-Valley and Sierra-Marygold intersections; new bikeways; new crossings; and streetscape improvements on Valley Boulevard. These different improvements work together and complement one another. They are mapped on Figure 1-2 on the following page.

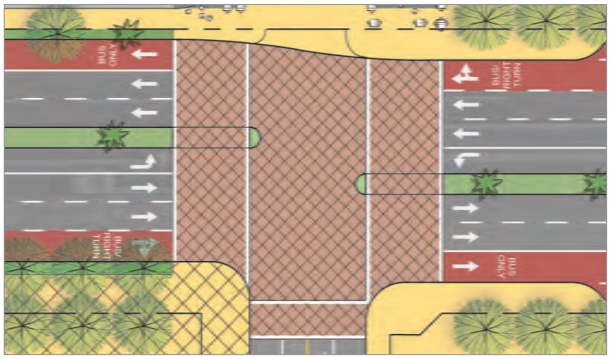


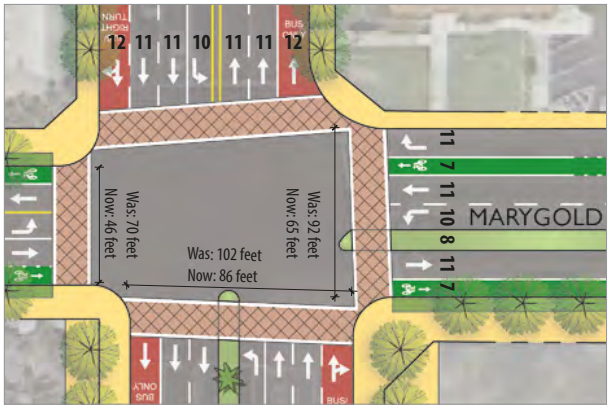
The multi-modal transportation plan concept integrates many of the concepts for individual improvements found throughout this plan's initiatives, including (clockwise from top left): Location concept for a new transit hub (Initiative 2.1) and transit-focused Sierra Avenue redesign (Initiative 3-1); a "gateway" pedestrian crossing (Initiative 3.3 and Pedestrian Promenade (Initiative 3-2); and a concept for pedestrian improvements to the Sierra-Marygold intersection (Initiative 3.5).

City role: Public process; Integrate into General Plan

Partner Engagement: Engage area stakeholders

Potential implementation strategies: Public policy





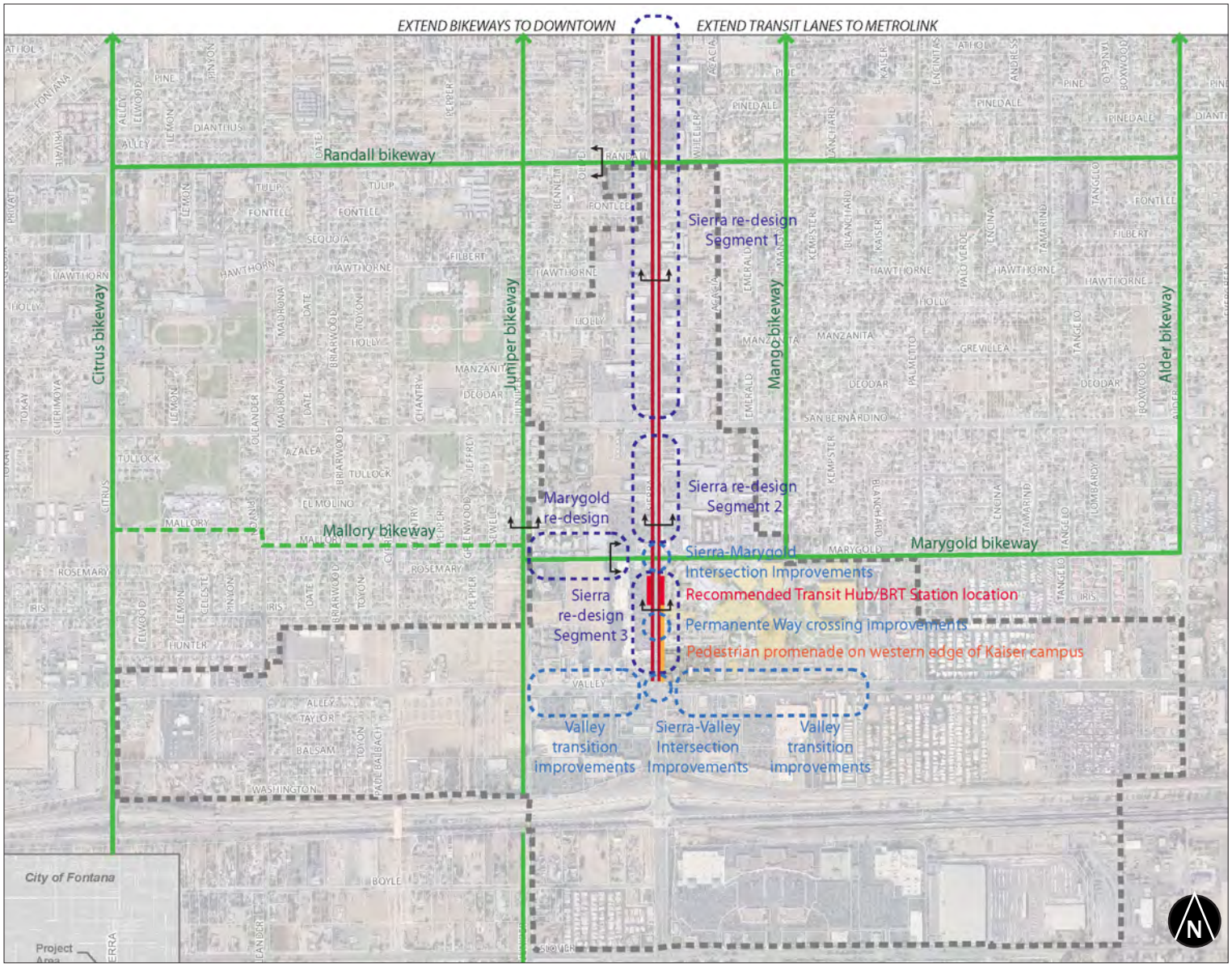


Figure 1-2: Draft multi-modal transportation plan for Sierra Corridor

Re-brand Sierra-Valley

Initiative 1.3: Re-brand the Sierra-Valley area

Sierra-Valley is a unique, active, and history-rich area whose uniqueness and history are not currently visible. Public realm, pedestrian, transit, and bicycle improvements will be a foundation for bringing out the area's identity through placemaking, but the City and its partners can also actively re-brand the area. The City should work with Kaiser Permanente and other interested parties to develop strategies to re-brand Sierra-Valley. Strategies could include developing a brand, marketing the area, providing more historical information and images in the public space of the area, developing a Business Improvement District or comparable organization, and eventually targeting specific businesses or uses to bring in to the area. See Implementation section.

City role: Economic development, Healthy Fontana

Partner Engagement: Engage area stakeholders and businesses, especially Kaiser Permanente, Chamber of Commerce, history associations

Potential implementation strategy: Public Policy, Private Sector Outreach

Images of the rich history of Fontana, Kaiser Steel, and Kaiser Permanente could lend character and identity to the Sierra/Valley area (www.kaiserpermanentehistory.org and Rob Jacox/ www.trainweb.org)

Gateway treatments in San Diego help shape the identity of districts and corridors.

OBJECTIVE 2

Shape a transit hub in the Sierra-Valley area

A new transit hub is one of the largest opportunities for achieving project goals. A transit hub would combine the existing Omnitrans transfer center at Marygold Avenue with a new Bus Rapid Transit station serving a planned Omnitrans BRT line. If located and designed correctly, such a hub could dramatically increase transit ridership and accessibility; increase walkability; improve public space and public safety; help lure private development; and become part of a welcoming gateway to Fontana. Focusing on a transit hub also leverages the likely investment of Omnitrans as well as the potential investment of Kaiser Permanente.

- 2.1: Recommend a location for a transit hub that combines a transfer center and bus rapid transit station
- 2.2: Redesign Marygold Avenue

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Transit hub location

Initiative 2.1: Recommend a location for a transit hub that combines a transfer center and bus rapid transit station

One of the first steps to shaping a transit hub in the Sierra-Valley area is picking a location. The Project Team recommends that a combined Marygold Transfer Center and bus rapid transit (BRT) station be located on Sierra Avenue just south of Marygold Avenue. This location:

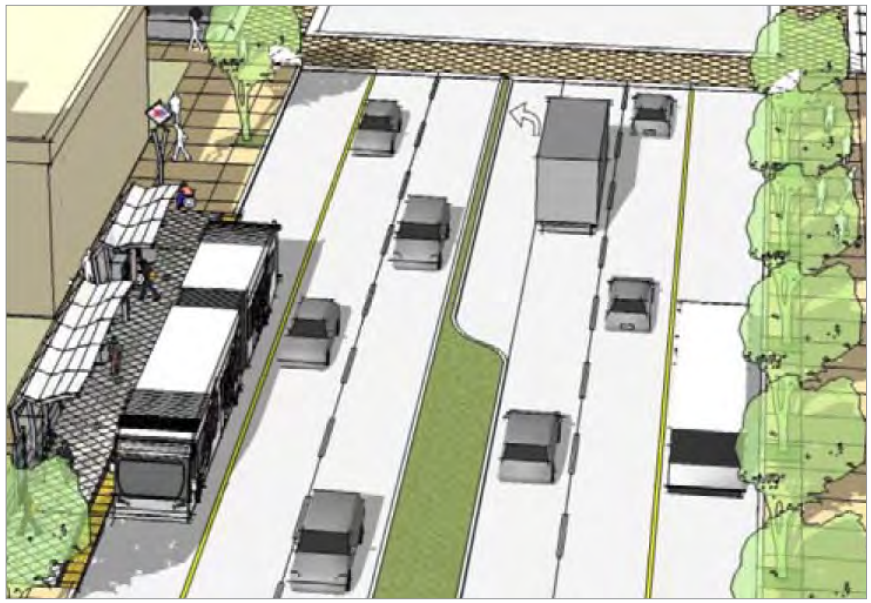
- leverages the proximity of the Kaiser Permanente campus and Kaiser Permanente community as potential riders;
- ties into potential transit-only lanes on Sierra Avenue (see Objective 3);
- makes the transit hub visible to potential riders and makes the investment of a transit hub more visible as a part of a Fontana Gateway; and
- creates an important piece of the public realm.

This initiative provides the background and the case for the importance of a transit hub and the recommended location.

City role: Make recommendation to Omnitrans; consider redesigning streets (see Objective 3)

Partner Engagement: Work with Omnitrans; work with Kaiser Permanente to integrate potential transit hub into campus

Potential implementation strategies: Public Policy, Public-Private Financing



Rendering of design of a future Omnitrans sbX bus rapid transit station.

Route map at the existing South Fontana Trans Center (Marygold Transfer Center)

Background

The Sierra-Valley area is an important node for transit. Omnitrans, the transit provider for the northern part of the Inland Empire, runs five bus lines run through the area, and the Sierra-Valley node is an important transfer point. From this point, Omnitrans buses provide service to other parts of Fontana, the Fontana Metrolink, and other Inland Empire communities and job and educational centers.

Omnitrans indicates that ridership in Fontana is increasing. Much of this growth is due to students, whose ridership has been growing at about 16 percent per year. The agency's most popular bus line, the 61, runs through the core of Fontana, coming from the west along San Bernardino Avenue and up Sierra Avenue to the Metrolink Station. The 61 has approximately 6,000 boardings per day.

Omnitrans is in the process of planning one of its sbX Bus Rapid Transit (BRT) lines from Pomona to Fontana, which will roughly follow the 61 route and come through the Sierra-Valley area. Omnitrans expects ridership on the 61 route to increase to over 10,000 boardings per day as a result of the BRT. However, the agency is unsure of the specific route of the BRT and the location of a station in the Sierra-Valley area.

Existing transit service at Sierra-Marygold and transfer center

The five Omnitrans bus lines that currently serve the Sierra-Valley area include longer "trunk" lines such as the 61 and 82, and shorter lines like the 20, 29 and 19. The Marygold Transfer Center is located on Marygold Avenue west of Sierra Avenue, at the side of the Sierra Plaza South shopping center. It is served by the 61, the 20 and the 29.

However, the Team believes the transfer center could be improved. This is not a well-known facility, perhaps due to its lack of visibility or bus stop amenities. The transfer center also only serves three of the five routes that come through the area; the others involve a walk to a stop on the other side of the block or across one of the busy streets intersecting nearby. Finally, its lack of amenities does not make it stand out.

Bus Rapid Transit and the sbX system

Bus Rapid Transit (BRT) is a form of transit relatively new to the United States that uses a bus to emulate a rail experience. A BRT system strives to create the smooth, dependable, and expedited rail experience with the lower costs of a bus. Cities throughout the world have found success with BRT, including Bogota, Colombia, and Queensland, Australia. BRT has begun to appear in US cities as well, with successful lines in Cleveland, Los Angeles, Las Vegas, and Eugene, Oregon.

Bus rapid transit station (left) and vehicle (right) in Las Vegas.

The sbX system is Omnitrans' emerging bus rapid transit system. It will include several aspects of BRT, including limited stop service, frequent buses, transit signal priority, distinct branding, enhanced stations with level boarding and off-board fare collection and dedicated lanes.

The first sbX line was recently completed on E Street in San Bernardino and Loma Linda. The $191.7 million project was 96 percent funded from federal, state and county funds designated for transit projects. The cities of San Bernardino and Loma Linda contributed the remaining 4 percent through in-kind contributions such as permit fee waivers, use of facilities owned by the cities, and spaces for the Civic Center park-and-ride. It is likely that for the Fontana routes, similar matching funding would be required as well.

As part of its System-Wide Plan to expand sbX bus rapid transit service throughout the San Bernardino Valley, Omnitrans has identified two potential transit corridors that could transform transit use in the Sierra-Valley area. Proposed Corridor Route 5, the 61 route, is an east-west corridor that would run from the Pomona Transcenter in the west through Ontario and then into Fontana, ending at the Fontana Metrolink. Proposed Corridor Route 8 Sierra Avenue is a north-south route that lies entirely within the City of Fontana and would extend from the Route 5 Kaiser station for seven miles along Sierra Avenue until terminating where Sierra meets Interstate Highway 15. Omnitrans considers Corridor 5 one of the two highest-priority routes and intends development within 6 to 12 years. Corridor 8 is lower-priority and would be considered only after substantial residential growth in northern Fontana.

The exact route of Corridor 5, also called the Holt Boulevard/4th Street corridor, has not been planned and it is unclear how to best manifest the sbX through the Sierra-Valley area to leverage the potential ridership of Kaiser Permanente as well as the rest of the residents and employees in the area. With the sbX integrated into the rest of the Omnitrans bus system, it would benefit riders to co-locate the BRT station and the transfer center into a combined transit hub.

Alternative transit hub locations

The Project Team identified three potential alternative locations for a Sierra-Marygold area transit hub:

Alternative 1: Marygold (status quo)

In this alternative, the Transfer Center remains on Marygold west of Sierra with the BRT station being built next to it. The routes serving the area could potentially be re-routed so that more routes stop at the Transfer Center than the current three.

Alternative 2: Split between Marygold and Sierra north of Marygold

In this alternative, the Transfer Center would remain on Marygold west of Sierra while the BRT station would be located on Sierra Avenue north of Marygold Avenue. The Team determined that there is not enough room on this stretch of Sierra to locate the entire hub there.

Alternative 3: Sierra at Kaiser Permanente campus

In this alternative, both the Transfer Center and the BRT station would be located on Sierra Avenue south of Marygold.

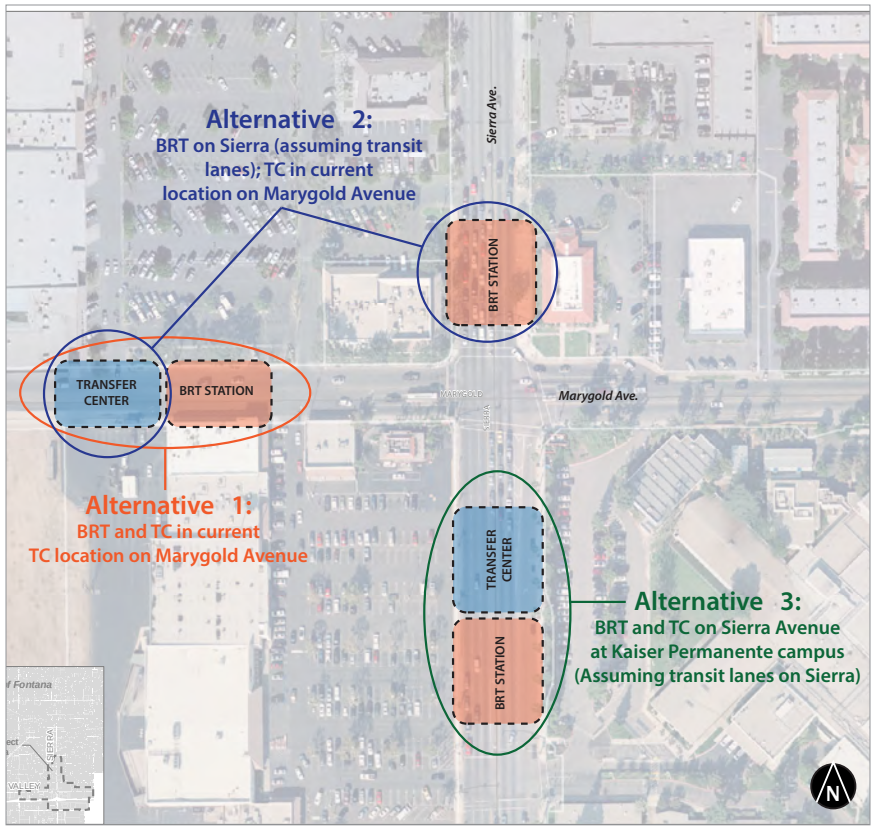


Figure 2-1: Transit hub location alternatives.

Evaluation

The Project Team evaluated the three alternative locations qualitatively on the following criteria, which took into account transportation function as well as the greater context of the community:

Bus rapid transit operations

How well could the location work for both the operation of the bus vehicles and the function of the station and its passengers?

Transfer center operations

How well could the location work for an improved transfer center? How many routes would be able to be incorporated into the transfer center?

Degree of change from existing condition

How much would have to change – including re-routing buses, re-designing streets and intersections, and acquiring right-of-way – to make this location work?

Big picture urban design

What is the potential of a transit hub at this location to contribute to, or to be a centerpiece of, an improved public realm for the area? Can a transit hub here be a part of a gateway for Fontana? Is it a legible, intuitive place for a transit hub in this district?

Small picture urban design

How well would this location provide a positive place to wait for transit? Does it have the type of frontage that supports pedestrians (i.e. active and transparent)? What is the potential of the adjacent sites to take on a more pedestrian and transit-supportive character?

Pedestrian access

Would it be easy, comfortable and safe for pedestrians to access a hub at this location? How close is it to the potential riders of the Kaiser campus? What is the experience of transferring between the BRT and other routes like?

Integration with Kaiser Permanente

How far from the Kaiser campus and its entry points is the location? What is the long-term potential to integrating a transit hub into the campus? Is it located in a place where it will be attractive to potential Kaiser riders?

Available space for facility

How much room would there be for the transfer center – its waiting passengers and amenities? How much room would there be for the BRT station platform, relative to the sbX's design guidelines? How much width is there and how much length?

Personal safety

Safety is a major issue in the area, and consistently ranks high on the list of priorities for transit riders and potential transit riders. Is the location safe, and perhaps just as importantly, does it feel safe? Urban form can contribute to safety and sense of safety through visible, well-lit locations.

Traffic operations

What is the impact on the current traffic patterns of a transit hub placed at the location?

The Team scored each of these criteria with a "1," "2" or "3." Figure 2-2 summarizes the evaluation of these criteria, with each alternative receiving a cumulative score. However, this is more of a qualitative analysis, so more attention should be given to how the various alternatives score for criteria for which the City has different priorities. While poor performance in some criteria may be able to be mitigated, poor performance in others are more indicative of low potential for great urban design.

Alternative 1 (score of 20, 2nd highest) essentially expands the existing transfer center, so it will not incur a high degree of change on the transportation network and infrastructure. It will also be beneficial for BRT operations due to the amount of longitudinal space along Marygold, space available in the Marygold cross section, and advantage of routing the buses down Juniper, across Marygold, and up Sierra. However, this alternative scored poorly in nearly every other criteria: it is not visible not prominent, not very safe, and is somewhat far (700 feet) from the nearest pedestrian entry to the Kaiser campus. Redevelopment of the adjacent site could improve this location as a transit hub, but the potential of this happening seems to be long-term.

Alternative 2 (score of 16, 3rd highest) did not excel at any of the criteria. It still possesses some of the operations benefits of Alternative 1, but the BRT operations are more complicated on Sierra, where there is less longitudinal room for the BRT stations. Transferring riders between the BRT and other routes will have to walk at least 400 feet and likely have to cross a busy street. It will likely impact traffic patterns without providing an obvious urban design benefit. Kaiser riders would have to cross at least one busy street.

Alternative 3 (score of 24, highest) excelled at many of the criteria. It has the most room in terms of both depth and longitudinally. It is the closest to the Kaiser campus, which, combined with being at the front of the shopping center, also means it has the most "eyes" on it, a benefit for personal safety. The presence of the "mid-block" crossing at Permanente Drive provides good pedestrian access across the busy Sierra Avenue. A transfer center here could serve four out of the five routes that operate in the area. Perhaps most importantly, this location presents the highest potential for both big picture and small picture urban design: it is situated in the most active, pedestrian-heavy environment in the area and would also be at the front of the most obvious long-term redevelopment site in the area. Sierra Avenue at the Kaiser campus is likely the most prominent location for a transit hub in the area because it is visible and adjacent to the largest activity generators without competing with the Sierra-Valley intersection. However, the large challenge of this site is the degree to which bus routes would have to be changed, and that the BRT would have to come down to Valley and through the Sierra-Valley intersection.

	Bus rapid transit operations	Transfer center operations	Degree of change from existing condition	Available space for facility (per Omnitrans sbX design criteria)	Small picture urban design ("sense of place")	Pedestrian access	Integration with Kaiser Permanente	Big picture urban design (in context of district and city)
Alternative 1: Transfer center at Marygold BRT at Marygold	BRT can run down Juniper to Marygold and has lots of space to stop	Lots of room for TC and Marygold easy to cross but only serves 3 routes	Simply adds BRT to existing condition along Route 61	Long stretch with no curb cuts; appears to have lots of right-of-way but quite constrained; BRT station would be at bare minimum width	Frontage is dead and not very many eyes on the street but some potential for redevelopment over the longer term	Sidewalks connecting to surroundings but no crosswalk at TC	360 feet to campus; 700 feet to nearest pedestrian entry	Not a visible or prominent location; new development could change this, but unlikely in short term
Alternative 2: Transfer center at Marygold BRT at Sierra north of Marygold	BRT can run down Juniper to Marygold but stopping on Sierra would be tougher	Only serves 3 routes and at least 400-foot walk and one street crossing to BRT	TC stays but must figure out way Sierra can accommodate BRT	BRT site on Sierra is constrained laterally and longitudinally; TC site on Marygold would be better off than Alternative 1, but still not enough room for optimal design	TC frontage is bad and BRT site is suburban frontage and poor sidewalk but some potential for redevelopment over the longer term	at least 400-foot walk and one street crossing between TC and BRT	BRT: 130 feet to campus; 470 feet to nearest pedestrian entry	Scattered facilities subdue impact of hub; putting BRT on Sierra more visible
Alternative 3: Transfer Center at Sierra at Kaiser Permanente BRT at Sierra at Kaiser Permanente	BRT has to run along a block of Valley and go through Sierra/Valley; lots of room on Sierra	Lots of room for TC; Sierra crosswalk present; serves all routes but 1	Re-route 61, 20, BRT to Valley; figure out way for Sierra to prioritize buses	Sierra has relatively wide sidewalks; lots of room curb-to-curb; few curb cuts; best scenario would depend on cooperation or ROW purchase from adjacent landowners	Suburban frontage but lots of peds & redevelopment potential	TC and BRT adjacent; closest to Kaiser; midblock pedestrian crossing	Adjacent to or on campus; can be placed immediately next to ped entry	Combined hub on Sierra at Kaiser leverages trip generator, pedestrian traffic, visibilty and public space potential; Marygold freed up for potential open space

	Personal safety	Traffic operations	**Total**	Success depends on:
Alternative 1: Transfer center at Marygold BRT at Marygold	Existing transfer center site has few eyes on the street and furthest for Kaiser passengers arrving or leaving at night	Little impact likely to occur on through traffic on Sierra. Marygold traffic volumes much lower, buses likely to have less impact on delay and congestion.	**20**	Redesign of Marygold to create better transit waiting environment Pedestrian crossing improvements at Sierra/Marygold Pedestrian-supportive new development
Alternative 2: Transfer center at Marygold BRT at Sierra north of Marygold	Existing transfer center site has few eyes on the street and furthest for Kaiser passengers arrving or leaving at night	Moderate impact on congestion on Sierra assuming bus-only lanes and transfer center is still on Marygold.	**16**	Pedestrian crossing improvements at Sierra/Marygold Additional right-of-way for BRT station on Sierra Bus lanes on Sierra
Alternative 3: Transfer Center at Sierra at Kaiser Permanente BRT at Sierra at Kaiser Permanente	Medical center and shopping center activity have some eyes on street; Kaiser passengers taken right to front door	Moderate impact on congestion on Sierra assuming bus-only lane. Potential for duckout on Kaiser side for local buses.	**24**	Cooperation of Kaiser Permanente Successful routing of BRT to Valley/ through Sierra/Valley (bus only turn lane?) Elimination of some curb cuts on west side of Sierra Bus lanes on Sierra

Figure 2-2: Evaluation matrix of transit hub location alternatives.

Recommendation

The Team recommends the highest-scoring alternative, Alternative 3. The Team believes that the location on Sierra Avenue presents the greatest opportunity to leverage the potential riders from Kaiser and create a major part of Sierra's public realm. It felt that the alternative's potential flaw of having to route the BRT buses down to Valley and through the Sierra-Valley intersection can be mitigated by adding a bus-only left-turn lane from eastbound Valley to northbound Sierra as a "queue jump" (see Objective 3).

The recommendation assumes cooperation with Kaiser Permanente and likely the property owner of the Sierra Plaza South shopping center. The minimum BRT station depth could likely be met within the existing right-of-way, but additional right-of-way or easements could create a better waiting and pedestrian environment. See Objective 3 for a potential cross section of the BRT station at the recommended location.

This recommendation also assumes the building of bus-only lanes on Sierra. Without bus-only lanes, Alternative 3 would still likely be the recommendation, but the alternative would perform more poorly especially with regard to bus operations and traffic.

The Team recommends that this location be integrated into City planning policy and that the City should work with Omnitrans and Kaiser Permanente to implement the transit hub. Details on a potential transit hub design concept are in Objective 3.

Marygold Avenue

Initiative 2.2: Redesign Marygold Avenue

A side effect of the re-location of the Transfer Center would be the opportunity to re-design Marygold Avenue. Marygold currently appears to have excess capacity that could be re-allocated for pedestrians, bikes, and/or transit. However, the needs of the street will be partially determined by the location of the transit hub. A potential benefit of choosing the recommended Alternative 3 transit hub location is that Marygold would no longer need to serve as a transfer point for buses and could likely narrow its space given to vehicular traffic. However, if either Alternative 1 or 2 is chosen, more of Marygold will need to be used for transit operations.

City role: Undertake process to design Marygold Avenue; Integrate recommended design into Capital Improvement Program

Partner Engagement: Work with public and especially senior community at Dino Papavero Senior Centre.

Potential implementation strategies: Public Policy, Public-Private Financing

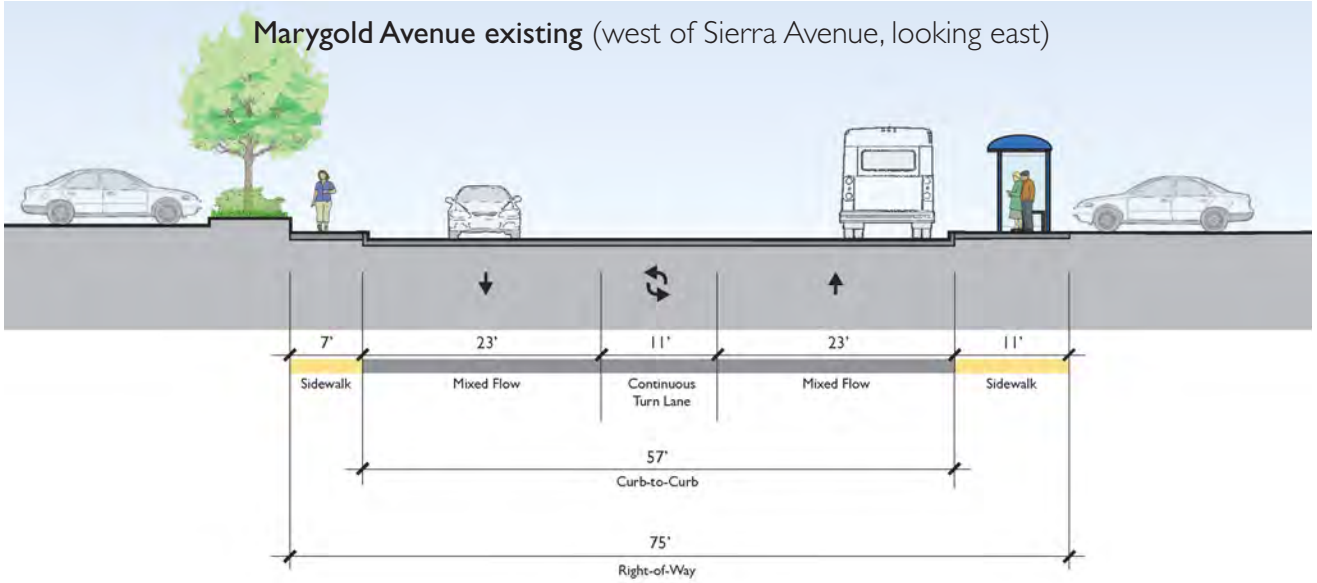


Figure 2-3: Existing image (above, looking west) and street cross section (right, looking east) of Marygold Avenue between Juniper and Sierra.

Site Analysis

Marygold Avenue between Juniper Avenue and Sierra Avenue is a two-lane collector street with enough width between its curbs to accommodate four lanes. Marygold Avenue is an important pedestrian link for seniors living along Juniper Avenue walking or taking mobility scooters to the commercial uses along Sierra Avenue. Marygold serves as ingress and egress for the shopping centers at Sierra and Marygold. This stretch of Marygold is also the site of the Marygold Transfer Center, a bus stop that serves three bus routes and transfers among the five routes that come through the area. Consequently, the needs for Marygold Avenue are dependent upon which option for a transit hub is selected; if there is no need for buses to stop and wait, it opens up more of the street for other uses. Without the need for space for buses to dwell, Marygold here has excess capacity. In the City of Fontana Circulation Master Plan, Marygold is designated as a two-lane collector and the Average Daily Trips on this segment is 7,700 vehicles per day.

Design Concept

The concept illustrates the potential of Marygold Avenue in conjunction with the recommended transit hub location on Sierra Avenue, which likely removes the need for buses to stop at Marygold Avenue. Travel lanes could include one each way, with bike lanes each way (see Objective 4). The sidewalks could be widened to 8 feet with a linear park providing an open space on the south side, with a 7-foot sidewalk and 5-foot landscape strip on the north side.

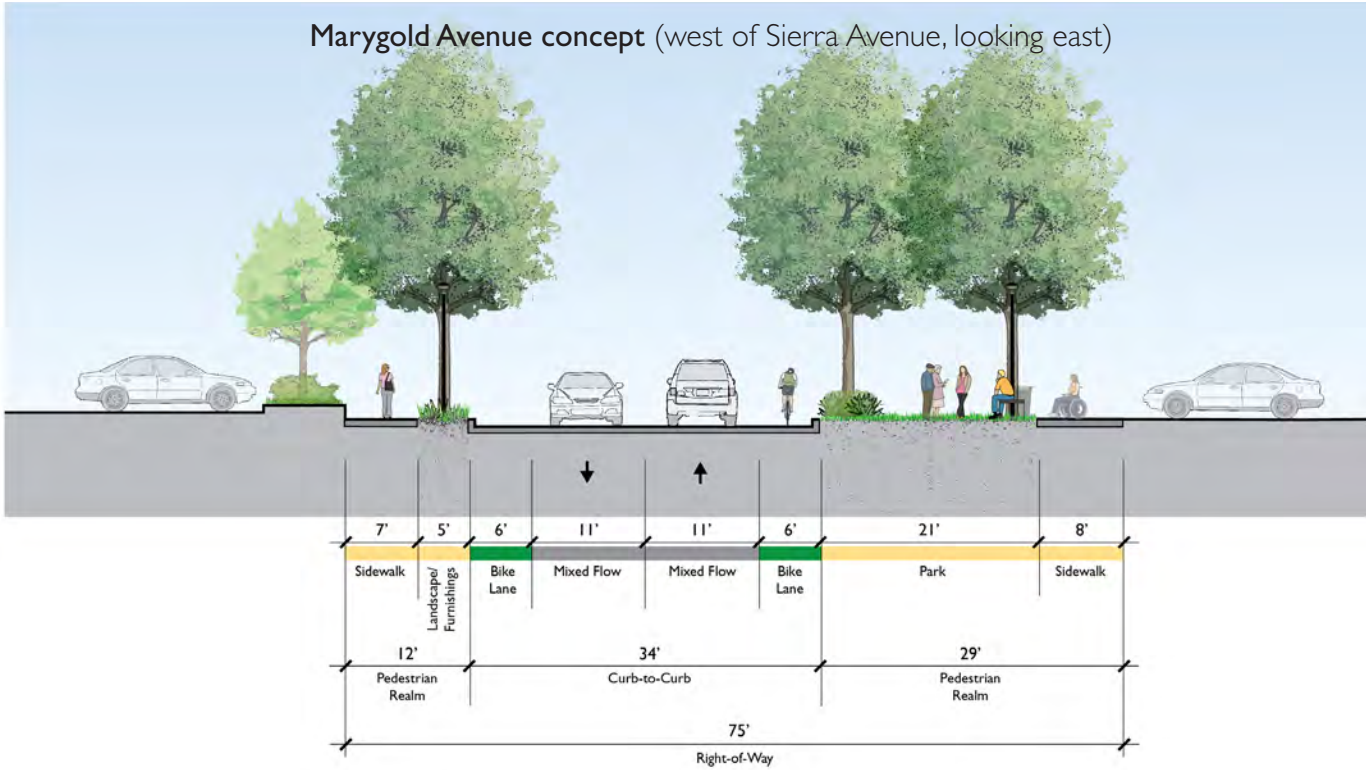


Figure 2-4: Potential concept street cross section (looking east) for Marygold Avenue between Juniper and Sierra.

Small or linear parks of the size that could be placed along Marygold Ave. can be vibrant urban open spaces.

OBJECTIVE 3

Improve Sierra Avenue to emphasize transit, walking, gateway, place and revitalization

Sierra Avenue is the spine of Fontana, linking its different areas and running through its downtown. The Project Team found that the land uses along Sierra – shopping, civic center, residential, office, education, and the Kaiser Permanente medical center – are ideal for a vital, urban walkable core. However, the way the Sierra corridor has been designed, fronted largely by parking lots, with a minimal, inconsistent pedestrian environment, does not create a good environment for walking, transit or enjoyable public space. By redesigning Sierra Avenue to be more walkable and multi-modal, the Team believes that the street could then leverage the land uses and activity centers along it to become a revitalized, connective spine of the city.

- 3.1: Transit priority on Sierra Avenue
- 3.2: Pedestrian Promenade along western edge of Kaiser campus
- 3.3: Emphasized “gateway” midblock crossing at Permanente Way
- 3.4: Improved pedestrian facilities at Sierra-Valley
- 3.5: Improved pedestrian facilities at Sierra-Marygold
- 3.6: Streetscape scheme to unify Sierra Avenue and strengthen walkability and character
- 3.7: Signalized pedestrian crossing(s) added between San Bernardino and Randall

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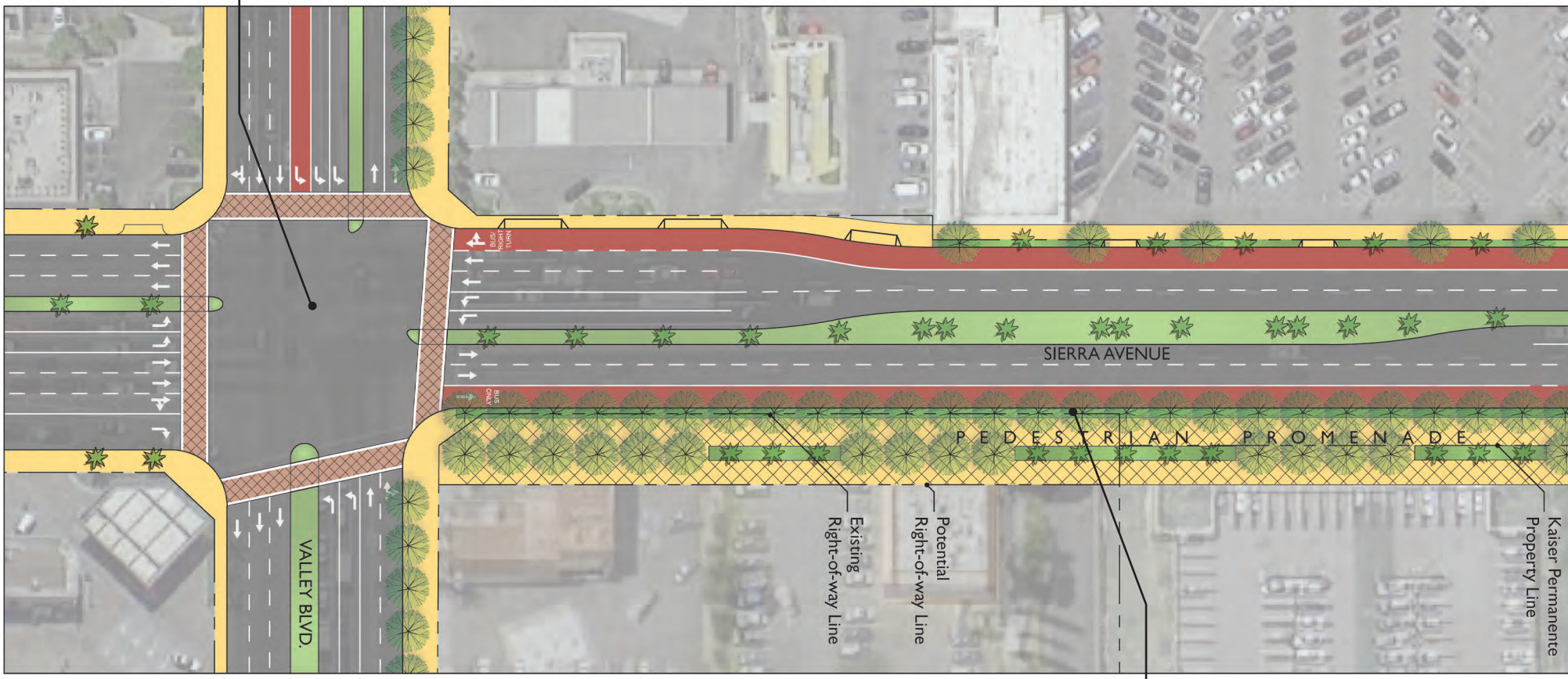
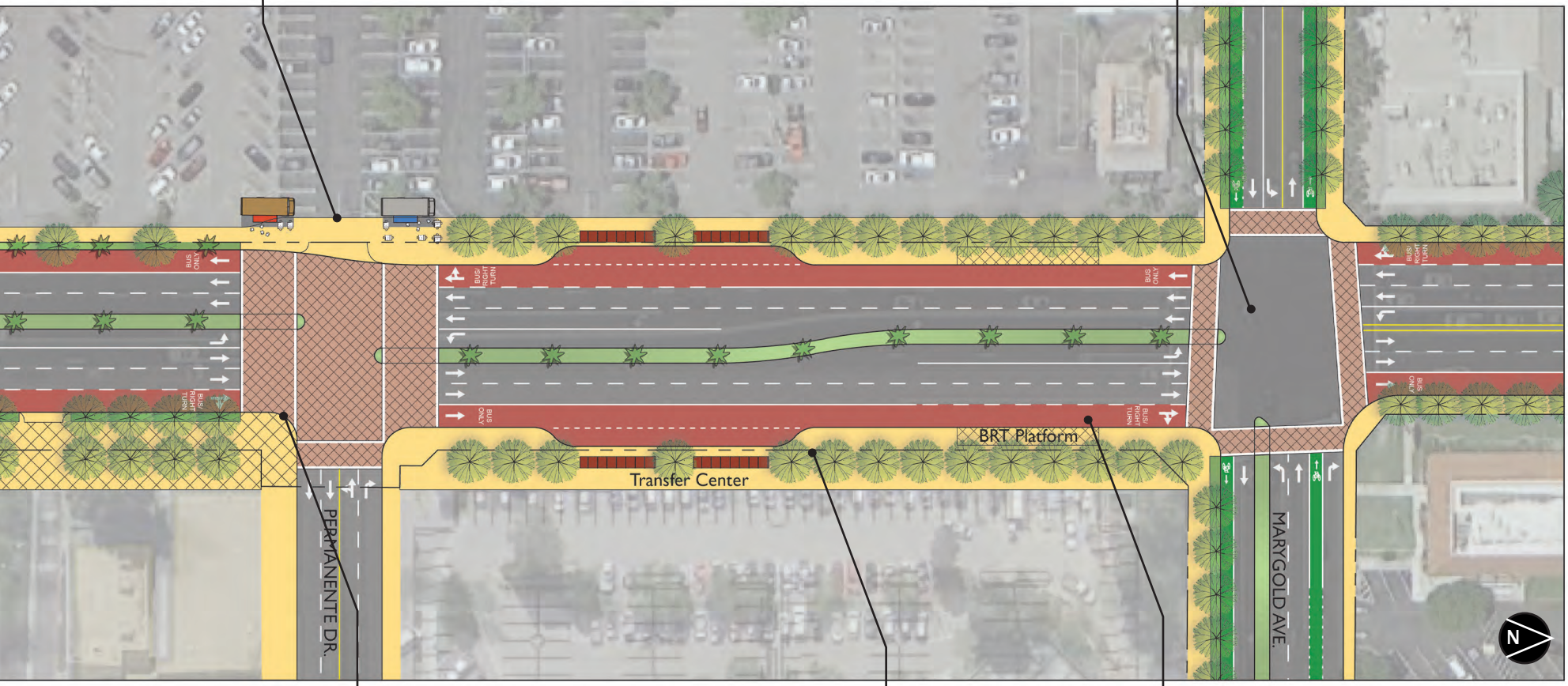
A vision for Sierra Avenue



This segment of Sierra Avenue, from Valley Boulevard to Marygold Avenue, is the focal point for many of this study's recommendations for the Sierra corridor. This segment of Sierra constitutes both the western edge of the Kaiser Permanente campus and a major entry into Fontana, as well as the location of many shopping and eating amenities, and so the project team sees many opportunities to achieve the study goals in this area. This illustration provides an overview of initiatives discussed in more detail elsewhere in the report.


FOOD TRUCKS (5.4)
SIERRA MARYGOLD INTERSECTION IMPROVEMENTS (3.5)
BRT Platform
Transfer Center
PERMANENTE DR.
MARYGOLD AVE.
N
PERMANENTE DRIVE "GATEWAY" CROSSING (3.3)
TRANSIT HUB: BRT STATION AND TRANSFER CENTER (3.2 and 2.1)
DEDICATED TRANSIT LANES (3.1)

Transit priority

Initiative 3.1: Transit priority on Sierra Avenue

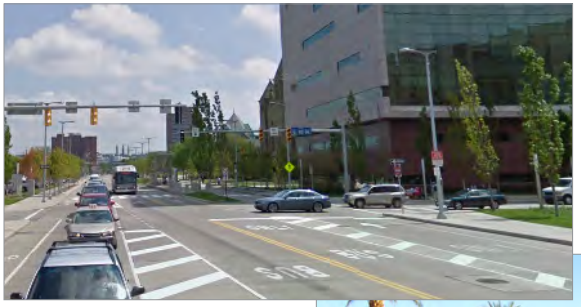
Re-designing the cross section of Sierra to support alternative transportation is one major opportunity for the change to a more multi-modal street connecting destinations between the Sierra-Valley area and downtown Fontana. While a good walking environment is critical to this corridor, and it also needs to better accommodate bicycling, the Project Team believes that the largest near-term opportunity for optimizing the Sierra right-of-way is bus transit. Specifically, the increasing ridership on Omnitrans and the agency's plans for a Bus Rapid Transit (BRT) line on Sierra constitute an outside investment that the city should attempt to leverage.

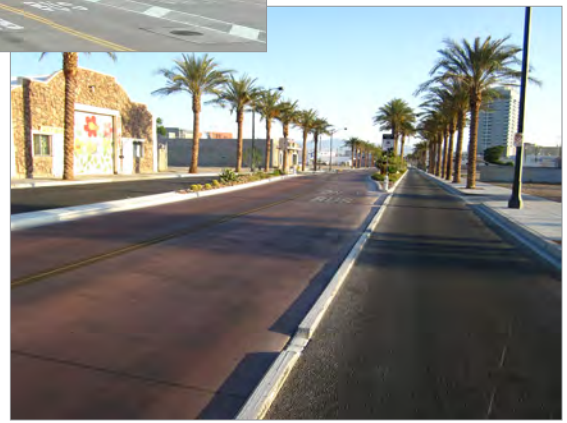
Consequently, the Team recommends that the City consider and study the incorporation of bus-only lanes that could serve the planned BRT as well as local buses and shuttles between destinations such as Metrolink and the Kaiser campus. As the existing cross section and conditions of Sierra are inconsistent between Interstate 10 and Metrolink/downtown Fontana, recommended cross sections and alternatives are presented below for three distinct sections of the corridor.

City role: Study conceptual alternatives; make decision; incorporate into General Plan/CIP; pursue funding

Partner Engagement: Work with OmniTrans for BRT route section

Potential implementation strategies: Public Policy, Public-Private Financing





Dedicated bus lanes have been employed in cities such as New York City (left); Cleveland, shown here near the Cleveland Clinic (above); and Las Vegas (right).

Existing conditions

Sierra Avenue's existing right-of-way between Valley Boulevard and downtown Fontana ranges between approximately 100 feet and 110 feet. What is within this right-of-way ranges from four to six through travel lanes; from a relatively narrow (9 feet) sidewalk to a relatively wide (17 feet) sidewalk; and from medians/turn pockets to a continuous center turn lane. In general, the capacity of the roadway increases the further south one moves along Sierra, increasing from 4 to 6 lanes, then to 5, then back to 6. In much of the corridor the Sierra pedestrian realm has a good foundation in places where the sidewalk is 17 feet and has relatively regularly spaced street trees.

The City of Fontana recently built a series of decorative planted medians along Sierra Avenue between Valley Boulevard and San Bernardino Avenue. The medians contain palm trees and monuments and constitute a gateway and identity element for the street. All of the concept designs for Sierra Avenue are compatible with these new medians.

One specific constraint that should be noted is the narrowing of the right-of-way at the northeast corner of the Sierra-Valley intersection due to inability of the City to purchase right-of-way from the property owner during the historical widening process. The Team's recommendations, as they are long-term, assume the eventual purchase of this right-of-way or negotiation of an easement.

The opportunity for enhanced transit and the case for transit lanes

As is summarized in Objective 2, Omnitrans sees multiple opportunities for increasing transit service on Sierra Avenue. These include both higher-frequency local service along Sierra for seniors, students and other riders as well as a planned sbX Bus Rapid Transit line. In addition, the Team heard interest in shuttles potentially operated by or for Kaiser Permanente along the Sierra corridor.

In addition to the utility of transit as a transportation mode, the potential new transit hub discussed in Objective 2 can also have placemaking, branding, and economic benefits for Fontana. A recent GAO report that surveyed 20 current projects in the U.S. concluded that BRT is contributing significantly to localized economic development by attracting business investment and boosting property values. A successful transit hub will have positive implications for Fontana, and so the Team recommends instituting measures to make the transit hub and its routes successful.

One of the best ways to ensure the success of the sbX BRT line in Fontana is to dedicate transit lanes for Sierra Avenue. Transit lanes are one of the most important aspects of the bundle of upgraded elements that a Bus Rapid Transit system provides. Transit lanes have both direct and indirect effects. For example, transit lanes allow buses to move faster and increase the predictability of bus arrivals; they can lower operating costs; and they can make for smoother and faster stops and pickups. At the same time, as the National Cooperative Highway Research program notes, separate bus lanes "are also known to have a positive effect on ridership because they increase the visibility and identity of the BRT system." BRT systems with transit lanes are also likely to induce land and economic development benefits.

The addition of transit lanes to Sierra Avenue could "cost" as little as one-and-a-half blocks of lane capacity. Segment 1 would only give up a lane in one direction; Segment 2 would give up a lane in both directions; and the recommended alternative for Segment 3 would not need to give up any existing roadway capacity. For those segments of Sierra where one or more mixed flow lanes would need to be converted to bus-only (and right turn), a more detailed analysis of the specific conditions and traffic and transit operations would need to be undertaken.

The opportunity for placemaking and walking

Sierra's land use mix and activity levels create the potential for positive, compelling places along the Sierra corridor. Specifically, the Team believes that the largest opportunity for placemaking is the segment of Sierra along the western edge of the Kaiser campus. This is due to existing and potential pedestrian activity; proximity to complementary land uses in the shopping center; the recommended location of a transit hub; and a place that does not compete with the congested Sierra-Valley intersection. See other initiatives in this objective for more detailed conceptual designs in this area.

Segment 1: Valley to Marygold

This is the segment of Sierra Avenue adjacent to the Kaiser Permanente campus, between what have been found to be the two most congested intersections. This is the critical segment of Sierra to achieve many of this project's goals.

The recommended design in this area (Figure 3-2) leverages the potential identified for both transit and placemaking. Many of the aspects of this design, including the pedestrian promenade and the mid-block crossing, are covered in more detail in other initiatives; this discussion revolves around the cross section recommended.

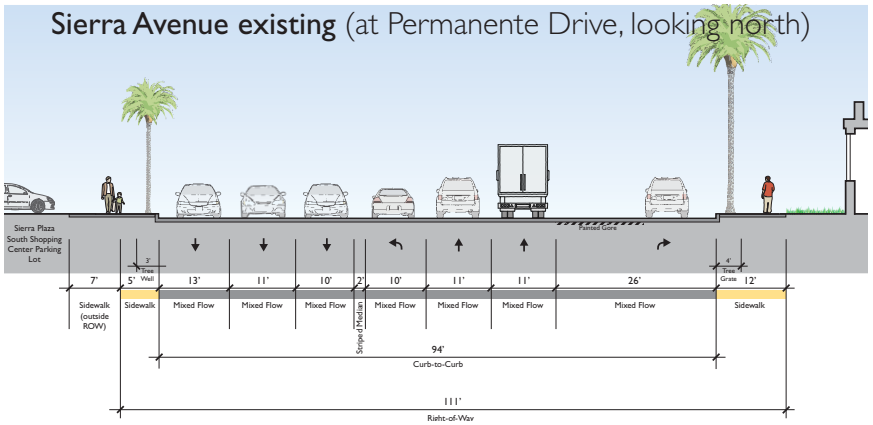
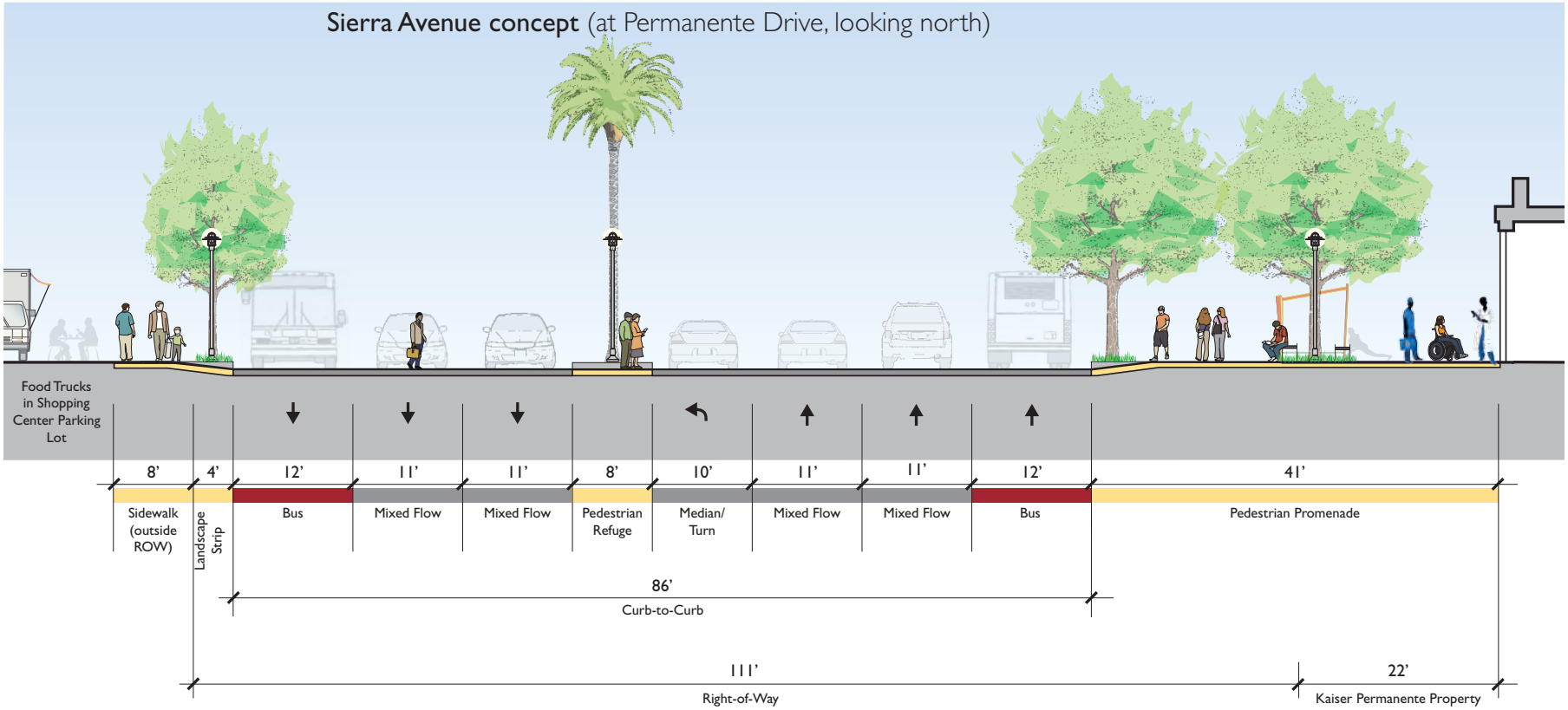


Figure 3-1: Existing cross section of Sierra Avenue at Permanente Drive (right) and Figure 3-2: Potential concept street cross section for Sierra Avenue at Permanente Drive (below).

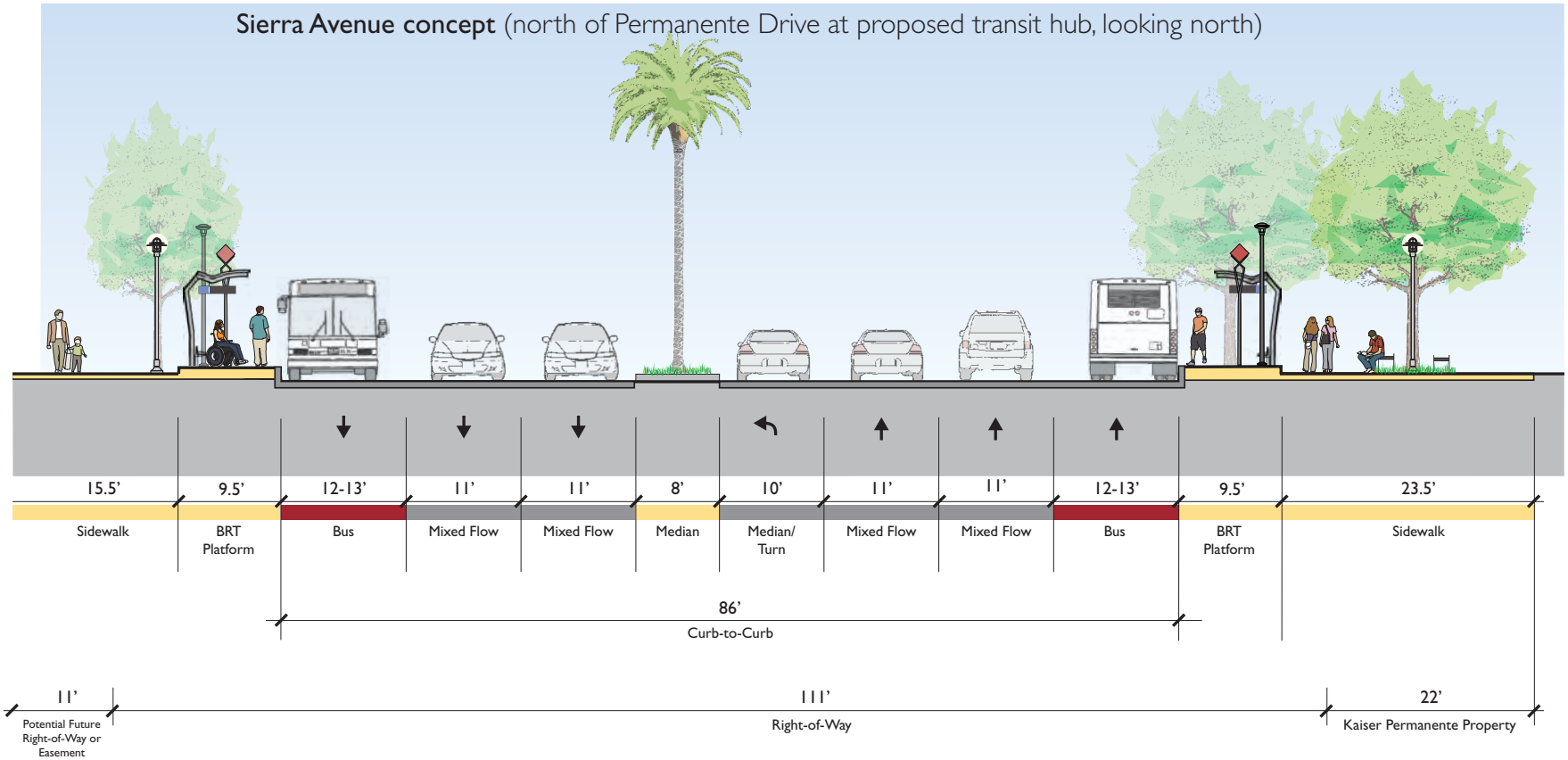


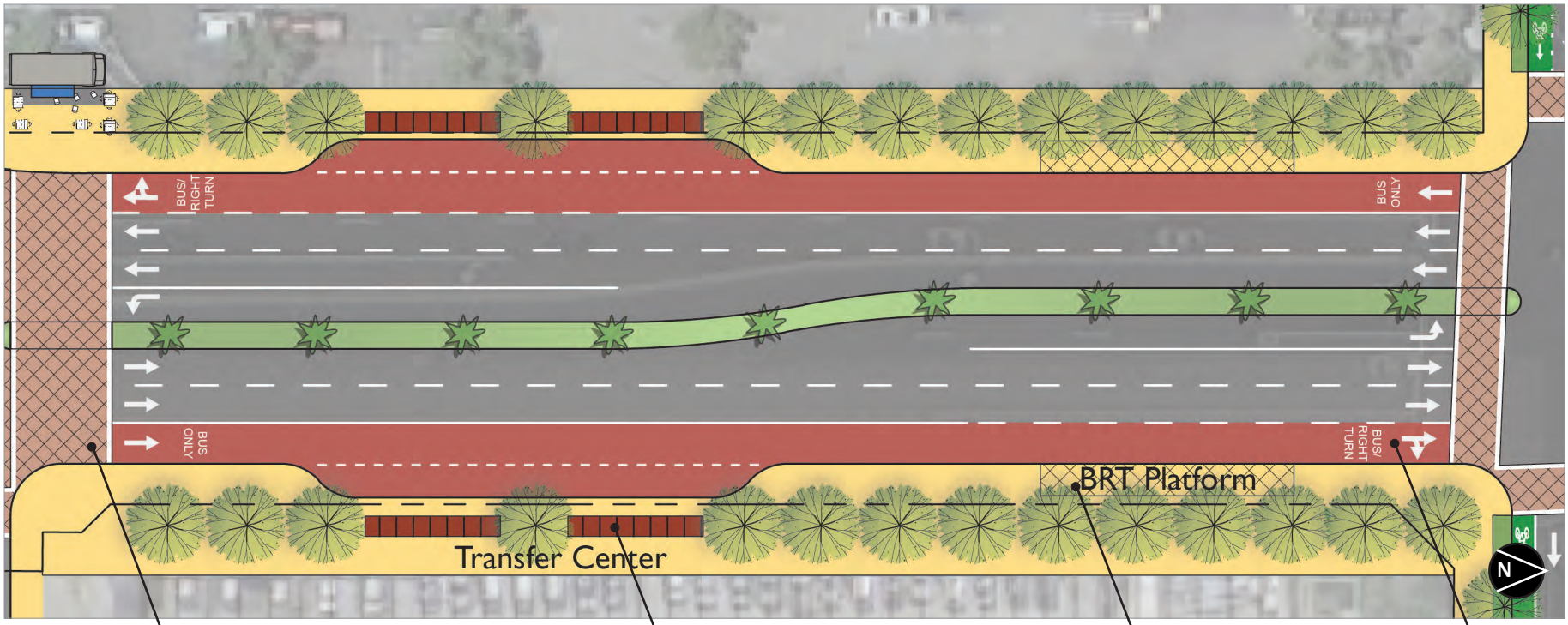
In the northbound direction, a transit lane would be added to the existing two travel lanes. The addition of this northbound transit lane would be made possible by the purchase or easement through the parcel at the northeast corner of the Sierra-Valley intersection. In the southbound direction, one of the existing mixed-flow lanes would be designated as a transit/right turn lane.

Finally, this segment encompasses the recommended location for a transit hub. See Figure 3-3. The existing right-of-way would provide enough space for the minimum Omnitrans sbX station platform depth, but widening the right-of-way with easements or purchases from adjacent property owners would improve the waiting environment and pedestrian flow around the stations. At the transfer center, meanwhile, a bus pullout should be added so as not to impede traffic flow.

Although the recommended cross section reduces vehicular capacity in the most congested segment of Sierra Avenue (by one lane), the Team believes significantly improving the pedestrian environment and transit service can capture both short and long vehicular trips being made in the area. In addition, the benefits of focusing on pedestrians, places and transit addresses more project goals than maintaining or increasing vehicular capacity.

Figure 3-3: Potential concept street cross section for Sierra Avenue north of Permanente Drive at recommended location for transit hub (see Objective 2)





Improved pedestrian crossings allowing for easy transfers and connections across Sierra Avenue

Transfer Center with bus duckouts and enhanced shelters and other amenities

Bus Rapid Transit platforms to sbX design guidelines

Dedicated transit/right-turn lanes on Sierra Avenue

Segment 2: Marygold to San Bernardino

This is the block-long segment of Sierra Avenue just north of Marygold Avenue, which was recently reconstructed to insert new decorative medians. This project also changed the configuration of the street to three lanes each direction, with a narrower sidewalk on the east side of the street.

The recommended cross section makes one change: designating one existing mixed-flow lane in each direction as a transit-only/right turn lane. However, this one change has potential implications for traffic operations.

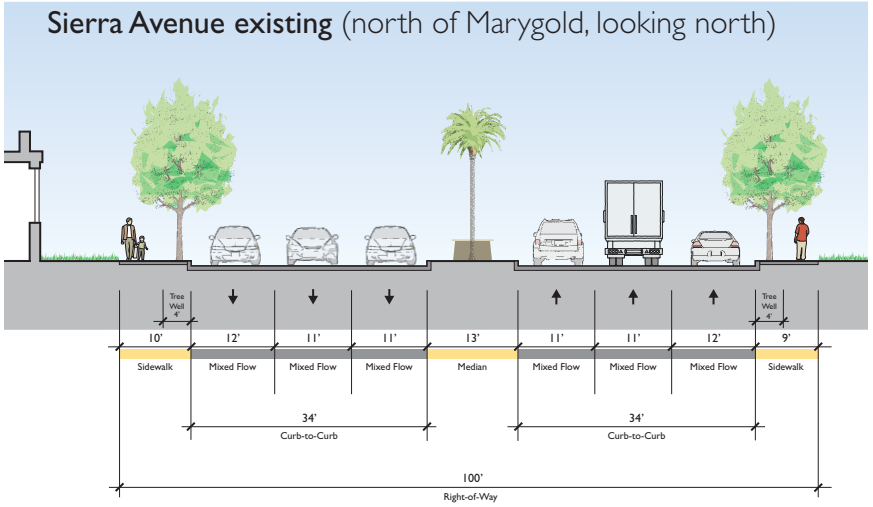
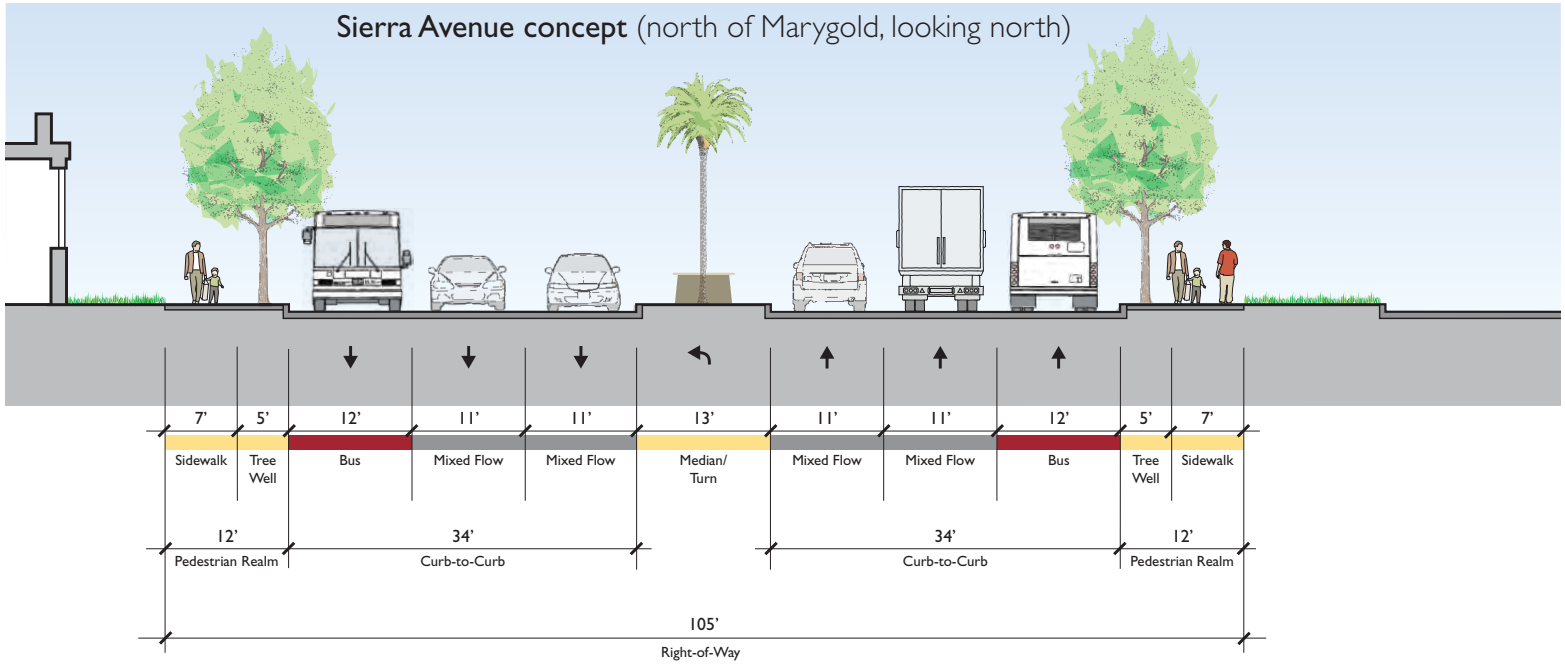


Figure 3-4: existing cross section of Sierra Avenue north of Marygold Ave (right) and Figure 3-5: Potential concept street cross section for Sierra Avenue north of Marygold Ave. (below).



Segment 3: San Bernardino to Metrolink

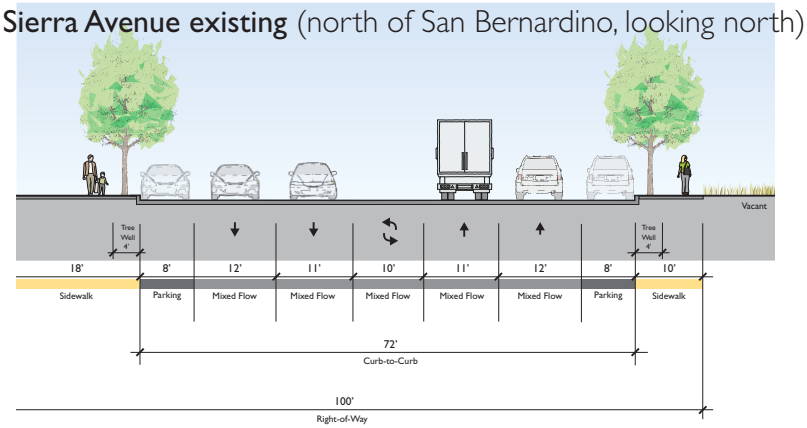
This is the segment that runs from San Bernardino Avenue to downtown Fontana and the Metrolink station at Orange. It is the longest segment of Sierra being considered.

The existing cross section in this segment provides excess capacity between the curbs (see Figure 3-6). Currently, two travel lanes run each way, with a center turn lane, leaving about 8 feet of space on each side that is informally used for on-street parking. The Project Team believes that, if the street's lanes can be narrowed, this space can be allocated to transit lanes without affecting either the curb placement or existing roadway capacity.

The recommended alternative (Figure 3-7) takes this approach, narrowing all the lanes and adding transit lanes in both directions. This configuration will fit within the existing curb-to-curb. This alternative is dependent on Omnitrans accepting 11-foot lanes for its buses. The Team recommends this option because it is a low-risk project; by simply re-striping, the City can evaluate the effectiveness of a transit-only lane without reducing vehicular capacity or committing to a larger project.

The Team also developed an alternative cross section for this segment that has wider lanes but eliminates the continuous left turn lanes (Figure 3-8). However, given the number of businesses and driveways along this segment, this alternative is not likely feasible.

In addition, in response to the plan of the City of Fontana to add a third vehicular lane in each direction, another long-term alternative is to use funds in conjunction with the sbX project to widen the right-of-way to create a six-travel-lane-plus-two-transit-lane in each way configuration (Figure 3-9). Because this alternative would necessitate purchasing right-of-way and moving curbs, it would likely cost substantially more than the others.



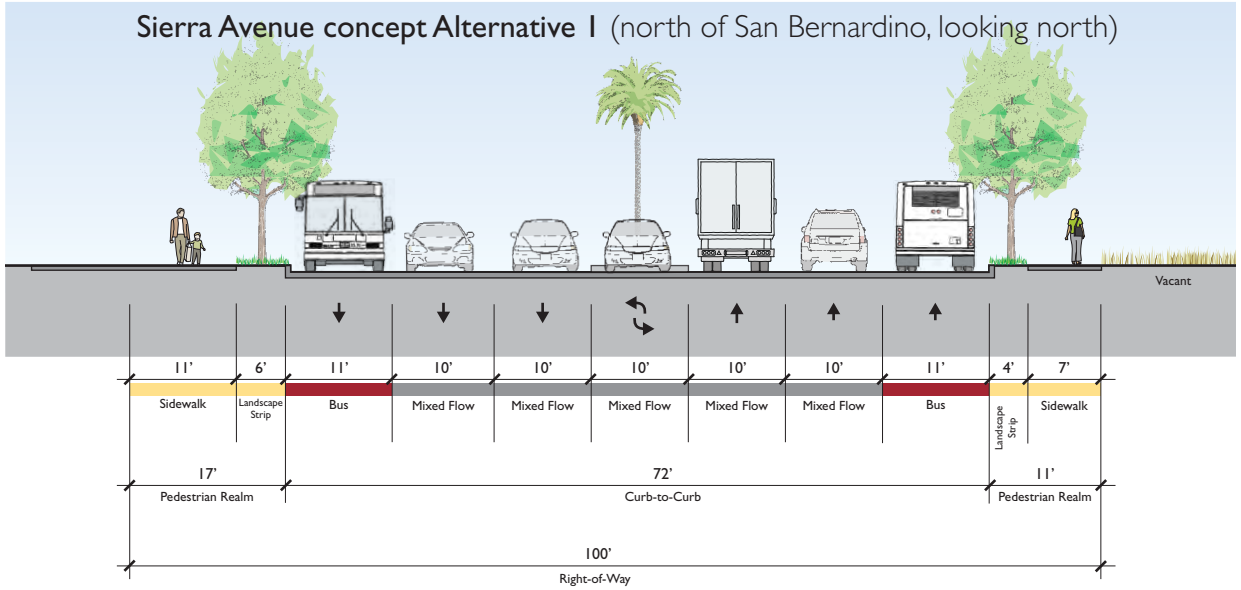
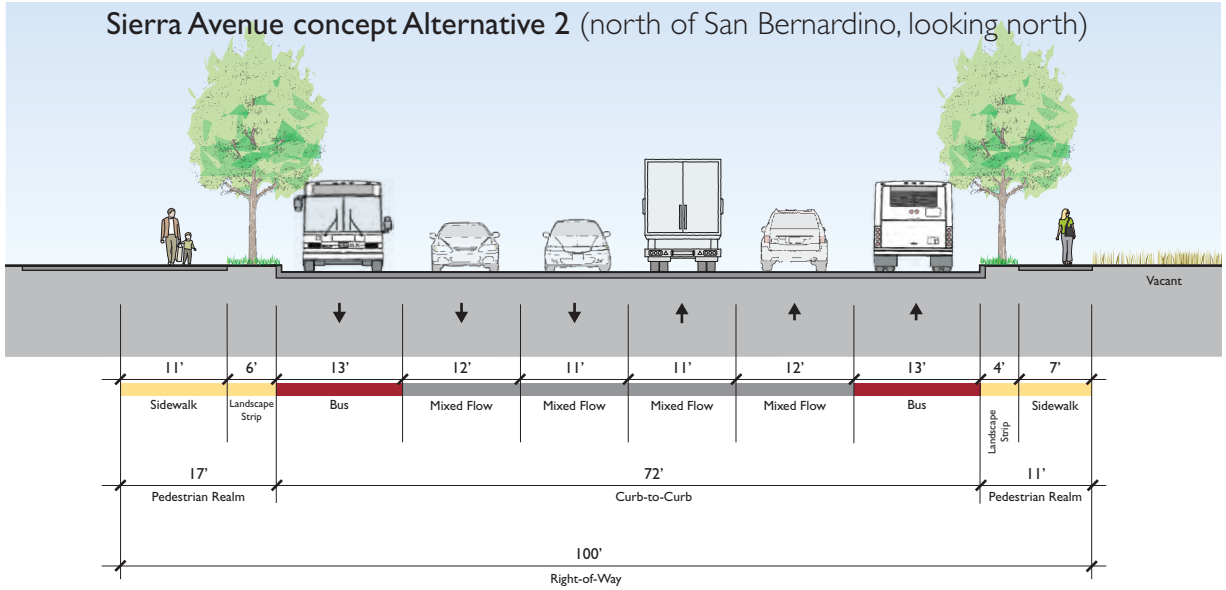


Figure 3-6: existing cross section of Sierra Avenue north of San Bernardino Ave (right) and Figure 3-7: Potential concept street cross section for Sierra Avenue north of San Bernardino Ave. (below).



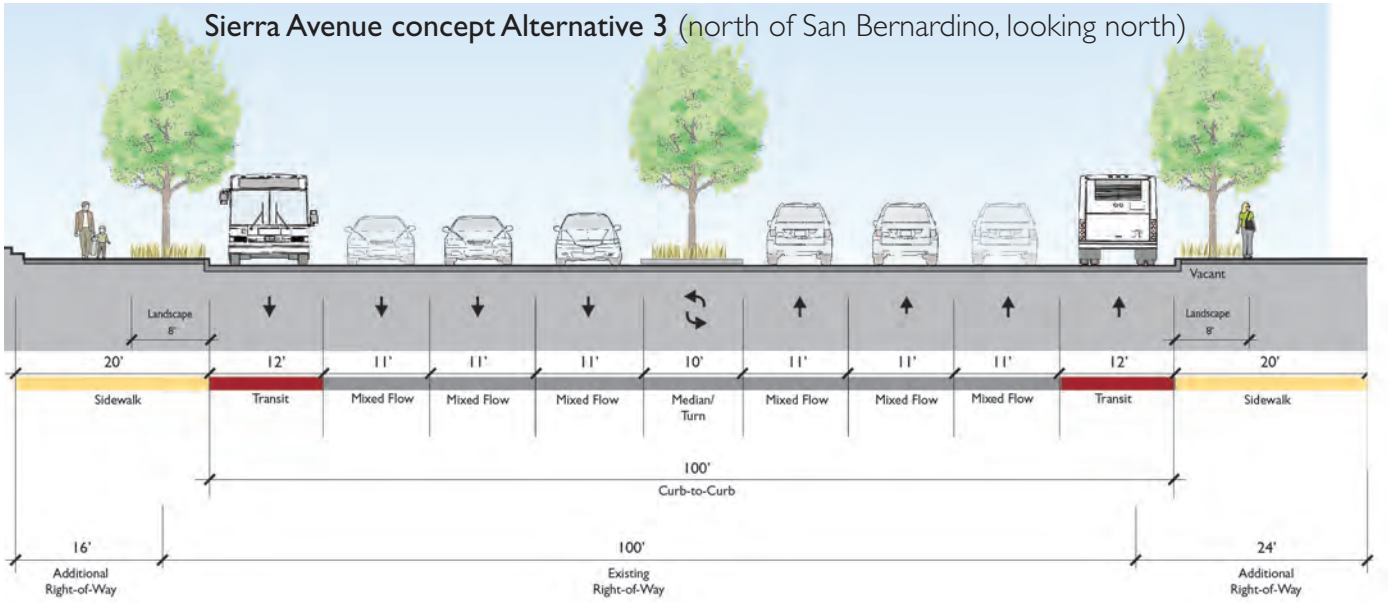


Figure 3-8: Alternative potential concept street cross section for Sierra Avenue north of San Bernardino Ave. that removes turn lane (above) and
Figure 3-9: Alternative potential concept street cross section for Sierra Avenue north of San Bernardino Ave. that expands right-of-way (below)

Pedestrian promenade

Initiative 3.2: Pedestrian Promenade along western edge of Kaiser campus

A wide pedestrian promenade along the eastern side of Sierra Avenue can be a centerpiece that plays a major role in creating an identity for the district and gateway for the city. At the western edge of the Kaiser Permanente campus, the promenade concept responds to many current demands in the area: for open space, exercise space, and walking routes by the Kaiser community, for a positive public face for the campus and the city; a venue to celebrate the Sierra-Valley area's history; and for a place to integrate a transit hub into the public realm and the Kaiser campus.

City role: Develop design concept; approach Kaiser Permanente; develop co-financing strategy

Partner Engagement: Kaiser Permanente; other area stakeholders including shopping center owners and tenants, senior communities, and other area residents.

Potential implementation strategies: Public Policy, Private Sector Outreach, Public-Private Financing

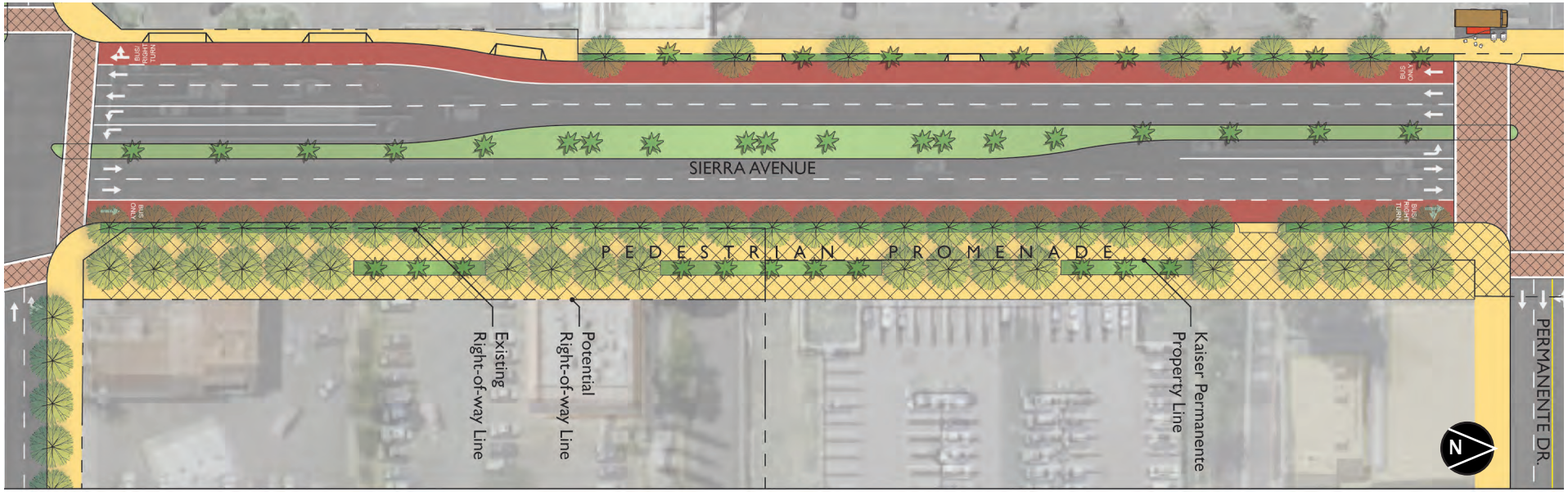


Figure 3-10: Plan illustration of Pedestrian Promenade concept

Site analysis

The existing 11-foot sidewalk on the east side of Sierra Avenue is consistent for the length of the block, though it swerves with the needs of the roadway, such as a right turn lane and a bus pull-out. It does not provide a buffer from the moving traffic nor does it provide shade for pedestrians. The frontage of the western side of the Kaiser campus is primarily parking lots buffered by landscape and trees. In general it does not engage the street, with the exception of a human-scale original campus building and the old emergency room access which is also a pedestrian access route into the campus.

However, a relatively high number of pedestrians use this stretch of Sierra. This pedestrian activity is largely due to the demand of Kaiser employees, members, and visitors for quick access to food and errands in the adjacent shopping centers as well as exercise. The surveys undertaken by the Project Team indicated the potential for pedestrian activity is greater than the existing; 44 percent of employees surveyed indicated that they would walk more with more shade along walkways; 30 percent if wider sidewalks; 26 percent if it were easier and safer to cross the street.

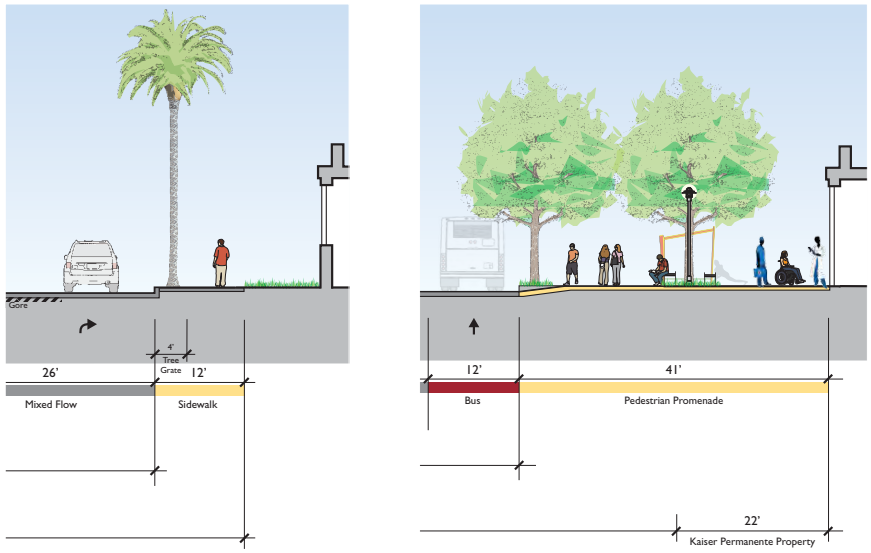


Figure 3-11: Existing cross section of east side of Sierra along Kaiser campus (left) and concept (right)

This is a visible stretch of Sierra due to its location next to the city's busiest intersection and largest employer. Creating an environment that encourages people to walk can create the best kind of gateway into the city – an active, vibrant public place.

Concept design

The Project Team's concept for a pedestrian promenade (Figures 3-10 and 3-11) emphasizes a comfortable place to walk or relax. It adds:

- A landscape buffer from moving traffic;
- Ample shade from two rows of trees;
- Ample seating, including benches or seat walls;
- Regularly spaced pedestrian lighting;
- Additional landscape;
- Potential to incorporate other aspects such as exercise, history, or food; and
- Integration of transit hub north of Permanente Drive.

Sierra Avenue has the potential to be a long-term pedestrian "front door" to the Kaiser campus. While the new hospital shifts much of the vehicular activity to the eastern side of the campus and its Valley entrance, this shift effectively opens up more opportunity for pedestrian-supportive design on Sierra. Investing in a high-quality pedestrian environment and linear open space along this edge of the campus would be the first piece that could lead to encouraging Kaiser and the shopping center property across the street to evolve toward more pedestrian-supportive, active frontages.

While the existing Sierra right-of-way would accommodate a wider sidewalk, the recommended concept is dependent on the purchase or easement of approximately 20 feet of width in the Kaiser property, which could likely avoid impacting or minimally impacting the campus's Sierra-adjacent parking lots.

Gateway crossing

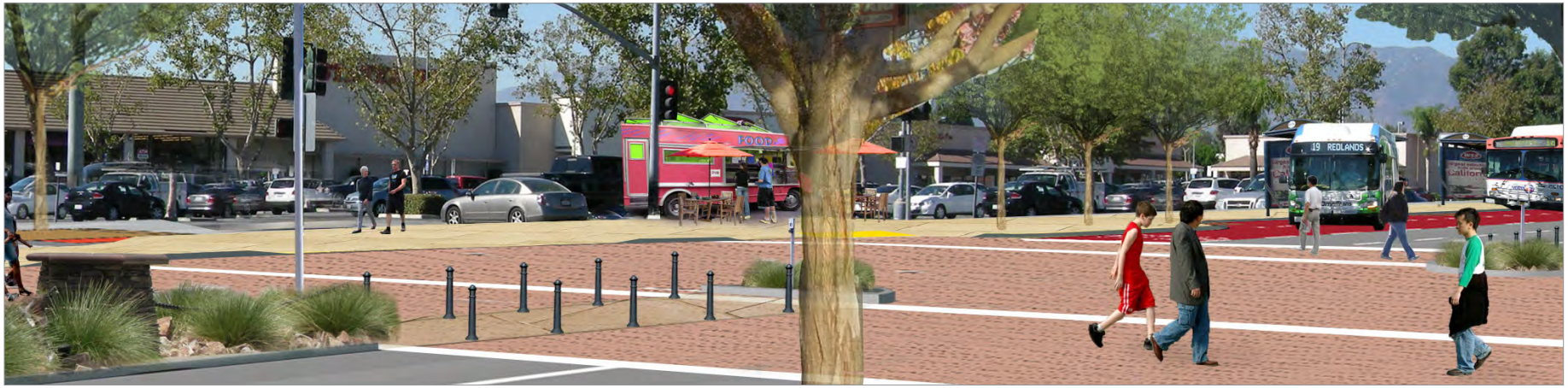
Initiative 3.3: Emphasized "gateway" midblock crossing at Permanente Way

Closely complementing the Pedestrian Promenade concept is a "Gateway Crossing" concept for the intersection of Sierra Avenue and Permanente Drive, which is essentially a driveway into the Kaiser campus. The existing "mid-block" pedestrian crossing at Permanente Drive is an opportunity to create a pedestrian-scale node on a critical segment of Sierra Avenue. Emphasizing this crossing can create a focal point for the western edge of the Kaiser campus, create a gateway element for the city, and make the popular crossing of Sierra Avenue safer, easier, and more pleasant.

City role: Stakeholder outreach, develop concept, integrate into General Plan and/or CIP, pursue funding

Partner Engagement: Area stakeholders including Kaiser Permanente, shopping center owners and tenants, senior communities, and other area residents

Potential implementation strategies: Public Policy, Public-Private Financing



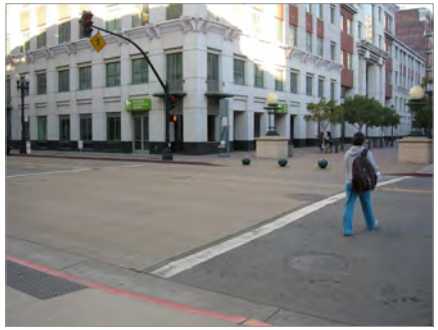


Fig. 3-12: Simulation of Gateway Crossing concept (above) and examples of special paving for an entire intersection (far left); and a wide crosswalk (near left).

Site analysis

This crossing links a pedestrian entry into the Kaiser campus and is already a convenient link across Sierra from the Kaiser campus that is likely more appealing than Valley or Marygold due to fewer conflict points with turning autos. Yet the existing pedestrian crossing infrastructure is minimal. The existing parallel 12-foot-wide crosswalk crosses a distance of 94 feet; there is only a marked crosswalk on the south side of the intersection. The median nose does not extend to the crosswalk.

With the Kaiser hospital's emergency entry being shifted to the south side of the campus on Valley, this entry should take on a reduced vehicular role, opening up an opportunity for converting this entry into the campus into a "pedestrian front door." This entry still holds interest for the Kaiser community since it links the campus with the closest options for food, groceries and other services. There is already a moderate amount of pedestrian activity here; in the Project Team's pedestrian counts, 74 people walked through the intersection in the two hours of midday, the fifth highest amount in any two-hour period.

This is a unique opportunity because it is a place where vehicles already stop but whose scale is not overwhelmed by the roadway or auto-oriented land uses, like most Sierra intersections. Because of this "loophole," an improved Permanente Drive crossing could become the basis for a pedestrian front door to the Kaiser campus and to Fontana.

Existing view of crossing of Sierra Avenue at Permanente Drive.

Concept design

The recommended cross section for this segment of Sierra Avenue improves the ability for pedestrians to cross the street by reducing the overall curb-to-curb distance as well as by adding the potential for a pedestrian refuge.

The Project Team's concept for an emphasized mid-block crossing includes:

- Treatment of entire intersection with decorative paving, such as pavers or scored concrete;
- 30-foot wide marked crosswalks across Sierra Avenue on both sides of the intersection;
- 8-foot wide pedestrian refuge with push-button and pedestrian-scale lighting; and
- Potential for monument sign or art piece on medians.

Additionally, a key part of this "pedestrian front door" concept is the pedestrian promenade discussed in the previous initiative.

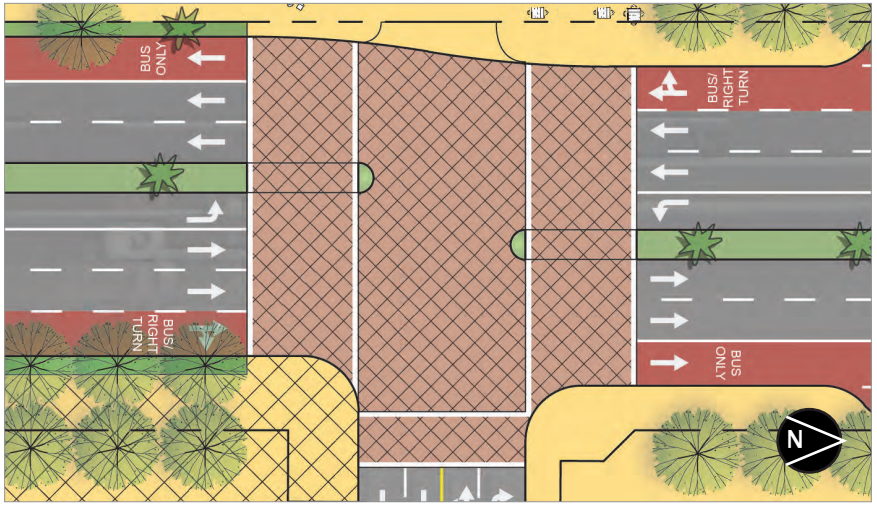


Fig. 3-13: Plan illustration of concept for improved crossing of Sierra Avenue at Permanente Dr.

Figure 3-14: Existing view north on Sierra Avenue at Permanente Drive (left); and simulation of Pedestrian Promenade, Gateway Crossing, and bus lanes concepts (right).

BUS
RIGHT

Sierra-Valley intersection

Initiative 3.4: Improved pedestrian facilities at Sierra-Valley

The intersection of Sierra Avenue and Valley Boulevard is the genesis of this project and poses some of the largest challenges to project goals of reducing congestion, improving walking, and creating a positive gateway for the city. The Team concluded that the land uses at the intersection will not likely change in the near term and continued traffic demands will challenge any dramatic transformation. However, the Team recommends smaller changes to this intersection that will improve the pedestrian crossing experience, untangle traffic bound for different destinations, and mitigate congestion faced by the sbX BRT line if it does travel through the Sierra-Valley intersection.

City role: Stakeholder outreach, develop concept, integrate into General Plan and/or CIP, pursue funding

Partner Engagement: Area stakeholders including Kaiser Permanente, shopping center owners and tenants, senior communities, and other area residents

Potential implementation strategies: Public Policy, Public-Private Financing

Site analysis

The Sierra-Valley intersection is one of the study area intersections that was found to have a failing Level of Service in the 2008 traffic study undertaken for the Kaiser hospital environmental documents. The Team's reading of this traffic study found that the failure was largely due to delay in turning movements.

However, other factors also likely contribute to the congestion here. One contributor to the congestion is the high number of driveways at properties around the intersection; another is the weaving that occurs on northbound Sierra Avenue among motorists coming into the intersection from different origins (Sierra overpass versus Interstate 10 off-ramps) and going different directions (largely northbound on Sierra versus turning right onto Valley).

There is some amount of pedestrian activity here. The Team's pedestrian counts found 350 people crossed here during three two-hour windows over the course of a day, with 175 of those counted crossing at midday. Yet the pedestrian infrastructure here is sparse, with minimally visible crosswalks, long crossings, no refuge points and a short walk signal that barely allows a pedestrian enough time to cross.

There is little that the Team found that indicates that the land uses around the intersection have incentive to change, and especially because of the demand by the Kaiser community, the vehicular demand on the intersection is likely to remain high.

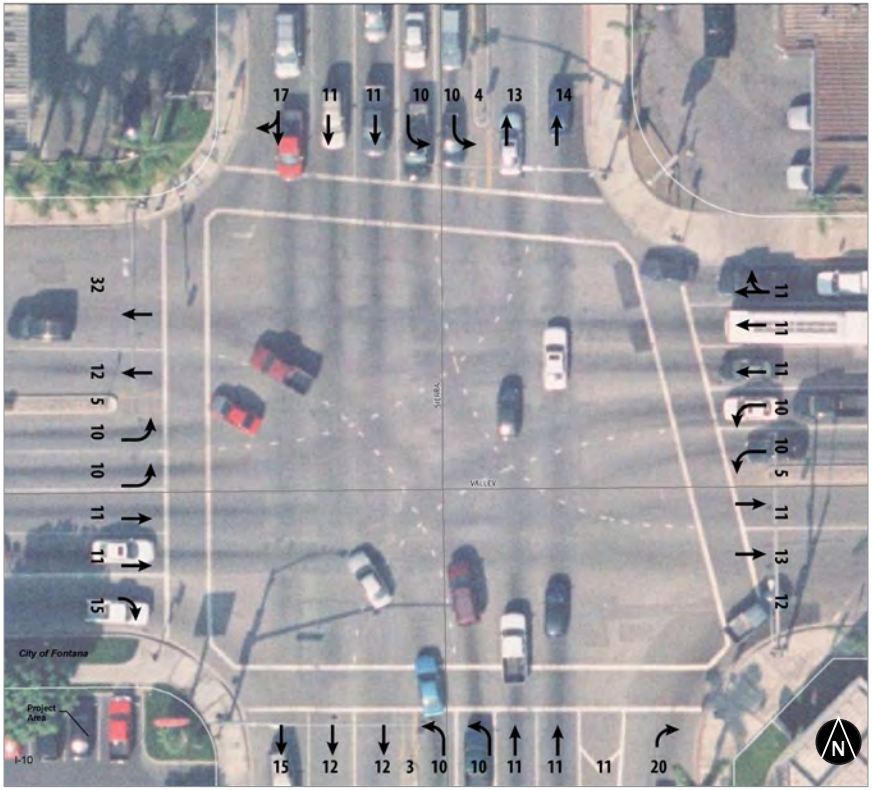


Figure 3-15: Existing aerial view of Sierra - Valley intersection with lane widths.

Concept Design

The recommended design for the Sierra-Valley intersection does not alter the capacity of the intersection (with the exception of adding the bus turn lane and the transit lanes on Sierra north of Valley), but includes small changes that the Team believes can both bring the pedestrian crossing experience to an acceptable level and untangle some of the traffic problems through the intersection.

- Wider (15-foot) high visibility crosswalks
- Median pedestrian refuges
- Longer walk signals
- Narrower lanes
- Signage and striping reducing weaving
- Bus-only turn lane on eastbound Valley

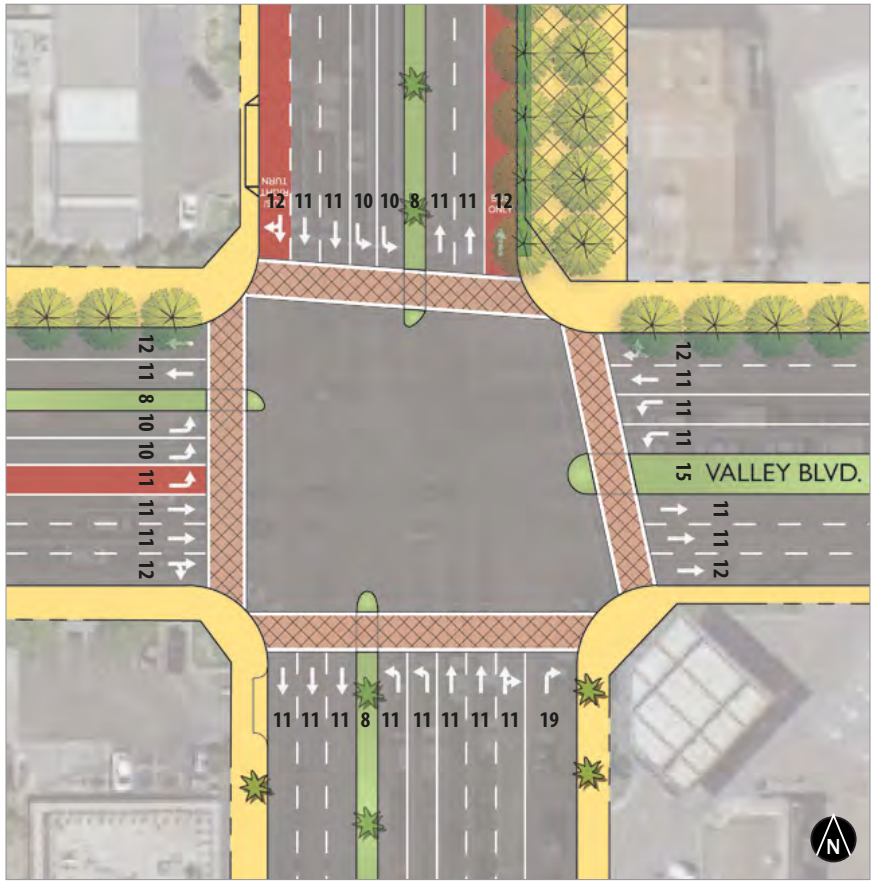


Figure 3-16: Plan illustration of concept for improvements to Sierra-Valley intersection

Sierra-Marygold intersection

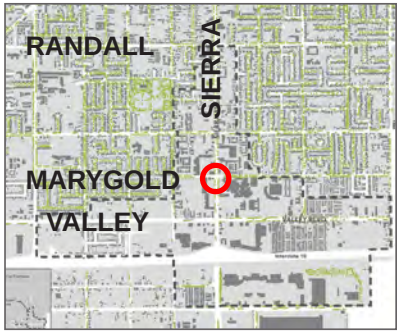
Initiative 3.5: Improved pedestrian facilities at Sierra-Marygold

The team believes the intersection of Sierra Avenue and Marygold Avenue has the opportunity to become the center of a walkable, mixed-use district focused on the Kaiser campus, a future BRT station, and commercial and residential land uses (see Objective 1). Improving the intersection to serve pedestrians would be a solid first step toward this vision.

City role: Stakeholder outreach, develop concept, integrate into General Plan and/or CIP, pursue funding

Partner Engagement: Area stakeholders including Kaiser Permanente, shopping center owners and tenants, senior communities, and other area residents

Potential implementation strategies: Public Policy, Public-Private Financing



Site analysis

The Sierra-Marygold intersection is one of the study area intersections that was found to have a failing Level of Service in the 2008 traffic study undertaken for the Kaiser hospital environmental documents. However, the new hospital shifts its main entry point from Marygold Avenue to Valley Boulevard, potentially reducing the need for motorists coming to and from Interstate 10 to access the campus via Sierra-Marygold. While trucks will likely need to use the intersection to access the shopping centers, neither street here is a designated truck route.

At the same time, the Sierra-Marygold intersection receives the highest amount of pedestrian traffic of any of the intersections counted. The Team's pedestrian counts found 550 people crossed here during three two-hour windows over the course of a day, with 312 of those counted crossing at midday.

Additionally, this is the intersection closest to the Team's recommended transit hub location, making pedestrian safety, convenience and comfort paramount.

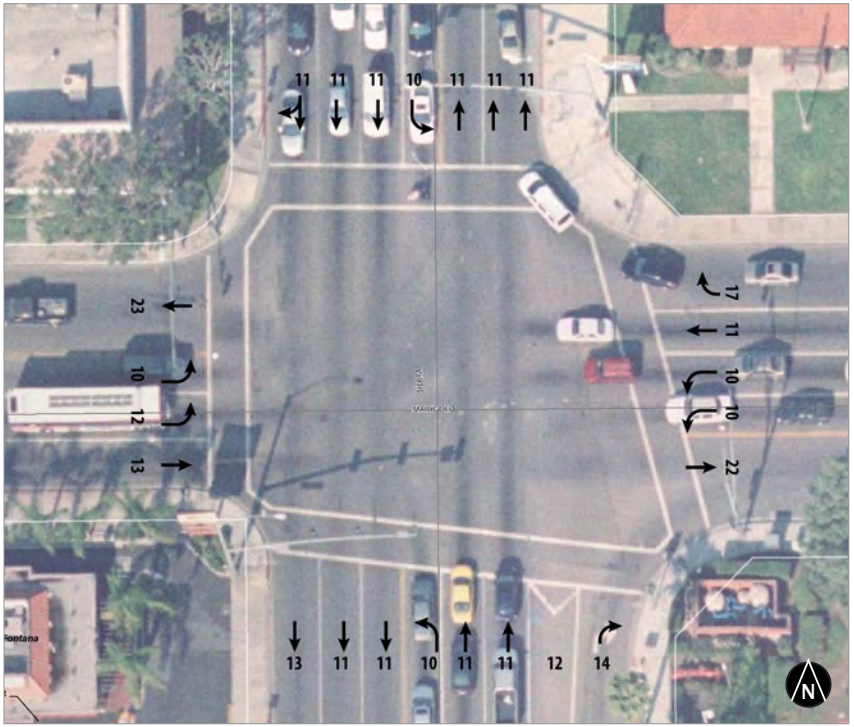


Figure 3-17: Existing aerial view of Sierra - Marygold intersection with lane widths.

Concept Design

As a result, the Project Team proposes re-envisioning the Sierra-Marygold intersection as a pedestrian-priority intersection. The Team's recommendation is to undertake improvements that will greatly improve the pedestrian experience, will support the public space recommendations for this stretch of Sierra, and can set the stage for more pedestrian-supportive new development around this intersection.

The recommended design for the Sierra-Marygold intersection re-fashions the better pedestrian crossing infrastructure, all within the existing curbs.

- Wider (15-foot), high visibility crosswalks
- Median pedestrian refuges
- Landscaped medians
- Longer walk signals
- Narrower lanes
- Widened sidewalks
- Tighter curb radii

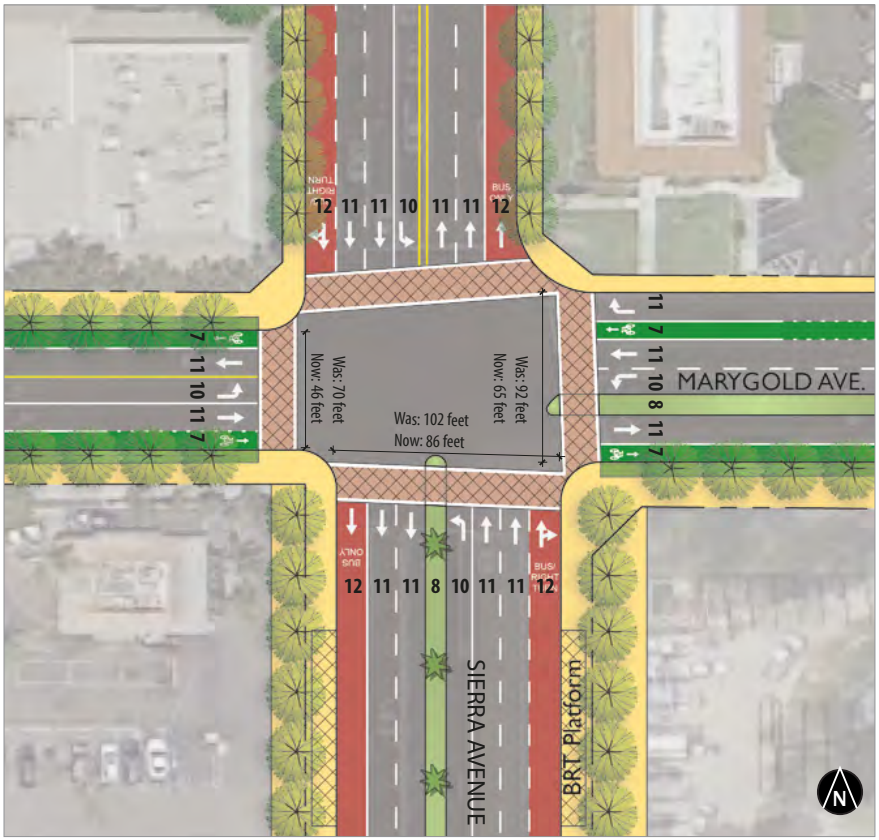


Figure 3-18: Plan illustration of concept for improvements to Sierra-Marygold intersection

Sierra streetscape

Initiative 3.6: Streetscape scheme to unify Sierra Avenue and strengthen walkability and character

Additional streetscape infrastructure – trees, landscape, street furniture, and lighting – can build on Sierra Avenue's assets of wide sidewalks, relatively regular street trees, and shopping. Targeted investment along the Sierra corridor can make walking safer and more pleasant for current pedestrians and set the stage for a future walkable, mixed-use street connecting the core districts of the city.

City role: Stakeholder outreach, develop concept, integrate into General Plan and/or CIP, pursue funding

Partner Engagement: Area stakeholders including shopping center owners and tenants, senior communities, and other area residents

Potential implementation strategies: Public Policy, Public-Private Financing

Site analysis

The segment of Sierra Avenue within the study area has sidewalks that range from approximately 11 feet wide to 20 feet wide (Figure 3-19). For much of the stretch between Marygold Avenue and Randall Avenue, Sierra has relatively regular mature shade trees. These two assets create a major foundation for a walkable street.

Sierra currently has little else for pedestrians, including places to rest, buffer against moving traffic, and pedestrian-scale lighting. Yet the assets it does possess make additional streetscape an efficient investment.

It is important to note that the urban form of the properties along Sierra is probably the biggest detractor from the pedestrian experience; transformation of this urban form is not likely to change in the near-term. And so it is not likely that Sierra becomes a great walking street in the near-term. However, improvements can be targeted toward existing pedestrian entries and high-pedestrian areas. This approach would be a useful, positive first step that, in concert with other policy-focused objectives (such as Objective 6), would move the Sierra corridor toward becoming a walkable urban street.

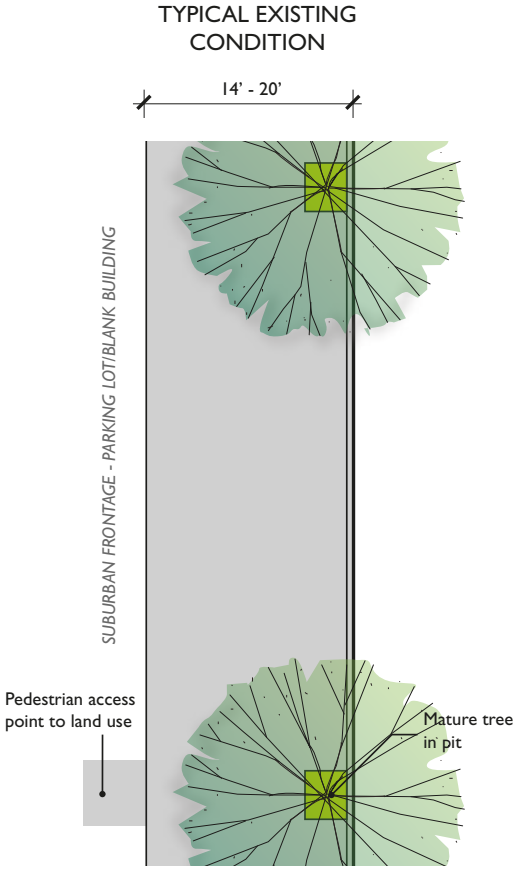


Figure 3-19: Plan illustration (left) and photos (above) of typical existing streetscape condition along Sierra Avenue between Marygold Avenue and Randall Avenue.

Concept Design

The example concept design focuses on a hypothetical portion of Sierra at the pedestrian entry to a shopping center that receives a relatively high amount of pedestrian traffic. The example area also has 14 -20 foot wide sidewalks and widely spaced mature street trees in small (3-foot by 4-foot) pits.

The concept proposes some improvements to run the length of Sierra, including:

- Additional street trees "filling in" the existing mature street trees along the edge of the curb; and
- A consistent 4-to-7-foot landscaped planter strip enveloping the existing and new street trees.

Additionally, the concept proposes sets of improvements at specific places along the corridor, identified as pedestrian "hot spots," at pedestrian entries to key land uses and points of high pedestrian traffic. This concept assumes that the sidewalk is fronted by surface parking, and proposes that a "furnishings" area at the back of sidewalk can help create a better frontage along the sidewalk. These improvements include:

- Additional street trees planted in grates
- Benches
- Pedestrian scale lighting

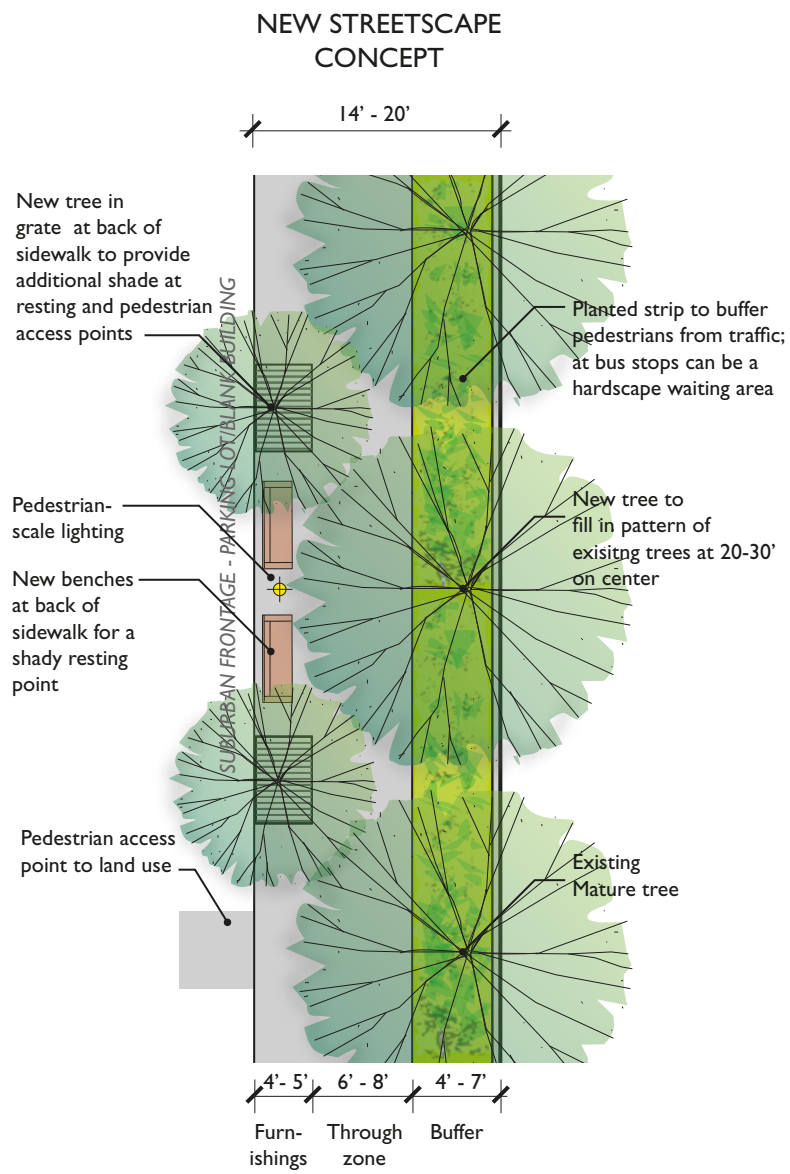


Figure 3-20: Plan illustration of streetscape concept along Sierra Avenue between Marygold Avenue and Randall Avenue.

New pedestrian crossings

Initiative 3.7: Signalized pedestrian crossing(s) added between San Bernardino and Randall

For the ¼ mile between San Bernardino and Randall Avenues, there is no designated place for pedestrians to cross Sierra Avenue. Because of the severity of this distance, as well as the amount of shopping, new land uses (such as Westech College), and transit on this stretch of Sierra, the Team recommends the city install at least one, and likely more, pedestrian crossings between San Bernardino and Randall.

City role: Stakeholder outreach, traffic/pedestrian study, develop concept, integrate into General Plan and/or CIP, pursue funding

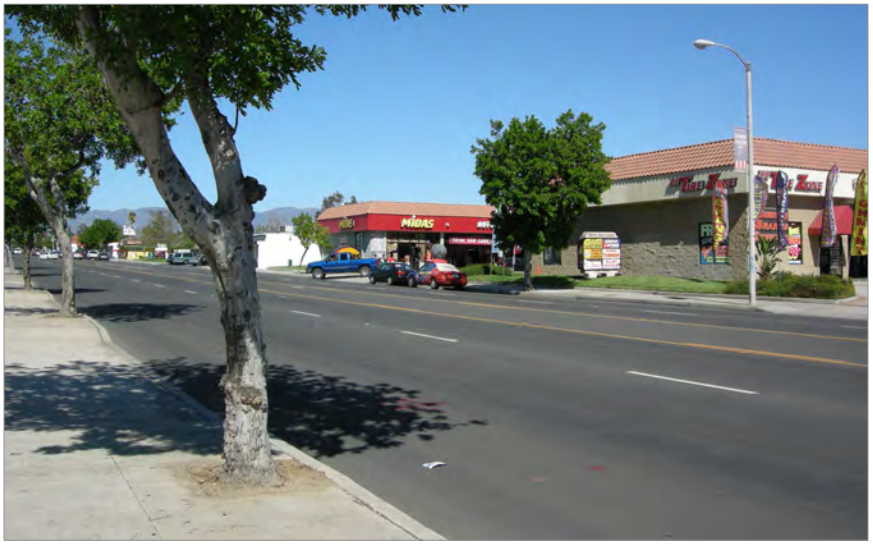
Partner Engagement: Area stakeholders including shopping center owners and tenants, Westech College, and other area residents

Potential implementation strategies: Public Policy, Public-Private Financing

Site analysis

While no streets intersect across Sierra Avenue, two local streets form "T" intersections with Sierra: Holly Drive and Fontlee Lane. Both connect to the west, however Holly provides a direct connection to Juniper Avenue and Jack Bulik Park, and is almost equidistant between San Bernardino and Randall while Fontlee connects more indirectly and is only about 500 feet from San Bernardino Avenue. Each has an existing bus stop.

In addition, the site of the new Westech College is located near the mid-point between San Bernardino and Randall and could also serve as a good crossing location.



No crosswalks exist for the quarter mile between San Bernardino Avenue and Randall Avenue.

Concept Design

The Team recommends one new pedestrian crossing at Holly Drive with either a full signal or pedestrian activated signal. The Team also recommends an additional marked crosswalk at either Westech College or Fontlee Lane.

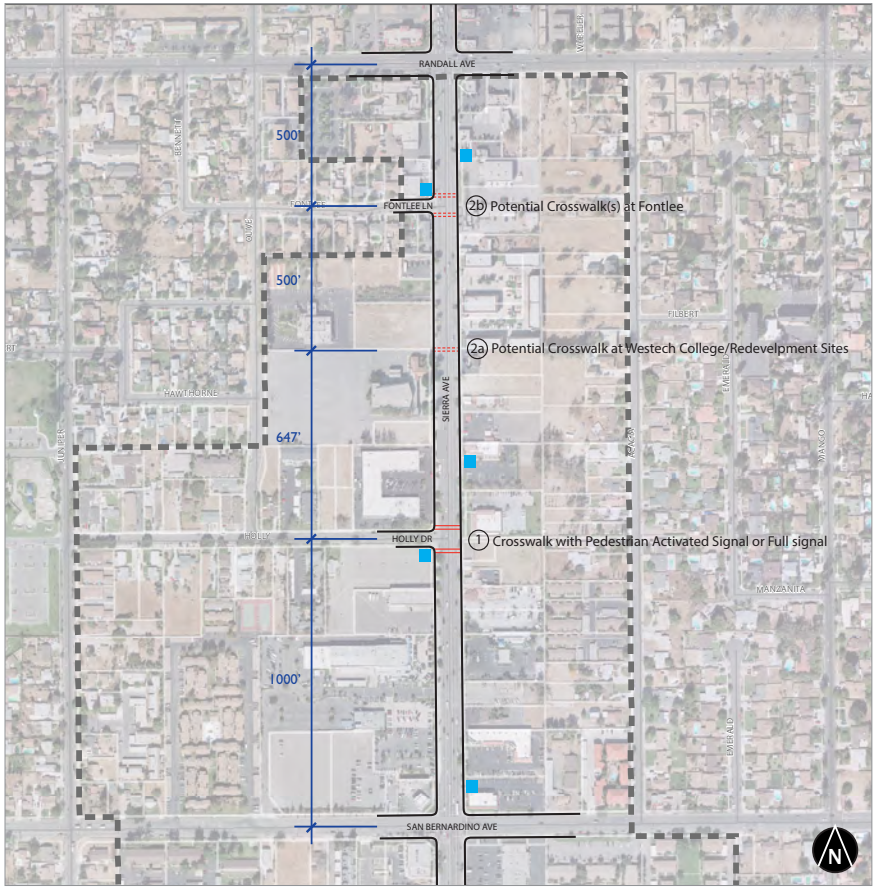


Figure 3-21: Plan diagram of potential crossing treatments and locations on Sierra Avenue between San Bernardino Avenue and Randall Avenue.

OBJECTIVE 4

Connect and improve the bicycling network

Bicycles are an important part of any transportation network. In the core of Fontana, the Project Team believes bicycles are an underutilized way to connect between many destinations, such as homes, places of employment, schools, the Kaiser campus and the Metrolink station. Currently, the core area of Fontana has minimal bike infrastructure, with some bike lanes planned. This objective makes recommendations for a new bike network that connects the area's destinations, balances the needs of bike mobility with a cyclist's sense of comfort and safety, and complements other recommended street improvements.

- 4.1: Refine the City of Fontana bicycle network in Fontana's core
- 4.2: Design and build new Fontana core bikeways

Core Fontana bicycle network

Initiative 4.1: Refine the City of Fontana bicycle network in Fontana's core

The Team proposes a refined bicycle network in Fontana's "core" area – which includes downtown and the Sierra corridor as far south as I-10, as well as Fontana neighborhoods on either side of Sierra.

Site Analysis

The largest goal of a core Fontana bike network should be to move cyclists up and down the Sierra corridor, among destinations such as downtown's Civic Center, the Metrolink Station, Kaiser Permanente, Chaffey College, and the shopping that runs along much of Sierra. The Project Team counted a moderate number of cyclists riding on Sierra; At the Sierra-San Bernardino intersection, 40 cyclists came through in the two hours of the p.m. count. However, observations revealed that many of these cyclists prefer to ride on the sidewalk because of the high levels of traffic on Sierra.

A secondary goal should be to connect other public and civic places, especially parks and schools.

The challenge with any bike network is achieving a balance of choosing routes that run long distances with as few barriers as possible on one hand and choosing a safe, comfortable street for a cyclist on the other. Often the routes that take a cyclist a certain distance the most direct and fastest are large arterial streets that pose safety issues, just as the routes that are comfortable for a cyclist run into barriers of large streets and freeways and are challenging to string together into an efficient route.

While Sierra is an intuitive bike route because it connects so many destinations so directly, the Team believes it is not the best choice, especially with the recommendation for transit lanes (see Objectives 2 and 3) on Sierra. Instead, the Team believes two parallel routes, Juniper and Mango, will better provide a balance of direct routes and comfortable streets for cyclists. Juniper and Mango parallel Sierra only a quarter mile off and provide the same connectivity to most of the same destinations, yet they have less traffic and a smaller scale.

The core area of Fontana has few existing designated bikeways. Currently, only the Pacific Electric trail is the only Class I separated bike path; there are no Class II bike lanes; and Juniper and Randall are Class III bike routes, but neither has any markings indicating this designation.

City role: Stakeholder outreach, develop concept, integrate into General Plan

Partner Engagement: Bicyclists, schools

Potential implementation strategies: Public Policy

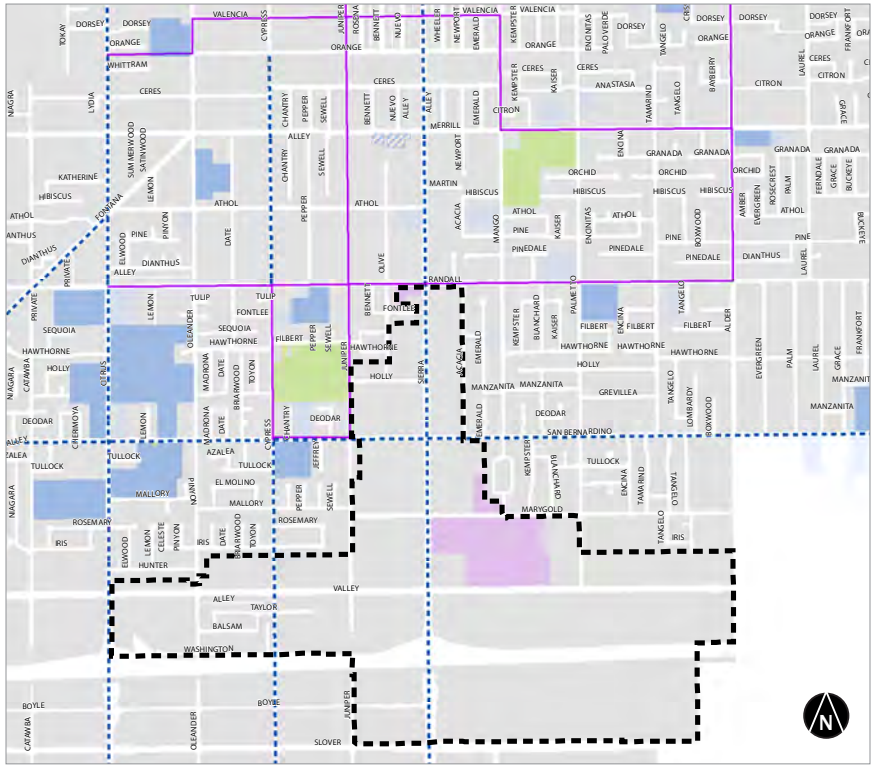


Figure 4-1: Existing City of Fontana bike network in General Plan.

The bike network designated by the General Plan proposes to place bike lanes on several core Fontana arterial streets, including Sierra Avenue, San Bernardino Avenue, Cypress Avenue and Citrus Avenue.

Concept

The recommended bike network concept is an evenly spaced grid of bike routes connecting major destinations along the Sierra corridor as well as schools and parks. Juniper and Mango connect downtown, the Pacific Electric trail, Metrolink, Chaffey College, and the Kaiser campus. Citrus accesses many of the schools in the core area of the city while Alder provides another north-south route on the east end of the Fontana core. Randall, Marygold, and Orange provide east-west access at key points, including the Metrolink Station, potential BRT stations, and the Kaiser campus.

One aspect of the network to note is a potential bike/pedestrian bridge at Juniper allowing this route to continue across Interstate 10. An alternative is routing the bikeway to Cypress to use that street's freeway overpass.

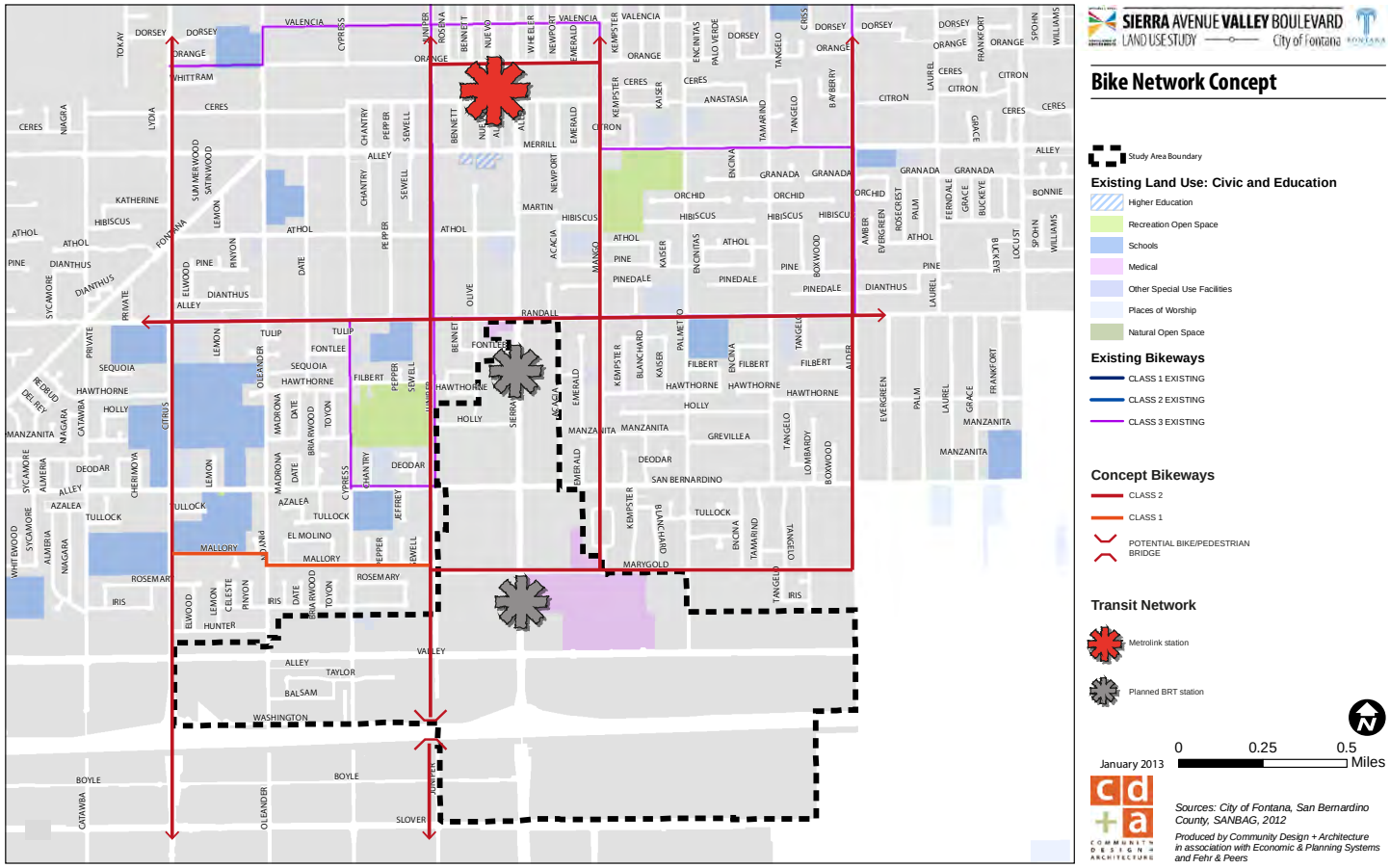


Figure 4-2: Concept for bike network in Fontana core.

New bikeways

Initiative 4.2: Design and build new Fontana core bikeways

The bikeways in the recommended bike network would primarily be bike lanes fit into existing streets. The streets selected for recommended bikeways are of two types: "larger" streets such as Randall, Citrus, and Alder; and "smaller" streets such as Juniper, Mango and Marygold. The concept designs discussed here do not propose to re-build the streets, simply re-allocate right-of-way within the existing curbs.

City role: Stakeholder outreach, develop concept, integrate into General Plan and/or CIP, pursue funding

Partner Engagement: Bicyclists, neighborhood residents

Potential implementation strategies: Public Policy, Public-Private Financing

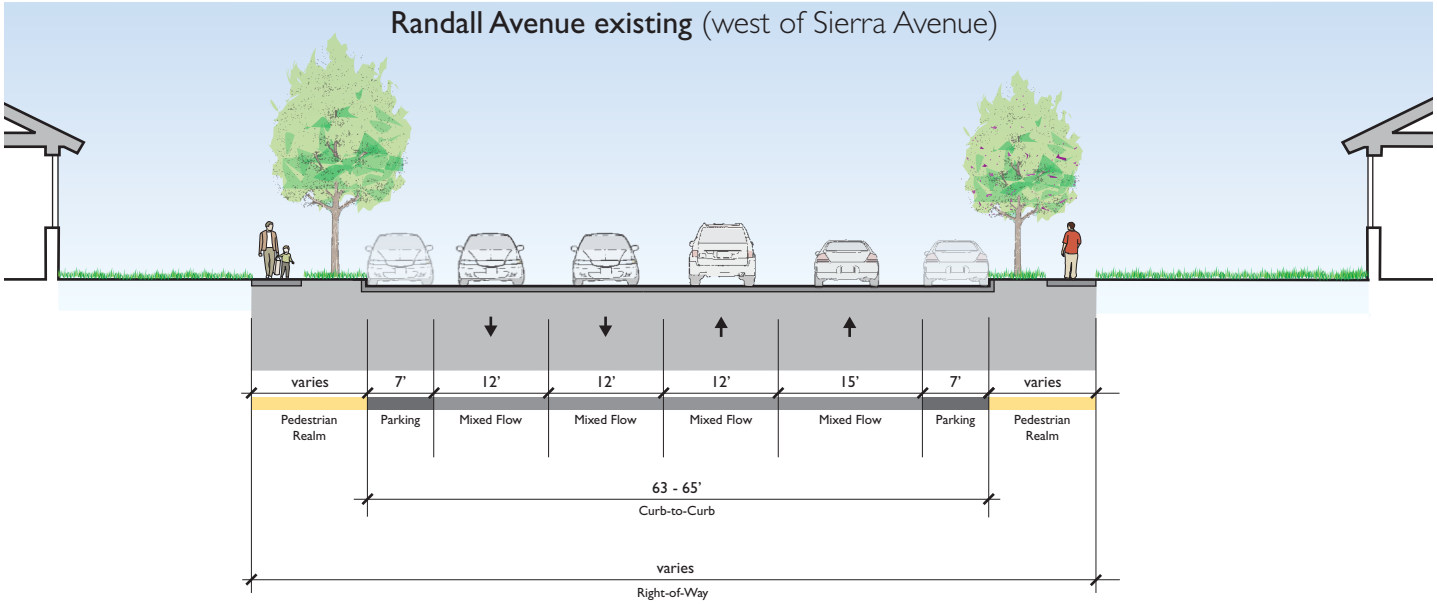
Randall, Citrus, and Alder bikeways

Randall, Citrus, and Alder each has an approximately 63-65-foot curb-to-curb width (Figure 4-3). Currently that space is used for four travel lanes and informal on-street parking on both sides.

The recommended concept (Figure 4-4) proposes the following changes:

- Narrow inner mixed flow lanes to 10 feet and outer mixed flow lanes to 11-12 feet.
- Remove on-street parking on one side
- Alternate the side that parking is removed from, to create a traffic calming effect of offsetting the mixed-flow lanes.
- Add 7-foot bike lanes (5-foot through lane with 1-foot stripe on either side) on both sides of the street.

Bike lanes on a neighborhood street and a commercial street.



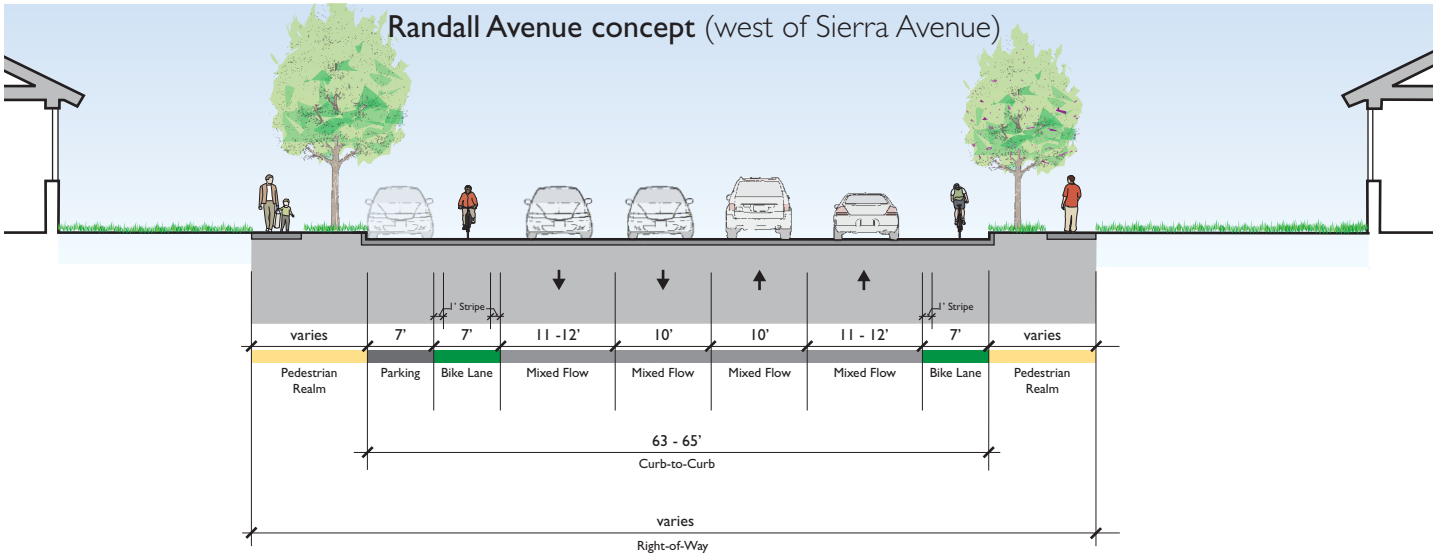


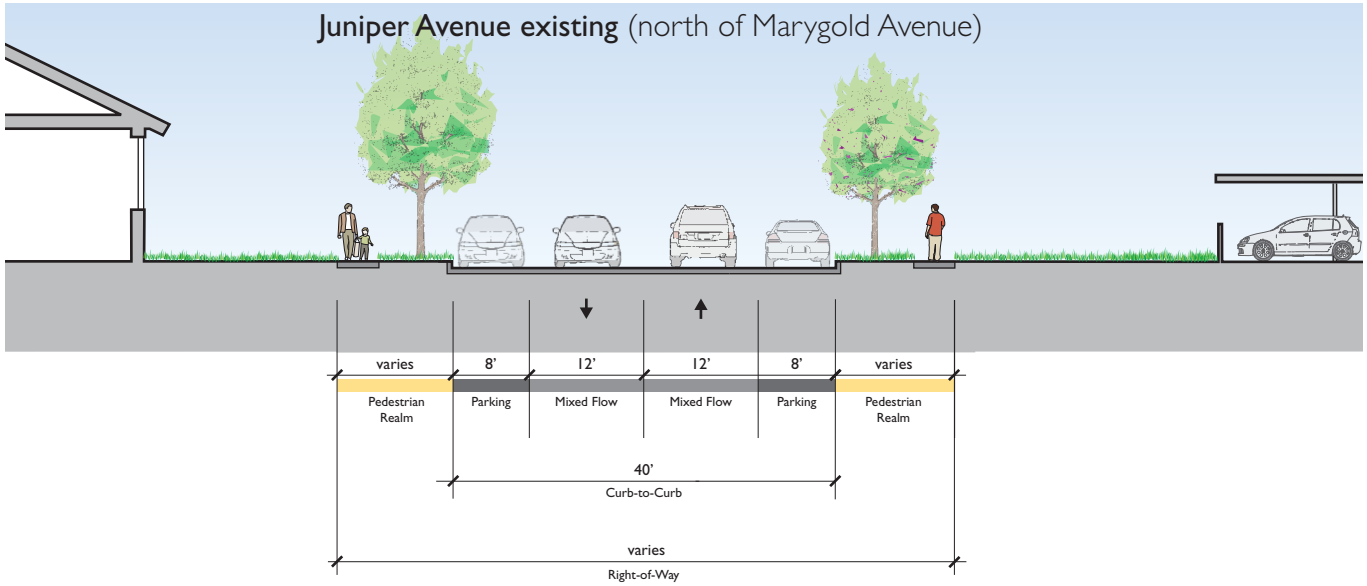
Figure 4-3: Existing cross section of Randall Avenue (top) and Figure 4-4: Potential concept street cross section for Randall Avenue (below).

Juniper, Mango, and Marygold bikeways

Juniper, Mango, and Marygold each have an approximately 40-foot curb-to-curb width. Currently that space is used for two travel lanes and on-street parking on both sides (Figure 4-5).

The recommended concept (Figure 4-6) proposes the following changes:

- Narrow mixed flow lanes to 10 feet
- Remove on-street parking on one side
- Alternate the side that parking is removed from, to create a traffic calming effect of offsetting the mixed-flow lanes.
- Add 7-foot bike lanes (5-foot through lane with 1-foot stripe on either side) on both sides of the street.



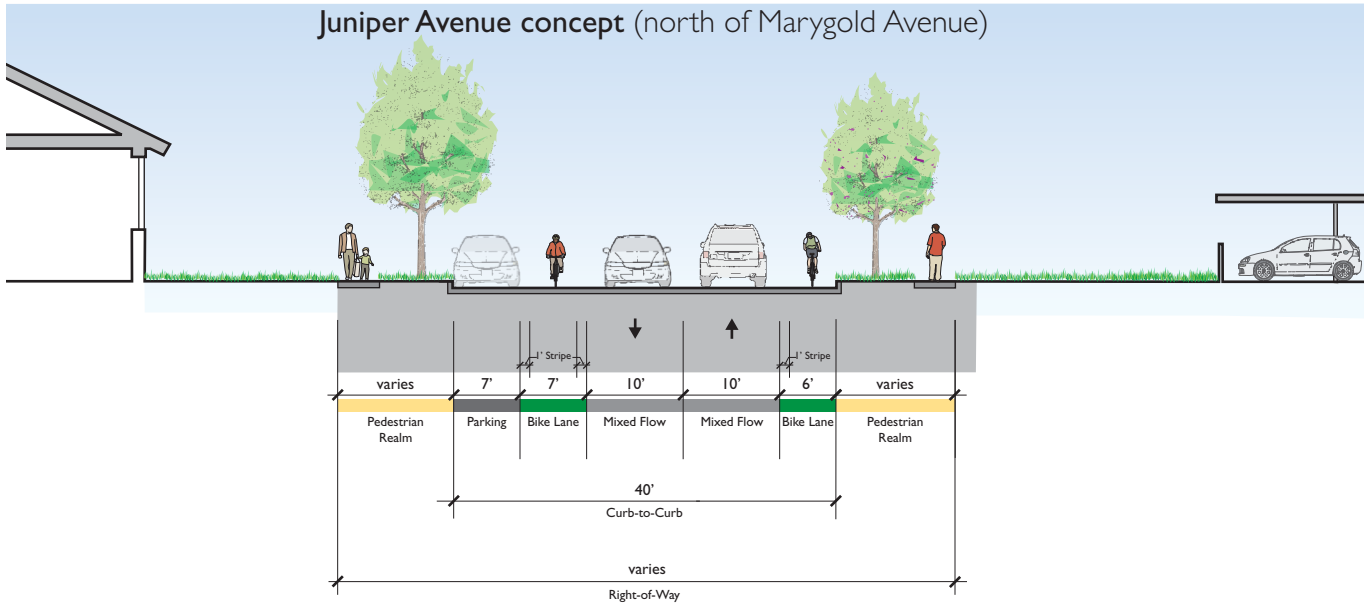


Figure 4-5: existing cross section of Juniper Avenue (top) and Figure 4-6: Potential concept street cross section for Juniper Avenue north of Marygold Ave. (bottom).

In order to understand the feasibility of removing half of the on-street parking along Juniper, Mango and Marygold the City should undertake a small study on the usage of the on-street parking. If it is deemed infeasible to remove the parking, the City could consider a configuration of a "couplet" of one-way bikeways on Juniper and Mango, as shown in Figure 4-7.

In addition to the bike lanes, the City should also consider lowering the 35-mile-per hour speed limits on Marygold and Juniper to 25 miles per hour.

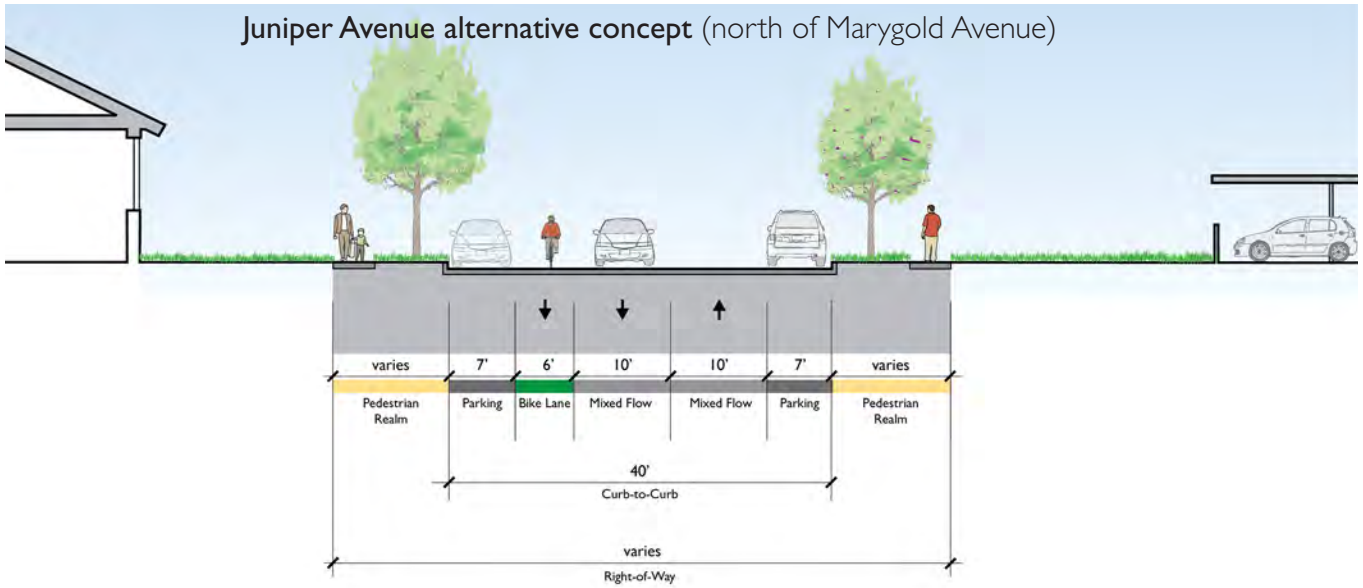


Figure 4-7: Alternative cross section for Juniper Avenue north of Marygold Avenue that does not remove parking.

OBJECTIVE 5

Integrate Kaiser Permanente Medical Center with surrounding community

The activity of Kaiser Permanente provides major potential for achieving many of the study's goals. Over 5,000 employees work at the Kaiser campus, their shifts covering 24 hours, while hundreds of patients and their visitors come and go each day from all over the region. The varied activity that takes place at the Kaiser campus could be the basis of a vital district, supporting complementary commercial uses and synergizing with residences and offices. However, the Kaiser campus is designed to be inward-focused. Its pedestrian connections with the surrounding Sierra-Valley commercial area are weak. The commercial uses immediately adjacent to the campus largely do not market to the Kaiser community. Still, the travel and shopping patterns of the Kaiser community indicate demand for better walking routes, connections to transit, more shopping options, and the potential to reduce frequent short auto trips that contribute to congestion. This objective makes recommendations that will leverage this demand into outcomes that can benefit both the City of Fontana and Kaiser Permanente.

- 5.1: Coordinate mutually beneficial transportation management policies with Kaiser Permanente
- 5.2: Create strategies for attracting key complementary uses such as office and retail
- 5.3: Develop mutually beneficial marketing and infrastructure initiatives with Kaiser Permanente
- 5.4: Create a food truck pod for Sierra Avenue

thrive

Transportation demand management

Initiative 5.1: Coordinate mutually beneficial transportation management policies with Kaiser Permanente

This initiative proposes that the City of Fontana coordinate with the Kaiser Permanente Fontana Medical Center to expand and coordinate its Transportation Demand Management program to leverage city infrastructure and ongoing multimodal transportation projects. The core of this initiative is likely communication between key City of Fontana departments and Kaiser Permanente and development and coordination of mutually beneficial strategies to use TDM to achieve this study's goals of reducing congestion, improving transit, and improving walkability.

Transportation Demand Management

Transportation Demand Management (TDM) programs are coordinated sets of incentives designed to change travel behavior of a community. TDM programs typically do not constitute physical improvements but rather economic or organizational programs that change the calculus for each individual or household as to what mode to take and when and how to travel.

Transportation Demand Management programs are typically created and managed by local or regional governments, but larger employers like Kaiser Permanente also manage TDM programs, typically for their employees' commutes to and from work.

According to the Victoria Transportation Policy Institute, commute trip reduction programs can reduce vehicle trips to a particular worksite by 15-30 percent, or more if implemented with regional TDM strategies such as road pricing and major transit improvements.

The range of components that TDM programs can contain includes:

- Parking management, including pricing, priority, and shared parking
- Subsidies for transit or other encouraged modes
- Organization of travelers for specific modes, such as carpooling or bicycling
- Sharing, i.e. car shares
- Marketing
- Education

City role: Community Development Department, Engineering Department, and other relevant department outreach to Kaiser Permanente with potential of regular communication

Partner Engagement: Kaiser Permanente

Potential implementation strategies: Private Sector Outreach

- Coordination with land use planning, economic development, and other areas

Perhaps the most important attribute of successful TDM programs is the coordination itself, which often involves the designation of one or more part or full-time staff members who can oversee the whole of travel demand and supply for the particular community. The coordinator can make the key relationships to coordinate with providers of transportation such as cities and transit agencies. Part of this coordination is collecting and analyzing data on travel behavior in the community and assessing the successes and failures of the program.

The Victoria Transport Policy Institute suggests best practices for TDM programs. They include:

- Make TDM Programs comprehensive.
- Include both positive and negative incentives.
- Do not limit TDM Programs to commute trips.
- Integrate transportation and land use planning as part of a comprehensive TDM Programs.
- Involve stakeholders in TDM Program planning and implementation.
- Be sensitive to equity concerns, by applying incentives equally (for example, by applying Parking Pricing to administrators as well as staff), and by providing positive incentives that balance negative incentives.
- Establish stable program funding.
- Produce an annual report, which describes TDM programs and resources, travel trends, and comparisons with other communities.

Northern California programs

Kaiser Permanente medical centers in Oakland, Richmond, and Santa Clara have developed a TDM program called Eco-Thrive, which uses many TDM tools. Eco-Thrive has a website and a staff coordinator. Some of Eco-Thrive's programs are likely not appropriate for the Fontana Medical Center, but it is useful to see the extent to which Kaiser has developed a TDM program. At Oakland Medical Center which, like Fontana, is being re-built, Kaiser, the City of Oakland and ALTRANS are developing a new TDM program. The available resources include:

- **Carpool**: Employees who carpool at least three days a week can park for free at Oakland Medical Center in designated carpool parking areas.
- **Vanpool:** Each vanpool has 7-15 members, and the driver usually commutes for free. Groups receive a $30 monthly subsidy from Kaiser. The vanpool parks for free.
- **Public Transit**: www.Eco-Thrive.com has links to transit schedules and employees can come to the Commuter Services office for personalized trip planning.
- **Bicycle:** Employees can store their bicycles in secure bicycle cages located in two parking garages, a bicycle room in one of the garages, or at a rack outside one of the buildings. There are showers and lockers in one of the buildings. In addition, there is a bicycle group, quarterly Urban Bicycle Safety classes, and information on bicycle routes to OMC on www.Eco-Thrive.com.
- **Walk:** There is information on walking routes on www.Eco-Thrive.com.
- **Shuttle Program**: The Oakland Medical Center offers free shuttle service to and from the nearest BART station to three locations at the medical center. The shuttle runs every 10-20 minutes; 5:45 a.m. until 12:25 a.m. In addition, there is free shuttle service to offsite parking. There are real-time shuttle predictions on www.NextBus.com.
- **Ridematching**: Employees looking for a carpool partner or vanpool group can contact Eco-Thrive or go to www.Eco-Thrive.com and find others to share their commute.
- **Commuter Subsidy**: Employees riding public transit or vanpool three or more days per week are eligible for a $30 monthly subsidy, funded by Kaiser.
- **Commuter Spending Account**: Employees can pay for transit, vanpool fares, and for parking, using pre-tax dollars, up to $245 per month.
- **Guaranteed Ride Home**: Employees who walk, bicycle, carpool, vanpool or ride transit to work are eligible to participate in the Guaranteed Ride Home program. This program will pay for a free taxi or rental car ride home in case of an emergency. Emergencies include personal or family emergencies or being asked to work unexpected overtime.
- **Car Share**: If employees join City CarShare and reserve a car for personal or business use, they receive the Kaiser discounted rate.
- **Sporadic parking**: Employees who use an alternative to driving alone at least three days a week can purchase sporadic parking in the visitor garage for $4/day, up to seven days a month.

Recommendations

TDM-related recommendations for Fontana include:

- Create a framework for coordination among City of Fontana; Omnitrans (and perhaps Metrolink); and Kaiser. Create a memorandum of understanding. Have regular meetings.
- Create a website as a clearinghouse of information.
- Collect data on mode splits and use of programs and their relationships to outcomes such as measures of congestion, traffic volumes, safety.
- Coordinate Fontana's multi-modal transportation network with Kaiser schedules and internal medical center circulation networks – vehicle, pedestrian, bike, and transit.
- Include a heavy marketing element to make people aware of the program.
- Work with Kaiser to enlarge existing TDM program based on other areas like Northern California; Oakland is a template in some ways because of the proximity to a train station. Differences include pay/free parking, overall use of transit and bikes in Bay Area versus Inland Empire. Potential areas to target:
    - Parking management
    - Coordination of transit
    - Subsidies
    - Carpools and Vanpools
    - Shuttle to Metrolink and Kaiser Fontana satellites
- Focus on the whole Kaiser community, not just employees but patients and visitors too.

Attract complementary land uses

Initiative 5.2: Create strategies for attracting key complementary uses such as office and retail

The area surrounding the Kaiser Permanente campus contains many of the types of land uses that serve its employees, members and visitors, such as places to eat and shopping. However, much of this retail is not geared toward the Kaiser community. This initiative seeks to broaden and upgrade the mix of retail tenants in the shopping centers surrounding the Kaiser campus. It also identifies office as a near-term complementary use. The Implementation section of this report contains more information on specific strategies for accomplishing this initiative.

City role: Community Development Department, Economic Development Department, and other relevant department outreach to property owners, tenants, including Kaiser Permanente

Partner Engagement: Kaiser Permanente

Potential implementation strategies: Private Sector Outreach

Broaden and Upgrade the Retail Tenant Mix

As long as current retail tenants perform well and vacancies remain low, the major Sierra-Valley retail operators have little economic incentive to re-position their centers. Furthermore, there is little the City of Fontana can do directly to encourage shopping center operators to broaden and upgrade the tenant retail mix so as to better serve Kaiser employees and patients. To the extent there is a market failure—that is, impediments or disincentives preventing property owners, tenants, or developers from transitioning to highest and best uses from a market perspective—it is likely tied to the long-term nature of tenant leases that obligate retailers to pay rents even if they are underperforming.

However, there is some evidence of pent-up demand among Kaiser employees for expanded shopping and dining options, which has been limited by the poor pedestrian infrastructure, high traffic congestion, and possibly also by limited-duration work breaks that make off-campus trips difficult. Mitigation of these issues by means of a friendlier environment for pedestrians may encourage Kaiser and other office employees to vote with their feet and show demand for a different tenant mix.

See Implementation section for specific strategies how to achieve this initiative.

Encourage Office Development

Given the commercial orientation of the Sierra-Valley area, convenient highway access, established presence of the Kaiser Hospital, and proposed Westech Medical College facility on Sierra Avenue, office and medical office development may present the best early-phase option for a revitalizing land use in the Sierra-Valley area. Historically, the full-service Kaiser operating model has not stimulated the type of spillover demand for complementary, medical office space that often occurs in other health-care related commercial districts. However, agglomeration economies may still be available, marketing benefits in particular, for office tenants that cluster in the area. Furthermore, improved physical connectivity and other "place-making" initiatives, combined with the expansion and build-out of the Kaiser campus, may improve this dynamic over time. In the long run, market factors rather than public intervention will drive office development.

See Implementation section for specific strategies how to achieve this initiative.

Co-marketing and infrastructure

Initiative 5.3: Develop mutually beneficial marketing and infrastructure initiatives with Kaiser Permanente

A collaborative approach between the City of Fontana and Kaiser Hospital, which aligns the interests of both parties to improve the pedestrian infrastructure and streetscape along the edges of the Kaiser property, could yield both better public spaces and strong marketing benefits for Kaiser.

City role: Community Development Department, Economic Development, Engineering Department, and other relevant department outreach to Kaiser Permanente with potential of regular communication

Partner Engagement: Kaiser Permanente

Potential implementation strategies: Private Sector Outreach, Public-Private Financing

Infrastructure

An improved urban neighborhood with better amenities could be a tool to increase patient satisfaction, employee attraction, and employee retention. A public-private collaboration at the oldest hospital in its system may also present an opportunity for Kaiser to demonstrate its long tenure in California and the integral role it plays in communities as a service provider and neighbor. The City should coordinate opportunities to integrate Kaiser Permanente's short-term campus renovation efforts and capital investments with the City's transit expansion and streetscape improvement goals, while also coordinating opportunities to integrate Kaiser's long-term strategic goals and planned capital investments with the City's transit expansion and streetscape improvement goals.

The City and Kaiser could consider co-financing any improvements found to be in mutual interest. Specifically, there may be an immediate opportunity, given that Kaiser is in the middle of a campus modernization effort, to coordinate the design of the boundary between the City and Kaiser campus in a manner that promotes the program goals of both (see Objective 3).

Such an approach with Kaiser's participation would potentially allow the City to obtain financing for projects and programs at better terms than either could obtain acting alone. One possible mechanism might be land dedication or granting of easements on the campus edges to permit realization of the proposed pedestrian, bicycle, and transit infrastructure. Another mechanism might be a Community Facilities District (CFD), which allows infrastructure to be financed by means of a special tax on property owners. A CFD can be used to finance all or part of an infrastructure project and has the additional benefit providing access to low-interest financing. If successful, such a near-term collaboration could establish a template for further collaboration that could benefit the City and support Kaiser's long-term capital and operational plans in Fontana.

Marketing

As long as current retail tenants perform well and vacancies remain low, the major Sierra-Valley retail operators have little economic incentive to re-position their centers toward the Kaiser community. But the Team believes that Kaiser employees, members, and visitors are not necessarily maximizing their utility of the existing businesses around the campus. Kaiser employees, members, and visitors have the capacity to walk more and better wayfinding and knowledge of available businesses could convince more people to walk from the campus across the surrounding streets to patronize businesses.

The City and Kaiser can work together to develop one or a series of programs to connect the Kaiser community with existing businesses. On one hand, programs could direct and inform Kaiser employees, visitors, and members to surrounding businesses through pamphlets and/or signage. Another could undertake outreach to business owners to market toward the Kaiser community.

Combined with pedestrian improvements proposed in other study objectives, more patronization of existing retail establishments by Kaiser employees, members and visitors could convince tenants to position their businesses more toward the needs and desires of the Kaiser community.

Food trucks

Initiative 5.4: Create a food truck pod for Sierra Avenue

One way to create more food options in the near term for the Kaiser community while also enlivening the street environment of Sierra Avenue is a "pod" of food trucks. While these could be independent taco trucks, they could also include a "health options" truck aligning with the mission of Kaiser Permanente. Food trucks can set up in a range of flexible locations, including on-street parking spots, parking lots, or even on a sidewalk or plaza if there is enough space. Such locations would need to conform to county and city regulations.

Food trucks could set up in a number of locations at the edge of the Kaiser campus. Potential locations include space in the Sierra Plaza South parking lot, Permanente Drive; and, if built, on the pedestrian promenade proposed along Sierra Avenue in Objective 3. Any location should have the following qualities:

- Visible from Sierra Avenue
- Easily accessible on foot from the interior of the Kaiser campus
- Near pedestrian crossings
- Adjacent to safe public space to set up tables or to sit down and eat

Food trucks have experienced a renaissance in the last several years: The quality and diversity of food served out of food trucks has skyrocketed and cities have adopted policies that allow trucks to set up in public spaces, streets and parking lots.

City role: Collaboration with Kaiser Permanente and potentially other property owners and other restaurateurs/ vendors; Healthy Fontana

Partner Engagement: Kaiser Permanente, shopping centers

Potential implementation strategies: Private Sector Outreach, Public Policy

Figure 5-1: Example location of food truck "pod," utilizing excess space in Sierra Plaza South (see photo) and adjacency to Kaiser campus and crosswalk at Permanente Drive.

OBJECTIVE 6

Lay foundation for pedestrian-oriented zoning

While there is little development pressure in the Sierra-Valley area now, it is important that when serious interest from the development community materializes, the City of Fontana be ready with both vision and zoning that supports the City's desired outcomes. One of the major obstacles of achieving the goal of increasing walkability in the Sierra-Valley area is the City of Fontana's land use policy. Walkable places are built on mixed land uses, well-planned and designed intensity, walkable streets, and comfortable and engaging street frontages. Three of these things are partially in the court of city land use policy, and the City's zoning currently emphasizes separated land uses, inefficient intensity controls, and large setbacks and has no requirements for engaging street frontages. This objective seeks to provide a road map to implement a new pedestrian-supportive zoning for the Sierra corridor through a form-based code approach.

- 6.1: Understand current code's obstacles to transit- and pedestrian-oriented development
- 6.2: Pursue a form-based code approach

Current code obstacles

Initiative 6.1: Understand current code's obstacles to transit- and pedestrian-oriented development

The City of Fontana's current land use policy presents several obstacles to the creation of development that supports walkable places in the Sierra-Valley area. The following are aspects of the General Plan and Zoning code that create specific challenges to achieving walkability.

City role: Community Development research

Partner Engagement: N/A

Potential implementation strategies: None needed

Conflicting and vague General Plan

The Land Use Element of the Fontana General Plan's goals and policies include statements promoting walkable places, especially in the realm of mixing of uses. The Plan calls for new provisions in the zoning code for mixed-use/multiple use development; the creation and adoption of guidelines for mixed use development within the Activity Center overlay designation to augment the regulations provided in the Zoning Code; the establishment of project review criteria that reward variety in development mix and product type, efficient use of land, high levels of amenity features, attention to quality details, and effective use of open space features as integral components of the development.

However, the Euclidian-style separation of use categories of the General Plan undermines the statements promoting mixes of uses. Also, the General Plan lacks a specific vision for the types of places that should exist along the Sierra corridor. If there is no vision, then any zoning (even if it is trying to support pedestrians) can have trouble finding a specific overall purpose.

Euclidean zoning

The Fontana zoning ordinance is underpinned by the separation of land uses ("Euclidean zoning"). For example, the primary zoning category that applies to properties fronting the Sierra corridor in the Sierra-Valley study area is General Commercial (C-2). C-2 does not allow residential uses. Meanwhile, the residential categories, such as R-3, do not allow commercial uses. This impedes mixed-use building projects from being built, and even the mixing of residential and commercial uses adjacent to one another at a fine-grained level.

Setbacks

A critical aspect of whether development is walkable is how buildings meet the street. The City of Fontana code consistently applies a significant minimum setback to the building façade as it relates to the properties' street yard. For C-2-designated properties not on freeways, setbacks range from 15 to 20 feet depending on the category of the street it fronts onto. And setbacks on some major streets, which include Sierra and Valley, are even more - 25 feet. On its own, this requirement is not fatal to walkability, but there is no requirement as to what the character of the frontage must be.

Intensity measures

Intensity measures are an important tool of "traditional" zoning because they regulate externalities of intensity, such as noise and crowding. For residential land uses, intensity is regulated by dwelling units per acre. For non-residential uses, intensity is regulated by floor-area ratios (FARs). Intensity measures are often not the best way to regulate externalities of intensity, and they usually have negative effects on walkability because being able to walk places is dependent on having a lot of things close together.

The FARs for the most frequently occurring zoning categories in the Sierra-Valley area are .5 to 1.0, meaning that even if a building only takes up half the site, it can only be one or two stories, despite the 60-foot height limit for C-2. In that case it is the FAR that is preventing the intensity that would help create walkable places.

Overlays do not do enough

The General Plan also contains overlays which have been applied in addition to the base designations. The key overlay in the Study Area is the Boulevard Overlay district, which has been applied to the Sierra Avenue corridor. The purpose of the Boulevard Overlay is to "ensure the long-term viability and attractive appearance of these boulevards...to encourage retail activity to cluster at major intersections. In the stretches between the retail nodes, non-retail uses such as offices, services, incubator/multi-tenant uses, mixed use and residential development are the preferred uses."

The Boulevard Overlay does not change the general intensity of the commercial or residential designations, but it allows a mix of uses, specifically introducing residential uses into commercial areas. The residential component of the Boulevard Overlay is intended to locate in "mid-block locations that are not viable for commercial/activity center type development." There is a minimum lot size of six contiguous acres for residential, and a minimum project size of 100 multi-family units per project, is required for multi-family development. Single family residential development such as townhomes or other forms of "boulevard style housing" may also be developed at a density of 5 to 24 dwelling units per acre, and for projects less than six acres in size.

The Boulevard Overlay remedies some of the above problems with the underlying zoning designations by mixing uses and possibly concentrating intensity at main intersections. Also there is some pedestrian-oriented frontage design, including transparency of façade and orientation of building entrances to the street.

However, the lack of a build-to line (see Initiative 6.2) and the keeping of the underlying zone's minimum setback reduce the potential for walkability resulting from projects built under this overlay.

Lack of measures for quality frontage

The heart and soul of walkable places is the interaction between private properties and the streets they front onto. There is nothing in the City of Fontana's land use policy that shapes this critical relationship. Guidance for such quality street frontage is complex – it includes both overall site layout and the details of building and site frontages. The General Plan and Zoning code do not address either, leaving the property-street relationship to the demands of auto access and mobility.

Onerous parking requirements

High parking requirements for both commercial and residential uses further shape the Sierra-Valley urban form away from being one that is walkable. Retail uses are required to provide at least one space per 225 square feet, while multi-family residential uses must provide between 1.5 and 2.5 spaces per unit, depending on the size. While these are relatively "standard," they are too high for a corridor that is targeted for transit and better walkability.

Pursue a form-based code approach

Initiative 6.2: Pursue a form-based code approach

One effective way to address the obstacles to walkable and transit-supportive development along the Sierra Avenue corridor is a form-based code. A form-based code is an alternative type of zoning that focuses more on the form and character of buildings and sites from the public realm while allowing more flexibility in terms of land use and other aspects of development programs. This initiative makes the case for the employment of a form-based code for the Sierra Avenue corridor in Fontana.

City role: Build off vision (Objective 1), develop form-based code standards

Partner Engagement: Area stakeholders

Potential implementation strategies: Public Policy

Photosimulation of form-based code for Grant Road corridor in Tucson, Arizona.

What is a form-based code?

A form-based code is a type of zoning ordinance that regulates development primarily through urban form. Form based-codes approach key development controls such as land use, site layout, building height, and street frontage in a fundamentally different way than current practice, adding more emphasis on some of these and reducing emphasis on others. Many cities have adopted form based codes for specific districts or citywide. Examples of these cities include Denver, Miami, and smaller cities in California like Grass Valley and Petaluma.

The table below compares how "traditional" zoning and form-based codes approach the various development controls.

The common thread of the form-based code is closer attention to aspects of design that create good public benefits and letting design address the public effect of a property rather than directly controlling what is happening at the site (land use) and how much of it is going on (intensity). Form-based codes generally control outcomes, whether it is the look of a site from surrounding streets or properties or standards of performance such as noise or odor. They tell the property owner the expected outcomes and give the property owner a range of methods to achieve the outcomes.

	Categories	Land Use	Site layout	Intensity	Building height	Street Frontage	Parking requirements
Existing City of Fontana zoning			Maximum site coverage and lot size; Building setbacks from property lines	Units per acre and FAR	Universal building heights throughout the site	No controls	
Form-based code	Simplified land use classes or no controls Emphasis on allowed mix of uses	Simplified land use classes or no controls Emphasis on allowed mix of uses	Build-to lines	No explicit controls; handled through height and street frontage and performance standards	Nuanced building heights that emphasize how height affects different sides of the site through stepbacks	Frontage types	Shared parking

Emphasized
Less emphasis
No controls

Figure 6-1: Comparison of approaches of current Fontana zoning and development standards with a form based code.

Buildings developed under a form-based code in Petaluma, California

Why choose a form-based code?

Employing a form-based code would address many of the shortcomings of the City of Fontana's zoning code as it relates to the creation of walkable places. For example, in a form-based code the lists of land uses that are allowed are less rigid, allowing for more mixing of uses. Meanwhile, the design of the part of the site that fronts onto the site is more rigid, mandating human-scale designs that help to create an inviting environment for people.

A form-based code provides other benefits for both property owners, the City, and other stakeholders. It provides more flexibility for a wider range of development programs to fit within the existing entitlements, obviating the need for long and costly rezoning processes. At the same time a form-based code can create more certainty for the community in the aspects of development that affect it, whether that is height, privacy, or façade design.

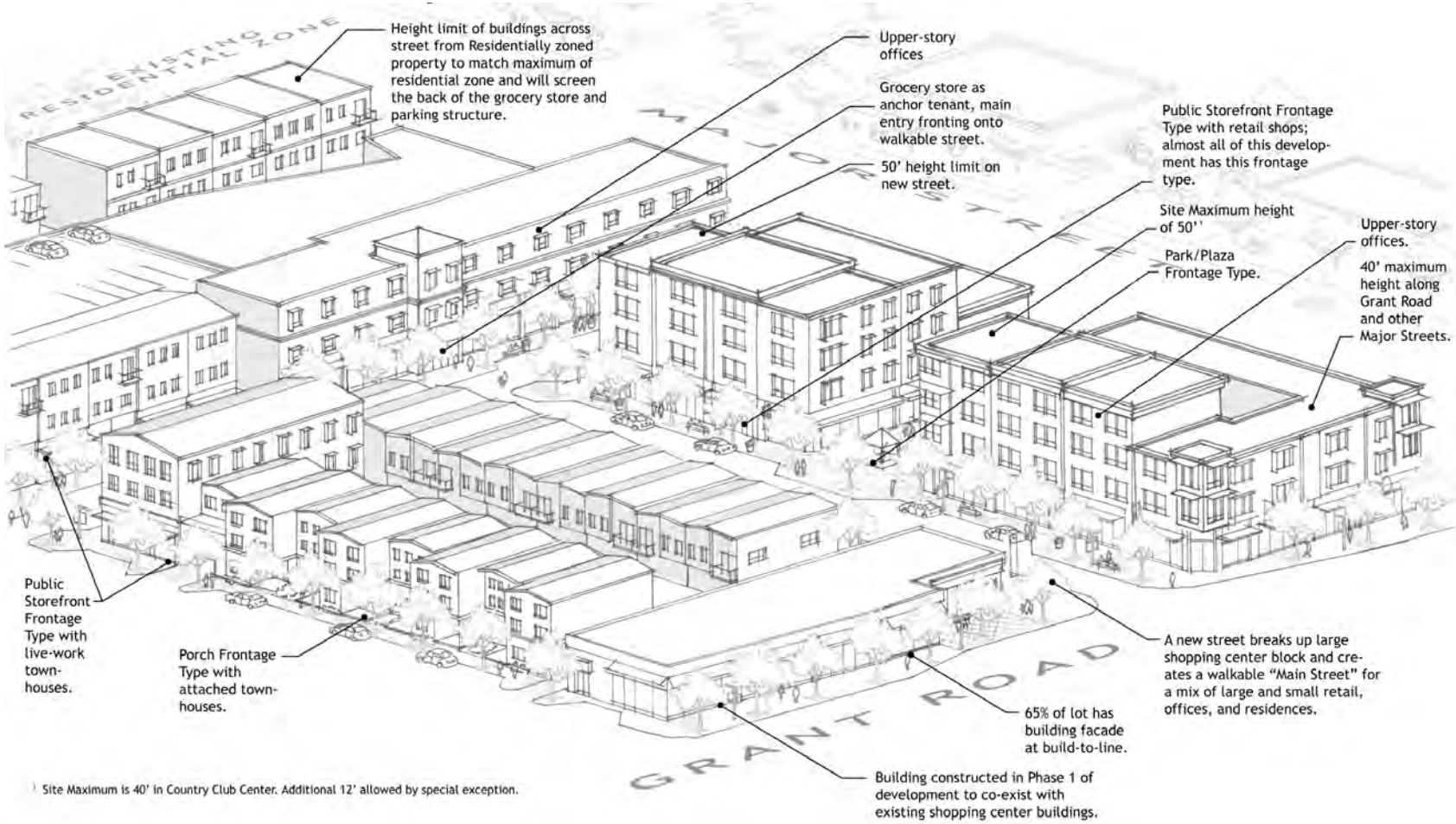


Figure 6-2: Illustration of types of standards of a form-based code, including height limits, building stepbacks, and frontage types.

How could a form-based code be applied to the Sierra corridor?

The City of Fontana would want to make sure that a new code would address the walkability challenges of the Sierra corridor. A point-by-point consideration of each problem follows:

Land Use: Change Euclidean zoning

A new code would reduce the barriers to mixing land uses by widening the lists of land uses allowed within a certain category or eliminating land use lists altogether, relying on the form restrictions and the building code to regulate uses.

In place of narrowly defined land use categories, a form-based code could substitute:

- Zone categories focusing more on common character than sets of uses: In some form-based codes, it may be useful to keep allowed land use lists. However, a form-based code might focus more on land use lists that create compatible mixes than separating "types" of land uses like commercial or residential. For example, in an effort to create a neighborhood-scale place, a form-based code may exclude retail over a certain square footage and businesses that would not likely contribute at the neighborhood level, such as heavy industry.
- Performance standards: Performance standards are one of the ways a form-based code controls outcomes. Performance standards set limits for nuisances such as noise or odor.

Site Layout: Reduce setbacks, introduce Build-to Line

A form-based code would change the emphasis of the current code's site layout requirements in three ways:

- Building coverage requirements: The current requirements as to how much of the site a building can cover would be eliminated. The positive benefits of limiting a building's coverage would be accounted for elsewhere.
- Setbacks: The requirements as to how far back a building must be from property lines (setbacks) would be adjusted. Under a form-based code, setbacks would function much like they do now; the interior property line setbacks might still remain the same. But there would likely be two major changes:
    - Interior property line setbacks could reduce because of the introduction of "stepbacks" to heights, a more nuanced way to pull buildings back from neighbors.
    - Street setbacks would shrink or go away, allowing buildings to come up to the street and help create a comfortable walking environment.
- Build-to Line: A new requirement for a maximum distance between the street property line and the building ("build-to line") would be created. A build-to line (illustrated in the diagram below) is one of the most important aspects of the form-based code. It makes sure that building, not parking lot, is defining the street frontage. The build-to line is typically zero (often referred to as "zero lot line"). Assuming the build-to line is zero, an example build to line requirement might be that, for a given percentage of a lot's frontage, the building must be at the front property line.

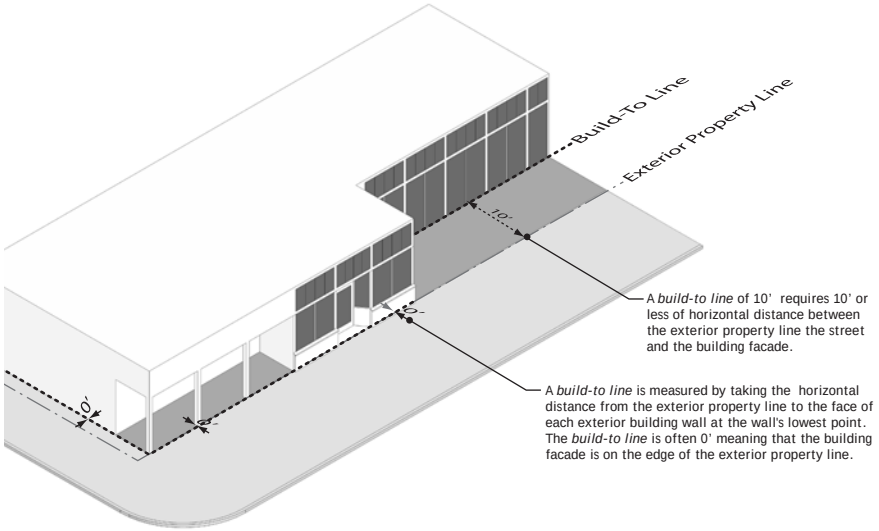


Figure 6-3: Illustration of a build-to line

Intensity: Eliminate controls

The philosophy of the form-based code is that there is nothing inherently wrong with relatively high levels of intensity and hence there is no need to regulate intensity of use itself apart from the building code, especially in the mostly suburbanized United States. Instead it is the opposite: intensity is a critical ingredient of walkable, vital public places. The relative intensity of the Sierra-Valley area is one of its best attributes, producing the potential for a lot of pedestrians.

But the key is that intensity is good as long as it is humanely designed and housed in buildings and sites designed for people. Intensity in the Sierra-Valley area emphasizes intensity of automobiles instead of pedestrians, hence it translates into congestion and the overwhelming of people by cars. A lot of people can fit into places in attractive ways, which are encouraged through other aspects of the form-based code. The negative effects of intensity, such as traffic or noise, can be handled through performance standards that address either the outcomes, as in odor or noise, or else address the source directly, such as how many parking spots would be allowed on-site.

Building height: Add nuances

Form-based codes typically emphasize building heights just like traditional zoning. But the difference is that where a traditional code, such as Fontana's, sets one maximum height for an entire site, a form-based code typically sets a variety of heights for different parts of a site. The idea behind this is that the reason for maximum heights in the first place is how a building looks to people, and typically people on different sides of a site will have different ideas of what is too tall: the single-family house dweller that backs onto the site will want to see a different building height than the commercial neighbor, who may want to see a different building height.

Form-based codes try to accommodate these different relationships through a tool called stepbacks, which set different maximum heights for different kinds of street frontages and property borders, depending on the type of street or adjoining zoning designation. Then there is a "step back" for a given horizontal distance, or a series of step backs, to the site's maximum height. The diagram below demonstrates this concept.

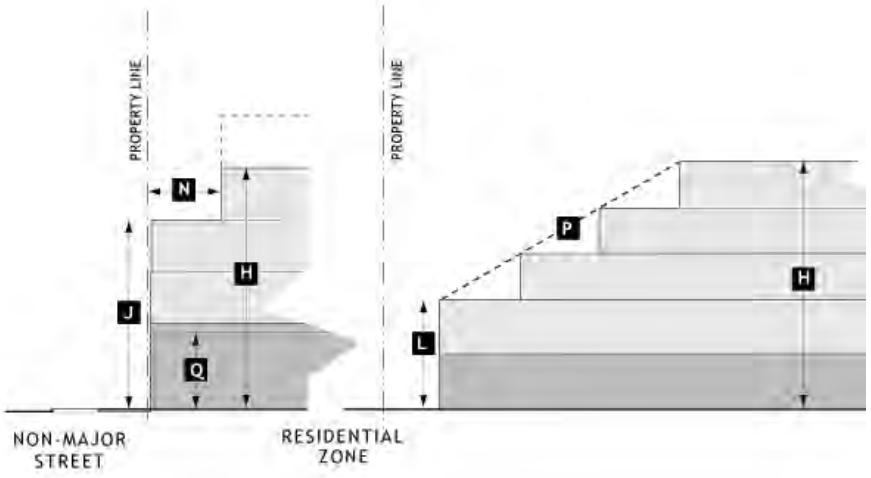


Figure 6-4: Example of a stepback standard for how a building height must "step back" from a street or property line as the building height increases, depending on what is adjacent to it.

Street Frontage: Implement frontage types as centerpiece of code

As mentioned earlier, street frontage is the soul of walkable places, creating a compelling engagement with land uses and a comfortable walking environment. Form-based codes regulate street frontage through a variety of means, including building massing and articulation, and transparency. One flexible means to handle street frontage is through "frontage types."

Frontage types would be the most foreign introduction to a new form-based code, as nothing of its kind exists in the City of Fontana's land use policy. However, it would also probably be the single most effective policy to create walkable places.

Frontage types are a set of requirements for how a site "fronts" onto a street or open space. These requirements may include the general character of the frontage (building, park, parking lot, etc.), how much of the building façade must be covered by windows, how frequent entrances need to be, how much landscaping needs to be along the edge of a park, and how large a stoop must be.

All lengths of street frontage and the edges of publicly accessible open spaces must conform to allowed Frontage Types for a given zoning category. In this way, frontage types provide a form-based code with a flexible kit of parts with which to define the street environment, and which can be customized to any environment. For example, if a zoning category focuses on a Main Street environment, allowed frontage types may be those that emphasize the public nature of buildings such as transparent storefronts. Conversely, if a zoning category focuses on environments where people are going to need more privacy, frontage types may emphasize more privacy, mandating fewer entrances, allowing opaque windows and landscape buffers between the sidewalk and the use. Frontage types are also a way to encourage unique aspects of a city or region.

Parking requirements: reduce, unbundle and share

While not necessarily part of the usual form-based code zoning controls, more efficient parking requirements are a key influence of whether a development can be walkable. In addition to lower parking requirements, the following techniques can aid walkability:

- "Unbundled" parking: A way to make parking more efficient and less wasteful is to "unbundle" it from the use it is serving. This is usually done for residential uses. A multifamily unit may require the building of two parking spaces, but the occupant may only use one, ensuring that one space sits empty. Unbundling puts a more of a "true cost" of parking by creating a market for it on its own, rather than an accessory of a use.
- Shared parking: Another way to make parking more efficient is to recognize that uses with different peak hours of demand can share the same parking spaces through a mutual agreement. This can open up more room for leasable space or pedestrian space.

Public Storefront

The Public Storefront provides an open, welcoming face to the street and easy movement between the sidewalk and places of business or gathering. The building façade directly abuts the sidewalk and is characterized by frequent entrances and large areas of windows. Enhanced detail and *articulation* in the façade design elements at the ground floor activate the public realm.

Private Storefront

The Private Storefront provides a measure of privacy for offices and other uses either not visited by the general public or those where visitation is appointment-based within buildings by allowing for some opacity of windows and the potential for a landscape screen to separate the facade from the sidewalk. but it also contributes to the street environment by employing direct or nearly direct frontage on the sidewalk and a high ratio of glazing to solid wall.

Figure 6-5: Examples of frontage types that guide the way buildings and sites relate to streets and other public spaces

OBJECTIVE 7

Complete the basic pedestrian network

While other planning objectives recommend special pedestrian features and targeted investment along the Sierra corridor, the Project Team also recognizes that all streets need to be walkable and universally accessible at a basic level. This is currently not the case; the Project Team found missing sidewalks, instances of noncompliance with the Americans with Disabilities Act, and other deficiencies. This objective identifies those deficiencies and recommends addressing them.

- 7.1: Fill in Gaps in Existing Sidewalks
- 7.2: Stripe missing crosswalks and add other pedestrian crossing facilities
- 7.3: Improve Sidewalk Quality
- 7.4: Address ADA Compliance

Identify missing pedestrian facilities

Initiative 7.1: Fill in Gaps in Existing Sidewalks (Priority #1)

City role: Integrate into General Plan/CIP, pursue funding

Partner Engagement: Area stakeholders

Potential implementation strategies: Public Policy, Public-Private Financing

Current condition

Missing sidewalks were observed adjacent to commercial, industrial, and residential areas within the study area. Valley Boulevard is a concern, given that it is a major street providing access between commercial and residential centers. Between Oleander Avenue and Juniper Avenue there exists no sidewalk or many gaps along the sidewalk, with some areas having unpaved terrain serving as the sidewalk. Even houses facing Valley Boulevard do not have walkways for travel to a neighboring home. In other areas on Valley Boulevard, such as at just west of Oleander Avenue, striped areas of paved streets are used as sidewalks with not even a vertical clearance separating pedestrians from vehicular traffic. Photos of locations with missing sidewalks are shown in Figure 7-1 and mapped on Figure 7-5.

Recommendation

Completing the sidewalk network through the study area should be the City's first priority. Completing the sidewalk network will ensure that residents, shoppers, and employees can walk safely. One approach to complete the sidewalk system would be to fund these improvements through the on-going Capital Improvements Program (CIP), through which sections of sidewalks could be improved over time. Alternatively, the sidewalks improvements could be implemented as individual sites develop or redevelop.

Figure 7-1: Missing sidewalk on Valley Boulevard, west of Oleander Avenue, facing east (bottom)

Stripe missing crosswalks

Initiative 7.2: Stripe missing crosswalks and add other pedestrian crossing facilities (Priority #2)

City role: Integrate into General Plan/CIP, pursue funding

Partner Engagement: Area stakeholders

Potential implementation strategies: Public Policy, Public-Private Financing

Current condition

At the intersection of Valley Boulevard and Juniper Avenue, there are missing crosswalks and the southwest corner of this intersection is dangerously unlevel and unpaved for pedestrian travel. Additional locations missing crosswalks are at Sierra Avenue at Permanente Drive, and Valley Boulevard at Inland Empire Center, Vineyard Valley, Healthcare Parkway, and Palmetto Avenue. Locations of mission crosswalks are mapped on Figure 7-5.

Recommendation

Provide striped crosswalks at all intersections. These crosswalks will ensure that pedestrians are able to cross the streets more easily. Additionally, the striped crosswalks will serve to provide advance warning to drivers of potential pedestrians in the crosswalks. These crosswalks should be implemented as part of the City's CIP.

Figure 7-2: Missing crosswalk at the intersection of Valley Boulevard and Juniper Avenue

Improve sidewalk quality

Initiative 7.3: Improve Sidewalk Quality (Priority #3)

City role: Develop concepts and new standards, integrate into General Plan/CIP, pursue funding

Partner Engagement: Area stakeholders

Potential implementation strategies: Public Policy, Public-Private Financing

Current Condition

There are numerous locations where sidewalks exist in the study area and are constructed to ADA standards, but could be improved to create a higher quality pedestrian environment and experience. Higher quality pedestrian environments might include:

- Level sidewalks
- Ample shade
- Buffers from traffic
- Street furniture
- Lighting
- Improved bus stops amenities (benches, shelters, etc)

There are limited instances in which these features are found throughout the study area. One significant issue related to the quality of the pedestrian environment is lighting. For this corridor, lighting is a critical issue given the number of persons who might be walking in and around the Kaiser facility due to their schedules. A robust pedestrian environment should include ample lighting beyond the minimal lighting that is provided for vehicles.

The Team's field review indicates that this lack of amenities also extends to lighting. For example, the Team observed a bus stop which lacked any lighting, which is particularly problematic given that the bus schedules extend beyond typical daylight hours.

Recommendation

Similar to the other pedestrian improvements, the City should identify ways to improve the pedestrian environment. One potential approach is to develop detailed streetscape guidelines or templates which can be applied by new development as that development occurs. Alternatively, the City could develop a more detailed Streetscape Master Plan to implement improvements to address the conditions identified above. Potential improvements could include:

- Adding in trees, which can provide both shade and a buffer from on-coming traffic
- Providing pedestrian scale lighting
- Providing street furniture

Figure 7-3: Wide sidewalks lacking landscaping on Valley Boulevard, between Oleander Avenue and Cypress Avenue (top); Uneven walking path on Valley Boulevard, west of Sierra Avenue (bottom).

Address ADA compliance

Initiative 7.4: Address ADA Compliance (Priority #4)

City role: Integrate into General Plan/CIP, pursue funding

Partner Engagement: Area stakeholders, especially disabled communities

Potential implementation strategies: Public Policy, Public-Private Financing

Current Conditions

Locations where sidewalks or crosswalks exist but are not constructed to ADA standards are visible throughout the study area. The Federal Highway Administration (FHWA) and Americans with Disabilities Act (ADA) have set design standards for pedestrian facilities.

A deficient sidewalk can include any of the following features:

- Less than 44" of unobstructed sidewalk width
- Greater than ½" of vertical obstruction (trip and fall hazards)
- Missing or non-continuous sidewalks, including unpaved areas, potholes, and uprooted sidewalks
- No curb ramps at intersections and driveways
- No crosswalks or pedestrian push-buttons at intersections

San Bernardino Avenue has sidewalks that are not a minimum of 44" wide. Palmetto Avenue has sidewalks with obstructions such as electric poles and mailboxes in the middle of the walkway. Valley Boulevard has a variety of issues such as not being a minimum of 44" wide or being unlevel with vertical gaps. Sierra Avenue has short segments lacking connection and consistency. A few intersections having crosswalks are in bad condition and are not clearly marked as well, Valley Boulevard at Vineyard Valley being one of them. All crosswalks should be clearly marked at major intersections and high pedestrian activity intersections should have high-visibility crosswalks. Most of the pedestrian deficiencies involve the sidewalk not being wide enough or the sidewalk not having enough unobstructed width. Non-ADA-compliant facilities are mapped in Figure 7-5.

Recommendation

Similar to other issue areas, this one should be best addressed through an incremental approach, whereby various issues are addressed in an opportunistic fashion concurrently with other projects. For example, the lack of pedestrian push-buttons might be remedied when a traffic signal is replaced at an intersection. This issue could also be addressed through the preparation of a Streetscape Master Plan, as discussed in Priority #3. Given the extent of the pedestrian network, it may be necessary to fully inventory all of the sidewalks in the study area proactively to identify all of the potential issues. Once that survey is complete, then the necessary improvements could be identified and implemented as other projects move forward.

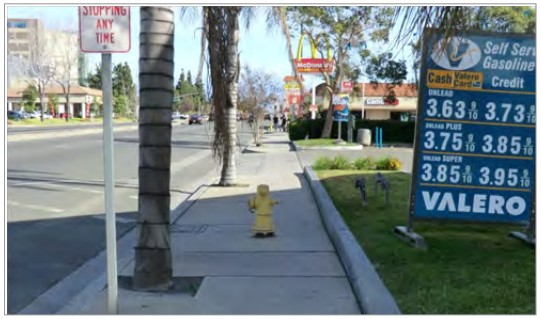


Figure 7-4: Obstructed sidewalk on southeast corner of Sierra Avenue and Valley Boulevard intersection (top); Incomplete and non ADA compliant sidewalk on Valley Boulevard, south side between Oleander Avenue and Cypress Avenue, facing west (bottom).

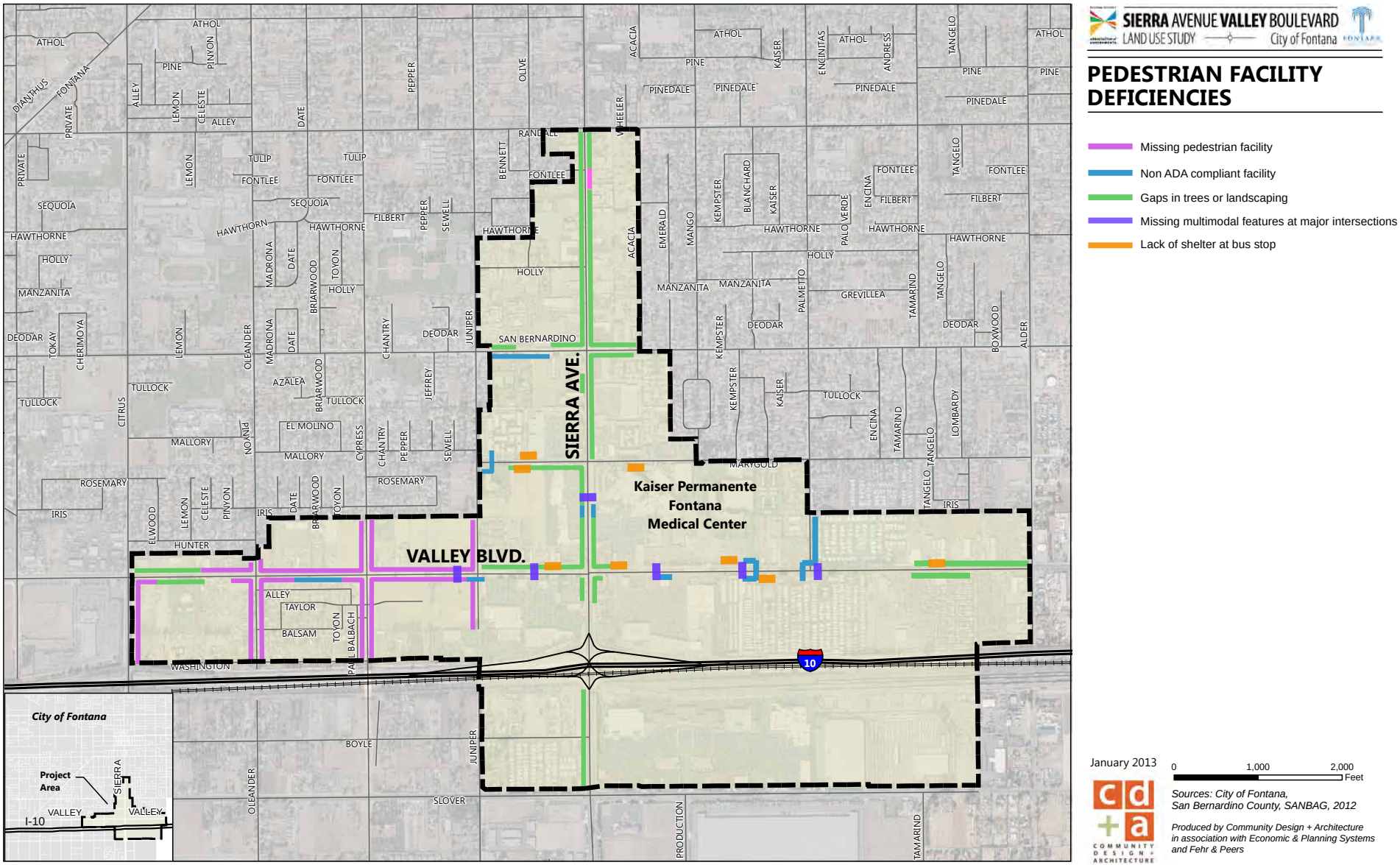


Figure 7-5: map of pedestrian facility deficiencies

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OBJECTIVE 8

Create transition on Valley Boulevard into walkable area

The Sierra-Valley area is defined by two contrasting transportation corridors, Sierra Avenue and Valley Boulevard. While Sierra connects the City of Fontana and largely includes land uses serving neighborhoods and the city, Valley connects the larger region and is largely defined by land uses serving the freeway such as trucking, warehousing and auto sales and repair. Many of the planning objectives focus on Sierra Avenue because it is more likely to achieve project goals, but the section of Valley that intersects with the Sierra corridor should communicate to travelers that they are entering an area with frequent pedestrians and should support the concept of a gateway into Fontana.

- 8.1: Build pedestrian and streetscape features on Valley around Sierra

A transition on Valley Boulevard

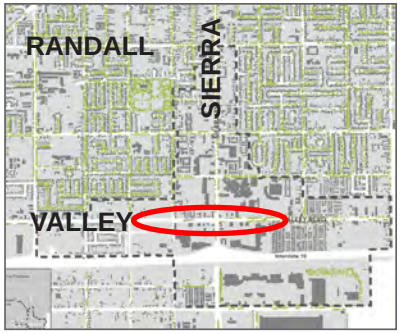
Initiative 8.1: Build pedestrian and streetscape features on Valley around Sierra

A series of streetscape features along Valley Boulevard, focused on Valley's intersection with Sierra, can accomplish three things: It can improve the pedestrian environment on the segment of Valley that intersects the pedestrian-heavy area around the shopping centers and Kaiser campus. It can also communicate to motorists driving on Valley that they are entering an area with more pedestrians. Third, it can reinforce the idea of a gateway for Fontana and the Sierra-Valley area as a place within the city.

City role: Outreach to stakeholders, develop concept, integrate into General Plan/CIP, pursue funding

Partner Engagement: Area stakeholders

Potential implementation strategies: Public Policy, Public-Private Financing



The Team's concept to create a transition on Valley focuses on the "midblock" signalized crossings that facilitate entry to the shopping centers on either side of Sierra Avenue. Similar to the "midblock" crossing on Sierra at Permanente Drive, these crossings are an opportunity to emphasize pedestrians and a sense of place where the scale of the intersection is relatively small and not overwhelmed by autos and auto-serving uses, like at Sierra-Valley intersection.

Recommended improvements include:

- Additional high-visibility crosswalks at "midblock" crossings
- Gateway signage at "midblock" crossings
- Decorative or accent trees clustered at "midblock" crossings
- Extension of median noses to create pedestrian refuges at "midblock" crossings
- Development of concepts for improved streetscape along Valley between "midblock" crossings and Sierra Avenue. Such concepts would create more consistency in the pedestrian environment and in the landscape treatment while providing consistent buffer from traffic and shade.

The Team also recommends lowering the existing 35 mile per hour speed limit to 25 or 30 miles per hour.

Figure 8-1: Existing conditions on Valley Boulevard near Sierra Avenue do not provide a good walking environment and do not create the sense of coming into a walkable urban place.

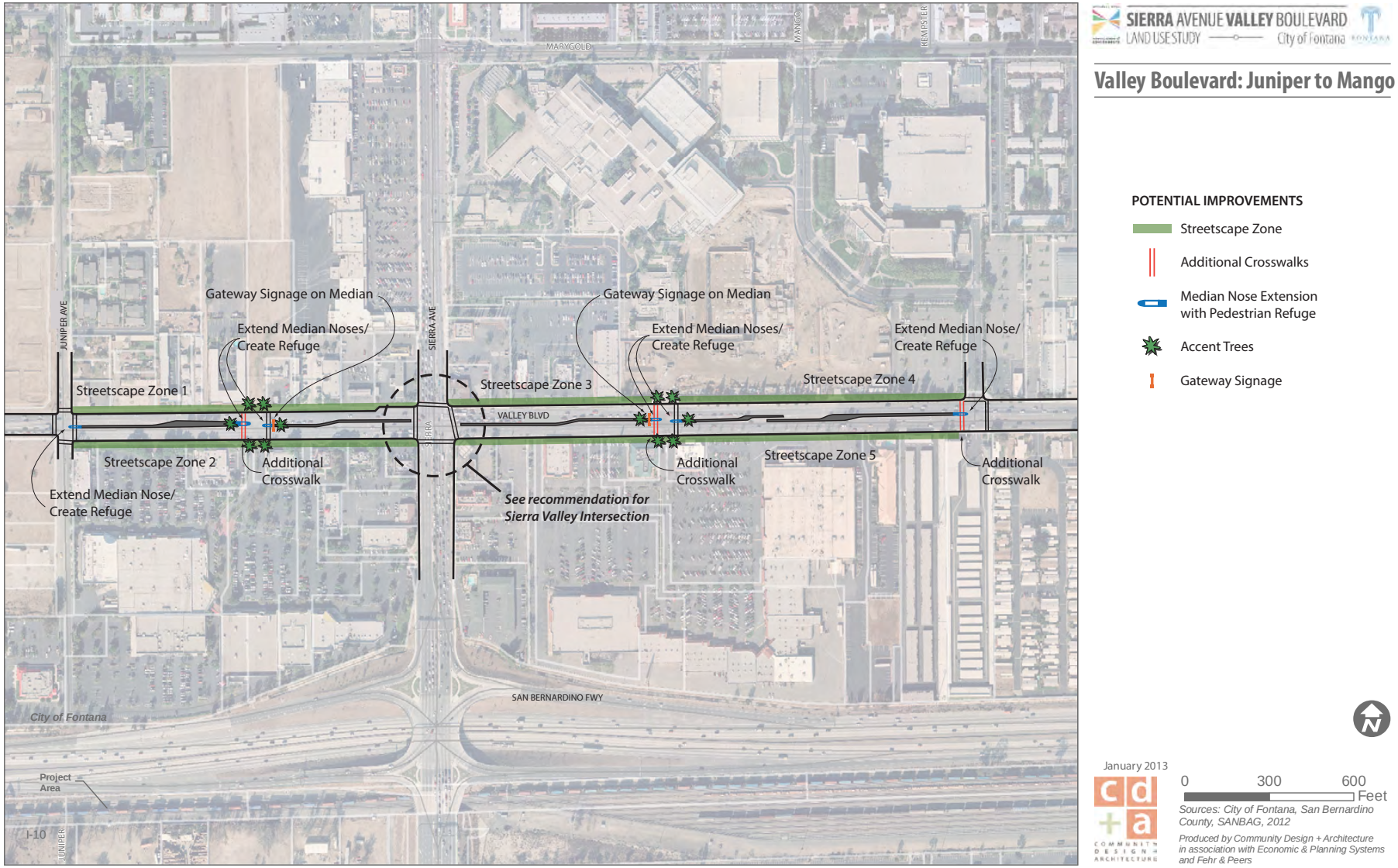


Figure 8-2: Diagram of recommended improvements to Valley Boulevard around Sierra Avenue.

OBJECTIVE 9

Create a strategy for creating and revitalizing housing in the Sierra-Valley area

Adding more housing to the Sierra-Valley area could complement other land uses and help achieve many of the study's goals for walkability, transit, and complementary land uses to Kaiser. The area's existing housing provides high levels of pedestrian activity and connection between the commercial areas at Sierra-Valley and the neighborhoods around it. While few Kaiser workers currently live in the Sierra-Valley area, over half of Kaiser Permanente employee survey participants indicated they would be interested in living within walking distance from the medical campus if the right type of housing were available. While the area is not currently competitive for the type of new market-rate housing that will likely attract Kaiser employees, it has been home to new affordable and senior projects.

- 9.1: Encourage New Residential Construction and Housing Diversity

New residences and housing diversity

Initiative 9.1: Encourage New Residential Construction and Housing Diversity

The Sierra-Valley market area does not currently support rents that justify new market-rate housing construction, nor does it offer large land parcels of the sort that helped feed suburban residential development in the northern areas of Fontana. Existing zoning, specifically the Boulevard Overlay Zone, already permits multifamily uses, but there may be additional incentives or regulatory changes that could encourage market-rate residential development. The City should seek further input from the development community on this issue.

In addition, affordable and senior housing development, which the area has recently hosted, can help establish a residential neighborhood and transition it to market-rate housing. Affordable and senior housing typically incorporate financing subsidies, which permit high-quality design and construction (as evidenced by Paseo Verde and the new building at the Dino Papavero Senior Centre). Such development can help establish a residential land use pattern and raise the perceived quality of the neighborhood, and with it rents capable of supporting market-rate construction.

Housing developments that have contributed to the community around Sierra-Valley include the Dino Papavero Senior Centre (left) and Paseo Verde (right)

City role: Housing Authority continue to pursue projects in Sierra-Valley area; Community Development Department, Economic Development Department, and other relevant department outreach to senior community developers and other prospective developers; Community Development Department, Economic Development Department outreach to Kaiser Permanente

Partner Engagement: Potentially Kaiser Permanente

Potential implementation strategies: Private Sector Outreach

Potential new housing types for Sierra-Valley area (clockwise from top left): Attached courtyard houses; Townhouses; multifamily over retail mixed use.

IMPLEMENTATION

This section proposes a range of methods to implement the recommendations. These include actions taken by the City of Fontana as well as working with partners in the public and private sectors. One or more of these methods is referenced in the Recommendations section as a possible implementation tool for each initiative.

Implementation Mechanisms

The recommendations contain nine distinct objectives. These objectives and their initiatives can be implemented through three general categories of methods:

1. **Public Policy**: Create City land use and transportation policies that enable the objectives and their initiatives. This is often the first step for implementing many of the recommendations. Objectives falling under this category include Objective 1, Objective 6, and aspects of the other objectives.

2. **Private Sector Outreach**: Lay the foundation for the revitalization of the Sierra-Valley area with outreach initiatives to land owners and developers that promote a common vision, solicit active participation in the process, and help stimulate improvement in market conditions. Objectives falling under this category include Objective 5, Objective 9, and aspects of Objective 3.

3. **Public-Private Financing**: Explore opportunities to pursue and implement financing mechanisms to support the planning, design, and construction of multi-modal infrastructure and public realm projects. Objectives falling under this category include Objective 2, Objective 3, Objective 4, Objective 7, and Objective 8.

The discussion below presents some of the actions and approaches available within each category in general terms for consideration by City staff. Additional specificity will be required when or if the City decides to pursue one or several of the approaches described.

Public Policy

Public policy can serve as both an implementation tool of some of the objectives and initiatives as well as a way to "set the stage" for objectives and initiatives that will be implemented by the other two methods discussed. This approach also covers the spectrum of land use and transportation planning, from the vision/concept level to the more detailed level of design and development standards and priorities for capital improvements.

Public policy tools available to the City to implement this study's objectives include:

- General Plan elements (including land use, circulation, community design)
- Specific plan
- Area plan
- Street standards
- Zoning and development standards, including overlays
- Capital Improvement Program

Private Sector Outreach

In order to realize the goals for transformation of the Sierra-Valley area, the interests of key private landowners and tenants must be aligned with public goals. Each of the proposed Sierra-Valley initiatives depends to a large degree on their active participation. While public investment in new transit and non-motorized infrastructure will provide the catalytic spark, the willingness of mostly long-term land-owners to contribute to the new vision for the area, possibly at some risk, is critical. Key private sector participants include the owners and tenants of the shopping centers, vacant opportunity site parcels, corner parcels at the big intersections, and most importantly, Kaiser Permanente Hospital.

To do so, the City must lay the foundation for Sierra-Valley area renewal with outreach and planning initiatives that promote a common vision, communicate the timing of proposed infrastructure developments, articulate the potential benefits to landowners, and solicits their active participation in this process. While the major opportunities for public-private joint ventures are described in the Financing section, there are other significant options available to the City of Fontana for private sector outreach, such as business recruitments and business improvement districts, as described below.

Marketing and Business Recruitment for Retail and Office Tenants

While the City should not be in the business of pre-programming the tenant mix of the Sierra-Valley area, it can work closely with existing land-owners and shopping center operators to identify, recruit, and retain businesses consistent with the goals for the Sierra-Valley area. Business recruitment efforts can not only attract new businesses but also support the needs of existing tenants. The types of activities often associated with business recruitment strategies include:

- Research on market conditions and space requirements for targeted tenant types;
- Analysis of available sites, including renovation requirements and lease terms;
- Marketing and solicitation aimed at specific retail or office tenants;
- Expedited or preferential permits and business licensing for targeted tenants (e.g., liquor licenses);
- Financial assistance with initial start-up costs (e.g., tenant improvements);
- Low-interest business loans; and
- Property acquisition or lease subsidies for targeted tenants.

Business recruitment efforts can be implemented by both public and private entities or as part of a coordinated effort. In either case, the effort should be closely linked to the overall vision plan for the Sierra-Valley area and focused on attracting businesses that reinforce or enhance the economic and social vitality of the district as a whole.

Business Improvement Districts

One useful tool to facilitate marketing, business recruitment, and establishment of a holistic vision for the future is a Business Improvement District (BID). A BID can play variety of roles and can provide a range of services designed to advance the overall commercial appeal of a specific district. At the very minimum, a BID can serve as an organizing tool to formulate and advance common area interests. Other BID activities can range from development of marketing and promotional activities, including sponsoring special events, to more strategic management of programs, maintenance services, construction of additional common area improvements, and possibly recruiting selected tenants.

Public-Private Financing

It is expected that a range of funding resources and mechanisms will need to be tapped to achieve the objectives of this study. In addition to typical development-based funding sources, several other sources may be available given the transit- and congestion-mitigation oriented nature of the development. At this point, the funding sources are identified for discussion purposes, to determine if the list is complete (and appropriate) and to guide subsequent analytical efforts. The ultimate mix of financing mechanisms will be determined in the implementation process, based on final technical analyses of costs, benefits, and burdens, and on deliberations involving City staff, Omnitrans, property owners, developers, elected officials, bond counsel, underwriters, finance experts, and others.

Regardless of the financing mechanisms selected, any financing approach should seek to align the sources, timing, and scope of financing to the specified uses, as described by the following principles:

- There should be assurances that necessary funding will be available at the time specific infrastructure items are required.
- Financial burdens on development should be kept within industry standards and market constraints.
- The plan should be responsive to expected variations in timing, location, and type of development.
- Infrastructure improvements that serve the City or region should be allocated to funding mechanisms outside the Sierra-Valley area, to the degree possible. For example, establishment of bus rapid transit should be financed through Omnitrans and other regional transportation sources.

The financing tools and their applicability to the Sierra-Valley area fall into five distinct categories, which will be discussed at greater length below. They include:

1. Area Specific Assessments, Fees, Dedications and Agreements
2. City sources or Mechanisms
3. Federal and State Funding

Area-Specific Fees, Dedications, and Exactions

Special Assessment Districts (1911, 1913, 1915 Acts)

California law provides procedures to levy assessments against benefiting properties and issue tax-exempt bonds to finance public facilities and infrastructure improvements. Assessment districts, also known as improvement districts, are subject to majority vote of property owners. Votes are weighted according to the amount of the proposed assessment on the parcel to which the ballot pertains. Assessments are distributed in proportion to the benefits received by each property as determined by engineering analysis and form a lien against property. Special assessments are fixed dollar amounts and may be prepaid, although they are typically paid back with interest over time by the assessed property owner. Only public infrastructure improvements with property-specific benefits (e.g., roads, drainage, and sewer and water improvements) may be financed with assessments. In addition, standard public finance underwriting criteria requires that the ratio of improved land value to assessment lien be equal to or greater than three to one.

Unlike impact fees, an assessment district would provide the Sierra-Valley area with a stable and predictable revenue stream to fund infrastructure improvements since the tax is a fixed dollar amount, regardless of whether development has occurred. In addition, since assessment can be applied to already developed property, area properties that remain in their current use could be required to contribute to project-wide costs, providing that a clear "nexus" is established. However, landowners in the area who do not anticipate developing their property until later phases may be reluctant to support an assessment district. Such a district would commit them to paying higher taxes for uses that are not immediately enhanced by the corresponding infrastructure.

Mello-Roos Community Facilities Districts

California's Mello-Roos Community Facilities Act of 1982 allows for the creation of a special district authorized to levy a special tax and issue tax-exempt bonds to finance public facilities and services. A CFD may be initiated by the legislative body or by property owner petition and must be approved by a two-thirds majority of either property owners or registered voters (if there are more than 12 registered voters living in the area).

Special taxes are collected annually with property taxes and may be prepaid if such provisions are specified in the tax formula. The special tax amount is based upon a special tax lien against the property. There is no requirement that the tax be apportioned on the basis of direct benefit. Because there is no requirement to show direct benefit, Mello-Roos levies may be used to fund improvements of general benefit, such as major utilities, fire and police facilities, and libraries and parks, as well as improvements that benefit specific properties. The provision also allows for the allocation of cost burdens to alleviate burdens on specific classes of development.

The City of Fontana has deep experience with CFDs, with over 50 established in different areas of the city—mostly for new residential developments—and the City may also benefit from establishing a CFD in the Sierra-Valley area. While the area is considerably built out, there may be opportunities for land consolidation and development along Sierra Avenue above San Bernardino and on the vacant lots on the block between Marygold, Valley, Sierra, and Juniper.

A Mello-Roos CFD is especially useful in cases in which there are a few developers/landowners who seek to develop a large area and have a reasonable expectation about the type, timing, and amount of development sought. Like an assessment district, a Mello-Roos can provide a stable and predictable revenue source and, thus, bonding capacity with which to fund project-wide improvements. However, the advantage of a Mello-Roos is that it offers a high degree of flexibility with regard to the apportionment of the tax. For example, vacant parcels in the area may be exempt from the tax until development actually occurs. Its disadvantage is that a Mello-Roos requires two-thirds approval among affected property owners, which means implementation would likely require a significant amount of negotiation and consensus among current and/or future land owners in the area. Further outreach and discussions with current landowners will be required to determine if a Mello-Roos is feasible and should be pursued.

Dedications and Exactions

Under the Subdivision Map Act, developers may be required to dedicate land or make cash payments for public facilities required or affected by their project (e.g., road right-of-way fronting individual properties). Dedications are typically made for road and utility right-of-ways, park sites, and land for other public facilities. Cash contributions are made for other public facilities that are directly required by their projects (e.g., payments for a traffic signal).

To improve the Sierra-Valley area as proposed, some land currently owned by individual landowners will be necessary for public uses. For example, the proposed sidewalk improvements and the proposed dedicated busway along Sierra could require road widening that may impinge on existing property lines. Some landowners may be willing to make such dedications in lieu of paying impact fees or other project-wide contributions and/or be entitled to reimbursements from other developers. Those property owners that dedicate their land for public or right-of-way uses that benefit the area as a whole should be compensated proportionately.

Development Agreements

A development agreement is a contract between a public agency and a developer that provides the developer with assurances that the land use entitlements for a project will not be changed in the future and specifies public sector commitments to financing, phasing, and other elements of project implementation. In return for these public considerations and assurances, the developer may be asked to make financial commitments beyond those that could be justified through typical subdivision ordinance dedications and exactions and/or impact fees, which are all limited by the "rational nexus" criteria. Development agreements can be drafted as standard agreements that can be modified to meet project-specific problems or objectives.

Development agreements are especially applicable to large projects in which the developer may be willing to make up-front investments in required infrastructure, which exceed the "fair share" allocation in return for an assurance of future entitlements. Possible candidates for use of this tool include Westech College, or future developers who may see an opportunity for further parcel assembly and consolidation in the area.

City Sources and Mechanisms

Development Impact Fees

Development impact fees may be enacted by a legislative body (i.e., city or county) through adoption of an ordinance. Such fees do not require a public vote to be enacted, but they do require public hearings. Area development impact fees must be directly related to the benefits received. Specifically, State law requires that impact fees be shown to have a "rational nexus" or relationship between costs and the impact or demand caused by the new development. They do not create a lien against property but must be paid in full as a condition of approval. Fees are established so that these properties pay their fair share at the time they are ready to be developed. Benefiting properties may be given the option to finance the fees by entering into an Assessment District (AD) or Mello-Roos Community Facility Districts (CFD) (see description of these financing mechanisms below).

A principal use of impact fees is to encumber properties that would not otherwise enter into an AD or CFD. For example, if an area consists of numerous parcels with separate developers it may be difficult organize an AD or a CFD. Likewise (as may be the case based on interviews with Sierra-Valley landowners), landowners may be believe city fees are already too high. Further discussions with the current landowners will be required to determine the likelihood of such an outcome.

Another advantage of impact fees is they can be enacted by the City without the approval of current landowners. Thus, the Fontana City Council could approve an Area Development Impact Fee Ordinance for the Sierra-Valley area, which would provide some policy direction early on in the process before resolving outstanding issues regarding the intentions and participation of current landowners. The revenue generated from the impact fees in early phases would be obligated to help finance the bulk of area-wide street infrastructure costs that will occur in later phases. It is important to note that the passage of such an ordinance would not preclude future developers from participating in one of the other financing mechanisms discussed below in lieu of paying an impact fee.

A major deficiency of impact fees is that they are typically collected over time as development occurs. To the extent that funding is needed "up front" for a particular facility, fee funding is not sufficient. Additionally, programmed or expected development that does not occur when expected, or never occurs, exacerbates the initial problem.

Infrastructure Financing District

Qualified entities can create an Infrastructure Financing District (IFD), per the 1990 Infrastructure Financing Act, to pay for the construction of capital facilities that have "communitywide significance and provide significant benefits to an area larger than the area of the district." Such facilities may include transit, highways, water systems, sewer projects, flood control, child care facilities, libraries, parks, and solid waste facilities.

An IFD provides funding by diverting a portion of property tax increment revenue for 30 years to secure the issuance of bonds to finance qualifying projects. The IFD increment is defined as total annual property tax revenue within the district, less

a base year amount, less the portion allocated to schools, less the portion claimed by agencies that did not voluntarily approve the IFD formation. As such, IFD tax increment is less than what redevelopment tax increment used to generate, possibly significantly less depending on agency approval.

However, the difficulty of implementing an IFD makes utilizing the mechanism to obtain infrastructure financing almost prohibitively difficult. To form an IFD, the qualified entity must develop an infrastructure plan, send copies to every landowner, consult with other local governments, and hold a public hearing. The infrastructure plan must be approved by every local agency that will contribute property tax revenue to the IFD. After agency approval, the applicant must submit for voter approval to form the IFD (by two-thirds majority), to issue bonds (by two-thirds majority), and to establish an appropriations limit for the IFD (by simple majority).

Even after forming an IFD, bond issuance is difficult. The thirty-year limitation restricts bond capacity. Furthermore, there is no current market for IFD bonds, which have a high risk profile, because tax increment cashflow to service the bond is susceptible to real estate market volatility, and there is no independent real property lien on land within the district to secure the IFD's obligations .

Ultimately, the applicability of IFD financing to support infrastructure in the Sierra-Valley area will depend in part on how the organizing authority assembles financing and in part on how IFD legislation evolves in the near-term. In light of the well-documented challenges in forming and utilizing IFDs, several legislative efforts are under way to amend the IFD law with key provisions including term extension from 30 to 40 years, elimination of voter approval requirements, and a broadening of qualifying projects. If successful, these revisions could open up a very significant source of infrastructure financing for Fontana and the Sierra-Valley area.

"Redevelopment 2.0" Agency Financing

As the CRA continues to unwind, several proposals looking to restore access to certain redevelopment tools have begun to circulate. As envisioned, successor agencies could regain the authority and power to:

- Buy and sell real property including, if necessary, the power to use eminent domain.
- Receive and spend a portion of the property tax revenues generated from the increase in assessed value that occurs after establishing a project area.
- Finance their operations by borrowing from federal or state governments and by using tax increment revenue bonds.
- Finance and develop infrastructure improvements.

While the elimination of urban blight was the primary public purpose justifying formation of a redevelopment agency with the powers described above, successor agencies under the new schemes would likely operate under a narrower mandate with access to a severely reduced portion of tax increment.

General Fund Revenues

The City of Fontana may elect to use General Fund revenues to help offset a proportion of the project-wide costs. Such a policy might be justified if it is determined that a substantial General Fund revenue surplus is expected to be generated by the development.

Local Bond Measures

Local bond measures are typically voter-approved general obligation bonds for specific projects. Bond measures are typically limited by time and based on the costs of the specific project. Funding from bond measures can be used for planning, design, and construction of infrastructure projects.

Federal and State Funding Sources

A variety of State and federal funding sources that may be applicable to the Sierra-Valley Objectives and Initiatives are summarized in Table 1. Most of the funding programs that fall into this category are competitive and may require preparation of extensive applications. Furthermore, many programs require a local match of between 10 and 20 percent of project cost. Finally, grant recipients must carefully monitor projects for compliance, which may absorb a significant quantity of staff resources.

Table 1: Federal and State Funding Sources

Program	Description
Moving Ahead for Progress in the Twenty-First Century (MAP-21)	The current iteration of the US DOT Federal-Aid Highway Program, Moving Ahead for Progress in the Twenty-First Century (MAP-21), is in effect through September 2014 (it is re-authorized roughly every six years). Because the process of allocating federal aid is subject to uncertain political outcomes, it is not possible to ascertain what programs will continue through the next version. The California Department of Transportation (Caltrans) and regional planning agencies administer MAP-21 funding. The MAP-21 programs that may be applicable to Sierra-Valley projects are discussed briefly below.
Transportation Alternatives (TA)	• Transportation Alternatives consolidates three separate programs under the prior version of the Federal Aid Highway Program: Transportation Enhancements (TE), Safe Routes to School (SR2S), and the Recreational Trails Program (RTP). Of these, TE and SR2S are particularly relevant to opportunities in the Sierra-Valley area. TE funds may be used for the planning, design, and construction of bicycle and pedestrian infrastructure such as bikeways, sidewalks, signaling and signage, traffic management techniques, and improvements designed for ADA compliance. SR2S funds are intended to finance healthy alternative approaches to driving or using the bus to go to school on projects within two miles of primary or middle schools, of which there are a number in the Sierra-Valley area. SR2S funds may be used for a range of engineering, traffic calming, and educational projects.
Surface Transportation Program (STP)	• The Surface Transportation Program (STP) allocates funds that can be used for a wide range of projects, including road and transit improvements that include bicycle and pedestrian elements. STP provides flexibility to fund improvements that are outside the Federal-aid highway system, so feeder streets around the Sierra-Valley intersection may also be eligible.
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	• The CMAQ program is designed to provide funding to support surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief. Eligible projects, which could include many of the non-motorized transportation infrastructure improvements envisioned for the Sierra-Valley area, are intended to lower emissions of ozone, carbon monoxide, and/or particulate matter.
New Freedom Initiative	• The New Freedom Initiative is intended to fund improvements that remove barriers to community living for people with disabilities. Among the eligible projects are those that expand transportation options. New Freedom Initiative grants may be used to fund both capital projects and operations and may be applicable for transit and pedestrian infrastructure envisioned for the Sierra-Valley area.
Transit-Oriented Development Planning Pilot	• This pilot program provides funding to advance planning efforts that support transit-oriented development (TOD) associated with new fixed-guideway and core capacity improvement projects. Eligible recipients include state and local government agencies engaged in comprehensive planning that seeks to enhance economic development and ridership by means of increasing multimodal connectivity and accessibility, enhancing access to transit hubs for pedestrian and bicycle traffic, and promoting and enabling mixed-use development.
Transportation Investment Generating Economic Recovery Program (TIGER)	The original TIGER Grant program, administered by the Department of Transportation (DOT), originated with the American Recovery and Reinvestment Act of 2009 (ARRA) and has been re-authorized for 2013. (If renewed for 2014, the program will likely feature provisions similar to those in 2013.) Through a highly competitive process, $474 million in discretionary grant money will be awarded to projects that achieve goals set forth in the Sustainable Communities Regional Planning Grant Program. These projects include larger-scale planning efforts that join housing, land use, economic and workforce development, transportation, and infrastructure investments that take into account the principles of sustainability, economic revitalization, social equity, public health, and environmental sustainability.
Bicycle Transportation Account (BTA)	Caltrans administers the Bicycle Transportation Account (BTA), an annual program providing state funds for city and county projects that improve safety and convenience for bicycle commuters. Cities and counties are eligible to apply for BTA funds. Eligibility is based on pre-adoption of a Bicycle Transportation Plan (BTP) that complies with Streets and Highways Code Section 891.4 that has been pre-approved by the appropriate Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA). Eligible uses for the funding include bikeways and related facilities, planning, safety, and education. The BTA is a reimbursement program, which requires allocated funds to be matched by at minimum 10 percent of the total project cost. BTA funds may also be used to apply for and match federal grants or loans. Approximately $7.2 million is appropriated annually for the program state-wide.

Table 1: Federal and State Funding Sources

Program	Description
Community Based Transportation Planning	Caltrans administers a grant program for transportation planning projects to improve mobility and lead to the programming or implementation phase for a community or region. With approximately $9 million in funding distributed through six grant programs annually, the program may offer the City of Fontana funding for the planning and code development elements of the proposed Sierra-Valley vision plan. Each of these six grant programs may be applicable for the Sierra-Valley area: Community-Based Transportation Planning, Environmental Justice, Partnership Planning, Statewide or Urban Transit Planning Studies, Rural or Small Urban Transit Planning Studies, and Transit Planning Student Internships.
Environmental Enhancement and Mitigation Program	Caltrans and the California Natural Resources Agency administer the Environmental Enhancement and Mitigation Program, which offers $10 million each year in grants for projects that relate to the environmental impact associated with the modification of an existing transportation facility or construction of a new transportation facility. Of the four grant categories available, two may apply to the Sierra-Valley area, including grants for Highway Landscaping and Urban Forestry Projects to offset vehicular emissions through planting of trees and other suitable plants; and grants for Mitigation Projects Beyond the Scope of the Lead Agency responsible for assessing the environmental impact of the proposed transportation improvement.
AB 2766 Clean Air Funds	The South Coast Air Quality Management District (AQMD) administers this program to fund air pollution reduction efforts. Funding is drawn from automobile registration surcharges. A 40 percent portion of annual disbursement is automatically allocated to South Coast District member cities in proportion to population. The remaining 60 percent is allocated through a competitive grant program for projects that improve air quality. Nearly all Sierra-Valley area initiatives may potentially be eligible for funding from AB 2766 grants.
State-Local Transportation Partnership Program	The State-Local Transportation Partnership Program (SLTPP), administered by Caltrans, is intended to help local agencies fund and construct transportation improvement projects both on and off the State Highway System. The SLTPP is funded by the State Highway Account and is allocated to projects that increase transportation capacity, extend service to a new area, or extends a roadway's useful life.
Transportation Development Act Article 3 Funds	The Transportation Development Act (TDA) includes two separate public transportation funds—Local Transportation Fund (LTF) and the State Transit Assistance fund—designated for development and support of public transportation needs. Funding is allocated to areas of each county based on population, taxable sales and transit performance. (Fontana has been a recipient of such funds in the past.) TDA funds may be used for many potential expenses the Sierra-Valley project may generate, including engineering expenses, right-of-way acquisition, construction, improvements to existing pedestrian infrastructure, ADA compliance, and support facilities, such as transit shelters, bicycle parking, and pedestrian amenities.
Office of Traffic Safety (OTS)	The California Office of Traffic Safety (OTS) was created to award grant dollars to local and state government departments for development of traffic safety programs. The office is in the state Business, Transportation and Housing Agency, and it functions as a conduit for federal grant money, which it allocates to eight separate program areas, of which two, for Pedestrian and Bicycle Safety and Roadway Safety, may be directly applicable to the Sierra-Valley area. City agencies are eligible to apply.

Greenhouse Gas impacts

The Project Team considered the ways that the Planning Objectives and Initiatives may reduce Greenhouse Gas emissions. The Team concluded that a likely low-side estimate of total Greenhouse Gas reduction is 8-10 percent of existing levels, and a high-side estimate is 13-15 percent.

		Does this Strategy Apply To The Following Objectives?												
Strategy	Description	1	2	3	4	5	6	7	8	9	CAPCOA Reference	Range of Potential Reductions	Likely Reduction for Sierra Valley	Explanation
Strategy #1- Increase Density in Corridor	This strategy refers to any increase in density above typical development patterns for Fontana in terms of both employment and residential uses. Any objective that increases the density of development would support this strategy. Higher levels of density discourage automobile ownership and usage and are more conducive to walking and biking.	X					X				LUT-1	9-30%	1-2%	The one limitation to this strategy is that it applies only to areas of the City which will develop or redevelop. It would not apply to areas where the land use form will not change. As such, we would estimate that the likely level of reduction would be below the optimal level. Additionally, the levels of the highest GHG reduction will occur only if the level of density increase is significantly higher than typical Fontana densities. For example, a double of density will produce a VMT reduction of only 9% at the low end of the range.
Strategy #2- Increase Level of Mixed Use	This strategy incorporates any additional mixed use which might include employment, residential, and retail. The main focus is on providing complementary uses, i.e. those which are lacking in a particular area. Higher levels of mixed use are more amenable to short distance vehicular trips, walking, and biking trips.	X				X	X			X	LUT-2	9-30%	2-3%	Similar to Strategy #1, this Strategy only applies to areas of the Corridor which would develop or redevelop. Given the current land uses within the Corridor including the Kaiser facility, we believe that this strategy might be more effective than anything related to density in that additional mixed-use development could complement the existing Kaiser facility. Complementary mixed-use development could include shopping and eating establishments, that can minimize travel by Kaiser employees.
Strategy #3- Improve Pedestrian Network	This strategy refers to any ehancements in the pedestrian network which can include additional sidewalks, crosswalks, trees, street furniture, and other related items to encourage people to walk. Increased pedestrian usage can reduce automotive use and also provide co-benefits related to health and physical well being.	X		X				X	X		SDT-1	0-2%	1%	A key strategy would be the implementation of comprehensive pedestrian improvements. However; pedestrian facilities have limited effectiveness under the best conditions. These strategies are likely to be most effective when offered in context of other land use related strategies.
Strategy #4- Provide Bicycle Lanes	This strategy reflects the provision of dedicated bicycle facilities, including the in-street bicycle lanes proposed along several roadways within the study area. Providing bicycle lanes increases the level of bicycle travel, particularly for commuting and other long-distance travel.	X		X	X						SDT-5	<1%	<1%	Bicycle lanes are important elements of multi-modal transportation planning. However; their ability to reduce vehicular trips is less than what we would occurs with other strategies. This level of effectiveness is associated with the low level of cycling found in Cities like Fontana.
Strategy #5- Implement Voluntary TDM Program	Travel demand management (TDM) can reduce vehicular usage for large employers. This strategy would be implemented at Kaiser, similar to what they've done at other campuses.					X					TRT-1	1-6%	2%	TDM programs could reduce VMT associated with the Kaiser facility. The only limitation is that it would not reduce vehicle trips by other users in the corridor, which is why the anticipated level of reduction is less than the optimal level. Additionally, the high level of auto usage by visitors would reduce the potential effectiveness of these strategies as visitors and patients would be unlikely to walk or take transit.
Strategy #6- Provide End of Trip Facilities	End of trip facilities include items such as bike lockers, showers, and changing rooms which allow people who travel to the site using alternative modes the option of changing prior to reporting to work. These types of facilities can incenvitze non-automotive travel including					X					TRT-5	<1%	<1%	This strategy would complement any TDM and bicycle/pedestrian improvements. Implemented independently, these strategies would have limited effectiveness.
Strategy #7- Provide BRT	We anticipate that Omnitrans will provide some form of BRT facility within the Corridor. The variable regarding BRT is the level of accomodation (i.e. exclusive lanes) and the location of supporting facilities such as stations.		X	X							TST-1	0-3%	2%	One of the most promising and effective strategies in the corridor will be BRT. We anticipate a high level of VMT reduction in the Corridor but not the highest given the relatively lower levels of transit usage as compared to other areas in California.
Strategy #8- Unbundle/share parking	This strategy would involve changes in the City's typical approach to parking which might include allowing more shared parking and unbundling parking for residences.						X				PDT-2	3-12%	1%	One limitation for any parking related strategies is that they are likely only to be implemented in new development or redevelopment. As such, it will be problematic to implement these strategies on existing sites. Therefore, the anticipated level of reduction would be moderated.

GHG Reduction (Low Estimate)	8-10%
GHG Reduction (High Estimate)	13-15%

APPENDIX: ANALYSIS REPORT

SIERRA AVENUE VALLEY BOULEVARD LAND USE STUDY

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

FONTANA CALIFORNIA

LAND USE AND TRANSPORTATION ANALYSIS

Prepared for

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)

CITY OF FONTANA

Prepared by

COMMUNITY DESIGN + ARCHITECTURE

with

Economic and Planing Systems

Fehr & Peers

November 19, 2012

LAND USE AND TRANSPORTATION ANALYSIS

Prepared for

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Executive Summary

Part 1: Introduction

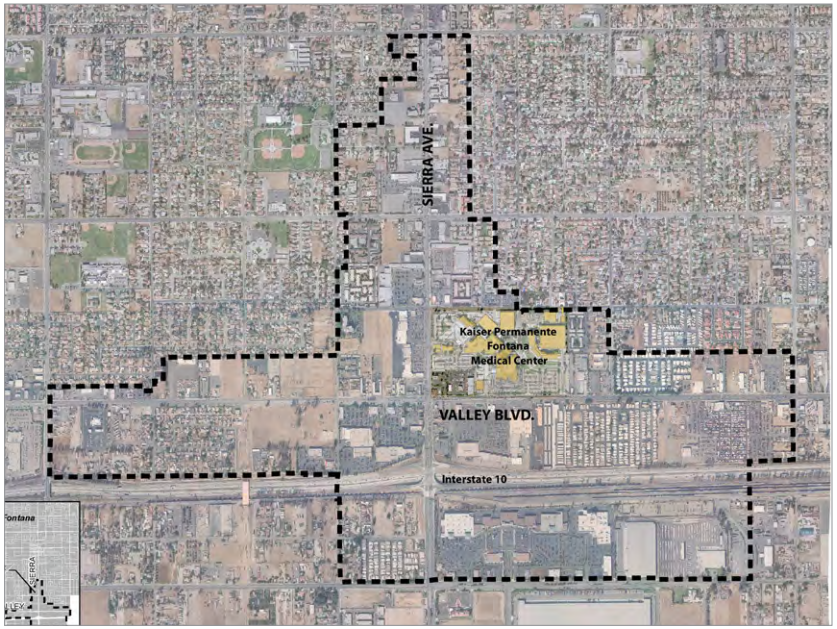
Background

The Sierra Avenue Valley Boulevard Land Use Study is a Southern California Association of Governments (SCAG) Compass Blueprint-sponsored project that seeks to address several interrelated goals in the area centering on the intersection of Sierra Avenue and Valley Boulevard in Fontana, California.

Sierra-Valley area is a unique and diverse part of Fontana: it contains the City's largest employer, sees some of its largest volumes of traffic, contains one of its largest concentrations of shopping, and contains residential neighborhoods with a mix of relatively affordable housing types. There is potential to build on this mix: Kaiser Permanente is underway with an approximately $1 billion expansion to the facility.

However, the area is the most congested in the city, and there are few convenient transportation alternatives in the area. It is unclear to what degree the surrounding area can capitalize on the medical center's activity. And because of the congestion and visual condition of the streetscape and surrounding uses the area surrounding the Sierra Avenue and Valley Boulevard intersection currently does not convey a message that Fontana is great place to live, work, and conduct business.

To address these challenges, the City applied for and won a Compass Blueprint Grant from SCAG for the Sierra Avenue Valley Boulevard Land Use Study.



Sierra Avenue Valley Boulevard Land Use Study Area

Format

This report is organized in three parts: Introduction; Land Use, Transportation, and Market Overview; and Opportunities.

Geography

There are three geographic 'lenses' through which to consider the Study Area:

- as a center of one of "three Fontanas," or three distinct sections of the City of Fontana defined by the eras of development of the built environment and socioeconomic conditions;
- as the intersection of two major street corridors, Sierra Avenue and Valley Boulevard. These contrast with one another in the land uses that exist along them; and
- as the area surrounding the city's largest employer and the generator of much of the traffic in the area, the Kaiser Permanente Fontana Medical Center.

Considering these different geographies helps us understand the different and often conflicting forces affecting land use and transportation in the Study Area, and the different levels at which policies, programs, and physical improvements can help to achieve the project goals.

Part 2: Land Use, Transportation and Market Overview

Existing Land Use findings

There are several key land uses in the Study Area

Land uses in the Study Area along the Sierra and Valley corridors and in the surrounding neighborhoods largely fall into one of the following groups of "key land uses." These land use categories have been defined specifically for this study:

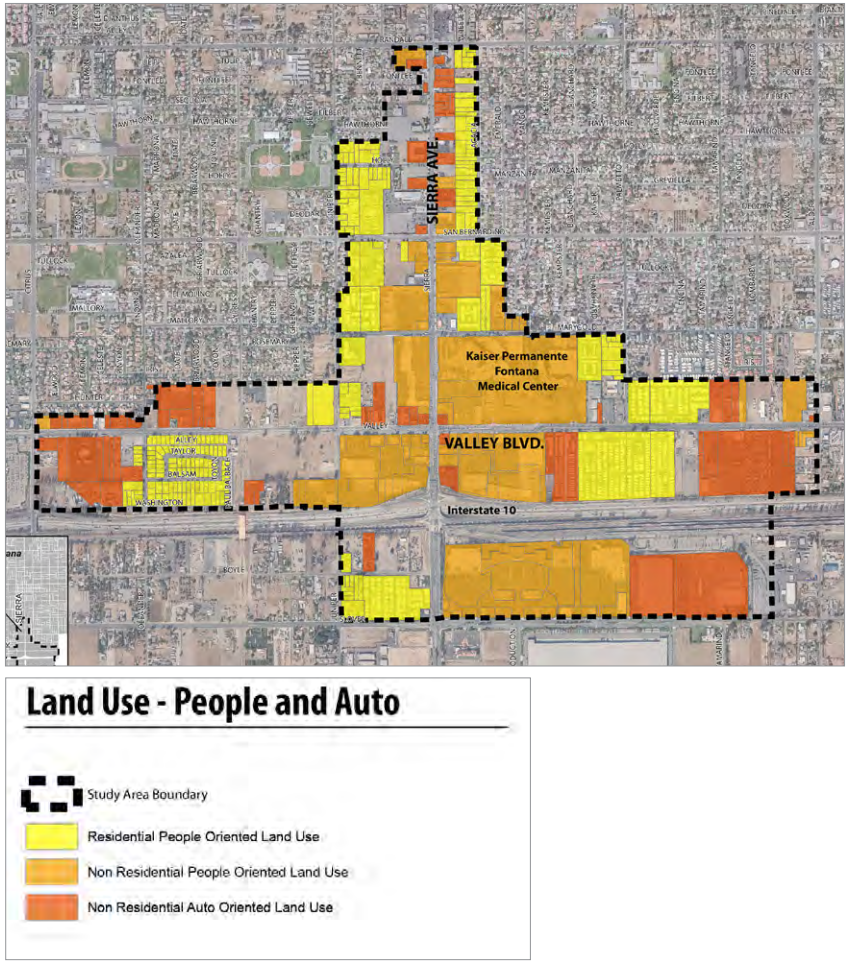
- Kaiser Permanente Fontana Medical Center
- Shopping Centers
- Food Service
- Lodging
- Auto Parts and Service
- Trucking Industry
- Low Intensity Land Uses
- Residential
- Vacant Sites

The Sierra corridor and Valley corridor differ in their land uses

The Sierra corridor is largely defined by uses that serve neighborhood and citywide residents such as the shopping centers and smaller auto parts and services businesses. The Valley corridor, meanwhile, is defined by a mix of uses that appeal more region-wide, including trucking, storage, equipment rentals, and larger Auto Parts and Services. Land uses tend to synergize with one another more on the Sierra corridor than on the Valley corridor. Because of these factors, the land use mix of the Sierra corridor, especially between Valley and San Bernardino, has a much higher potential for walking and synergy than the mix along Valley Boulevard.

The Study Area contains both inherently people-oriented and inherently auto-oriented land uses

Some dominant uses are inherently auto-oriented. In the Study Area, these include trucking, and low-intensity land uses (especially those based on vehicle storage or vehicle hauling). Some dominant uses are inherently people-oriented.



The Study Area contains both people-oriented and auto-oriented land uses

In the Study Area, these include Kaiser Permanente Fontana Medical Center, the shopping centers and lodging. Residential is its own category, because it is where people reside, not a destination, and it is the most people-oriented land use. The existing patterns of people-oriented and auto-oriented land uses are somewhat haphazard and this is a factor that discourages walking and contributes to the lack of identity or sense of place in the Study Area today.

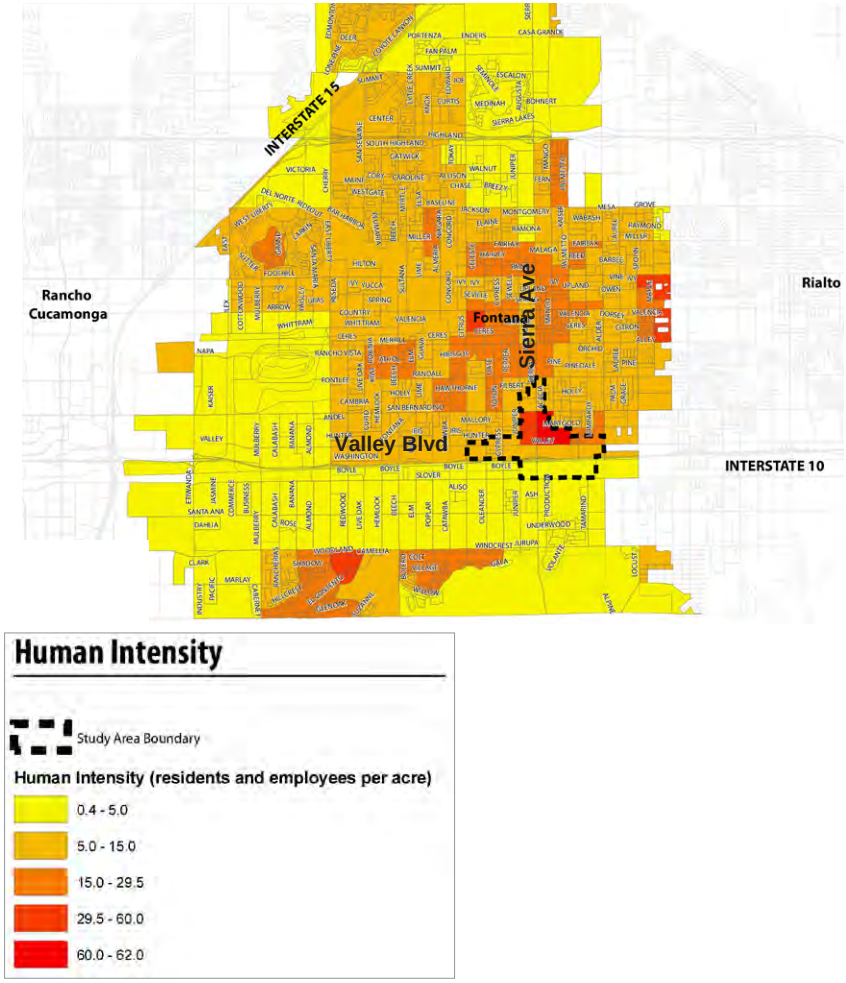
The Sierra-Valley area is the most intense area in Fontana

The Sierra-Valley area contains the most human-intense places in the City of Fontana. The area north of Valley Boulevard, centered on Sierra Avenue, has the highest levels of combined employees and residents; see map at right. This is due to a number of factors. The biggest factor is the presence of the Kaiser Permanente Fontana Medical Center, which employs over 5,000 people. However, other key land uses such as the multifamily residences and shopping centers, also contribute to this level of activity. The future Westech College will add to the activity. This metric says nothing of the visitors to the medical center and the shopping center customers that are not included in this equation, as well as the through travelers congesting the roadways.

What this means is that these human-intense land uses supply much of the activity needed to fulfill many goals of the project, including making transit successful and creating quality places. The human-intense land uses in the Study Area also contrast directly with many non-intense land uses in the Study Area such as equipment rentals and auto repair.

The Sierra-Valley area is among the most mixed-use areas in Fontana

In addition to being intense, the land uses in the Study Area are also mixed to the degree that there is a relatively equal number of employees and residents in much of the area. This means that there is the chance for there to be local activity throughout the week and the day.



The Study Area contains some of the most intense areas of Fontana

Urban Form findings

While the Study Area's land uses create activity and synergy, the auto orientation of their form reduces the ability of these land uses to create enjoyable places

While many of the inherent qualities of the land uses in the Study Area could help achieve the study goals, including their intensity, synergy and mix of uses, the form in which they have been manifested presents the major challenge of catering to the automobile at the expense of the pedestrian.

The Study Area is auto-oriented in almost every way

The key land uses identified above oriented their form to autos in different ways, but all are oriented to autos. The key aspects of auto orientation are:

- blocks in the Study Area are generally a very large quarter-mile square and land uses are coarse;
- buildings in the Study Area are largely horizontal, except for the Kaiser hospital and some multi-story multifamily residential buildings;
- streets are generally fronted by parking lots instead of buildings; and,
- auto access points dominate the Study Area.

The Study Area is defined by large land uses

The land uses in most of the Study Area are large chunks of similar or singular uses within the large blocks. While the Sierra corridor has a mix of uses, the uses mix coarsely. The Study Area has many land uses occupying over 10 acres. One exception to this is the northern part of the Sierra corridor between Randall and San Bernardino, where land uses are more fine-grained.

Many large land uses are oriented internally

Key land uses in the Study Area are oriented inward and are largely surrounded by walls and berms. Internal orientation and lack of access points define the Kaiser Permanente campus from the surrounding public streets. The campus is largely surrounded by parking lots, walls, and landscaping. Any pleasant places tend to be inside the campus, not along or easily accessible from public streets.

Lack of streetscape amenities

Other than street trees, the medians just built by the City of Fontana, and transit shelters, there are few streetscape amenities in the Study Area. The amenities that are lacking include bike racks, trash cans, pedestrian-scale lighting, seating, special paving, and understory landscape.

Public Realm, Quality of Life and Place findings

The Sierra-Valley area is an important gateway to the City of Fontana, but neither the City nor many stakeholders, including Kaiser Permanente, are satisfied with this gateway

Because of the importance of Sierra Avenue to many parts of Fontana and the presence of Kaiser Permanente, major shopping centers, and other nearby land uses, the Sierra Avenue exit has the potential to be a gateway to Fontana.

Aspects of this gateway include the appearance of the properties on either side of the Interstate 10 freeway, the experience of the motorist exiting the freeway and entering Fontana, and the appearance of Fontana once on Sierra Avenue, especially in the northern direction. Each of these is problematic. Many properties along I-10 "back" onto the freeway, the experience of exiting the freeway is often dominated by congested traffic (though the new interchange seems to have helped) and when the motorist drives on Sierra Avenue, there is no sense of the unique history or land uses in the area.

However, considering that many of the goals of this study emphasize other transportation modes, it is important that this concept of a gateway to Fontana not only include the experience of motorists, but also how bus riders enter through the bus stops and bus transfer center, as well as people that could be connecting from the Metrolink Station on a bike, bus, or on foot.

Despite the uniqueness and history of the Sierra-Valley area, there is a lack of sense of place here

Kaiser Steel and Kaiser Permanente have significant and interesting history in Fontana, and specifically the Sierra-Valley area, but a person coming into the area gets no sense of this past. In interviews, many people were unable to come up with a "place" that they liked in the Study Area. The positive aspects of the land uses – synergy, intensity, a balance of employment, commercial, and residential uses – do not create sense of place because of the aspects of urban form above, including auto orientation, lack of building orientation to the street, as well as larger socioeconomic forces.

The Kaiser Permanente campus is a microcosm of this shortcoming. Despite the activity and history of the campus it lends almost no positive place qualities to the public realm of the Sierra-Valley area because of its inward orientation and auto orientation.

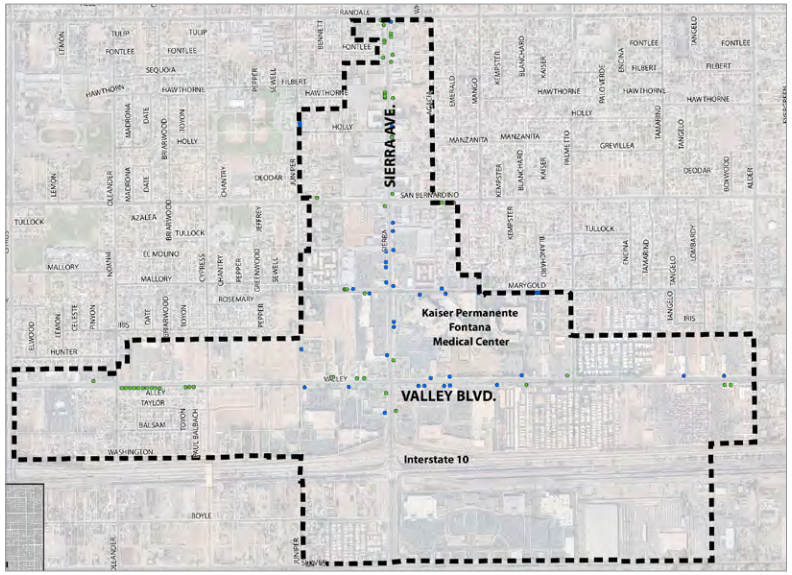
There is almost no urban public space in the area

In one of the most intense and mixed-use area of Fontana, there is no quality public space. There are no parks or plazas, and the most basic public space, the public streets, provide generally poor public space because of the emphasis on autos and the inconsistent design of the pedestrian areas within the public right of way.

Stakeholders in the area have expressed a desire for open space. Residents on the east side of Sierra Avenue expressed a strong desire for park space. From the perspective of Kaiser Permanente's employees and visitors, there appears to be a demand for public open space beyond the semi-public walks, plazas, and green areas that exist on the Kaiser campus. Interviews with Kaiser employees and patient representatives expressed a desire both for places to exercise during work and places for children to play.

Perceptions and realities of crime are a barrier to achieving many of the study's goals

The perception and realities of crime in the Sierra-Valley area are another factor of how people experience the area. Anecdotally, the area is known for a certain level of nuisance and danger as a part of Central Fontana, and statistics support this.



The relative lack of direct and indirect pedestrian entries contribute to the feeling of auto dominance

Land Use Policy findings

The General Plan seeks to overcome many of the Sierra-Valley area's challenges

The General Plan recognizes the challenges Fontana faces in being a unified city. The Plan refers to the freeways and other barriers that break up the city, as well as the different eras of development. Several policies refer to bridging barriers like that presented by Interstate 10, and others point toward building a stronger Downtown that acts as a center for all of Fontana's different areas.

The General Plan also recognizes the specific challenges of Central Fontana. The Plan pinpoints many of the issues facing this part of the city, including deterioration of older housing, the image of the city along Interstate 10 and the lack of a proper gateway from Interstate 10, public safety, and the challenge of redevelopment due to competition from other parts of the city or region and the difficulty of the infill sites.

The Plan also acknowledges the potential of this part of the city. The Vision notes "Much of the central core area of Fontana is made up of decades-old existing development with enormous redevelopment and infill potential." And: "What is more evident in those areas is that a number of land parcels are simply underutilized: activity takes place there, but a lot of land parcels and many buildings are simply not performing to their true potential."

The General Plan seeks to connect the Sierra-Valley area to Downtown

Several policies in the General Plan seek to create a better core for Fontana by better connections to other parts of the city. An especially important component of this is the accessibility of its Metrolink station. The Plan states: "Downtown, its Metrolink Station and Transit Plaza, and the surrounding community shall be accessible and connected by multiple modes of transportation including pedestrian, bicycle, transit and automobile." It is clear that the Sierra corridor, with its direct connections to other areas of activity and potential nodes of future development, is among the best opportunities to achieve this goal.

Despite the primacy and uniqueness of the Sierra-Valley area, there is no identity defined in the General Plan or other policy for it

Even though the General Plan states that development standards and regulations will "allow opportunities for creative forms of development that stimulate a sense of place here," the General Plan's lack of specificity about the Study Area reduces its ability to support these types of goals. The Sierra-Valley area is not called

out in the General Plan as a place even though the Plan identifies it as the most congested area of the city and it contains the city's largest employer and almost a quarter of all city jobs. This node needs an identity as a place to move forward.

There is no vision for the Kaiser Permanente Medical Center within the Sierra-Valley area or the city

The Kaiser Permanente medical campus is by and large not addressed in the General Plan. There is no vision for the Kaiser Permanente campus or the area around it. This could be problematic, since this part of Fontana ends up being defined in the Plan completely by its other two geographies - aging commercial corridors and the older core area of the city, and not by the more vital element of the hospital, the city's largest employer. Despite the existence of the Medical Center Overlay, there is nothing in the General Plan or the zoning that addresses proximity to Kaiser Permanente campus, though the Valley Specific Plan was in the process of developing more specific land use policy for the medical center area.

Generally, City Zoning does not encourage walkability

The Euclidian-style separation of use categories of the General Plan and Zoning hinders the walkability of the area. The Zoning and site planning standards have several attributes that make for poor walkability, including prevention of mix of uses and low FARs. The parking requirements are typical to auto-oriented suburban locations. Neither the General Plan nor Zoning addresses other aspects of walkability of development such as design of sites and buildings.

The Boulevard Overlay is a good tool that could help create more walkable or transit-supportive development but does not go far enough and is not tailored for the Sierra corridor

The Boulevard Overlay remedies some of this by mixing uses and possibly concentrating intensity at main intersections. Also there are some pedestrian-oriented design standards, including transparency of façade and orientation of building entrances to the street.

However, the lack of a build-to line and the keeping of the underlying zone's minimum setback reduce the potential for achieving a highly walkable environment.

Transportation Networks findings

Auto

The auto network is generally connected

The roadway network in the Study Area consists of freeways, arterials, and collectors for circulation and is generally well connected, but does result in several larger blocks.

Success of the auto network relies on success of internal circulation of major sites

The functionality of the arterials and collector streets is heavily influenced by the design of the internal circulation of the larger land uses such as the Kaiser Permanente campus and the shopping centers. The locations and numbers of major entries or driveways influences how well the roadways around them function.

Major land uses have onsite parking

All major land uses, including the shopping centers, multifamily residential complexes, and Kaiser campus, have onsite parking. The Kaiser campus has the largest demand for and supply of parking in the Study Area. A 2008 parking study undertaken by Walker Parking Consultants for the City of Fontana and Kaiser Permanente found that the campus had 4,392 spaces among its three garages and several surface lots. Some of the older shopping centers are parked with relatively low ratios, in the range of 3 to 3.5 spaces per 1,000 square feet of development when typical suburban shopping centers, today, might have 4 to 5 spaces per 1,000 square feet.

Frequent curb cuts contribute to congestion and lack of safety

There are frequent driveways on arterials in the Study Area, causing circulation delays and increasing the potential for collisions at these locations.

Pedestrian

The pedestrian network generally has the basic infrastructure of sidewalks and crosswalks at signalized intersections

Within the Study Area, the majority of the sidewalk network is built-out, with the basic infrastructure of sidewalks and crosswalks; with the most notable gaps being along significant portions of Valley Boulevard where there are worn dirt

paths just outside the curbs of the street. There are gaps and uneven connections between segments of pedestrian facilities. This makes crossing small streets and driveways difficult as pedestrians and drivers may not be aware of each other along inconsistent roadways.

However, this basic infrastructure is not supported by the surrounding urban form and lacks streetscape amenities.

In most places in the Study Area, the sidewalk lacks any amenities such as pedestrian lighting or seating, or a buffer from moving traffic. The design of sites along public streets does not support pedestrians because there is little relationship between sidewalks and buildings, and autos dominate the access and scale of the area.

Pedestrian trips between synergistic land uses are prone to indirect routes, danger and discomfort

Many land uses in the Study Area synergize with one another, however the pedestrian routes among them are often indirect, uncomfortable and dangerous. The most important examples of this condition are the routes from the Kaiser campus to nearby shopping centers, though the pedestrian connections among residences and shopping centers are also poor.

There are some stretches on major streets without pedestrian crossings

North of San Bernardino Avenue, there is no pedestrian crossing of Sierra Avenue until Randall Avenue, a distance of a half-mile. Revitalization of this high-potential segment of the Sierra corridor, including the Westech College project and future redevelopment of the Rock Honda site, would benefit from at least one pedestrian crossing to increase walkability and synergy between land uses on either side of the street.

Special challenges exist in the pedestrian network within internal circulation of the larger land uses

In the Kaiser campus, some of the pedestrian routes to get out to the public streets are not direct. The project team observed some Kaiser employees crossing over landscaped berms and walking across parking areas to make their walks shorter. Within shopping centers, sidewalks often end into parking lots and routes through parking lots from the surrounding streets or between businesses in one shopping center are circuitous.

Transit

Several Omnitrans bus lines converge in the Sierra-Valley area and provide connections to local and regional destinations

There are five transit lines that currently operate in the Study Area, Routes 19, 20, 29, 61, and 82. These lines all converge in the Sierra-Valley area. The Marygold Transfer Center provides a transfer point among the local routes and longer regional routes. The majority of these lines operate on fairly frequent headways of 15 or 30 minutes providing a relatively good level of transit access to this area of Fontana.

While existing and planned east-west transit service is robust and rapid, complementary north-south service is weaker

In the Inland Empire, Metrolink and several planned bus rapid transit routes will provide strong east-west service among the region's different population and job centers. However, north-south service, such as along Sierra Avenue, is not as strong. Better north-south service could help connect more centers and destinations to the east-west routes.

Complementary land uses and activity provide the potential for faster and more frequent service between Downtown Fontana and the Sierra-Valley area via Sierra Avenue

A high frequency, fast service on the Sierra corridor could better connect the origins and destinations in the Sierra-Valley area with those in Downtown Fontana, including the library and Metrolink. In particular, such a service could provide Kaiser employees better access to the Metrolink station.

Bus Rapid Transit projects being planned could create another rapid transit alternative and emphasize Sierra-Valley as a transit node

Omnitrans, along with the coordination of SCAG and the City of Fontana, plans to implement Bus Rapid Transit (BRT) service to the San Bernardino Valley region. BRT is designed to provide fast, high-quality bus service to attract choice riders and reduce the volume of individuals contributing to vehicular congestion. Within the Study Area, a BRT route is proposed along San Bernardino Avenue as part of the Corridor 5 plan. This route is planned to run through the Marygold Transfer Center at Sierra Avenue. The addition of this route to the network could further emphasize the Sierra-Valley area as a major transit node.

Bicycle

The Study Area lacks bicycle connectivity for destinations within biking distance

While there are some segments of Class 3 bikeways in the Study Area, they do not make important connections between destinations. Specifically, existing bikeways do not fully connect Downtown Fontana and the Kaiser campus. Planned bikeways along Sierra, Cypress, and San Bernardino do make these connections, but bikeways along less busy streets could provide better access for a broader cross section of people who would ride a bicycle.

For bike trips between Downtown Fontana and Sierra-Valley, Sierra Avenue is the most direct connection but it does not have bicycle improvements

Sierra Avenue is a natural bike route because of its connection of different residential, commercial, educational, and employment destinations. However, Sierra is a very busy street and does not have existing bicycle improvements.

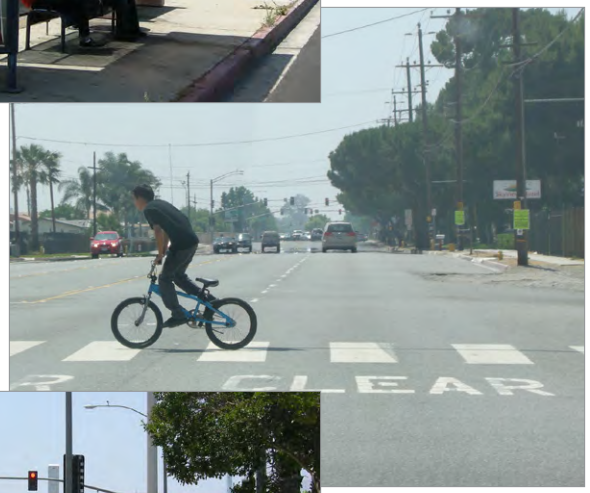
Streets

Major streets have inconsistent cross sections

While some street cross sections are consistent, others, especially Sierra Avenue, change frequently even within the Study Area. This results in traffic flow problems but creates opportunities to accommodate other modes.

Key streets in the Study Area likely have capacity for multimodal improvements

The existing cross sections of Sierra Avenue north of Valley Boulevard show some potential to narrow lanes and improve conditions for pedestrians, transit and potentially cyclists. Likewise, there is space within Marygold Avenue, west of Sierra, to improve conditions for pedestrians, transit riders, and cyclists, especially at the location of the transfer center, in the block between Sierra and Juniper.



Transportation Behavior findings

Driving

The vast majority of trips occurring in the Study Area are by car

Census, survey, and interview data combine to indicate that most people traveling through the Study Area for both long and short trips make these trips by auto. This includes the 93% of commuters living in and around the Study Area; 87% of Kaiser employees surveyed in this study; and 94% of Kaiser members and visitors who were surveyed in this study. It also includes shorter trips: 75% of members and visitors surveyed said they drove for trips to patronize adjacent businesses, while 65% percent of employees said they always or usually drove.

Sierra is more congested than Valley

Sierra Avenue carries higher volumes of traffic than Valley Boulevard. This could be attributed to drivers going to/from I-10.

Congestion in the Study Area is concentrated in two intersections

Two intersections - Marygold Avenue at Sierra Avenue (PM peak hour) and Valley Boulevard at Sierra Avenue (PM peak hour) – operate at levels of service deemed unacceptable by the City of Fontana. Turning movements are primary contributors to the congestion at these key intersections. According to the City of Fontana criteria, the roadway segments within the Study Area operate within design capacities.

Walking

Anecdotally, there are high levels of walking from surrounding residential areas to shopping and eating destinations

Merchants in the Sierra Plaza South shopping center such as Stater Brothers grocery store and Billy J's restaurant stated that significant percentages of their customers arrive on foot. Stater Brothers estimated that about 25 percent of their customers are nearby residents or employees who walk to the store.

Jaywalking and cutting through landscaped and parking areas occurs to shorten pedestrian routes

In the pedestrian count, 17 jaywalkers were observed crossing east of the Sierra Avenue at Fontana Center/Permanente Drive intersection during the midday peak hour. The majority of jaywalkers were not seen crossing over public streets, but across private developments before entering into the crosswalk.

Transit ridership

The most Omnitrans bus ridership in the area occurs at the Sierra-Marygold stops

According to 2011 Omnitrans bus boarding and alighting data, the Marygold at Sierra stop – the Marygold Transfer Center – had more than twice the number of boardings and alightings as any other stop in the Study Area. An average of 149 people got on buses at this location and 179 people got off buses at this location on a daily basis.

Omnitrans sees increasing ridership

In general, Omnitrans perceives its ridership is high and growing quickly – systemwide, in Fontana, and the Sierra-Valley area. Omnitrans stated that it is beginning to see choice riders, especially in the form of affluent students attending institutions like Chaffee College. Omnitrans stated that among students, ridership is increasing 16 percent a year.

Omnitrans stated that customer satisfaction was high, especially with its network and on-time performance. Omnitrans cited an 86% on time performance and added that the new interchange, at Sierra, has drastically improved on-time performance. The agency said what its customers desire most is high frequency bus service.

Bicycling

Generally, the Study Area has a low level of biking activity, but biking does occur

In general bicycling counts indicate low levels of cycling. However, there were 40 cyclists observed at Sierra-San Bernardino in the PM peak hour. Three-quarters of these cyclists were riding along Sierra, showing some cycling demand for this corridor.

Kaiser Permanente employees, members, and visitors

The majority of people driving to the Kaiser campus come from I-10 through the Sierra-Valley intersection

61% of all Kaiser employees, members, and visitors surveyed for this study said they used the I-10-Sierra interchange when they drove to the Kaiser campus. Smaller percentages of people used the Citrus (17.4%) and Cedar (8.7%) interchanges.

Onsite parking on the Kaiser Permanente campus appears to serve demand

The 2008 Kaiser campus parking study indicated that the supply of parking on the campus was serving the demand. The study found that 77% of spaces were typically occupied. However, in interviews, Kaiser members and their families indicated that the process of parking on the Kaiser campus was a source of anxiety, sometimes even more than driving through traffic to the campus.

Anecdotally, tenants of the Sierra Plaza South shopping center noted that they observe Kaiser employees, members or visitors parking in the shopping center lot and walking across the street to the campus, putting an additional strain on their available customer parking.

Short trips for shopping, eating and personal services occur frequently

26% of employees surveyed leave the campus at least once per day to shop eat or obtain personal services, with another 39% leaving the campus at least 1 to 2 times a week. Meanwhile, over half (53%) of visitors and members surveyed said they patronized businesses adjacent to the Kaiser campus at least 1 to 2 times a week, and 25% of respondents said they left the Kaiser campus to patronize these businesses and then returned to the Kaiser campus.

However, the study's survey found that a minority of these trips occur by foot

75% of members and visitors surveyed said they drove for trips to patronize adjacent businesses, while 65% percent of employees said they always or usually drove. 26% of employees said they either usually or always walked for these trips.

Observation and counts showed high numbers of Kaiser employees and members walking in the area around the Kaiser campus, especially at midday

The 26% of short trips taken by employees on foot do create a demand for good walking environments and make an impact on the surrounding area. A pedestrian count undertaken for the study found that the five count locations immediately bordering the Kaiser campus had high levels of pedestrians. Generally, the highest levels of pedestrian activity are at midday. Within two hours at the midday lunch period, there were 312 pedestrians counted at Marygold and Sierra; 139 at Sierra and the Kaiser driveway; 175 at Sierra and Valley; 105 at Marygold and the Kaiser driveway; and 94 at Valley east of Sierra, for a total of 825 pedestrians at all locations.

Kaiser-related pedestrians seem to prefer walking north and west of the campus versus the southwest.

Despite more variety of shopping and eating in the Vineyard Valley and Empire Center shopping centers south of Valley Boulevard, the study's pedestrian counts showed far more pedestrians walking through the two intersections to the northwest and west (451) than the two intersections to the southwest and south (269). One reason could be more comfortable and direct pedestrian routes. These pedestrian patterns may change as the new hospital becomes operational as it has entries that are more proximate to Valley.

In addition to shopping and eating trips, Kaiser employees walk in the area around the campus for exercise

Project team observations and conversations with employees found that many employees like to walk for exercise during their breaks, outside of the campus.

Kaiser employees, members and visitors say that improvements to the walking environment would make them walk more to nearby shopping and eating destinations

Significant percentages of employees, members and visitors indicated that improving aspects of the pedestrian environment would induce them to walk to nearby eating or shopping establishments. Survey respondents said that they would walk from the campus to a nearby eating or shopping establishment more if there were wider sidewalks (25%); more shade provided along the walkways (44%); and the streets were easier to cross (25%). In the employee survey, more shade was the leading factor (along with a greater variety of eating and shopping) that would induce employees to walk to nearby amenities. Visitors seemed to want more and better signage and easier ways through the campus, while these factors were not as important to employees.

Few Kaiser employees use Metrolink; those surveyed said one major factor that prevented them from taking Metrolink was the lack of proximity to the Kaiser campus

None of the Kaiser employees surveyed took Metrolink to work. However, 35% of respondents said they would likely take Metrolink but it stops too far away from the Kaiser Permanente campus. This is an issue that could be addressed locally by improving bicycle connections between Kaiser and Metrolink.

Market findings

Due to Fontana's location at the epicenter of the foreclosure crisis and its demographic characteristics, the City was particularly hard hit by the "great recession" and recovery is expected to be gradual, factors that will affect the pace and form of revitalization for the Sierra Valley Study Area.

Fontana achieved its strong growth through residential development and expansion of the warehousing sector, which leveraged the city's strategic highway location to take advantage of growing trade out of the Ports of Los Angeles, Long Beach, and San Diego. This emphasis left the city exposed to the sudden deflation of the housing bubble and the global recession, which lowered international trade significantly. As a result, Fontana has experienced high levels of unemployment and home foreclosure rates double the Inland Empire average and triple the California average. Projections assume that population and residential growth will eventually resume in Fontana, but recovery will be gradual and linked to the City's ability to address a number of underlying socio-economic factors, including relatively low levels of educational attainment.

Fontana's high-growth years between 1990 and 2007 largely bypassed the central portions of the City and effectively partitioned the City by wealth, establishing a development pattern that will need to be countered as part of the revitalization efforts for the Sierra Valley Study Area.

From 1990 to 2010, Fontana's population grew by 124%, nearly double the Inland Empire total of 63 percent. This growth was catalyzed by an aggressive city program to annex unincorporated county land, which increased city land area by 19 percent and added 4,400 acres of mainly raw land to fuel residential subdivision development. Most of this annexation activity and residential growth took place north of Foothill Boulevard and south of Interstate 10, leaving Central Fontana—the oldest and most built-out part of the city—out of the city's growth boom. As a result, home values and incomes in central Fontana, which includes the Sierra Valley Study Area, stagnated relative to the rest of the city. While the recession temporarily slowed growth, much raw land remains, and projections forecast an eventual return to fast residential growth in these areas. This pattern may put the Sierra Valley Study Area at a disadvantage, especially in the short-term, as it competes for revitalization.

Kaiser Permanente-Fontana hospital is the largest employer in the City, but its impact on the development patterns and tenanting in the broader Sierra Valley Study Area appears to be relatively small.

With approximately 5,300 employees, Kaiser Permanente contributes approximately 11 percent of Fontana jobs and 49 percent of jobs in the Study Area. These are among the best-paying jobs in the City, but only a fraction are held by residents of Fontana (according to the Census, Study Area residents hold 2.9 percent of Study Area jobs, and Fontana residents hold 9 percent of Study Area jobs). This outcome is at least partially attributable to Kaiser's vertically integrated business model and service orientation. Specifically, unlike many other hospitals, Kaiser operates as a full service medical care institution; few patients have an alternative primary care or specialty providers outside the system and the physicians are all in-house. However, it also corresponds to a larger pattern of land use in Sierra Valley Study Area: all primary uses, including the hospital and major shopping centers, depend to a large degree on highway access; interconnections between Study Area uses are thus of secondary importance. Consequently, effectively addressing these economic, physical, and institutional realities represents one of the most critical challenges to the revitalization process.

Although the major retail nodes in the Sierra Valley Study Area are not currently upscale and highly amenitized centers that draw in significant Kaiser employees or regional shoppers, most are strong performers from a financial perspective, providing owners with a stable source of income and little incentive to redevelop.

Despite the seemingly dated design and challenges to access presented by congestion and circulation, the retail centers north of the 1-10 in the Study Area perform extremely well, as indicated by owners and available market data. For example, occupancy and lease rates are relatively strong, generally outperforming the City as a whole. Consequently, the owners may have little short-term incentive to invest in major redevelop efforts of the type necessary to transform the Sierra Valley area. Ultimately, the motivation to upgrade and modernized may come from the tenants themselves, as they struggle to justify their lease obligations and seek ways to compete more effectively in a dynamic regional market and take better advantage of their strategic location. For example, for the most part the existing tenants do not appear to be taking full advantage of Kaiser, with over 5,000 employees, about 150,000 patients per year, and an untold number of other visitors, as a major activity center and potential demand generator.

Although current market conditions do not appear to warrant higher-density market-rate residential development in the Study Area, longer-term opportunities may emerge as the local economy recovers and urban design improvements begin to support a more attractive and amenitized environment.

Given current rents and related market demand and supply conditions, the Study Area does not currently support development of market-rate housing and the demise of Redevelopment in California makes a subsidized product (i.e. low-income and/or publicly supported) equally challenging. For example, there is still considerable residential development capacity in the City's more upscale neighborhoods and the limited regional demand for higher-density product is currently captured by higher-end projects and locations in Rancho Cucamonga and Ontario. In addition, there does not currently appear to be substantial demand from Kaiser employees as their level of pay has buying power in the Inland Empire, and strong freeway access (even with congestion at Sierra and Valley) facilitates commuting. Nevertheless, over a longer time frame the above dynamic may improve if the Study Area evolves to offer a distinctive sense of place, commute patterns change (driven by increasing energy prices and congestion, for example), and employment levels at Kaiser and surrounding properties expand.

New office uses in the Study Area may represent the best option in the near term for land use revitalization, building off area's locational assets and existing commercial environment.

Relative to residential and retail land uses, office uses face fewer impediments to growth and complement the already strong commercial orientation of the Study Area, reinforced by the professional orientation established by Kaiser. Office vacancy rates in the Study Area are far lower than the Fontana average, and there has been no new office capacity constructed in the area for at least six years. In addition, the expected arrival of Westtech medical college to a site on Sierra between San Bernardino and Randall may catalyze momentum and confidence for office expansion. Finally, over the long term, Kaiser itself may also generate additional demand for office space outside its campus, either from ancillary service providers or as a result of space constraints on-site.

With a few exceptions, most Kaiser Hospitals appear to be located in commercial areas with more jobs than residents within a one-half mile radius and the Fontana campus appears to be near the top in this regard.

Only the Woodland Hills campus has a higher job per resident ratio than Fontana. In most cases, however, a preliminary review of existing land use suggests only a marginal relationship between the tenants in adjacent or nearby commercial areas and the respective Kaiser facilities.

The neighborhood surrounding the Fontana campus appears less affluent than those surrounding other Kaiser facilities

This is as indicated by median household income and percentage of renter occupied housing.

Healthcare appears to be the predominant industry sector surrounding most, but not all of the Kaiser hospitals

But this appears to reflect the predominant role of Kaiser itself as a job provider rather than ancillary healthcare uses. For example, preliminary estimates of Kaiser on-site jobs account for a large share of total healthcare related employment in most of the neighborhoods. The Los Angeles Medical Center is a noteworthy exception as this area appears to have evolved as a highly clustered medical district.

Most Kaiser Hospitals appear to employ a relatively low number of local residents

This is indicated by the high proportion of jobs held by residents living outside a one-mile radius from the campus. The two Kaiser hospitals located in neighborhoods with the highest overall density, based on the number of total jobs and residents within a one-half mile radius, also appear to have the highest level of internal commutes (i.e. proportion of residents who work near their home).

Implications for Project Goals

Goal 1 – Reduce traffic congestion at Sierra/Valley intersection

- The intense, diverse mix of land uses within the Study Area and the citywide and regional use of Sierra Avenue and Valley Boulevard result in the large volumes of traffic and congestion in the Sierra-Valley area.
- The auto-dominated urban form in the area reduces the options for walking, bicycling and transit riding, resulting in the vast majority of trips being made by auto.
- This misalignment of residents and jobs is one of the key factors contributing to congestion at the Sierra-Valley intersection.
- Congestion – in terms of an unacceptable level of service (LOS) at a given intersection – is concentrated in the Study Area in two Sierra intersections, Valley and Marygold. These are the two intersections nearest the Kaiser Permanente campus, and the heavy turning traffic toward and away from the Kaiser campus seems to indicate that traffic to and from the campus is responsible for much of the congestion.
- Congestion sometimes appears to encourage walking. Kaiser Permanente employees, when going on eating or shopping trips in the middle of the day, often elect to walk as an alternative to traffic congestion.
- Gaining the full Sierra right-of-way at the northeast corner of the Sierra-Valley intersection could address congestion in these intersections performing at an unacceptable LOS.
- Many auto access points to large land uses – driveways and other curb cuts –exacerbate congestion and create conflict points.
- The land use mix presents the opportunity to capitalize on the synergy among land uses and reduce the short trips taken by car by converting them to walking or bicycling, as well as to support the use of transit for longer trips to and from the Study Area.
- This goal will likely be most effectively achieved in the short term by shifting both long and short trips connected with the Kaiser campus and other key land uses both in the Sierra-Valley area and downtown to other modes – especially transit and bicycle for longer trips and walking for shorter trips.
- More intensity here could add more congestion. Without better multimodal transportation infrastructure, new development would likely depend on the auto network and could exacerbate the congestion.

Goal 2 – Maximize walkability between land uses

- The intensity of the land uses puts a lot of people in the area who are potential pedestrians; the synergy created by having residential, retail, employment, and institutional land uses in close proximity creates the raw potential for a good walking environment.
- The land use mix of the Sierra corridor creates more potential for walking than on Valley.
- Everything about the urban form of the Study Area challenges walkability, including the auto-orientation of site design with parking lots between buildings and the street, large blocks, coarse land uses, horizontality, lack of street definition by buildings, internal orientation of residential and medical land uses, and excessive auto access and limited, or convoluted, pedestrian access to land uses.
- The Study Area's public spaces are not places people enjoy being in, further challenging walkability.
- The Euclidian-style separation of use categories of the General Plan and Zoning hinders the long-term walkability of the area.
- The Boulevard Overlay begins to address the shortcomings of the General Plan and Zoning by mixing uses and concentrating intensity at main intersections, but could be strengthened.
- There is existing pedestrian demand and pedestrian trips. These include trips made by people associated with Kaiser Permanente to surrounding shopping and eating destinations, as well as trips made by residents of the nearby neighborhoods, including seniors, to shopping and eating in the Sierra-Valley area.
- The routes for these existing trips can be improved, potentially encouraging others to make the same trips on foot. The study's survey indicated that the quality of the pedestrian environment could make more Kaiser employees, members, and visitors walk more to nearby destinations.
- The challenge in the core of the Study Area is to take the activity here and the inherently walkable land use mix in the Study Area and convert the form and transportation improvement into something that is comfortable and safe for walking. This could happen with small improvements at first which could set the stage for larger improvements.
- North of San Bernardino, there are different opportunities for increasing walkability. In general, the area lends itself better to a "Main Street" type environment due to a pattern of finer-grained land uses and the way some buildings face onto the street.

Goal 3 – Anticipate future mass transit opportunities

- The City can capitalize on present transit opportunities as well as anticipate future ones. Omnitrans is seeing rising ridership in Fontana and is looking to improve connections and increase frequencies in the near term; Additional BRT lines and changing land uses could emphasize Sierra-Valley as a transit node in the long term.
- The relative intensity found in the Study Area also provides the concentrations of people needed to support transit and coincides with high numbers of boardings and alightings onto and off of Omnitrans buses.
- The convergence of Omnitrans lines and the relative frequency of boardings at the Sierra-Marygold stop lend this potential as a larger transit node and better public place.
- There is an opportunity to better connect the Sierra-Valley area to the existing Metrolink station. In the study's survey of Kaiser employees, about a third of those surveyed said the biggest factor preventing them from taking Metrolink to work was the distance between the Fontana Metrolink and the Kaiser campus.
- There is potential for a high frequency, fast service on the Sierra corridor that could better connect the destinations in the Sierra-Valley area with those in downtown Fontana.
- Anticipating future transit opportunities also means considering how the other transportation modes can support the transit network, such as how bicycles can connect Sierra-Valley to the Metrolink, or how better street crossings could create better pedestrian access to bus stops.
- A good transit environment will help achieve other goals of this study connected to walking, placemaking, and will potentially improve regional access to the area and support economic vitality.

Goal 4 – Identify land uses synergistic with Kaiser Permanente

- The richness and complexity of the Kaiser Permanente campus as a land use provides the potential for a variety of surrounding complementary land uses.
- Kaiser employees, members, and visitors express a clear desire for a wider variety and higher quality of shopping and eating around the campus.
- However, the current lack of synergy is not likely a problem of land use, but of urban form and economics.
- While there is lots of retail around the Kaiser campus, little of it is targeted toward higher-earning Kaiser employees.
- Retail north of the 1-10 in the Study Area performs extremely well, as indicated by owners and available market data, and so long as occupancy and rents stay high, owners have little short-term incentive to invest in and redevelop their properties in a manner that will help advance the revitalization of the Sierra Valley area.
- In some respects, office is a more appropriate vehicle for Sierra Valley Study Area revitalization than residential uses, because expanded office would reinforce and expand the Study Area's role as a jobs center and fully utilize highway and transit links.
- The lack of synergy could also be a lack of public vision. There is no City vision for this evolving asset, which is a strategic disadvantage in capitalizing on the presence of the jobs and activity and stature of this institution. A vision for the public aspects of the Kaiser campus as well as for the area around it could be a key step in revitalizing this area.
- The General Plan supports the kinds of uses that would complement the Kaiser campus, but there is no specificity given to help this process along. The area surrounding it is not seen by the General Plan as a unique area.
- Downtown Fontana land uses could be synergistic with Kaiser campus if the right multimodal transportation were in place.
- One opportunity to achieve this goal is to do things that increase the synergy between land uses already in the Study Area: to improve the walking environment for the uses immediately surrounding the medical campus and improving the multimodal transportation along Sierra Avenue.
- The Medical Center overlay is a tool that could be refined to address these land use issues.

Goal 5 – Identify opportunities for new housing

- The Study Area contains a variety of housing types, including single and multifamily market rate housing, mobile home parks, senior housing, and affordable housing. The only new housing in the area is the affordable housing in the Paseo Verde project and the new senior housing.
- Residential land uses are compatible and synergistic with many of the commercial uses on Sierra Avenue; many of these businesses serve the neighborhood.
- If designed in a pedestrian-supportive way, new housing could help remedy the area's urban form problems by creating active, inviting frontages.
- As a land use, more housing would help achieve a many other study goals, especially walkability and transit, a sense of place, and support for additional commercial investment, although adding more housing could likely increase congestion if multi-modal options are not increased in the area.
- Rents in the Study Area are not yet sufficient to support market-rate multi-family housing, and with the demise of the Redevelopment in California, it may be challenging to develop a subsidized product.
- Over a longer time frame the above dynamic may improve, especially if the Study Area begins to offer a distinctive sense of place and stronger set of amenities. In addition, evolving commute patterns (driven by increasing energy prices and congestion, for example), may also improve the marketability of the Project Area for high density residential over time, especially as employment levels at Kaiser and surrounding properties continue to expand.
- Many of the vacant or underutilized sites in the Study Area are in places close to both existing housing and these commercial uses. If the City desires to put more housing where density already exists, this location makes sense.
- The General Plan identifies infill housing as a part of its vision and policy.
- The Boulevard Overlay makes it possible for housing to be on Sierra Avenue in a mixed use configuration.
- Kaiser Permanente does not feel that residential uses are synergistic with their campus in that housing and hospitals are two 24-hour uses that are not always compatible, and that it is not likely that more housing will be attractive to its employees. However, the study's survey of Kaiser employees showed a relatively high interest in housing near the campus.

Goal 6 – Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

- One of the most important aspects of the Study Area is its lack of a sense of place. The overall feel of the area is not unique in any way.
- From a land use perspective this area is very unique: it is the most intense and busiest area of the city, has the city's largest employer, an interesting history, and has a diverse and rich mix of uses and people. And yet one does not get a sense of this richness and uniqueness when there.
- The need for a sense of place is increased by the area's position as an important gateway for Fontana and for Kaiser Permanente. Neither the City nor Kaiser feels that this is currently a good gateway.
- Like with other goals, the land uses here provide the raw material for good places but the auto-driven urban form prevents good authentic places from happening.
- One of the problems is that the Sierra-Valley area is primarily a gateway for people arriving in cars, yet it is other modes of transportation that must create an authentic sense of place. A place's attraction is created by a visceral appeal to people, so the modes of transportation that occur at a human scale – transit, biking and most of all walking – must create a good place.
- A good place is also created by the act of voluntary stopping – by focusing solely on mobility, there is nowhere in the Study Area's public realm that people want to stop and be.
- The place of the Fontana medical campus within Kaiser's history provides potential to bring out this history in the area's sense of place.
- Fragmented ownership challenges placemaking improvements in shopping centers, as separately owned pads often cover the centers.
- Better linking the land uses on the Sierra corridor, especially connecting the Sierra-Valley area with Downtown Fontana, can develop Sierra Avenue as a unified place.
- In the short term, achieving this goal will likely have to happen through the improvement of street rights of ways, and especially making a better pedestrian environment. Achieving a more comfortable, shady, safe, and human-scaled pedestrian environment will inherently create a better gateway to and impression of the city.

Part 3: Opportunities

The Project Team found a variety of potential opportunities to achieve the project goals. The following table summarizes the opportunities and how they relate to the six goals, and if their effect on meeting the goals would likely occur in the short or long term.

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
General opportunities	1	Change the geography of the Sierra-Valley area						
	2	Create an identity for the Sierra-Valley area that transcends Central Fontana						
	3	Orient the Sierra-Valley area to the city spine of the Sierra corridor, and plan Sierra as a central multi-modal corridor connecting Fontana's key destinations and centers						
	4	Recognize the Kaiser Permanente campus as a major activity center that has a large potential to revitalize the Sierra-Valley area if better connected to it						
	5	Partner with agencies and organizations with shared interests and goals						
	6	Catalyze the intense and diverse activity happening here into authentic places through better environments for people.						
	7	Illuminate the history of Kaiser Steel and Kaiser Permanente in the public realm of Sierra-Valley area						
Land Use Policy opportunities	8	Define a role and vision for the Kaiser Permanente campus within Fontana						
	9	Prepare land use and zoning policy to promote walkability, transit and good places						
	10	Explore development of a Specific Plan for the Sierra corridor or the Sierra-Valley area						
	11	Refine Boulevard Overlay on Sierra						
	12	Refine Medical Center overlay						
	13	Adapt Activity Center Overlay to Sierra-Valley area and/or Sierra corridor						
	14	Serve Kaiser Permanente patient and visitor need for overnight stays through innovative means that also fulfill other study goals						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
Transportation and Public realm opportunities	15	Invest in public realm and multi-modal transportation improvements to catalyze land use change farther in the future.						
	16	Create urban public spaces						
	17	Improve environment for walking trips already occurring						
	18	Complete the basic pedestrian network						
	19	Augment the wide sidewalks and street trees of Sierra Avenue with additional trees and streetscape amenities						
	20	Consider "midblock" crossings as unique opportunities						
	21	Consider multimodal improvements at Sierra-Valley and Sierra-Marygold intersections						
	22	Add a pedestrian crossing near Westech College						
	23	Reduce curb cuts to manage access to major streets and improve pedestrian environment						
	24	Reduce the speed limit on a section of Valley Boulevard						
	25	Create a substantial transit hub at Marygold-Sierra						
	26	Create fast, reliable, frequent transit service on Sierra Avenue						
	27	Integrate Bus Rapid Transit into current and planned land uses						
	28	Make the bicycle connection between the Fontana Metrolink Station/Fontana Metrolink Station Transcenter to the Kaiser Permanente Hospital						
	29	Evaluate Juniper Avenue and Marygold Avenue as a bikeway alternative to Sierra Avenue and other arterials						
	30	Investigate improvement of turning movements at failing intersections						
	31	Work with Kaiser Permanente to develop a Transportation Demand Management (TDM) strategy						
	32	Improve wayfinding from Kaiser campus to surrounding shopping and eating destinations						
	33	Accommodate exercise routines of Kaiser Permanente employees and patients in the area surrounding the campus						
	34	Make use of extra right of way in sections of Sierra Avenue						
	35	Make use of extra right of way in Marygold Avenue, especially at transfer center						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
Market opportunities	36	Use better pedestrian connectivity to incent retail tenants to cater to Kaiser employees, members and visitors						
	37	Reduce mutual exclusivity between Study Area residents and employees						
	38	Explore workforce housing in the Sierra-Valley area						
	39	Explore housing that is attractive to Kaiser Permanente employees						
	40	Explore attracting office development to complement Kaiser Permanente and Westech						
	41	Explore development of a business improvement district in the Sierra-Valley area						
Specific Site opportuinities	42	Develop the west side of Kaiser Permanente campus as a pedestrian gateway and promenade						
	43	Develop the northeast corner of Sierra-Valley as a pedestrian-oriented gateway and complementary use to the Kaiser Permanente campus						
	44	Create informal mobile food plaza						
	45	Vacant parcel between the Sierra Plaza South shopping center and the senior housing						
	46	Rock Honda site						
	47	Bel-Air swap meet						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

Part 1: Introduction

Project background

The Sierra Avenue Valley Boulevard Land Use Study is a Southern California Association of Governments (SCAG) Compass Blueprint-sponsored project that seeks to address several interrelated goals in the area centering on the intersection of Sierra Avenue and Valley Boulevard in Fontana, California.

The Sierra Avenue-Valley Boulevard intersection is the busiest intersection in the City of Fontana. Approximately 70,000 vehicles travel through this intersection every day. Its proximity to the I-10 Freeway, connection to major commercial, residential, and industrial areas, and location adjacent to The Kaiser Permanente Fontana Medical Center (the City's largest employer and the largest Kaiser facility in California), attracts both passenger vehicle and commercial truck traffic in overwhelming volumes. This high volume of traffic leads to congestion and long idling times for cars and trucks waiting to travel through this intersection. It is estimated that the 70,000 vehicles that pass through the intersection contribute to 133,626,500 metric tons of Carbon Dioxide green-house gas emissions into the atmosphere per year.

Meanwhile, there are few convenient transportation alternatives in the area. Currently, the only mode of mass transit that serves the area is Omnitrans buses. Even though the Study Area includes the largest employer in the City, it is not easily accessible to the Metrolink Station which is over two miles away along a street, Sierra Avenue, that is not pedestrian-friendly. The surrounding street network is also not particularly supportive of bicycling.

The Sierra-Valley area is a unique and diverse part of Fontana: it contains the City's largest employer, sees some of its largest volumes of traffic, contains one of its largest concentrations of shopping, and contains residential neighborhoods with a mix of relatively affordable housing types. There is potential to build on this mix: Kaiser Permanente is underway with an approximately $1 billion expansion to the facility, but it is unclear to what degree the surrounding area can capitalize on the medical center's activity. Meanwhile, several vacant and underutilized parcels sit in the Study Area providing potential opportunities for new uses that could help to invigorate the area.

The area surrounding the Sierra Avenue and Valley Boulevard intersection is often the first impression people have of Fontana and is a key to communicating that Fontana is great place to live, work, and conduct business. This area currently does not convey this message because of the congestion and visual condition of the streetscape and surrounding uses.

For these reasons, the City applied for and won a Compass Blueprint Grant from SCAG for the Sierra Avenue Valley Boulevard Land Use Study.

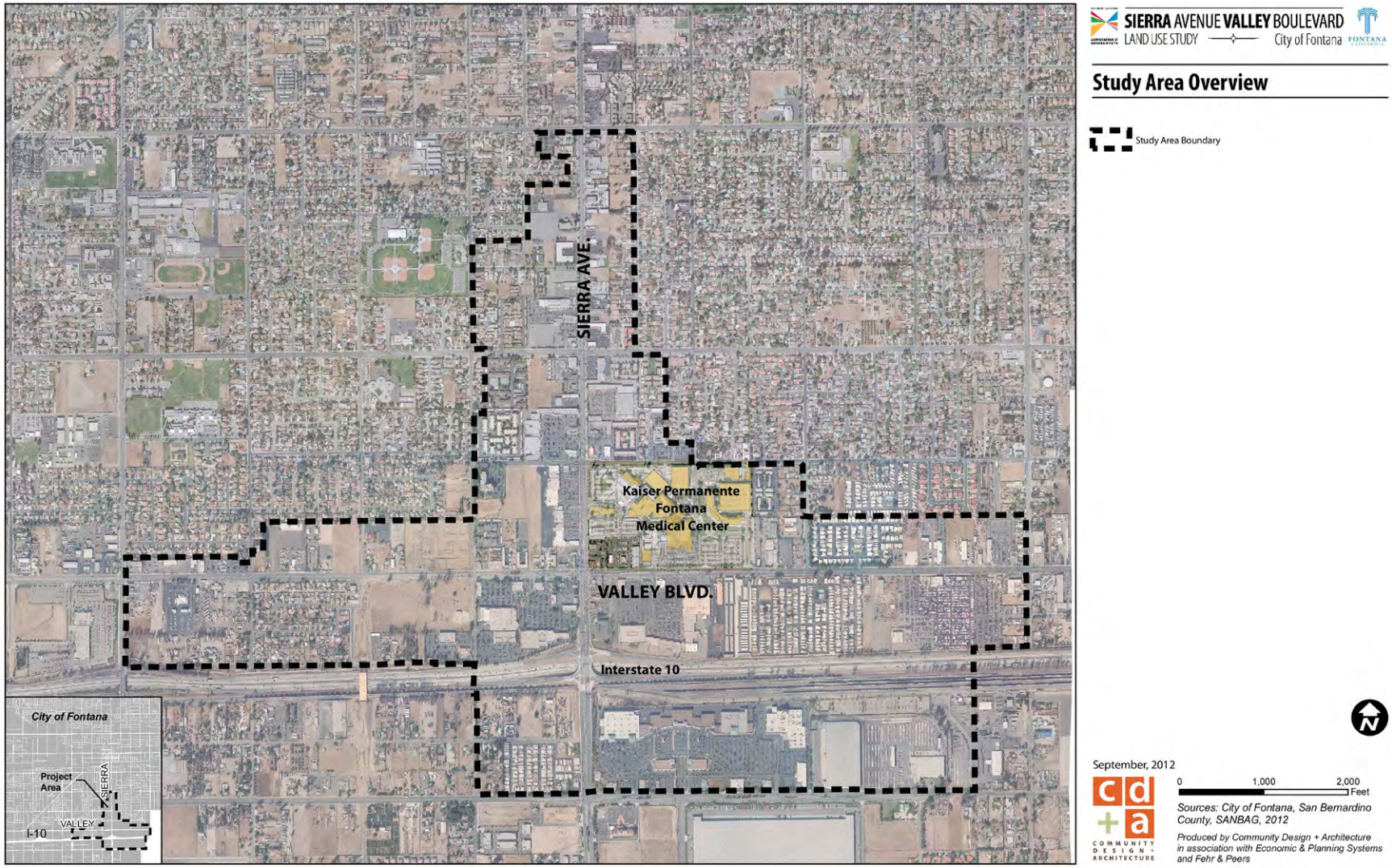


Figure 1-1: Study Area Overview

Project goals

The goals for the Sierra Avenue Valley Boulevard Land Use Study are a foundation for the project. They are an important way to focus the efforts of the Study and will be used to make decisions and evaluate potential solutions in all steps of the project. For this Land Use and Transportation Analysis, the project goals have guided the selection of aspects of the Study Area to analyze and the relevance of the data.

The project's goals were initially developed through the City's development of the Request for Proposals (RFP) and included the following:

- Reduce traffic congestion at Sierra/Valley intersection
- Maximize walkability between land uses
- Anticipate future mass transit opportunities
- Identify land uses synergistic with Kaiser Permanente
- Identify opportunities for new housing

These goals were refined during the project's kick-off meeting held on June 12, 2012. The meeting was attended by members of the consultant team including Community Design + Architecture (CD+A), Economic and Planning Systems (EPS), and Fehr & Peers; SCAG staff; and staff from the City of Fontana from a range of departments such as Community Development, Engineering, Economic Development, and Housing, and Healthy Fontana. A major part of the kick-off meeting was devoted to discussion of the project goals, detailed objectives or "sub-goals," and potential additional goals. The inter-disciplinary range of viewpoints in the room enabled a full fleshing-out of the cross-cutting issues of the project.

Based on the kick-off meeting discussion, the consultant team proposes the following refinements to the project goals, which included one new goal (Goal 6).

Goal 1 – Reduce traffic congestion at Sierra/Valley intersection

- Understand the origins of the congestion along Sierra Avenue and Valley Boulevard
- Reduce conflicts between local and regional auto traffic in the Study Area
- Improve driving times to Kaiser Medical Center within the Study Area along major access routes
- Improve access for residents in and around the Study Area to citywide and regional destinations
- Determine possibilities for reducing truck traffic at the Sierra-Valley intersection
- Reduce conflict points and potential for collisions at the Sierra-Valley intersection
- Reduce idling in the Study Area and resulting greenhouse gas emissions

Goal 2 – Maximize walkability between land uses

- Enable people currently walking in the Study Area to do so safely and comfortably
- Remove barriers for walking between existing and emerging pedestrian origins and destinations
- Convert more local vehicle trips to pedestrian trips
- In the long term, take steps toward creating more pedestrian destinations and origins in the Study Area
- Expand the focus on walkability to also support bicycle access in and through the Study Area

Goal 3 – Anticipate future mass transit opportunities

- Maximize use of current bus service
- Create a better connection between the Study Area and the Fontana Metrolink station
- Explore potential for a more substantial transit hub in the Study Area
- Explore potential for circulators/shuttles
- Improve access to transit via walking and bicycling

Goal 4 – Identify land uses synergistic with Kaiser Permanente

- Explore what medical industry uses would complement and/or support the Kaiser Medical Center
- Explore what goods and services Kaiser Permanente employees, members, and patient visitors might need and/or desire in the Study Area
- Understand what barriers have prevented synergistic land uses desired by the market from manifesting
- Create strategies to support implementation of land uses found to synergize with the Kaiser Medical Center

Goal 5 – Identify opportunities for new housing

- Determine opportunities within the Study Area for housing to meet citywide housing, economic development, and community development goals
- Determine opportunities for new housing to provide pedestrian origins
- Determine demand for temporary or long-term housing by Kaiser medical center employees, members, and/or patient visitors

Goal 6 – Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

- Determine the opportunities for creating a sense of place in the Sierra-Valley area
- Create a gateway to Fontana from the south that leaves a positive image
- Create a gateway to the Kaiser Medical Center that communicates the vitality of the medical center
- Convey a positive image to freeway motorists at and around the Sierra interchange
- Communicate the transition from the auto-oriented freeway and Valley environments to walkable and multimodal places along Sierra, surrounding developments and neighborhoods.
- Accomplish other project goals in a way that builds identifiable and enjoyable places in the Study Area

Purpose of this report

This report is intended to be a broad analysis of the land use, transportation, and real estate market and economic development aspects of the Study Area, and specifically as they relate to the project goals. The report's analysis and opportunities will be used to develop proposals for projects and policies that will best achieve the project goals.

Three Fontanas, Two Corridors, and One Key Land Use: Key Geographies

The Study Area for the Sierra-Valley Land Use Study centers on the intersection of two major streets, Sierra Avenue and Valley Boulevard. It is also bisected by Interstate 10. See Figure 1-1.

There are three geographic ways to consider the Study Area in its context: as a center of one of "**three Fontanas**," or three distinct sections of the City of Fontana defined by the eras of development of the built environment and socioeconomic conditions; as the intersection of **two major street corridors** that contrast with one another in the land uses that exist along them; and as **the area surrounding the city's largest employer** and the generator of much of the traffic in the area, the Kaiser Permanente Fontana Medical Center.

Considering these different geographies helps us understand the different and often conflicting forces affecting land use and transportation in the Study Area.

Three Fontanas

The Study Area is a key piece of what is referred to as Central Fontana, which is older than North or South Fontana and includes the city's Downtown and older residential neighborhoods. Fontana was built in several waves that define these different subareas.

Central Fontana, in which the Sierra Valley Study Area is located, is bound roughly by Baseline Avenue in the north and Interstate 10 in the South and was the original civic core. After being founded as an agricultural community, the city first boomed around the Kaiser Steel Plant during and after World War II. Kaiser supplied steel plate for the war effort and instantly came to dominate production on the West Coast. During the war, Kaiser opened the first Kaiser Permanente hospital facility in Southern California to provide health services to its workers. Although moved from its original location, the Kaiser Fontana Hospital is still the oldest in the Kaiser Permanente system. The steel mill closed in 1987, but central Fontana remained economically viable due to the hospital complex and to uses that grew up along the 10 highway corridor, including manufacturing and warehousing-related businesses and the cluster of shopping centers around the Sierra Valley intersection. The Central Fontana neighborhoods that the Study Area includes were part of this wave, and many aspects of the Study Area – from Kaiser Hospital to former Kaiser Steel workers to the Dino Papavero Senior Centre, built for retired Kaiser Steel workers – directly descend from Kaiser Steel.

In the 1970s, the city experienced another wave of development. This wave of development capitalized on Fontana's location near freeways and largely served workers in and around Los Angeles, 60 miles away, who were looking for housing outside of the city. The South Ridge development, to the south of Interstate 10, grew to house these workers and their families and Fontana became a "bedroom community"[1]In South Fontana.

In more recent decades, Fontana saw residential and commercial development proliferate along the Interstate 15 and CA 210freeway corridors in the northern portions of the city, forming North Fontana.

Among these different subareas, Central Fontana is distinct in several ways. Figure 1-2 shows the age of different areas of Fontana. The map clearly shows how the area between Interstate 10 and Baseline Avenue is much older than those to the north and south of it.

Central Fontana is further defined by ethnicity. Fontana is a very ethnically diverse city. While Hispanics make up two-thirds of the population, Figure 1-3 shows that for a given Census block, the dominant ethnicity is no greater than two-thirds of the population. This means that ethnicities are mixed at a fine grain and no ethnicity is segregated in a certain area. Fontana is home to a large number of immigrants: fifty-nine percent of its households speak a language other than English at home.[2]

However, Central Fontana is distinct from the other areas in that it is largely a mix of Hispanic and non-Hispanic white, and many of the respondents to the 2010 US Census described themselves as having more than one race. Anecdotally, the Study Area is a mix of newer Hispanics and older non-Hispanic whites.

However, Central Fontana is perhaps most clearly delineated by economics. Its residents on average earn much less than Fontana residents overall. Fontana's median income according to the 2010 American Community Survey was

1 *Community history developed from Fontana General Plan and interviews with various stakeholders, June, 2012*

2 *American Factfinder, http://quickfacts.census.gov/qfd/states/06/0624680.html*

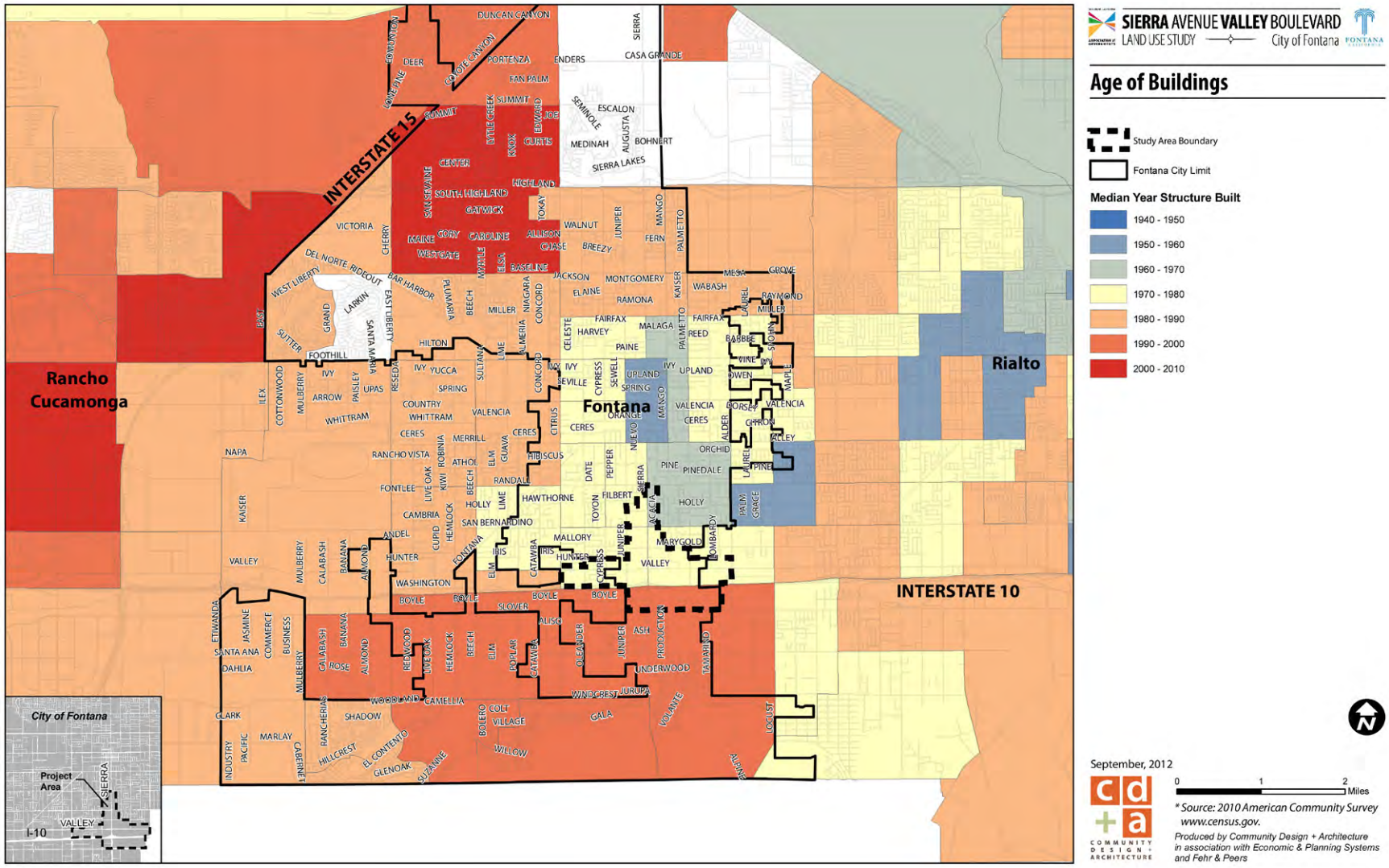


Figure 1-2: Age of Buildings

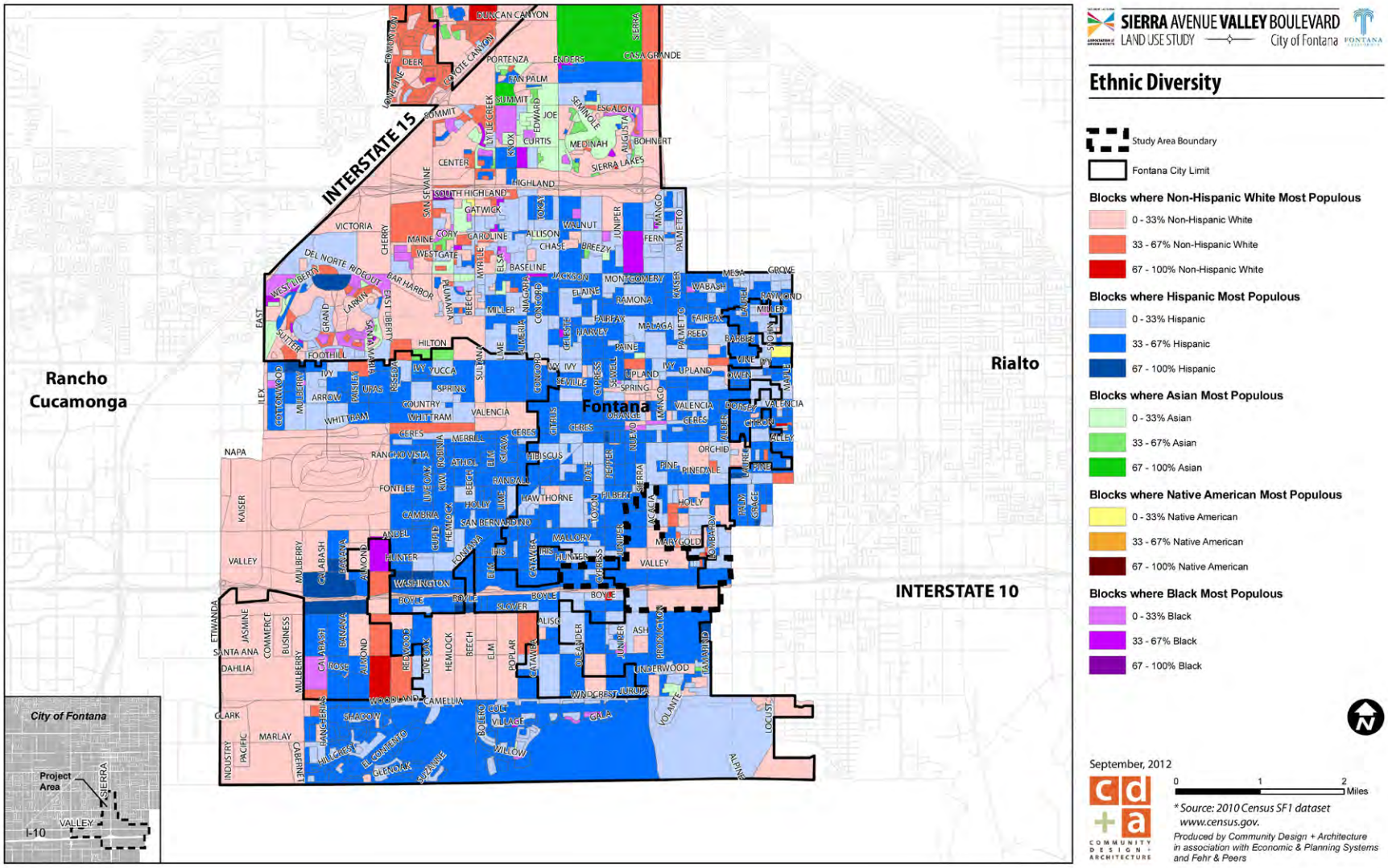


Figure 1-3: Ethnic Diversity

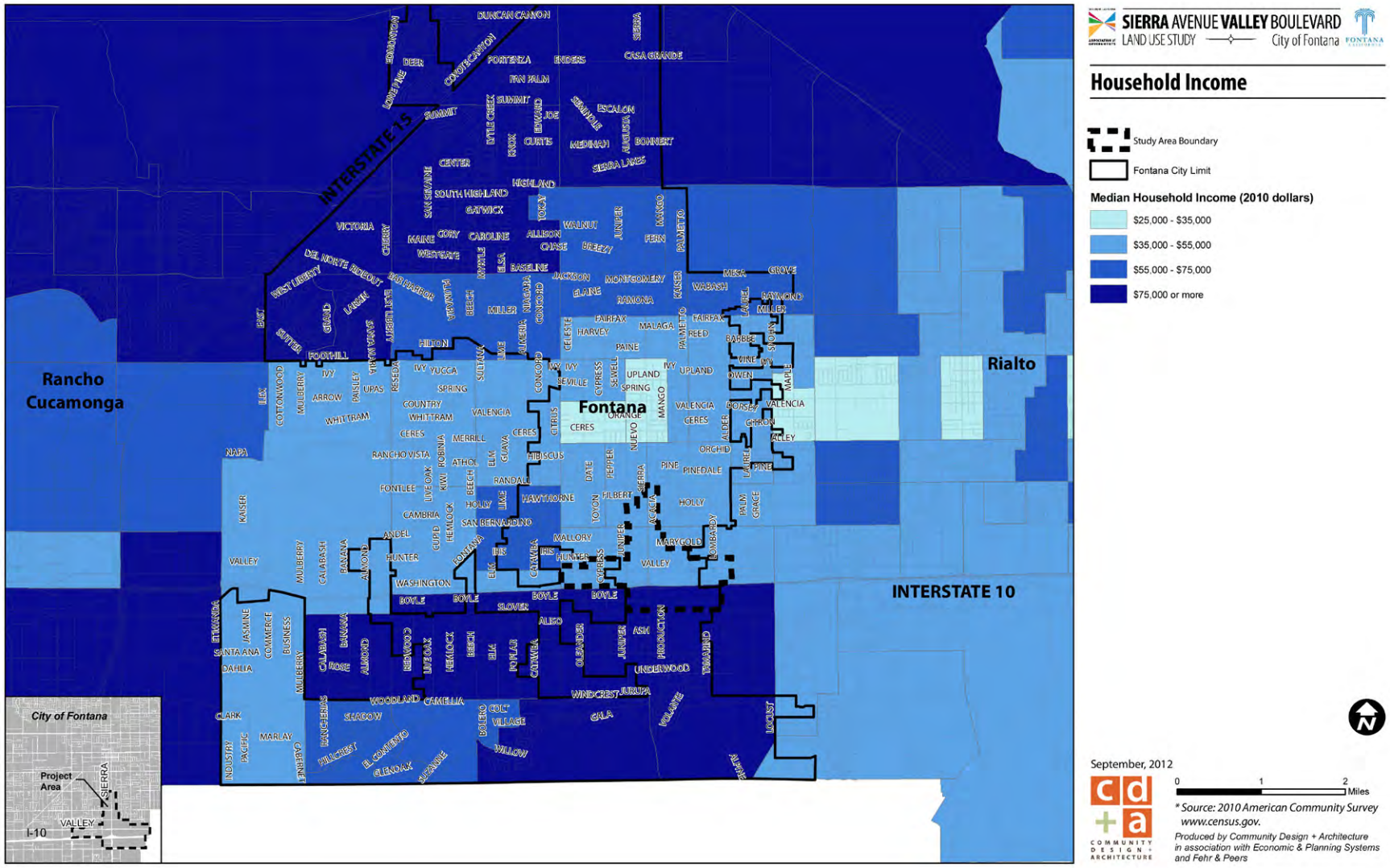


Figure 1-4: Household Income

$63,252,[3]higher than California's median income of $60,883. But the Study Area's median income in 2010 was $44,852, and in some tracts was as low as $37,500 just northwest of Sierra and Valley.[4]Figure 1-4 shows the economic stratification of the city, with North and South Fontana both showing higher incomes than Central Fontana. The Study Area isn't the lowest income part of Central Fontana, which is Downtown, but is clearly part of the lower-income core of the city.

Central Fontana also has characteristics typically associated with older urban areas, compared to other parts of the city. It is denser than the newer parts of the city, both in population and in dwelling units, and has a higher proportion of renters. In Figures 1-5 through 1-7, there is a clear "band" of density and renter-occupied housing running through Central Fontana that is most intense near Downtown but runs southeast and northwest from the Foothill corridor down to the Sierra-Valley area.

The tenure of housing provides an interesting window into the residential areas around the Sierra-Valley intersection in that while, on average, renters make up half of the households, compared to only 30% in Fontana as a whole, some blocks are heavily renter occupied while some are heavily owner occupied. This finding could likely relate to the demographic duality of newer households and older ones.

This dynamic – of the duality of a longtime resident home-owning middle class and a newer, renting working class, with the latter coming to be the majority – is played out anecdotally in conversations with residents. This part of Fontana is portrayed as a place that used to be one of the best parts of the city. Longtime residents interviewed for this study remember a time when their neighbors worked for Kaiser Steel, the hospital, the railroad, insurance company or the school, to a place with commuters and the threat of high crime.

"This used to be the ideal section of town," one resident said. "Now [people] want to live further north." Another said, "It's not our town anymore."

Residents also perceive that little investment is going into Central Fontana, especially compared to North Fontana. They point to a lack of parks and freeway interchanges and crossings east of Sierra Avenue.

The earning power and consumption preferences of the aging, long-term, largely white component on one hand, and a younger, newer, largely Hispanic component on the other, also drive the market for commercial amenities like shopping and restaurants. Business owners in Study Area shopping centers say that their clientele that keeps them in business, whether seniors or large families, are largely looking for value. For more detail on demographics in the Study Area and Fontana, see the Market section.

In seeking to achieve its goals, especially those that involve revitalizing this part of Fontana, this study must consider these demographic dynamics. This geography of Central Fontana, especially relative to other parts of the city, explains much of the existing character and land use of the area.

3 Demographic statistics for the Study Area are tabulated for an area that is different than the project Study Area boundaries shown in Figure 1-1 and used throughout the report. The Demographic Study Area is shaped around the Census tracts that most closely follow the project Study Area. . .

4 2010 American Community Survey, www.census.gov

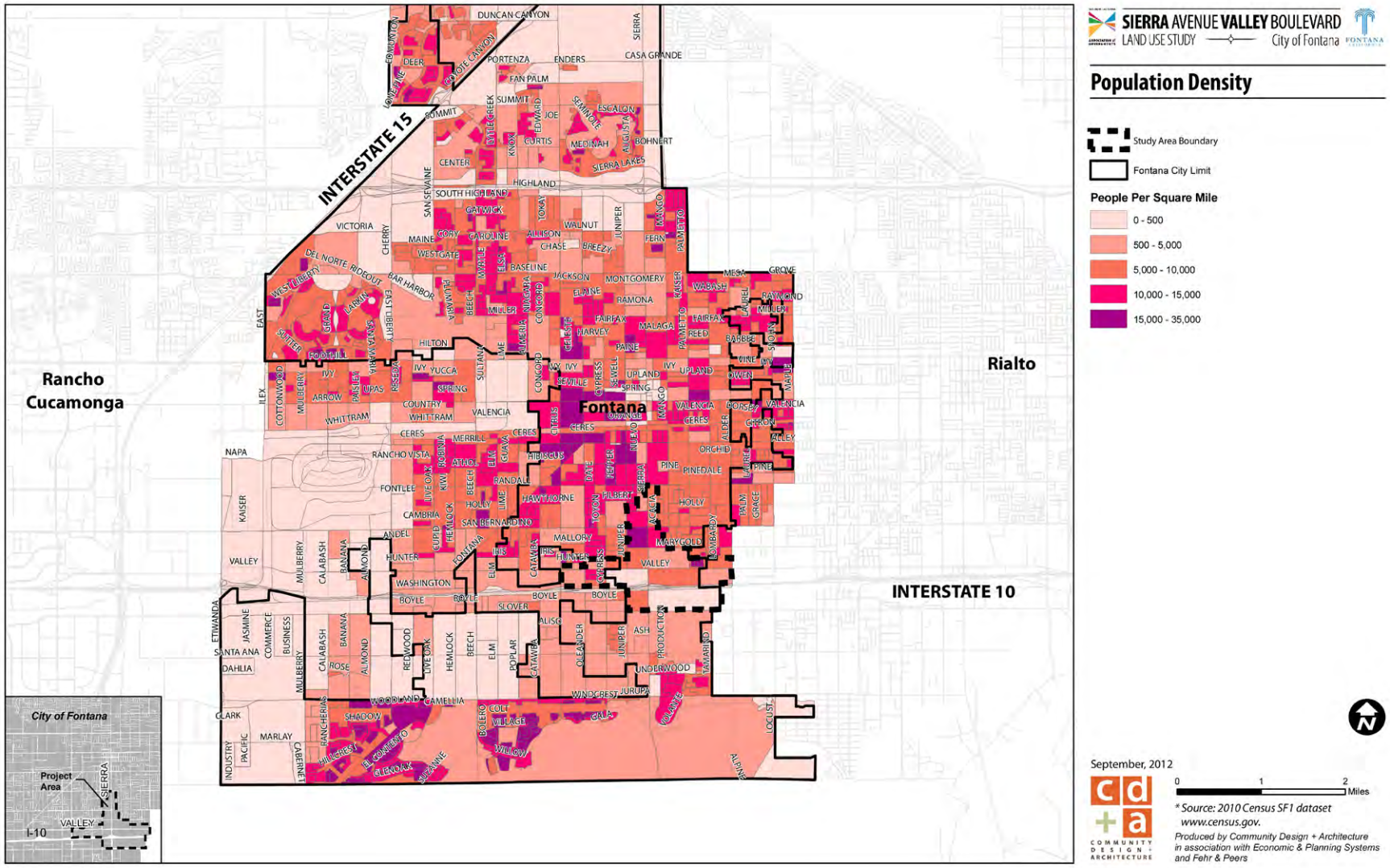


Figure 1-5: Population Density: People per Square Mile

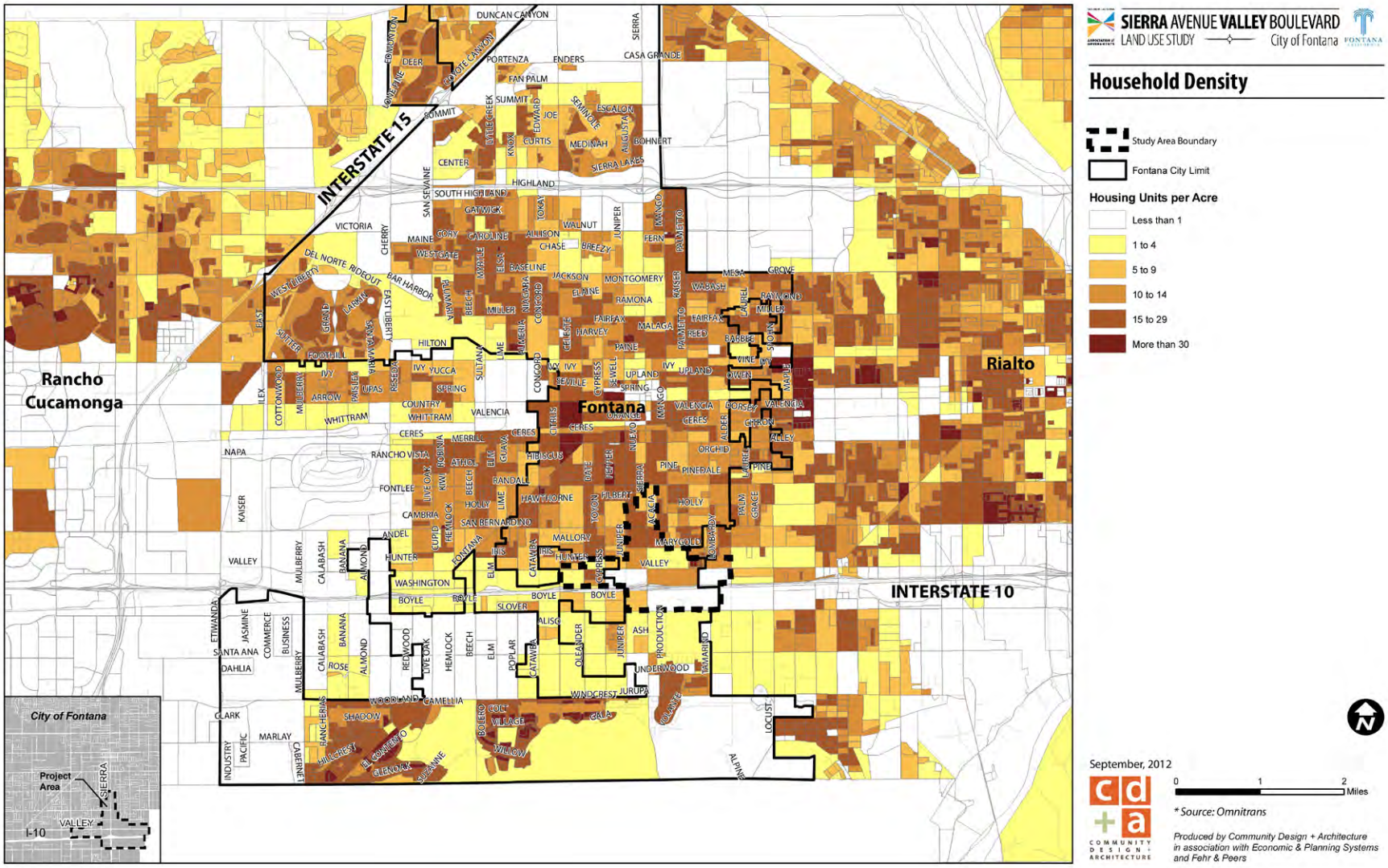


Figure 1-6: Household Density: Dwelling Units per Acre

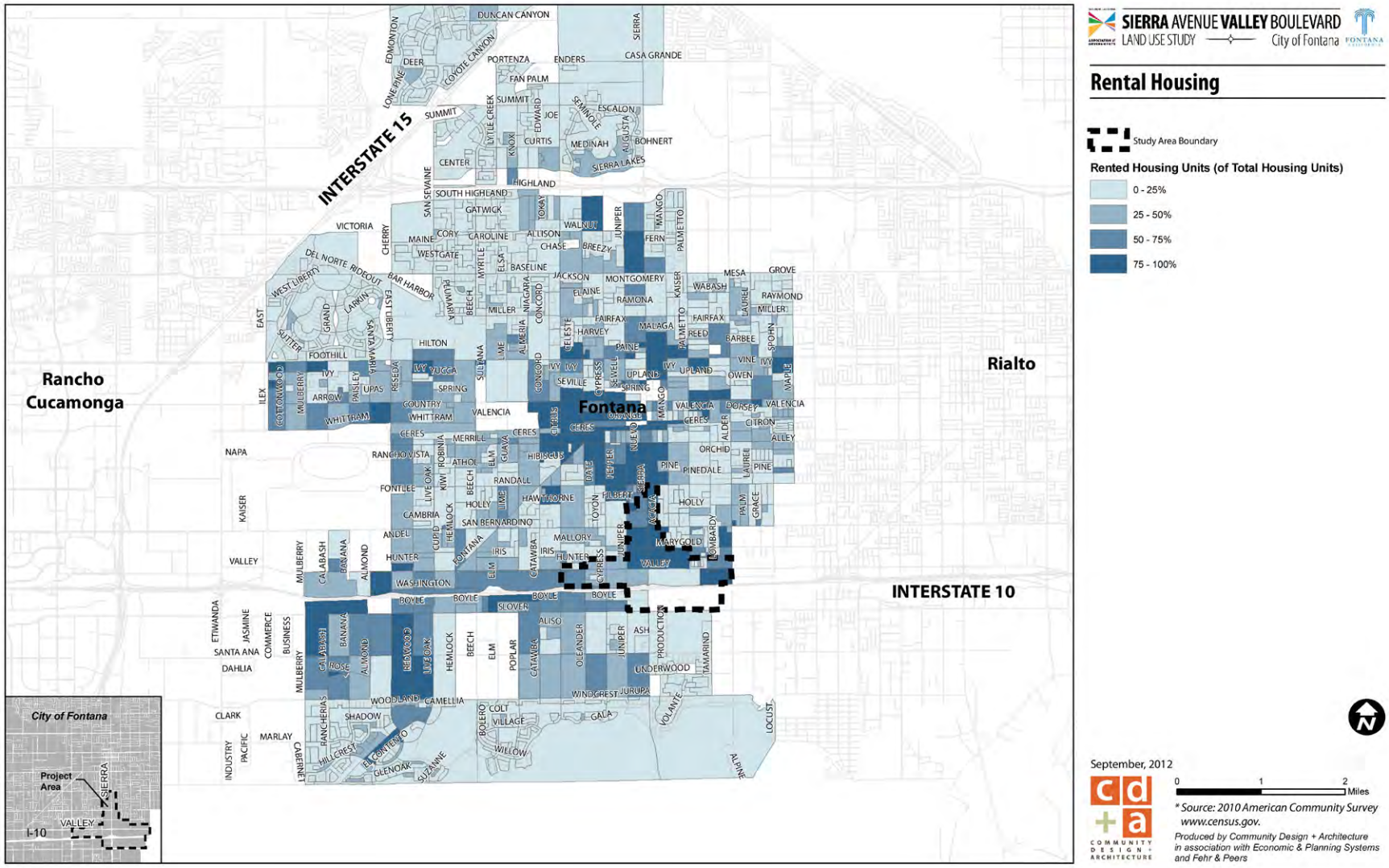


Figure 1-7: Housing Tenure

Two Corridors

The Study Area is also shaped by the two major streets that cross through it and the development along the two streets. Many of the challenges and opportunities of this study are informed by the different character of these corridors. Figure 1-8 depicts each of these corridors and their associated land uses.

Sierra Avenue is the primary north-south connector of the City of Fontana. It strings together the "Three Fontanas" and serves as the city's "Main Street" in its Downtown. It crosses all three freeways running through the city as well as connecting to the Metrolink station in Downtown. It connects population centers, job centers, and major institutions like schools, the City library, and Kaiser Medical Center within Fontana.

Sierra Avenue is also the location of many of the city's older shopping centers as well as much of the city's older multifamily residences; the concentration of commercial uses along Sierra Avenue is one of the three most significant in Fontana. Sierra Avenue also forms a spine of relative population density in Fontana. Sierra's importance is relative to the rest of the city of Fontana.

Valley Boulevard, meanwhile, is more important regionally. Like the freeways, it is Fontana's connection to other Inland Empire communities like Ontario, Rancho Cucamonga, Rialto and San Bernardino. The land uses along it reflect this more regional nature and the historic proximity to the railroad and then I-10, especially the trucking industry that capitalizes on the I-10 corridor. Land uses along Valley Boulevard capitalize on its freeway access. Where the retail corridor of Sierra Avenue intersects with Valley Boulevard and I-10, it becomes a freeway-serving retail center format.

Valley Boulevard and Interstate 10 is also a jobs corridor. This corridor connects some of the Inland Empire's largest jobs centers in Ontario, Rialto, and San Bernardino.

So, in many ways, the intersection of where Sierra Avenue meets Valley Boulevard is where the region meets the city, a meeting which comes with challenges: mobility versus access and autos versus pedestrians. The Valley-Sierra area is the overlapping of many different types of trips, and the lack of relation to one another creates the tensions that this project is addressing.

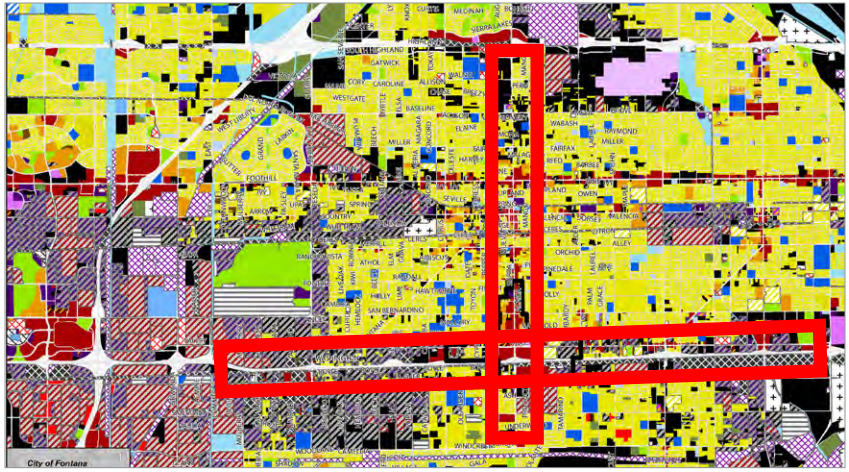


Figure 1-8: Two Corridors: Sierra and Valley

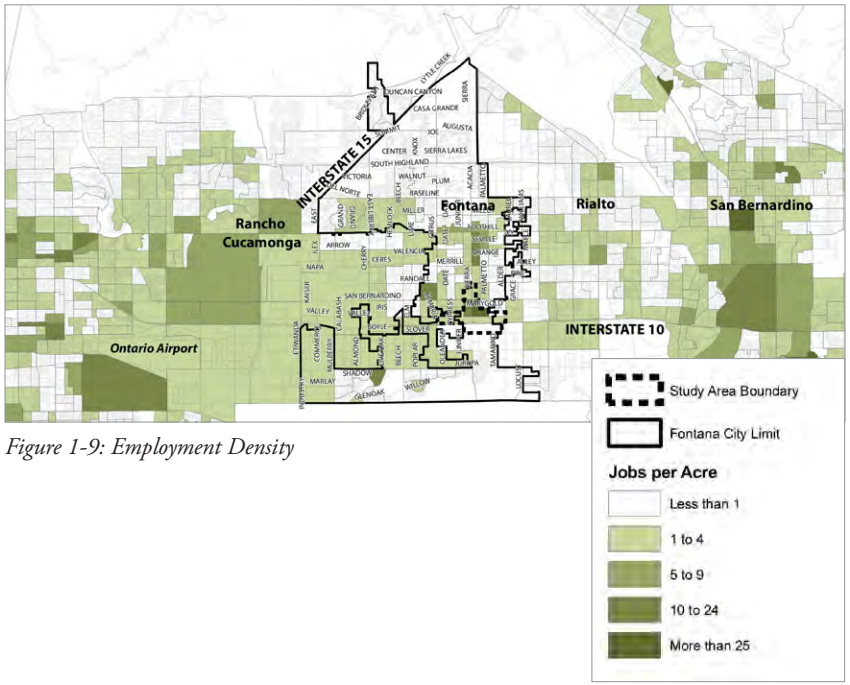


Figure 1-9: Employment Density

One Key Land Use

Another lens through which to view the Study Area is focused on the area's relationship with the Fontana Kaiser Permanente Medical Center. Fontana's Kaiser Permanente campus is an increasingly important piece of a major health network stretching over nine states. It is one of 37 medical centers which contain over 5,000 of Kaiser's 167,300 employees. In 2011, the non-profit Kaiser Foundation Health Plan and Kaiser Foundation Hospitals reported a combined $1.6 billion in net income on $47.9 billion in operating revenues Kaiser serves 8.9 million Americans, three-fourths of whom are Californians.[5]It is the 2nd largest employer in the state of California. The Fontana Kaiser campus also draws people from all over Southern California, creating even more transportation demand for the Sierra-Valley node. The importance of the hospital within the Kaiser system will be increasing as they implement changes to increase its use as a "tertiary care" hospital that draws members for special medical services.

At the same time, Kaiser Permanente has deep roots in Fontana. Kaiser Permanente began as health insurance for Henry Kaiser's workers in various locations during the Great Depression and World War II, including Fontana, where Kaiser Steel was based. Kaiser has affected other aspects of the Sierra-Valley area – for example, the Dino Papavero Senior Centre on Marygold Avenue was founded by Kaiser workers.

The Kaiser Permanente campus affects the surrounding area in many ways. Its employees, members, and visitors heavily use the surrounding streets and freeways to get to and from the campus; its employees, members, and visitors provide demand for services in the area. Its hospital building is the tallest building in Fontana and provides the overriding image of the area.

At the same time, the Kaiser campus and its thousands of employees and visitors has the potential to positively affect the Sierra-Valley area more. Its inward-focused design and auto-orientation contributes to the lack of sense of place that pervades the area, the streets around it are difficult and unpleasant to cross, and it is unclear whether the consumer demand of employees is being met in the businesses that currently exist in the surrounding shopping areas.

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5 *Rauber, Chris, "Kaiser 2011 profit held steady at $2B, revenue rose 8.3%," San Francisco Business Times, February 10, 2012*

Each of these geographies provides a different lens through which to see the Study Area, and different perspectives by which different people within it see it and use it. This is a crowded place and one of the challenges of this study is to untangle and understand each of these perspectives. Perhaps the major challenge of this study is to reconcile how the different groups involved perceive and use this small area, and how to unify it as a place that better serves these groups in terms of services and choices for comfortably and conveniently accessing those services.

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Part 2: Land Use, Transportation and Market Overview

Existing Land Use

The Study Area is the intersection of many of the City of Fontana's and Inland Empire's land use patterns. The Study Area includes some of the older residential neighborhoods built to house Kaiser Steel workers; two of the City of Fontana's major older commercial corridors; the city's largest employer and one of its largest

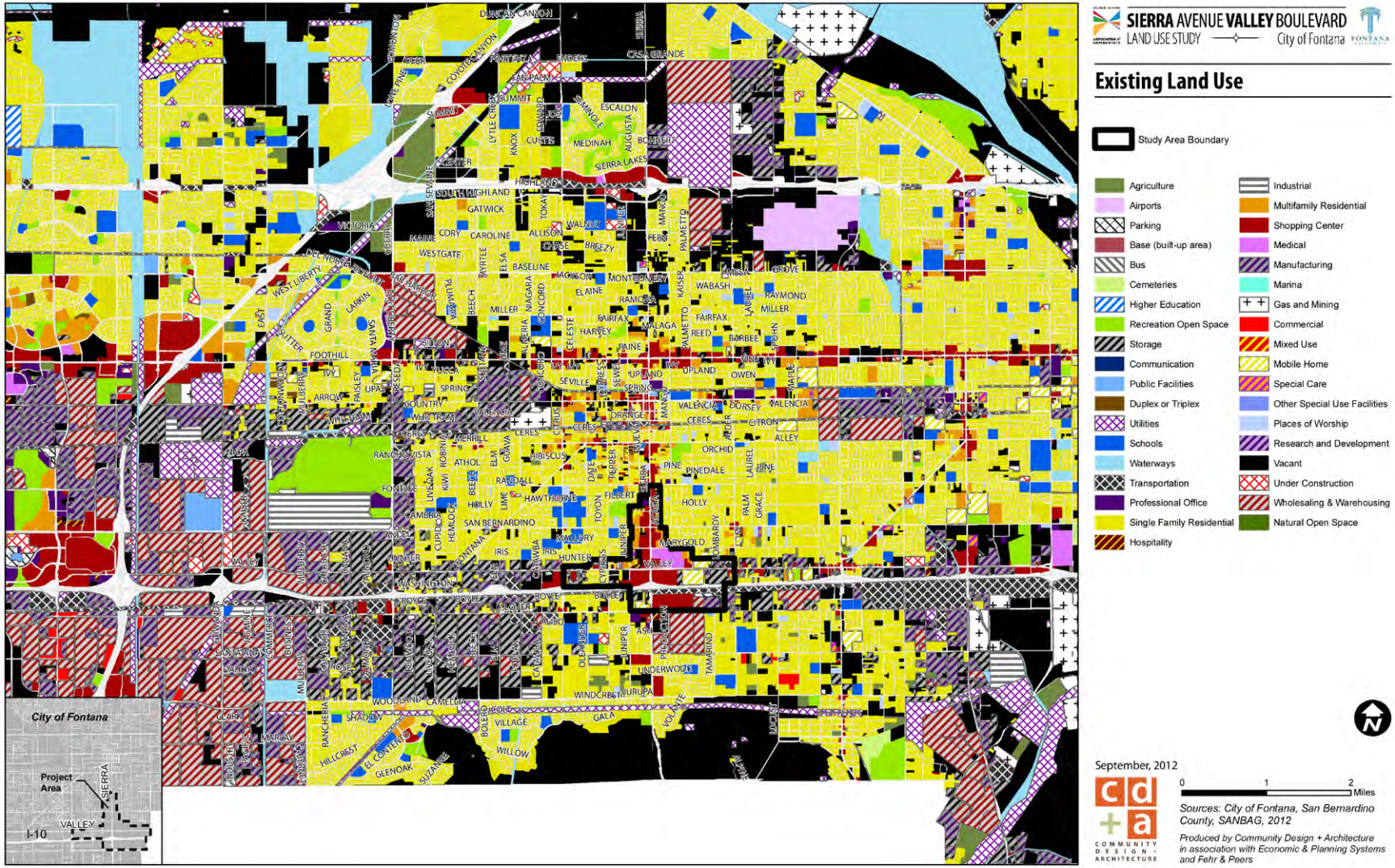


Figure 2-1: City of Fontana Land Use

institutions in the Kaiser Permanente Medical Center; and a part of the Inland Empire's I-10 trucking and industrial corridor. Figure 2-1 shows how the Study Area is part of these larger land use patterns.

Land uses in the Study Area along the Sierra and Valley corridors and in the surrounding neighborhoods largely fall into one of the following groups of "key land uses." These land use categories have been defined specifically for this study and are mapped in Figure 2-2.

- Kaiser Permanente Fontana Medical Center
- Shopping Centers
- Food Service
- Lodging
- Auto Parts and Service
- Trucking Industry
- Low Intensity Land Uses
- Residential
- Vacant Sites

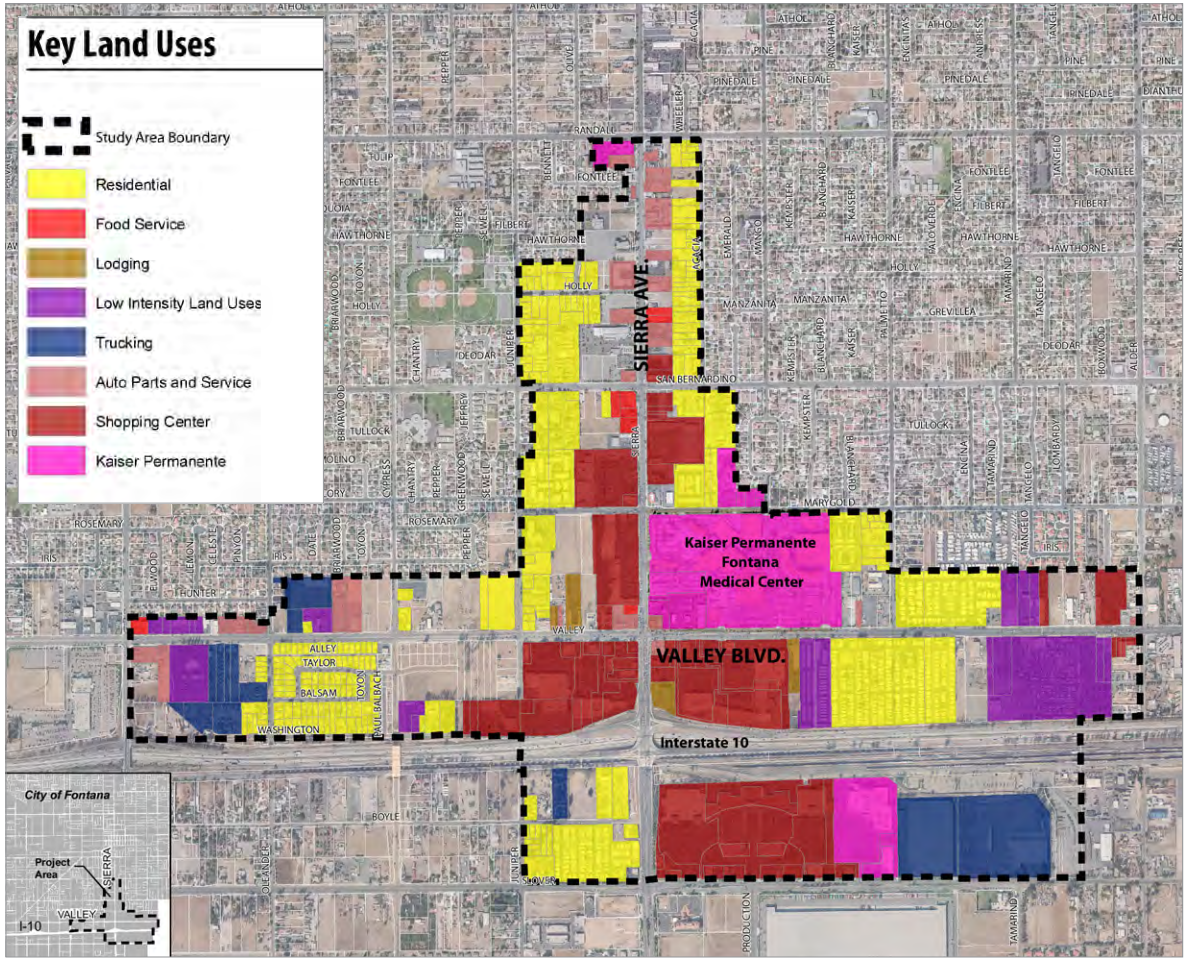


Figure 2-2: Study Area Key Land Uses

Kaiser Permanente Fontana Medical Center

Kaiser Permanente has a major presence in the Study Area, primarily through its Fontana Medical Center on the block between Sierra Avenue, Valley Boulevard, and Marygold Avenue, which employs some 6,000 people and has 420 hospital beds. But Kaiser also occupies a call center in the Palm Court Shopping Center and a Kaiser Permanente Mental Health office at Sierra and Randall.

The first hospital buildings were built on the current Medical Center site in 1955. Kaiser added buildings to the medical center until 1994, when the medical center had its existing hospital facilities, medical outpatient facilities, administrative services, utility services, and parking areas. In 2007, Kaiser moved its regional call center from the main medical campus to a building that previously housed an IKEA in the Palm Court Shopping Center.

Kaiser is nearing completion of a new hospital on the site to accomplish two primary goals: The first is compliance with the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1953 (Senate Bill 1953), which mandates that all hospitals remain functional after a major seismic event. The second is modernizing and better accommodating state-of-the-art medical facilities and procedures. Due to code changes, the new structure, although housing 26 fewer hospital beds than the existing structure, will have 96,010 more square feet than the existing hospital. The fate of the old hospital appears to be in flux: Kaiser had planned on demolishing it but now plans to demolish only the wings and plans to keep the old hospital building for potential future use.

Meanwhile, Kaiser is shifting the focus of care at the Fontana Medical Center. As it "decants" primary care to smaller satellite facilities, Kaiser plans to convert the Fontana hospital into a tertiary care facility, meaning that it will focus on the most specialized procedures and care.

As a land use, the Kaiser Permanente Fontana Medical Center is complex, representing both a place of work for 5,300 people and a destination point for daily outpatients and inpatient visitors, while also serving a quasi-residential function for inpatients. The medical center has within it land uses that rarely receive visitors (administrative offices); scheduled visitors (medical offices); and unscheduled visitors (inpatient visitors and emergency room patients and visitors). Even within the ranks of employees, there are stark differences in the hours and type of work done here.

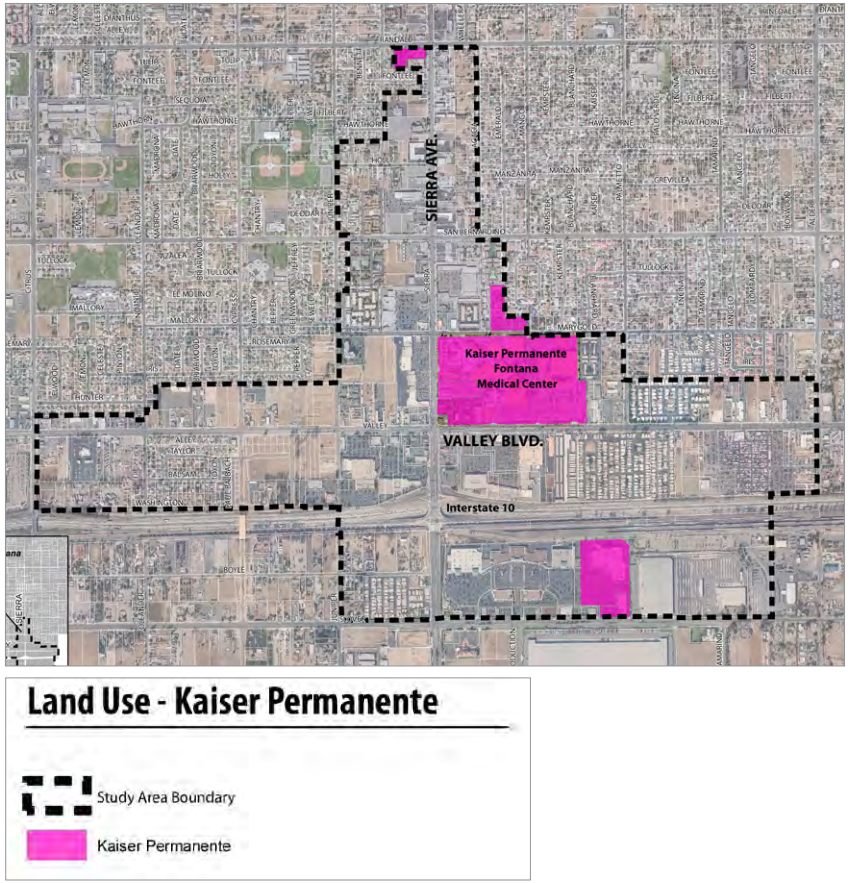


Figure 2-3: Study Area Kaiser Permanente Land Use

One result is that the intensity and diversity of activity and the 24-hour environment of the medical center provides the potential for a rich urban environment in and around the medical campus. However, the medical center's level of activity also provides challenges of accommodating access to and from the medical center.

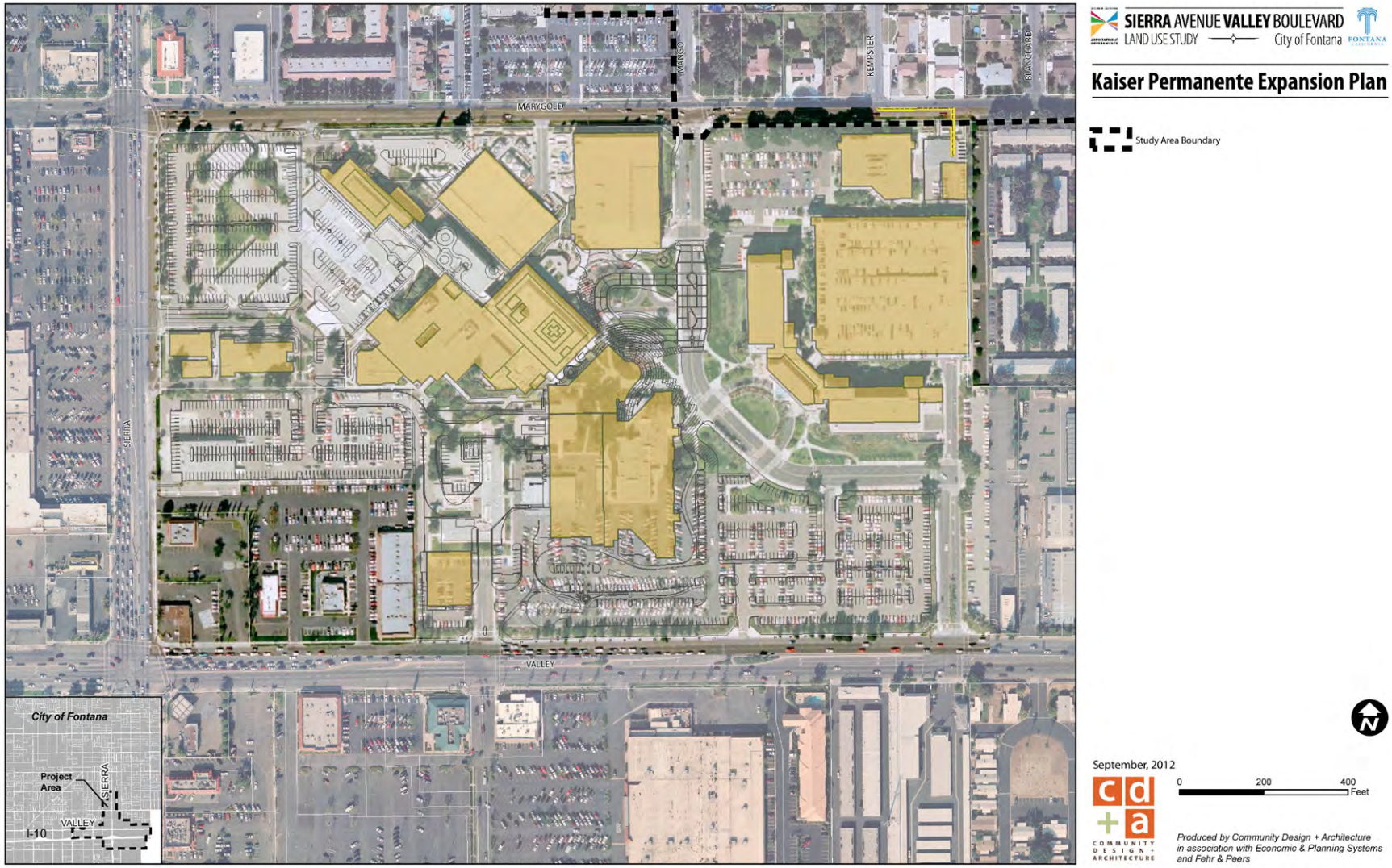


Figure 2-4: Kaiser Permanente Hospital and Expansion

Shopping Centers

The Study Area contains 13 distinct shopping centers, 9 of which make up a majority of the frontage of Sierra Avenue between Interstate 10 and San Bernardino Avenue.

Based on amount of square footage, the shopping centers sort into a clear hierarchy: Large Sierra (approximately 350,000-500,000 square feet);Medium Sierra(approximately 100,000-150,000 square feet); Small Sierra (approximately 20,000 to 25,000 square feet); and Valley (approximately 15,000 to 17,000 square feet). See Figure 2-6.

This hierarchy of shopping centers manifests itself in many ways. Generally, the shopping centers along Sierra become smaller the further north, or away from Interstate 10, they are. The Large Sierra shopping centers often contain several parcels and different ownerships. The tenants in the larger centers also tend to be national retailers that rely more on the regional I-10 traffic.

The Medium and Small Sierra centers north of Valley Boulevard have simpler ownerships and fewer national chain retailers. Many of the businesses in the shopping centers north of Valley Boulevard cater to the area's many Hispanic residents.

If the entire City of Fontana is considered, the shopping centers become more important. The Study Area shopping centers contain 28.4 %, or almost a third, of City commercial square footage – 2.3 million of the City's total of 8.1 million square feet. The Sierra-Valley area is a major concentration of shopping in the city.

These shopping centers are a key component to the goals of this project, especially as they provide amenities to residents, employees and visitors, the specific types of amenities they provide, their influence on the character of Sierra Avenue and Valley Boulevard, their potential for redevelopment, and their potential to become walkable, enjoyable places.

The shopping center land uses are further discussed in the market analysis section.

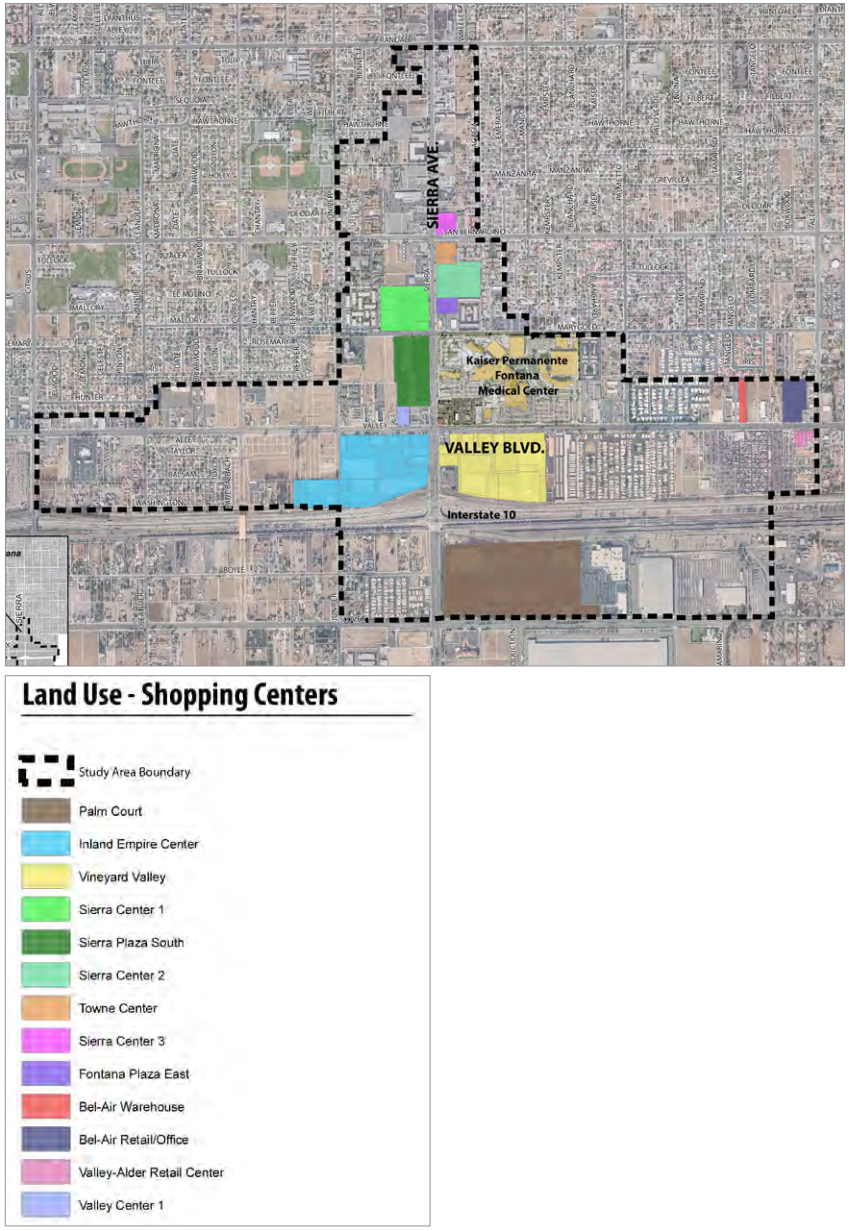


Figure 2-5: Study Area Shopping Centers Land Use

	Center	Parcel Area (SQ FT)	Improvement Footprint Area (SQ FT)	Floor-Area Ratio	Key Tenants
LARGE CENTERS	PALM COURT	1,956,206	503,740	0.26	Target, Ross, TJ Max, AutoZone, China Super Buffet, Shop 99¢, Kaiser Permanente, Bath & Body Works, New Age Fashion, Fashion Q
	INLAND EMPIRE CENTER	1,332,014	350,940	0.26	Pep Boys Auto, Toys "R" Us, Big 5, Famsa, Cardenas, Ultra Star Cinemas, Western Dental, Red Wing Shoe Store, China Panda
	VINEYARD VALLEY	1,178,012	350,215	0.30	Kmart, Food 4 Less, Big Lots, Fashion Plaza, McDonald's, Subway, Papa John's Pizza, GameStop, Denny's, Chuck E Cheese's
MEDIUM CENTERS	SIERRA CENTER 1	412,163	145,125	0.35	El Super, CVS, Rent-A-Center, Baskin Robbins, O'Reilly Auto Parts, GNC, Sizzler
	SIERRA PLAZA SOUTH	457,143	140,602	0.31	Rite Aid, Dollar Tree, Stater Bros, Bank of America, Del Taco, T-Mobile
	SIERRA CENTER 2	292,648	109,262	0.37	Fontana Indoor Swap Meet, Bakers Billiards, Western Dental Orthodontics, Star Video
SMALL CENTERS	TOWNE PLAZA	79,447	25,429	0.32	MetroPCS, Mario's Pizza, Thai Kitchen Bowl, Donut Hut, Quicker Liquor
	SIERRA CENTER 3	80,888	20,774	0.26	Community Bank, Inland Empire Spine & Rehab Medical Center, Bud's Pizza, US Army Recruiting Office
	FONTANA PLAZA EAST	61,422	20,312	0.33	In-N-Out Burger, Automated Financial LLC, Chase Bank ATM
VALLEY CENTERS	BEL-AIR WAREHOUSE	59,291	15,017	0.25	Games Plus, Digonza Soccer, Flex Furniture, The Copy Place, Hermandad Mexicana Nacional
	BEL-AIR RETAIL/OFFICE	185,753	15,151	0.08	Nunez Boots, Global Enterprises, RJ's Glass & Mirror, Dentist
	VALLEY-ALDER RETAIL CENTER	44,379	16,392	0.37	Naty's Furniture, JL Major Appliance, Tito's Party Rental, Citywide Realty, Libreria Cristiana
	VALLEY CENTER 1	43,107	10,758	0.25	Race N Rock, Golden Shears, Barber Shop
	GRAND TOTAL	6,182,472	1,723,715	0.28	

Figure 2-6: Study Area Shopping Centers

Food Service

Most restaurants and other food service land uses in the Study Area are located within the shopping centers described above, however a few restaurants occupy individual parcels fronting onto the major arterials and include independent restaurants like Pancho Villa's and Tom's Super Burgers and chains like Wienerschnitzel and Little Caesar's Pizza.

The food service land uses emphasize how retail services in the area serve working-class and fixed-income senior residents and not necessarily the higher-earning Kaiser Permanente employees. An interview with one restaurant owner revealed that he was not able to succeed above a certain price of entrée. Some more expensive, though still moderately priced chain restaurants such as Olive Garden that opened in the Palm Court shopping center but did not succeed.

There has been some interest by food service industry in the Sierra-Valley area because of the Kaiser Permanente expansion. The fast casual restaurant Chipotle recently sought out the owner of the northeast corner of Sierra and Valley because of its location so close to the Kaiser campus.

Like with other uses in the shopping centers, food service land uses are key parts of achieving many project goals, especially providing synergistic land uses to the Kaiser Permanente campus. However the specific type of restaurants has a large bearing on the achievement of these goals, and that issue is explored further in the market analysis section.

Figure 2-7: Example of Food Service along Sierra Avenue and Valley Boulevard

Figure 2-8: Study Area Food Service Land Use

Auto Parts and Service

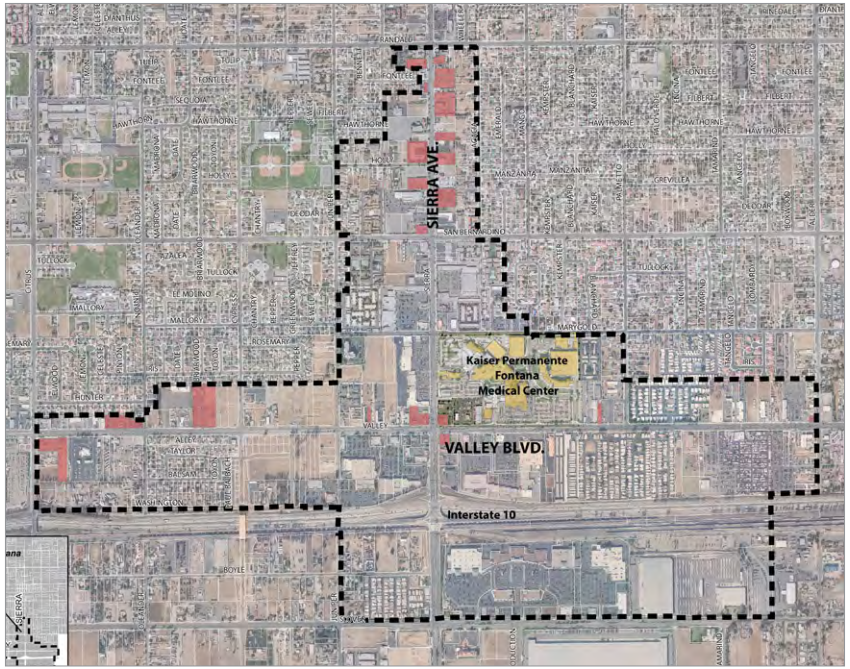
Auto parts and service is a frequently occurring use in the Study Area. Auto uses occur in three main ways in the Study Area: on small parcels clustered along Sierra Avenue north of San Bernardino Avenue; on larger parcels on scattered locations along Valley Boulevard away from Sierra Avenue; and in gas stations on three corners of the Sierra-Valley intersection.

The auto uses on Sierra north of San Bernardino are a mix of auto parts retailers like Auto Zone and retailers/servicers with specialties like tires, brakes, upholstery, carwashes and car rentals. The Rock Honda dealership was formerly located on this stretch before it relocated. Even though these uses tend to cluster for economic reasons, the land use impacts vary based on whether they do retail and/or service, what types of service, the frequency of visitors, and the size of the operation.

Valley auto uses, meanwhile, tend to be less compact land uses such as used auto sales, as well as services like auto glass and body repair.

Auto uses for the most part do not relate to this study's goals. In general, they are inherently not walkable, contribute to congestion, and do not synergize with transit, housing, or the Kaiser campus. However, they appear to be an important part of the vitality of both the Sierra and Valley corridors and achieving the goals of this study will likely mean working around these uses.

Figure 2-9: Example of Auto Parts and Service



Land Use - Auto Parts and Service

Study Area Boundary

Auto Parts and Service

Lodging

The Study Area contains five motels that loosely cluster around the Sierra-Valley intersection: Motel 6, Econo Lodge, America's Best Value Inn, Skyview, and the Valley Motel. It is likely that these hotels and motels are located here due to the proximity to I-10. According to the City, these motels largely serve people associated with Kaiser Permanente as well as truckers waiting for their trucks to be repaired.

The City undertook a study five years ago to determine if there was more demand for lodging. The report determined that there were no numbers to support more demand.

Lodging as a land use is relevant to the study goals in that the motels are a potential complementary use for the Kaiser Permanente Medical Center, although Kaiser's new hospital and current policies will allow for a limited number of relatives of inpatients to stay in the patients room.

Some of these motels, specifically the Motel 6, have been the site of reported crimes such as prostitution.

Figure 2-10: Example of Lodging Related Land Use

Extended stays related to Kaiser Permanente

Among families other visitors of Kaiser Permanente inpatients in Fontana, where to stay during long hospital stays are an issue. In an interview with hospital patient representatives, patient families indicated that they were challenged by where to stay. In a survey administered by this study to Kaiser members and visitors, a question was asked, "If you or your family must make overnight visits to the Fontana Kaiser Permanente campus, where do you stay?" In response to the question, 30 percent said they stayed with a relative; 25 percent said they stayed at a hotel or motel. In the interview with patient representatives, patient families stated that a Ronald McDonald House would be a helpful amenity.

RV Resorts

Because of the potential need for Kaiser Permanente members and visitors to stay in the area, the Project Team researched RV resorts as a specific land use, in particular in relation to hospitals. In the visitor /member survey undertaken by the study, almost 6 percent of respondents said they stayed in an RV if they needed to make an extended stay in the area. Many hospitals do offer long-term treatment programs offer RV parking free of charge with basic hook-ups. Many RV parks advertise their proximity to hospitals and medical facilities, including:

- Pecan Park RV resort, Jacksonville, FL.
- Children's Hospital, St Louis
- Duke Medical Center (Birchwood RV Park)

City of Fontana Land Use policy has no code regulations regulating RVs other than regulating parking in residential and industrial zones. The city does not define or recognize "RV Park." However, 'Campgrounds' are allowed in Public and OS districts. Mobile home parks are allowed in all R zones.

Several neighboring jurisdictions have RV Parks. The San Bernardino RV Park is located in CG-1 Commercial General, where it is a conditional use and located near several schools and a warehousing complex. The City of Yorba Linda has Canyon RV Park within Featherly Regional Park, where it is a conditional use in the Open Space (FP-2 district) zone. It is located near regional park and highway access. The City of Pomona has Fairplex RV Park, located in the F (Fair) zone and is a Permitted 'Fair Related' use: "Outdoor Recreation including but limited to camping, picnics, rallies, social events, and sporting events." This RV park is located near the Pomona Valley Hospital Medical Center.

Based on this brief survey, it can be concluded that RV Parks are located near attractions/businesses that may require an extended stay. It is common for the parks to recognize hospital component. RV parks are generally a conditional use, but often are permitted in special zones. RV parks are typically not regulated as mobile home parks.

The question for the City of Fontana is whether and how the addition of an RV Park to the Sierra-Valley area would help to satisfy other goals of this study, as well as other City General Plan goals and policies.

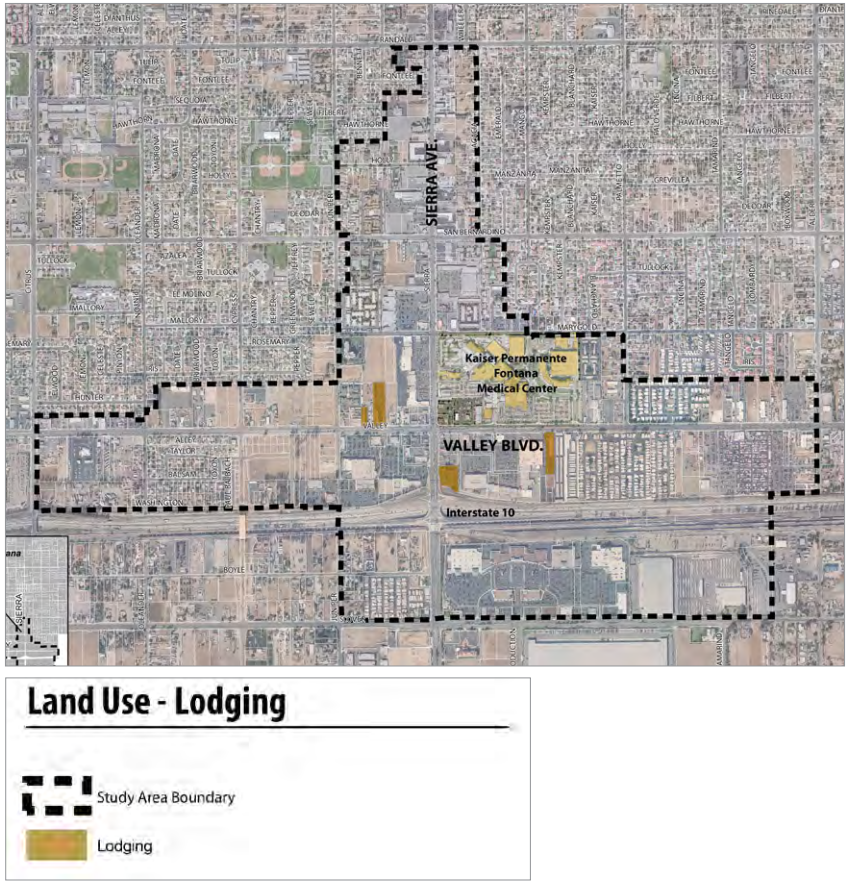


Figure 2-11: Study Area Lodging Land Use

Trucking

While the trucking industry relies on the Interstate 10 corridor, and to some degree access to the rail line that parallels I-10, formal, trucking-related uses do not dominate land use patterns along the Study Area's section of Valley Boulevard. Trucking uses in the Study Area include one trucking center, some informal trucking repair facilities, and a Weyerhaeuser warehouse facility, which is served by a BNSF rail spur. However, it is important to understand trucking as a land use because of its importance to the Valley-I-10 corridor and the potential for trucking uses to occupy vacant and underutilized sites in the Study Area.

Trucking-related land uses

Land uses generating truck traffic generally fall into two main categories: uses that trucks serve, such as heavy and light warehousing, heavy and light industry; and uses that serve trucks, such as truck sales and leasing, truck terminals, and truck stops. In the Study Area, neither occurs in large numbers, but they do east and west of the Study Area.

According to Spatial Characteristics from the Federal Highway Administration's Freight and Land Use Handbook, good trucking sites are:

- Near good transportation infrastructure;
- Near key markets within given radius;

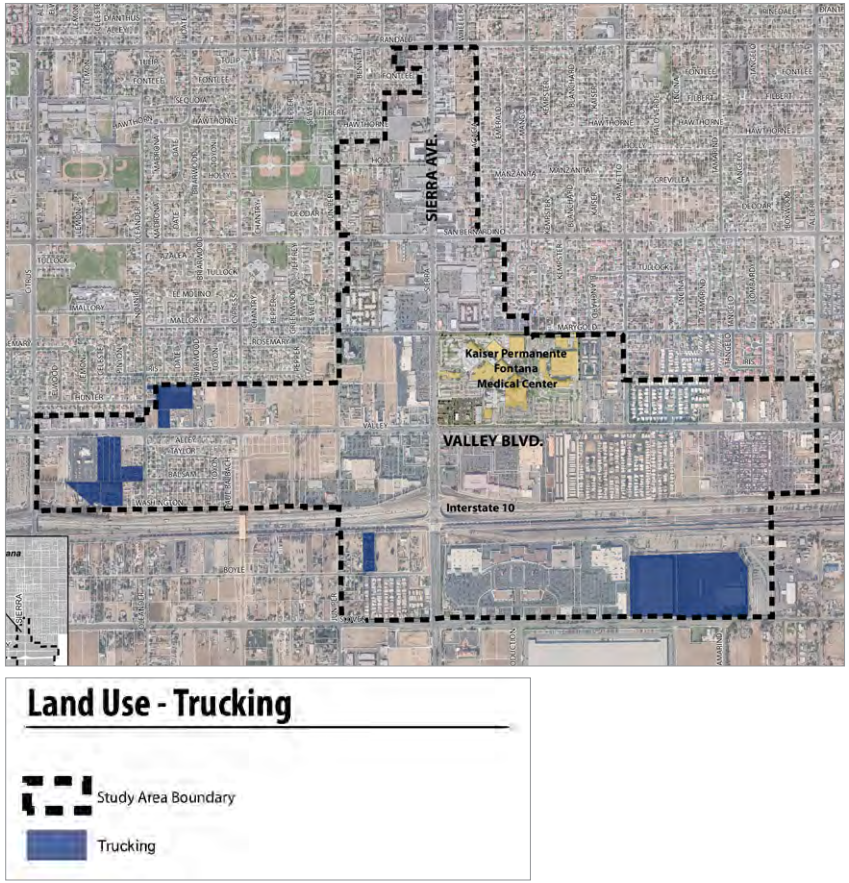


Figure 2-12: Study Area Trucking Land Use

- Proximate to a qualified workforce;
- Relatively affordable for lease or purchase;
- Located in jurisdictions that can be cooperative regarding permitting and regulations; and,
- Have available public assistance and other incentives.

Trucking uses seek site design that:

- Ensures sufficient turning radii (~68' semi needs ~46 radius);
- Ensures sufficient vertical clearance (12'-6" – 22'-6");
- Avoids blind corners (landscaping, building dimensions and utility infrastructure);
- Utilizes overlay zones to offer authorities an opportunity to address special circumstances;
- Provide freight transfer areas of 65 acres minimum, on flat terrain; and
- Nearby truck stop rest areas with amenities and services.

Trucking in Southern California

In Southern California, high land costs in the developed areas surrounding ports, intermodal terminals, and truck terminals have forced the freight transportation industry to look to outlying areas for facility growth. The Southern California region's sprawling development patterns have caused regional freight distribution patterns that emphasize peak period congestion and high levels of freight VMT. Distribution centers utilize cheap suburban land to relocate and expand their facilities, but housing builders are expanding in the same areas.

I-10 is the top California trucking route with 16,000 ADT and 16 intermodal facilities. Airports in the area with top 10 in the U.S. cargo movements include LAX and Ontario. Ports in the area with top 10 cargo movements include Port of Long Beach and Port of Los Angeles/San Pedro. The BNSF rail line paralleling I-10 is increasingly important to the distribution of cargo to and from the port, and ability to transfer cargo between rail and trucking is an important aspect of the attractiveness of the corridor to trucking industry uses.

Meanwhile, truck operators face increasing parking and traffic route restrictions in cities throughout Southern California.

Trucking in Fontana and the Study Area

Fontana has in some ways capitalized on this corridor. According to the website www.quicktransportsolutions.com, it has 1,353 Trucking Freight Shipping Service Companies (many of which are only commercial vehicles such as service vans, etc.) and 61 Trucking Service Repair Businesses.

In the Study Area, the length of Valley is a trucking route with Sierra south of Valley to Jurupa, which is also a trucking route, yet few trucking businesses are present directly along Valley. The 2003 Truck Trip Generation Study for the City of Fontana identified two trucking opportunity areas adjacent to the Study Area: Valley Boulevard west of Citrus and Slover Avenue west of Citrus. The City has commissioned a number of studies that sought to identify the opportunities associated with trucking on the Valley corridor. See the Land Use policy section of this report.

With few land uses directly related to trucking in the Study Area, the primary importance of trucking to the goals of this study is the degree to which trucking contributes to the congestion at Sierra-Valley intersection and the geometry of intersections and driveways within the Study Area; whether the City wishes to continue to pursue trucking and associated land uses near the Sierra-Valley intersection; and whether trucking related land uses are compatible for the City's other goals in the area.

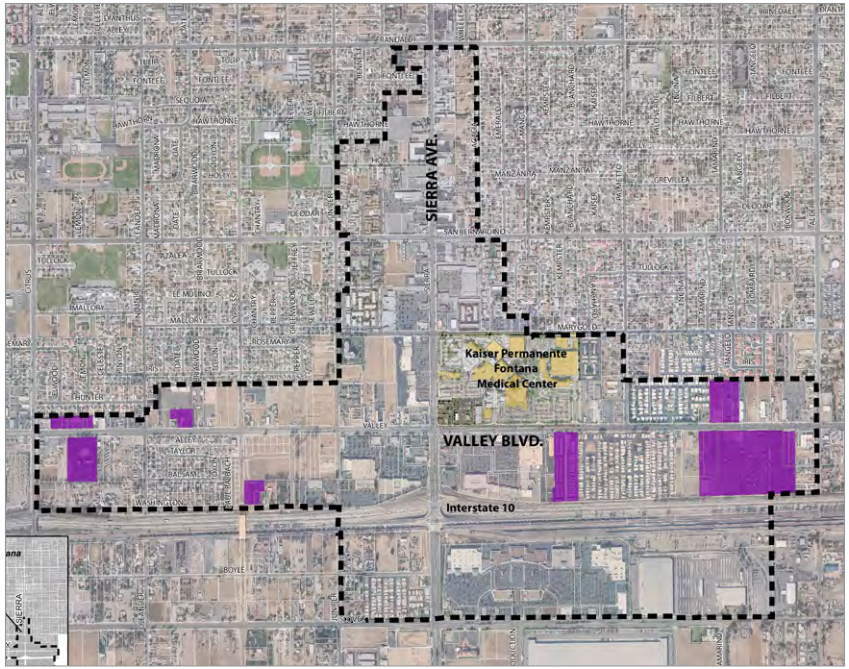
Low Intensity Land Uses

More prevalent than trucking-related uses are "Low Intensity Land Uses" – uses that do not have large concentrations of people and activity either in space or time. Often demand for space in these uses is driven by vehicle storage. Customers visit infrequently.

Low intensity land uses thrive on regional access and cheapness of land. In the Study Area, they are concentrated along Valley and include equipment rentals, storage and gas sales. The Bel-Air Swap Meet may also count as a low intensity land use because much of the time it sits empty.

Low intensity land uses, like Auto Parts and Service described above, do not relate to this study's goals. In general, they are inherently not walkable, some of the uses contribute to vehicle congestion, and do not synergize with transit, housing, or the Kaiser campus. However, they are economically viable and appear to be an important part of the vitality of both the Sierra and Valley corridors and achieving the goals of this study will likely mean working around these uses and potentially enhance their edges and access to support the study's goals.

Figure 2-14: Example of a Low Intensity Land Use



Land Use - Low Intensity

Study Area Boundary

Low Intensity

Figure 2-13: Study Area Low Intensity Land Use

Residential

The Study Area is surrounded by largely single family neighborhoods, but housing occurs within the Study Area in six primary settings:

- The single family neighborhoods behind to the north of Valley Boulevard;
- Older multifamily residences along the Sierra corridor between Valley Boulevard and Randall Avenue;
- The Dino Papavero Senior Center;
- Newer affordable housing in the Paseo Verde phases;
- Mobile home parks along Valley Boulevard and Slover Avenue south of I-10; and,
- In a pocket of single family residences between Valley and I-10 east of Sierra.

These different housing types help create the diversity in the area in terms of income, age, and intensity.

Single family neighborhoods north of Valley Boulevard

The majority of housing that surrounds the Study Area is part of Fontana's older residential neighborhoods between Valley and Baseline. These areas are largely low-density. The demographic characteristics of these areas are described in Part 1: Introduction.

Multifamily residences on the Sierra corridor

Higher density housing helps to define the Sierra Avenue corridor. Between Valley Boulevard and Randall Avenue are six Study Area blocks that house approximately 3,200 residents in 1,040 housing units. Many of these developments are up to 25 units to the acre.

Senior Housing

The Dino Papavero Senior Centre started in the early 1980s by three former Kaiser Steel employees, to house steel workers as they aged. The center has 175 residents and has a one-and-a-half year waiting list. The center also has 80 employees and so serves as a job destination as well.[6]Next to it is the Piazza Senior Apartments, which includes 60 senior housing units affordable to very-low income senior citizens (with incomes at or below 50% of median income).

6 *Interview with Lia Winston, Dino Papavero Senior Centre manager, June 13, 2012*

Figure 2-16: Example of a Single Family Neighborhood

Figure 2-17: Example of Multifamily Apartments

Figure 2-18: Dino Papavero Senior Centre

Together, the two senior housing facilities create a concentration of senior citizens in the area. Based on an interview with the center director, walking is important to these residents because it is a primary mode of transportation to nearby amenities, the proximity of which is also important.

Paseo Verde

On either side of Juniper Avenue north of Valley Boulevard are the three phases of the Paseo Verde housing project built by the City of Fontana Housing Authority in conjunction with Related California. The first, second, and third phases consist of 144 two and three bedroom townhomes. The units are available for lease by to very-low income families (with incomes at or below 50% of the median income). The first two phases are complete and the third phase is underway.

Mobile home parks

Some of the housing along the Valley corridor is mobile home parks. The Villa Fontana Estates and Sierra Estates mobile home parks lie on Valley Boulevard and the Capri Mobile Estates are on Slover Avenue.

Single family neighborhood between Valley Boulevard and I-10

Another of the residential "patches" is the pocket of single family houses between Valley and I-10. This neighborhood is similar in density to the neighborhoods north of Valley Boulevard but is zoned for commercial and light industrial. According to Census information this neighborhood is primarily owner-occupied, particularly the block within the center of the neighborhood; see Figure 1-7.

Understanding the existing residential uses and their inhabitants in the area is vital for the goals of the project. The demographics and travel behavior of residents can inform traffic congestion and potential complementary uses to Kaiser Permanente; The density and design of housing can inform the walkability and transit support of the area; and the market performance of existing housing units can inform the potential for new housing in the area.

Figure 2-19: Paseo Verde Affordable Housing

Figure 2-20: Arrowhead Estates Mobile Homes

Figure 2-21: Residential Neighborhood South of Valley Boulevard

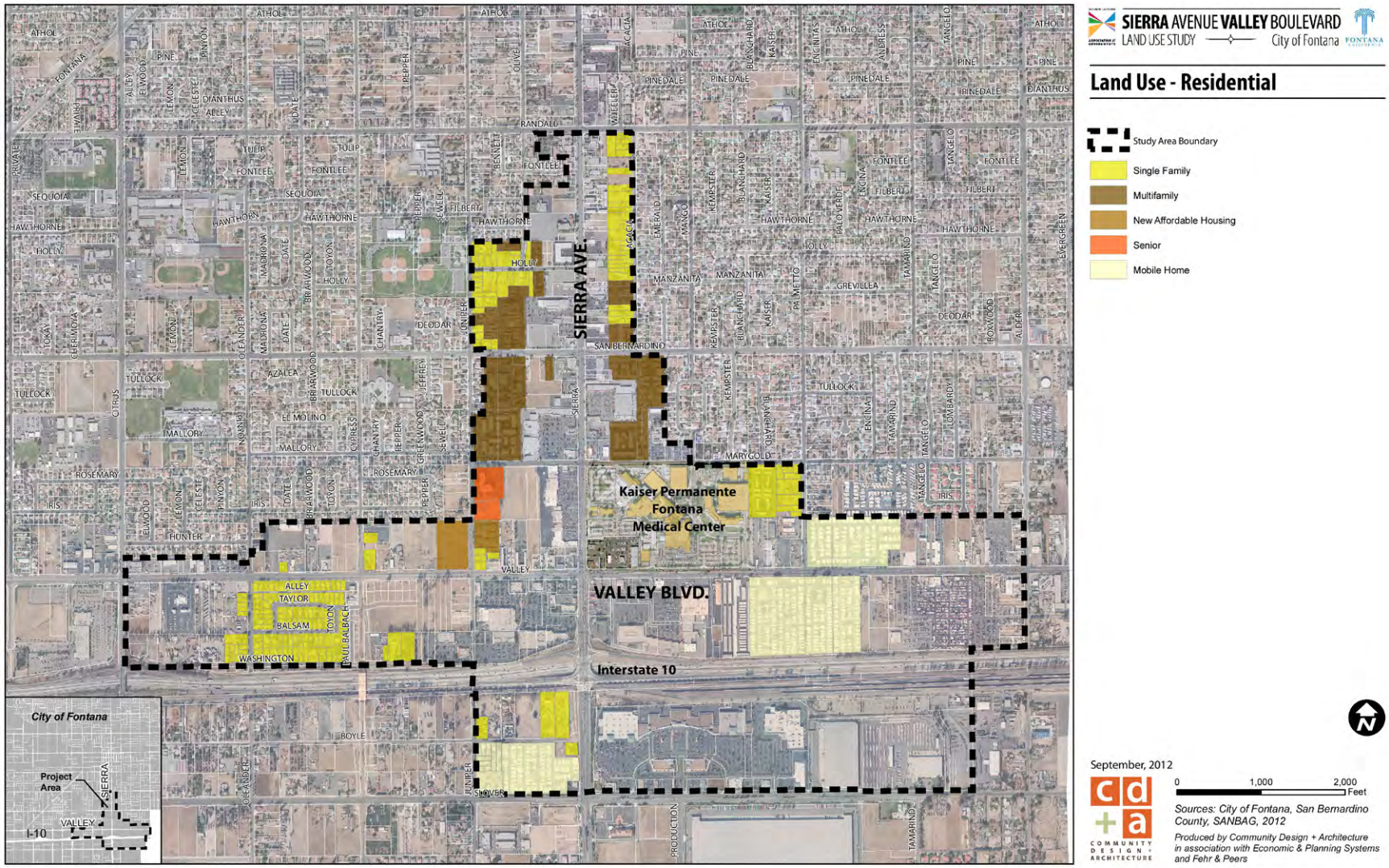


Figure 2-15: Study Area Residential Land Use

Vacant sites

Vacant sites, including those with vacant buildings, make up almost 8 percent of the Study Area acreage. These vacant sites occur both on the Sierra corridor and on the Valley corridor. They include larger sites – up to 7 acres, behind the Sierra Plaza South shopping center– and smaller ones of less than a tenth of an acre.

Some of the vacant sites in the Study Area have had projects proposed for them. For example, the2.4-acre site at 16826 San Bernardino Avenue was proposed as a 100-unit apartment complex beginning in 2006.

The old Rock Honda dealership on Sierra Avenue is also a vacant site since it is now unoccupied.

Currently, the vacant sites in the Study Area present challenges to many of the study goals such as walkability, transit, and sense of place and gateway to Fontana. However, understanding the land use, urban form and market potential of vacant sites is critical to this study's goals. Some of the vacant sites in the Study Area are located in a way that they could be catalysts to achieve many of the goals of the project.

Figure 2-23: An Example of a Vacant Site in the Study Area

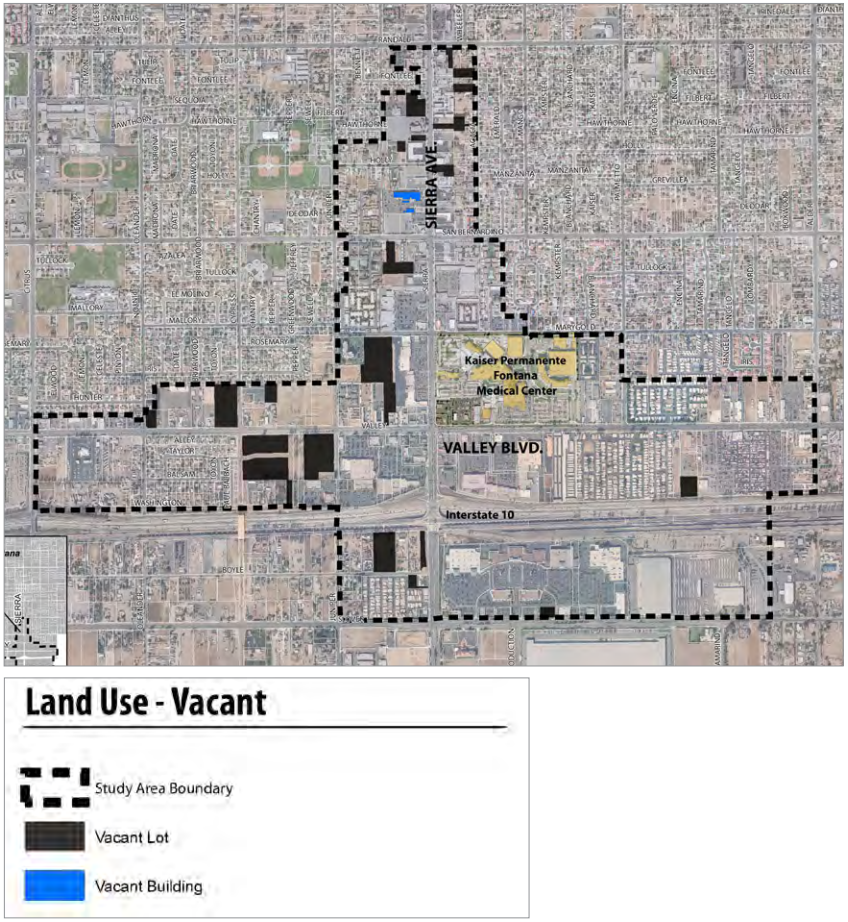


Figure 2-22: Study Area Vacant Sites & Buildings

Pipeline projects

Kaiser Permanente expansion

See description of Kaiser Permanente campus in the Key Land Use section.

Westech College

The Steelworkers Auditorium at 9460 Sierra Avenue will be demolished and replaced by a new building that will house a Westech College. Dix Development, Inc., plans to build a two-story, 20,000 square foot building to house a Westech campus.

Westech is a medical trade school with several campuses throughout Southern California in locations such as Ontario, Victorville, and Irvine. It offers courses in medical support fields such as phlebotomy (blood drawing), billing, administration, and insurance.

The new campus on Sierra Avenue will have approximately 25 employees and serve 150 students. There will be 164 parking spaces, nearly enough for every person who would be at the campus. The City hopes to see further phases of the college to create a campus.

From a land use perspective, Westech College adds a destination and an active, complex institutional use that could act as another hub along the Sierra corridor between Sierra-Valley and Downtown Fontana. Vacant and underutilized sites surrounding Westech could fill with complementary amenities; currently, the site is surrounded by mostly auto parts and service businesses, which would not synergize with the college. However, the small number of students and employees in the first phase will not likely create the critical mass for such a hub similar to the Kaiser Permanent campus, or from drawing many complementary uses.

Westech also has the potential to be a synergistic use with the Kaiser Permanente campus. Interviews with Kaiser Permanente administration revealed that Kaiser recruits Westech graduates frequently and is eager to partner with the college.

From an urban form perspective, the project will demolish one of the few buildings in the Study Area that has good urban design qualities. The Steelworkers Auditorium fronts onto the sidewalk with multiple entrances and has a small, welcoming entrance plaza at its front. The new building will be in a similar location, but it appears to be more oriented to the parking areas on the side and back, with a mandated 25-foot setback from the front property line. This is a loss for the walkability of the corridor, even though there is one walkway from the sidewalk between a parking lot and the building that provides pedestrian access to the main entry.

The addition of Westech does present some transportation challenges, namely that the congestion along Sierra presents issues for transporting students and faculty, and that there is a lack of pedestrian crossing options nearby on Sierra Avenue.

Figure 2-24: Westech Aerial Site Plan

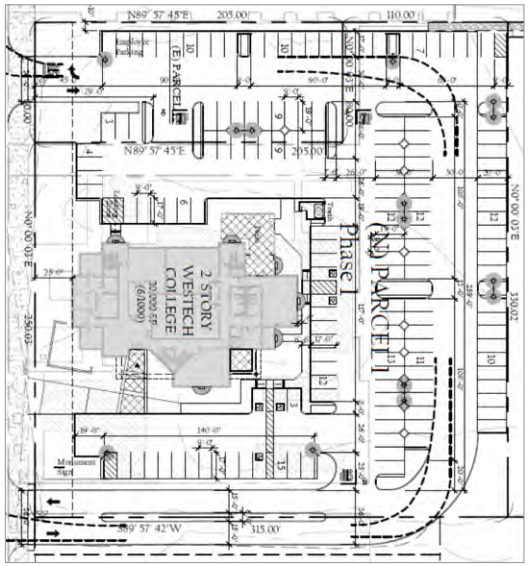


Figure 2-25: Westech Site Plan

Land Use Characteristics

The Study Area's specific mix of land uses creates overall characteristics of the area. The key land uses described above, independent of the form they take (discussed in the next section), have intrinsic qualities that have implications for the character and vitality of the Sierra-Valley area. These characteristics help distinguish it as a unique place within Fontana and the Inland Empire and can create understanding of the area's strengths, weaknesses, and potential in achieving the project goals.

Human intensity

Human intensity is the sum of residential and employment density. It is meant to capture the total human activity within a place. In this study the human intensity metric was derived from household and employment numbers from the 2010 Census at a block group level.

The Sierra-Valley area is the most human-intense place in the City of Fontana. Specifically, this is the area north of Valley Boulevard, centered on Sierra Avenue, see Figure 2-26. This is due to a number of factors. The biggest factor is the presence of the Kaiser Permanente Fontana Medical Center, which employs over 5,000people. However, other key land uses such as the multifamily residences and shopping centers, also contribute to this level of activity. The future Westech campus will add to the activity. This metric says nothing of the visitors to the medical center and the shopping center customers that are not included in this equation, as well as the through travelers congesting the roadways.

What this means is that these human-intense land uses supply much of the activity needed to fulfill many goals of the project, including making transit successful and creating quality places. The human-intense land uses in the Study Area also contrast directly with many non-intense land uses in the Study Area such as equipment rentals and auto repair.

The level of human intensity within the Study Area is also a validation of the goals of the project: the most congested and intense area of the city needs multimodal transportation options to make it more livable and enjoyable and for it to function better.

Synergy between land uses

In addition to intensity, the area of the Study Area centering on the Sierra corridor has land uses that synergize with one another. Specifically, both the surrounding residential uses and the Kaiser campus have residents and employees who demand retail, although these markets seem to demand different goods and services and by most accounts, the Study Area shopping centers primarily serve the residents; see the Market Analysis section. While in many hospital areas, surrounding land uses synergize with a medical center by providing complementary medical services, in the Kaiser Permanente model these uses are not as viable, and given that Kaiser tends to provide all related-services within the system. The primary synergy with the medical center appears to be in the shopping centers.

However, the Valley corridor land uses do not synergize with each other as much. Rather, uses share a common need for Valley's proximity to the freeway and access to the broader region (trucking, lodging, auto service such as gas stations) and large lots (the various low intensity land uses like storage, equipment rentals and the swap meet). While synergy exists among trucking-related uses to the west, here trucking is one use among many that seeks the same inexpensive land with good freeway access.

North of San Bernardino Avenue along Sierra Avenue has the potential to house land uses that synergize with Westech College. Looking further afield, it is possible to see synergy between the land use mix Downtown of employment, high-density residences, shopping, civic amenities and transportation hub and the land use mix in the Study Area part of the Sierra corridor if the levels of multi-modal transportation were better. For example, one interviewee stated that senior residents desire to go to the library and senior center Downtown but the bus transportation is not good enough.

Land use synergy is important in helping to make the area more walkable and to create a sense of place, as well as to generally increase economic vitality in the area. Groupings of destinations that complement one another also help make transit trips more feasible.

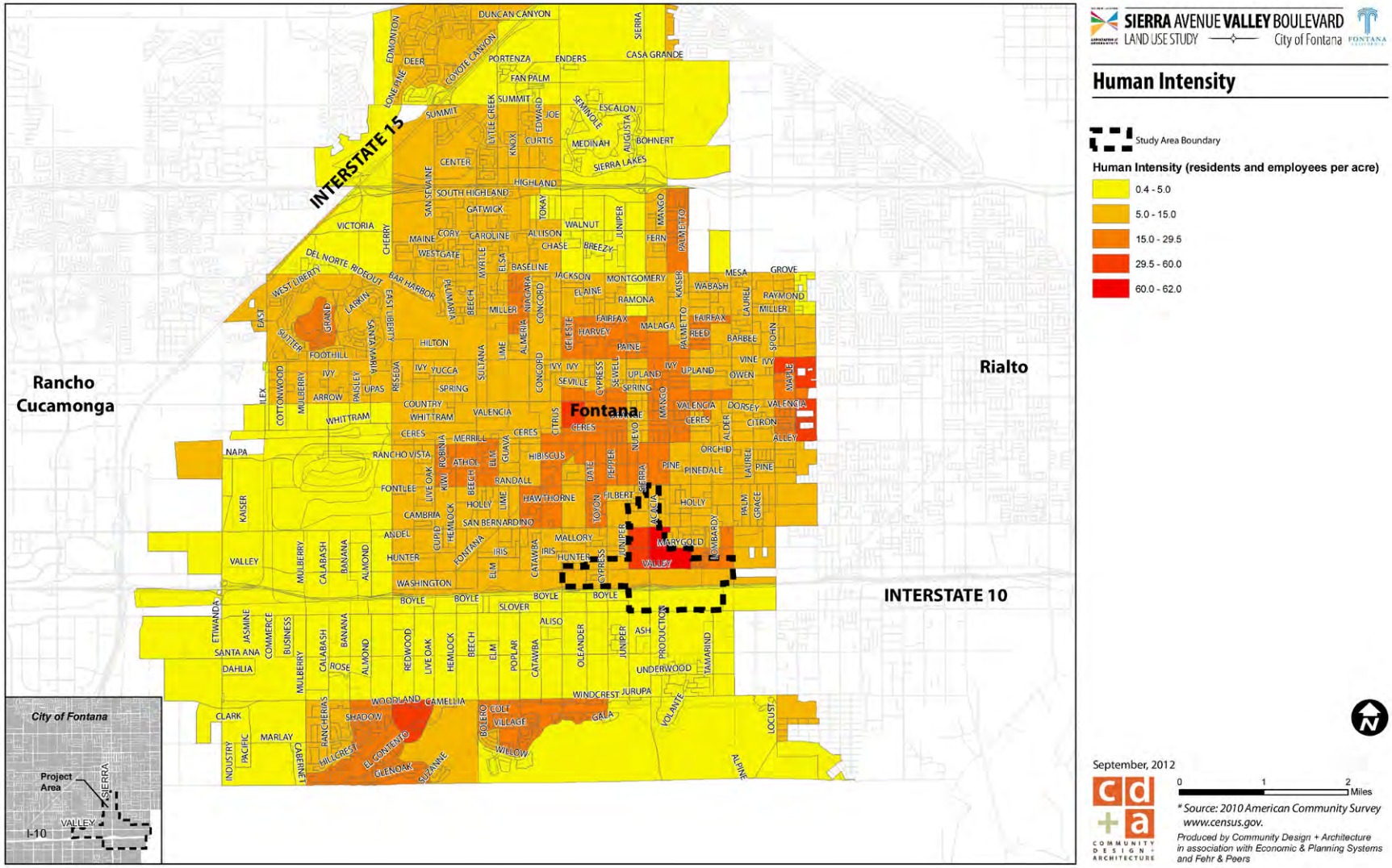


Figure 2-26: Human Intensity

Employee-resident ratio

Resident-employee ratio is the ratio of employees to residents in a place that can be used to understand the distribution of activity throughout the day and the week. For this study, an employee-resident ratio of 0 is equal number of residents and workers; an employee-resident ratio of 10 is 100% employees; an employee-resident ratio of -10 is 100% residents.

In addition to being intense, the land uses in the Study Area are also mixed to the degree that there are a relatively equal number of employees and residents in much of the area. See Figure 2-27.This means that there is the chance for there to be local activity throughout the week and the day. One of the central block groups, north of Valley and west of Sierra, shows an almost even mix of employees and residents (-2), similar to that achieved in Downtown Fontana (-1). The block group north of Valley and east of Sierra, shows the infusion of thousands of employees by the Kaiser campus (8). The map shows that in Fontana, this presence of employees is rare, with most block groups tending toward residents or an even ratio.

Employee-resident ratio is distinct from the concept of jobs-housing balance which is often sought to minimize commute distances and increase livability within a region, sub-region, or city. In this part of Fontana, with the Kaiser Permanente campus drawing employees from throughout Southern California, it is unclear whether there is the potential for this to happen. However, the study's survey of Kaiser Permanente employees does indicate a relatively high level of interest of Kaiser employees in living within the area surrounding the hospital. Meanwhile, the current ratio of residents and employees in the area serves to activate the area around the clock.

In addition to residents and employees, there are other types of users that further enrich the activity in the Study Area, such as customers, hospital visitors, and hospital patients.

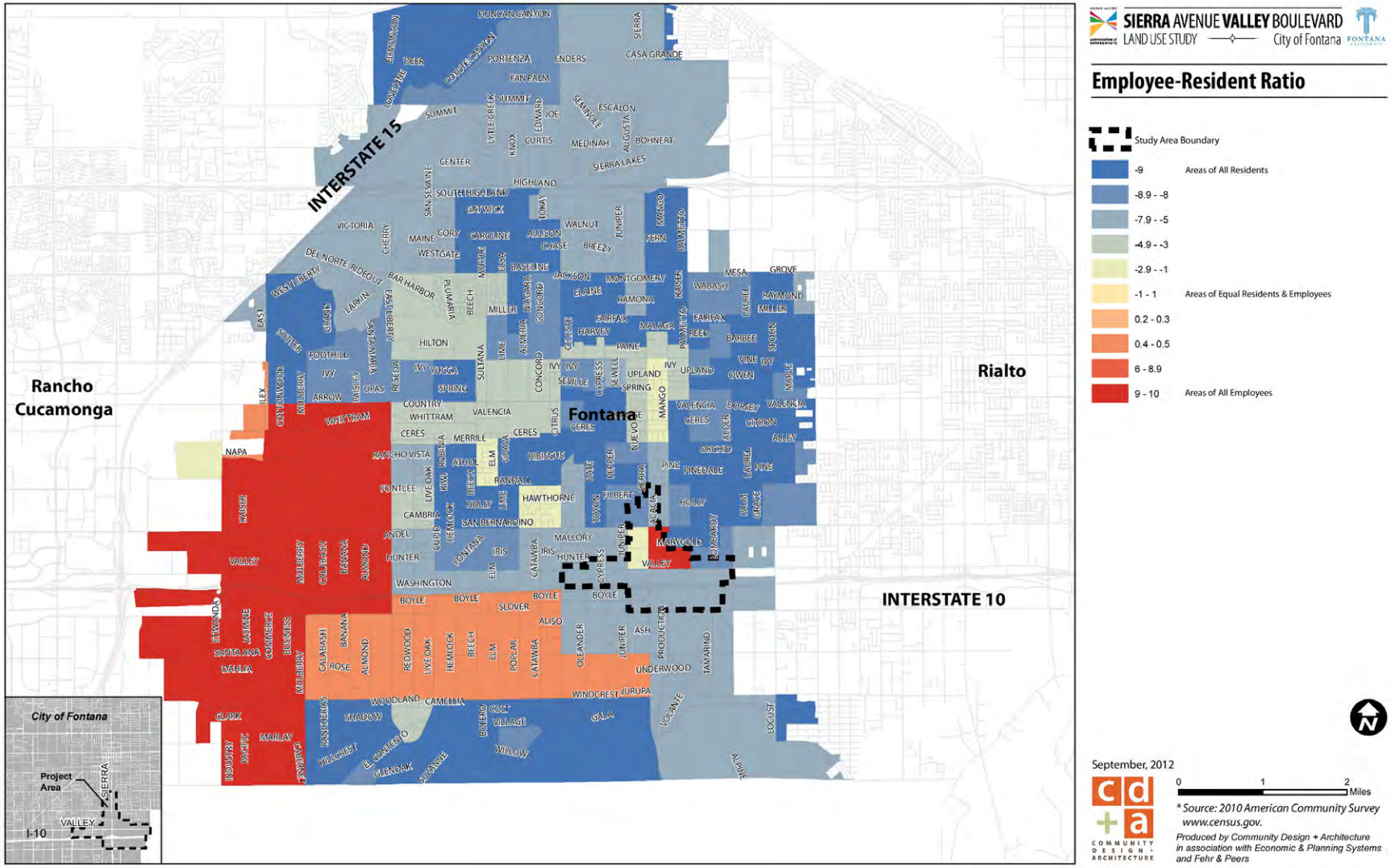


Figure 2-27: Employee-Resident Ratio

Local and regional-serving uses

The Sierra corridor is largely defined by uses that serve neighborhood and citywide residents such as the shopping centers and smaller auto parts and services businesses. The Valley corridor, meanwhile, is defined by a mix of uses that appeal more region-wide, including trucking, storage, equipment rentals, and larger Auto Parts and Services. The exceptions to this are the Kaiser Permanente campus and the future Westech College, which are clearly regional draws, but more concentrated and human-intense regional draws than the less intense uses that tend to locate on Valley.

People- and auto-oriented uses

Because of the factors described above, the land use mix of the Sierra corridor, especially between Valley and San Bernardino, has a much higher potential for walking than the mix along Valley Boulevard. Land uses in the Study Area fall into three categories: Inherently auto-oriented, Inherently people-oriented, and Residential with the later two categories having more potential to support pedestrian activity.

Some dominant uses are inherently auto-oriented. In the Study Area, these include trucking, and low-intensity land uses (especially those based on vehicle storage or vehicle hauling).Some dominant uses are inherently people-oriented. In the Study Area, these include Kaiser Permanente Fontana Medical Center, the shopping centers and lodging. Residential is its own category, because it is where people reside, not a destination, and it is the most people-oriented land use.

The map in Figure 2-28 shows clusters of green, yellow and red. The clusters of green are the most people-oriented places, the origins of people on a daily basis. These areas should not be interspersed to an overly high degree with red areas, inherently vehicle-oriented places. They should be interspersed with yellow areas, which are destinations that are where people go to serve their needs. In the Study Area, the former occurs in a few places along the Valley corridor, while the latter condition occurs in the Sierra corridor north of Valley Boulevard.

What this means is that some areas of the Study Area have land uses that cannot really be made walkable or good places because they inherently serve vehicles, not people. In these areas, a vehicle must be the primary part of the equation. In other areas, though, because of the inherent qualities of the land use, there is the potential for walkability and place creation. Although, given the current dispersion of people-oriented uses throughout much of the Study Area, a minimum of pedestrian accommodation and safety should be provided throughout the Study Area.

Where is it headed?

Both the Valley and Sierra corridors have land uses that appear to be stable into the future and land uses that appear to be transitioning in or out. On Sierra, both the residential and shopping centers appear to be stable land uses, although the centers are aging. However, the north end of the Sierra corridor, between San Bernardino and Randall, is more in flux with the vacant sites and the coming of Westech.

On Valley, the supply of vacant land and the miscellaneous nature of land use make it difficult to see a direction. Trucking is a major opportunity for Fontana, however the parcels on Valley are small and oddly shaped, and the larger cluster of truckling uses is further to the west. However many of the individual land uses such as the swap meet appear to be stable, with the land owner discussing further investment in this and supportive uses into the future, and in this way the miscellaneous mix of uses along Valley will likely continue.

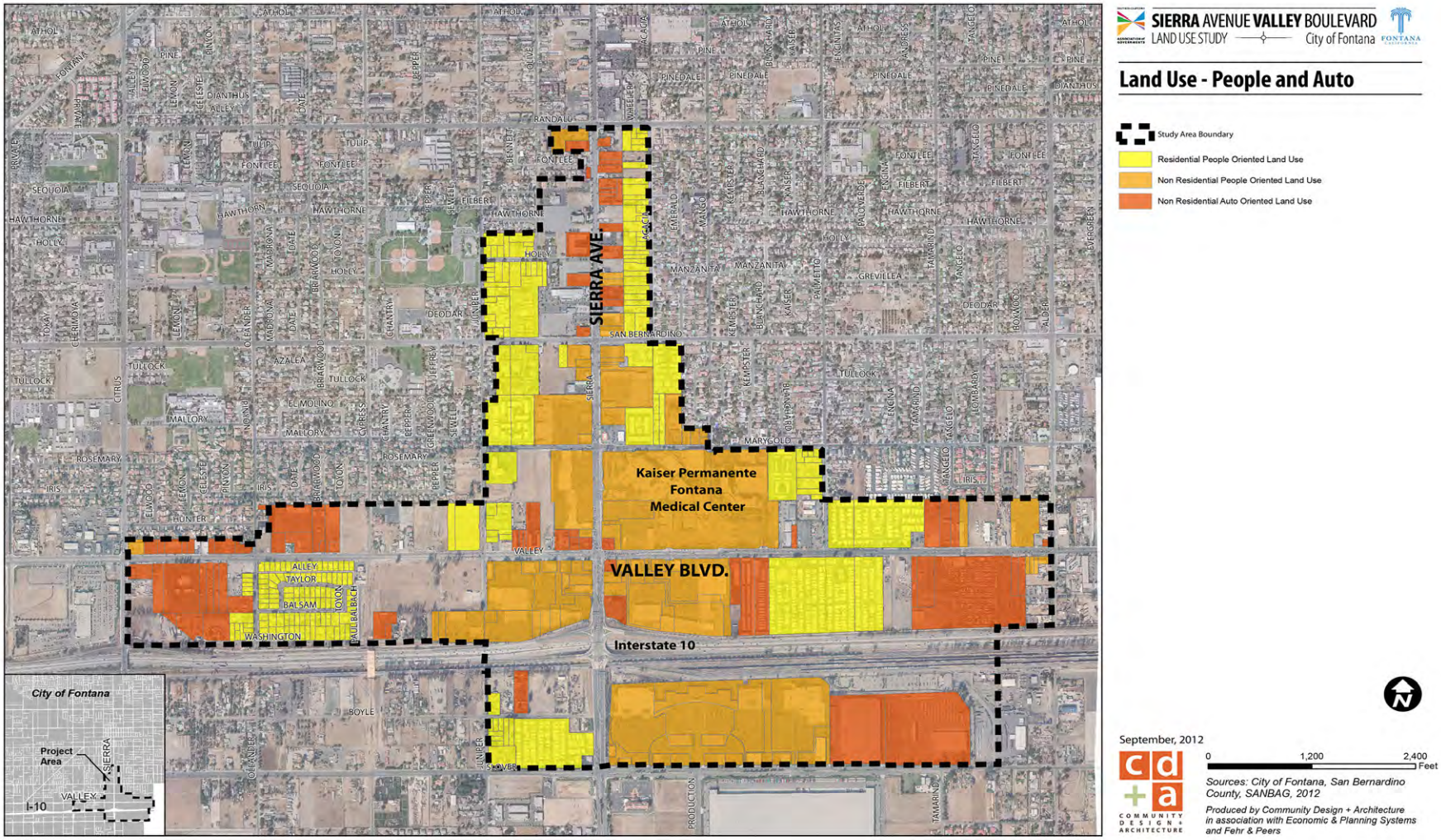


Figure 2-28: People- and Auto-oriented Uses

Urban Form

While many of the inherent qualities of the land uses in the Study Area could help achieve the study goals, the form in which they have been manifested presents major challenges.

Auto-Oriented

The urban form of the Study Area is auto-oriented. The majority of the buildings developed within it were built after World War II. The key land uses identified above oriented their form to autos in different ways, but all are oriented to autos in a dominant way. The most important aspect of the shopping centers built along Sierra Avenue was plentiful, convenient and visible parking. With residents arriving in a car to multifamily residential projects and employees, patients and visitors arriving in cars to the Kaiser Permanente medical campus, it made sense to design these large land uses with parking surrounding inward-focused "campus" environments. For other land uses, the nature of the land use was already focused on vehicles: Valley became a trucking service corridor with large lots for vehicle or equipment rental and Sierra north of San Bernardino became an agglomeration of auto parts and services businesses.

Figure 2-29: Example of Auto-oriented Land Uses

Large blocks

The blocks in the Study Area are generally very large. The Study Area is part of an overall grid pattern that creates blocks a quarter-mile square. In the generally single family residential areas surrounding the Study Area, these quarter mile blocks are cut up by smaller streets, often cul-de-sacs. However, in the Study Area, along the Sierra and Valley corridors, the quarter mile blocks are left whole. In some places, blocks are longer than a quarter mile; the Kaiser Permanente campus south of Valley Boulevard east of Sierra the block structure disappears almost completely.

A quarter-mile block structure is much more massive than other city grids, including Downtown Fontana. For example, almost nine Downtown Fontana city blocks can fit within one of the Study Area's blocks.

The large blocks have several effects. While they provide for large development sites, they also reduce the potential walking routes to a destination, potentially making it longer to walk and dependent on privately controlled circulation. They can also force people walking onto a few highly trafficked streets.

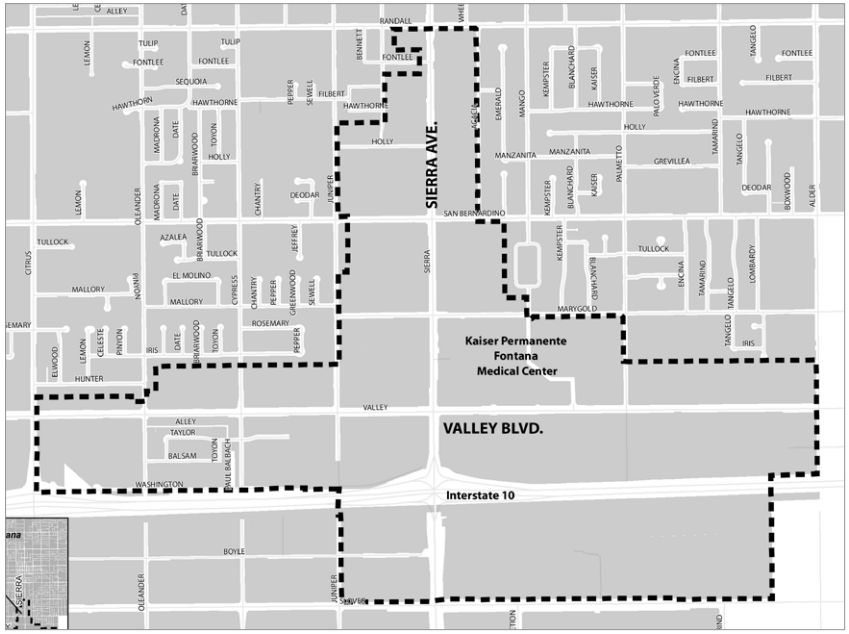


Figure 2-30: Blocks

Coarse land uses

Similarly, the land uses in most of the Study Area are large chunks of similar or singular uses within these large blocks. While the Sierra corridor has a mix of uses, the uses mix coarsely.

The Study Area is full of land uses occupying over 10 acres (about a quarter of one of the quarter mile blocks, and several blocks in most city grids): the Kaiser Permanente campus; four of the shopping centers; the Bel-Air swap meet; the Weyerhaeuser facility. See Figure 2-31. Several of the other shopping centers and multifamily residential developments are five acres or larger, which would take up almost two Downtown Fontana's three-acre blocks.

One exception to this is the northern part of the Sierra corridor between Randall and San Bernardino, where land uses are more fine-grained, although still not as fine-grained as Downtown Fontana.

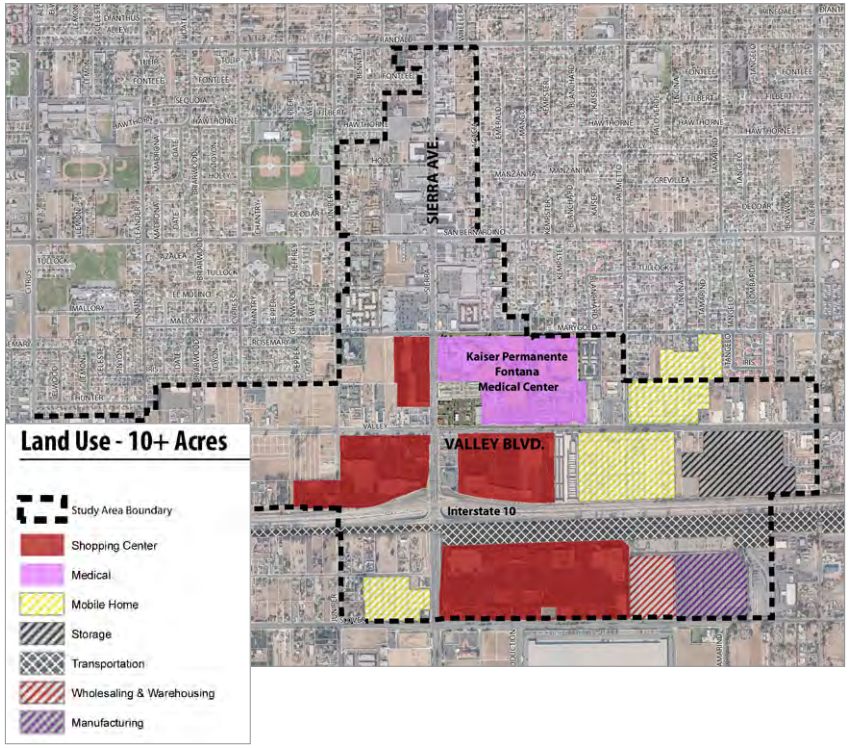


Figure 2-31: Study Area Land Uses Occupying Over 10 Acres

Horizontal with some exceptions

Largely due to the auto orientation, buildings in the Study Area are largely horizontal. Almost all buildings are only one story. With the exceptions being multifamily residential buildings (up to 3 stories), and the few tall buildings in the Study Area: The Kaiser hospital is up to 7 stories tall; the Dino Papavero senior center is 7 stories tall.

Lack of street definition by buildings

The lack of height and the auto orientation combine to create an environment where buildings do not define the public space of the street corridors. Figure 2-32 shows how, especially on the major street corridors, the footprints of buildings do not define spaces especially when the space between buildings is occupied by vehicle circulation and parking.

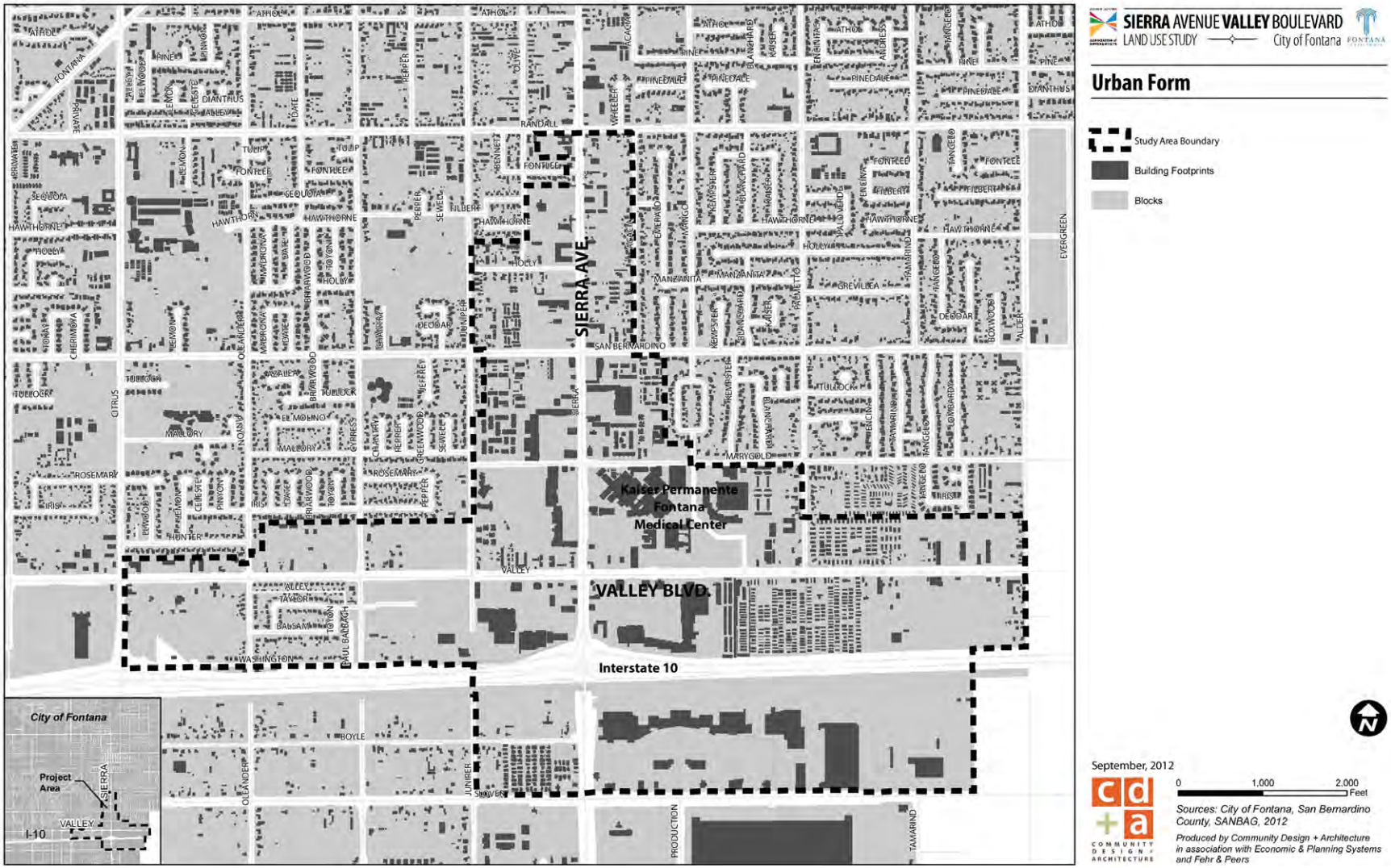


Figure 2-32: Study Area Building Footprints

The effect of buildings not being located against the street is a lack of defining the street as a place, and perpetuating the street's lack of pedestrian orientation. Figure 2-33 shows this effect.

Conversely, in the limited locations in the Study Area where buildings are located against the street, the street feels more like a comfortable place. In Figure 2-34, the combination of trees and buildings frame a relatively human-scaled comfortable space in the street. Even along Marygold Avenue east of Sierra Avenue, with the walls and fences and lack of pedestrian entries, the presence of buildings along the street defines it as a public space.

Some locations on the north end of Sierra have street-fronting buildings that appear to be the last vestiges of a Main Street district here. In this same area, the Civic Auditorium building that will be demolished to become the Westech campus also provides a presence on the street.

Figure 2-33: On most sites in the Study Area, buildings do not front the street and have parking lots in front

Figure 2-34: Where buildings do abut the sidewalk, the street has a more comfortable character

Figure 2-35: Some older buildings on the north end of Sierra front the street in a way that supports the pedestrian

Excessive auto access and limited pedestrian access to land uses

The nature of access also defines the urban form of a place. Access determines how a person accesses a land use and in doing so determines the patterns of travel that shape the character of the place.

The main distinction in type of access is access by auto and access by pedestrian, and can range from domination by autos or pedestrians to a more balanced accessibility for both pedestrians and autos. Figures 2-36 and 2-37 shows the breakdown of access points from major public streets to land uses between auto and pedestrian. The pedestrian site entries are broken down into two categories.

Direct pedestrian site entries are where there is a walkway that creates a direct visual and design connection between the sidewalk and a building entry, even if the building is set back. Indirect pedestrian site entries are where there is a walkway into the site, but no direct visual connection or a weaker design connection to the building entrances.

The map shows that by in large auto access points dominate the Study Area. In many stretches of the major streets there are no pedestrian access points – people on foot must use the auto access points. Even in the coarse, 10-acre plus land uses, there are many auto access points.

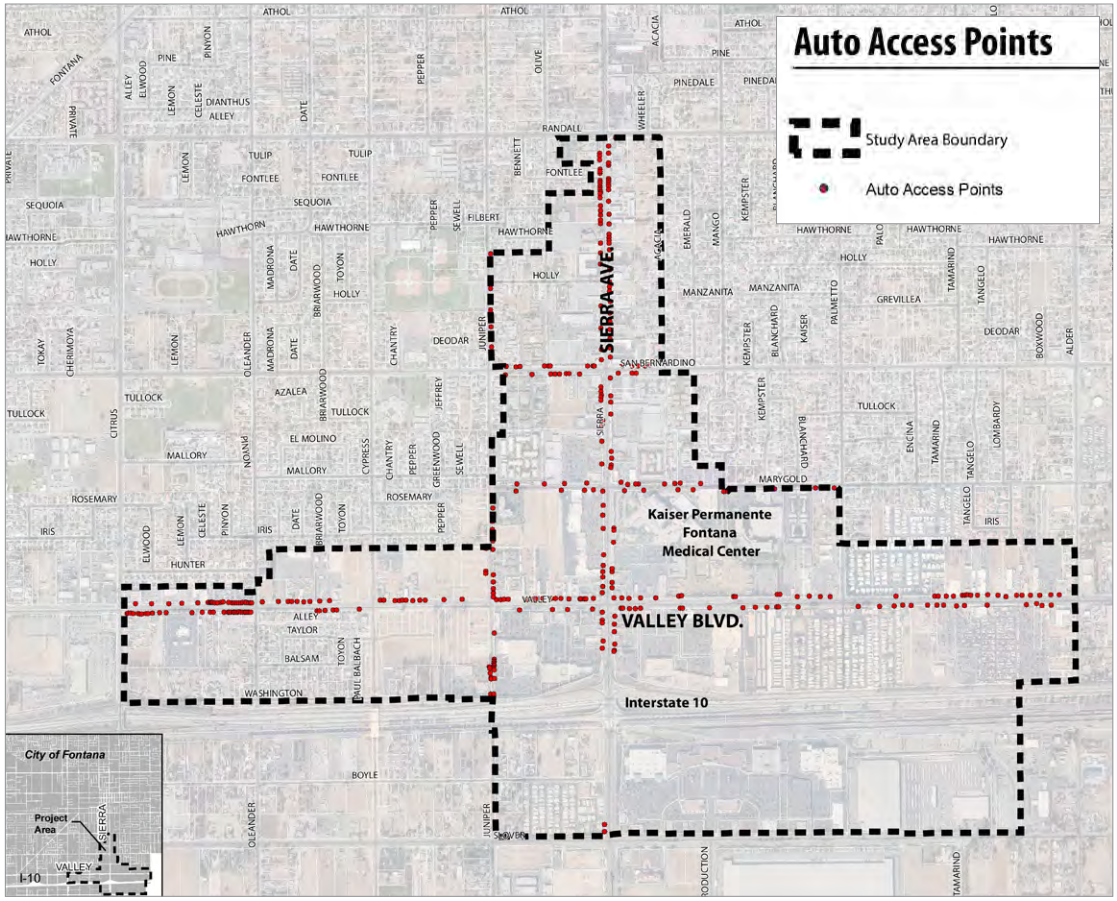


Figure 2-36: Study Area Auro Access Points

Figure 2-37 also shows how many more pedestrian entries there are along Sierra Avenue than along Valley Boulevard. However, most of those entries are indirect pedestrian entries, and so lack a direct relationship between the building entry and the sidewalk.

North of San Bernardino Avenue, there are more direct pedestrian entries, due largely to older "Main Street" type street-fronting buildings scattered along Sierra Avenue. However, these entries are overwhelmed by the large amount of auto entries into these and surrounding properties.

In general, Figure 2-37 shows that the Kaiser Permanente campus has poor, infrequent pedestrian access. All pedestrian entries into the campus are indirect. There is also a lack of lining up entries into the Kaiser campus, crossings of major streets, and entries to sites across major streets. For example, there is a pedestrian entrance to the Kaiser campus on Sierra Avenue between Valley and Marygold, and a crosswalk at the entry, but no pedestrian entry on the other side into the shopping center.

There are places in the Study Area where major land uses have good direct pedestrian entries that are unimpeded by vehicle entries, such as the old Steelworkers Auditorium on Sierra Avenue (see Figure 2-35).

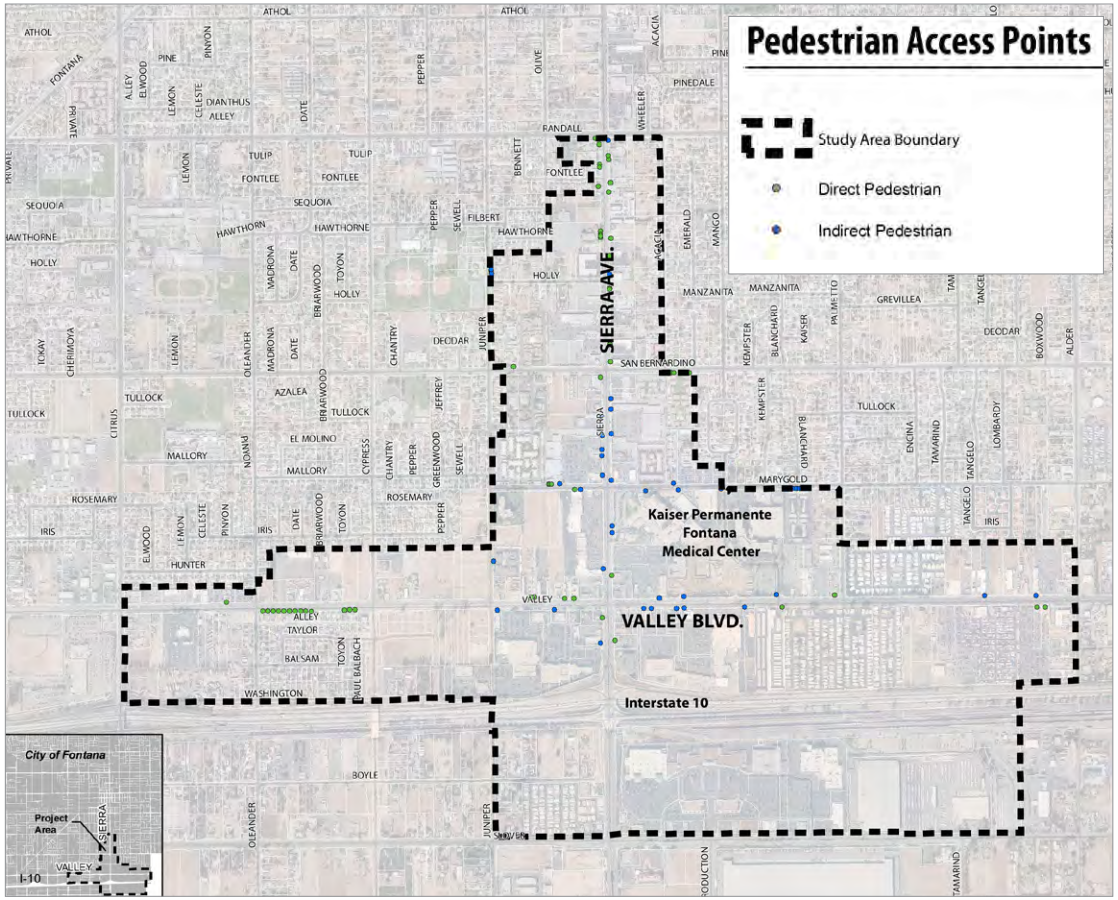


Figure 2-37: Study Area Pedestrian Access Points

Internal orientation

Related to the lack of entries, large blocks, and coarseness of land use is the issue of internal orientation. While many of the commercial land uses have excessive auto access points, other land uses such as multifamily residential have a lack of any access points because they are oriented inward and are largely surrounded by walls and berms. As mentioned above, the internal orientation and lack of access points define the Kaiser Permanente campus from the surrounding public streets with the internal private streets and pedestrian pathways providing indirect access to public sidewalks and destinations in the surrounding area. The campus is largely surrounded by parking lots, walls, and landscaping.

Street trees

Perhaps the only potential strength of the Sierra corridor from an urban form perspective is the trees that line portions of the street north of Marygold Avenue. Figure 2-38 shows the distribution of street trees in the Study Area. Street trees from an urban form perspective help define the public space of the street. While for the most part, buildings do not do this in the Study Area, the existing trees are an asset that will help to mitigate this problem as they grow, and if they can be enhanced with the planting of additional trees. These trees also provide the critical pedestrian amenity of shade: the study's survey of Kaiser members and employees concluded that shade was among the top factors that would encourage more walking in the area. 44% of those surveyed said they would make more walking trips to nearby eating and shopping amenities if there were more shade.

Figure 2-39: Frequent street trees help create a comfortable walking environment on some parts of Sierra Avenue

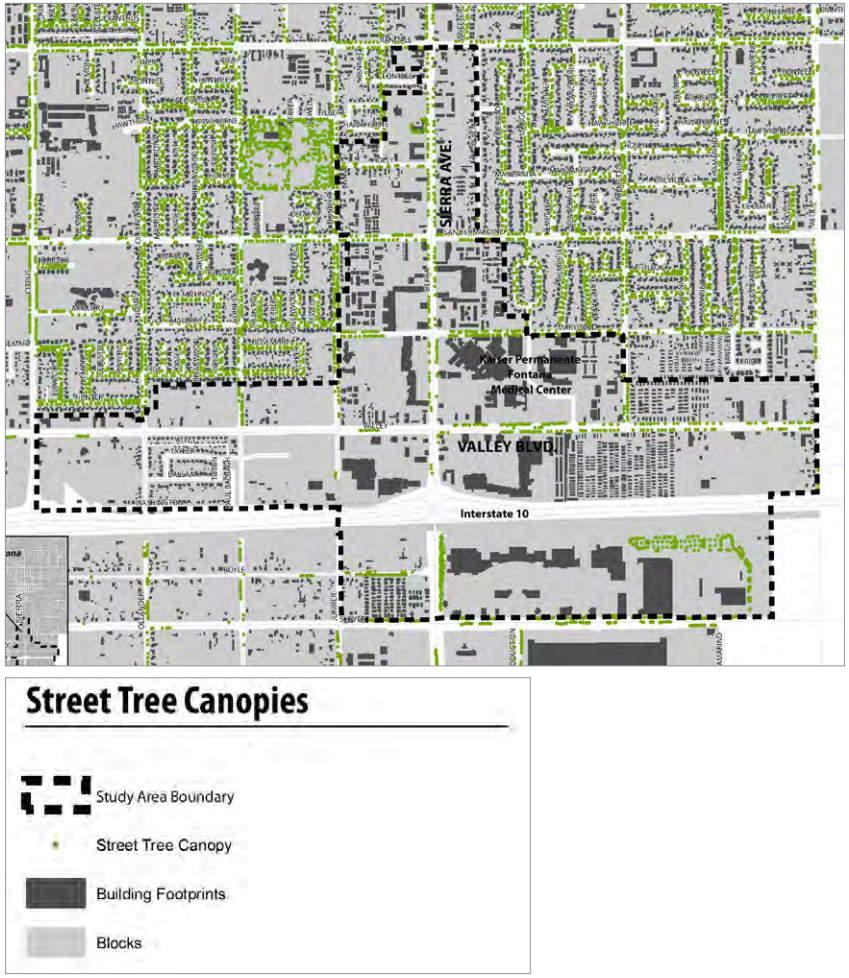


Figure 2-38: Street Trees in the Study Area

Median project

Another positive aspect of the Study Area's urban form is the medians with monuments and plantings recently constructed on Sierra Avenue. These add architecture to the street, provide a gateway element, provide some greening, and reduce the scale of Sierra Ave.

Lack of streetscape amenities

Other than the street trees, the medians just discussed, and transit shelters, there are few streetscape amenities in the Study Area. The amenities that are lacking include bike racks, trash cans, pedestrian-scale lighting, seating, special paving, and understory landscape.

"Locked up" intensity

The result of many aspects of the urban form working together is to "lock up" the intensity documented in the Land Use section either behind walls, behind parking lots, or in other ways organized with the result being that activity is internalized within sites or campuses. Achieving many of the goals in this study will mean "unlocking" this intensity.

Quality of Life and Place

Beyond the land uses and the form they take, some other factors and issues affect the sense of place and quality of life in the Study Area. These affect how the place feels to residents and visitors and their impression of it, acting as either drawing factors or barriers to improving the area.

Gateway to Fontana

Because of the importance of Sierra Avenue to many parts of Fontana and the presence of Kaiser Permanente, major shopping centers, and other nearby land uses, the Sierra Avenue exit has the potential to be a gateway to Fontana. But neither the City nor Kaiser Permanente appears to be satisfied with the degree to which the Sierra-Valley-I-10 area provides a gateway to Fontana and the Kaiser Permanente campus.

Aspects of this gateway include the appearance of the properties on either side of the Interstate 10 freeway, the experience of the motorist exiting the freeway and entering Fontana, and the appearance of Fontana once on Sierra Avenue, especially in the northern direction. Each of these is problematic. Many properties along I-10 "back" onto the freeway, the experience of exiting the freeway is often dominated by congested traffic (though the new interchange seems to have helped) and when the motorist drives on Sierra Avenue, there is no sense of the unique history or land uses in the area.

However, considering that many of the goals of this study emphasize other transportation modes, it is important that this concept of a gateway to Fontana not only include the experience of motorists entering the city here, but also how bus riders enter through the bus stops and bus transfer center, as well as people that could be connecting from the Metrolink Station on a bike, bus, or on foot.

Lacking a sense of place

A key related issue to the gateway issue is the lack of a sense of place. Often the best kind of gateway is an authentic, vital, attractive place. In interviews, many people were unable to come up with a "place" that they liked in the Study Area. The place qualities of the Sierra-Valley area are hindered by excessive auto orientation and lack of support for pedestrians. The positive aspects of the land uses – synergy, intensity, a balance of employment, commercial, and residential uses – do not create sense of place because of the aspects of urban form above, including auto orientation, lack of building orientation to the street, as well as larger socioeconomic forces.

The Kaiser Permanente campus is a microcosm of this shortcoming. Despite the activity and history of the campus it lends almost no positive place qualities to the public realm of the Sierra-Valley area because of its inward orientation and auto orientation.

Lack of public space

Also underlying the lack of a sense of place in the Study Area is a lack of public open space, whether recreational parks or urban plazas. Quite simply, in one of the most intense and mixed-use area of Fontana, there is no quality public space.

While there is one nearby park to the Study Area, Jack Bulik Park at Holly Drive and Juniper Avenue, and Cypress Elementary School on San Bernardino Avenue has a controlled access field, there is no open space in the most intense part of the Study Area, along Sierra Avenue near Valley Boulevard. The most basic public space, the public streets, provide generally poor public space because of the emphasis on autos and the inconsistent design of the pedestrian areas within the public right of way.

Stakeholders in the area have expressed a desire for open space. Residents on the east side of Sierra Avenue expressed a strong desire for park space. From the perspective of Kaiser Permanente's employees and visitors, there appears to be a demand for public open space beyond the semi-public walks, plazas, and green areas that exist on the Kaiser campus. Interviews with Kaiser employees and patient representatives expressed a desire both for places to exercise during work and places for children to play.

Meanwhile, public space is an important complementary use for the activity of the Kaiser campus, as well as for many other land uses in the area. Like the retail, it helps to create synergy. The lack of public space prevents the many different groups of users of the area from having common points of overlap and interaction, beyond when they are behind the wheel of a car or walking across a street.

Views

The Sierra-Valley area is surrounded by views of mountain ranges. The most imposing view is that to the north and the San Gabriel Mountains, including 10,068-foot Mount San Antonio. To the south are the Jurupa Hills. Incorporating these views could be a key part of placemaking in the area.

Crime

The perception and realities of crime in the Sierra-Valley area are another factor of how people experience the area. Anecdotally, the area is known for a certain level of nuisance and danger as a part of Central Fontana.

Crime statistics somewhat support this. A mapping of crimes reported from March to September 2012 showed that for more violent crimes such as robbery and assault, the Sierra-Valley area was one of many concentrations of incidents in Fontana. Taking robbery specifically, since the fear of robbery can convince people to stay away from an area or not walk on the streets, the Study Area had 17 reported robberies in that six-month time frame. Eight of those incidents were on Sierra between Marygold and San Bernardino.

Generally with robberies, there were many fewer robberies north of Baseline Avenue and many more in the San Bernardino area.

The Sierra-Valley area also had one of the greatest concentrations of sex crimes in the City of Fontana for the six month period. This was largely due to two areas with motels – the 16700 block of Valley (Juniper to Sierra) and the 10100 block of Sierra (I-10 to Sierra). Five incidents were reported for one location on the 167 block of Valley, three for the 10100 block of Sierra.

Other nonviolent crimes such as vandalism and burglary were more evenly distributed across the city.

Existing Land Use, Urban Form, and Quality of Life Analysis

This analysis evaluates how land use and urban form in the Study Area according to how it meets each project goal.

Reduce traffic congestion at Sierra/Valley intersection

The intense, diverse mix of land uses within the Study Area and the citywide and regional use of Sierra and Valley result in the large volumes of traffic and congestion in the Sierra-Valley area. The auto-dominated urban form in the area exacerbates the resulting negative environment for pedestrians and the general lack of a positive identity for the area. With the majority of Study Area trips in vehicles, the most intense part of the City of Fontana has its greatest congestion. The variety of land uses – Kaiser Permanente, trucking, shopping centers, residences, and on some days, the Bel-Air Swap Meet – generates many potentially conflicting traffic flows that need to use the same space.

Aspects of the urban form add to this conflict and restricted space, including the size of the blocks, the poor pedestrian environment along the streets, and the amount of curb cuts for auto access that all reduce the ability and desire for people to make trips on foot

However, the land use mix presents the opportunity to capitalize on the synergy among land uses described above and reduce the short trips taken by car by converting them to walking or bicycling, as well as to support the use of transit for longer trips to and from the Study Area.

More intensity here could add more congestion. Without better multimodal transportation infrastructure, new development would depend on the auto network and would likely exacerbate the congestion. See the next section for analysis of how much more intensity is allowed here versus what is here now and how that could influence congestion.

One additional observation is that the congestion actually appears to encourage walking. Kaiser Permanente employees, faced with stiff congestion when going on eating or shopping trips in the middle of the day, often appear to elect to walk in spite of the barriers that have been discussed in this report.

Maximize walkability between land uses

The largest implication for walkability presented by Study Area land use is the nature of the land uses themselves. The intensity puts a lot of people in the area who are potential pedestrians; the synergy created by having residential, retail, employment, and institutional land uses in close proximity creates the raw potential for a good walking environment.

This is most true on the Sierra corridor, while the Valley corridor has little potential for walkability – the very nature of its land uses are not based on people. Still an infrastructure that allows walking is needed on Valley, particularly in proximity to the homes that are there and that are under construction there.

Meanwhile, everything about the urban form of these land uses challenges walkability, including the auto-orientation of site design with parking lots between buildings and the street, large blocks, coarse land uses, horizontality, lack of street definition by buildings, internal orientation of residential and medical land uses, and excessive auto access and limited, or convoluted, pedestrian access to land uses.

In addition, there is no sense of place and identity here. The Study Area's public spaces are not places people enjoy being in. There are several factors that contribute to this, including the urban form mentioned above, but also the realities and perceptions of crime in the area and the socioeconomic status of the area, as well as the lack of identity as a place in Fontana and the Inland Empire – this will be discussed more in the next section. There is a lot of activity here, but people appear to want to move along instead of stopping to enjoy being in a place. The only exceptions to this seem to be internally, such as in the Kaiser campus or in some of the local restaurants.

The challenge in the core of the Study Area is to take the activity here and the inherently walkable land use mix in the Study Area and convert the form and transportation improvement into something that is comfortable and safe for walking. This could happen with small improvements at first which could set the stage for larger improvements.

North of San Bernardino, there are different opportunities for increasing walkability. In general, the area lends itself better to a "Main Street" type environment due to a pattern of finer-grained land uses and the way some

buildings face onto the street, apparently remnants of the tail end of the pre-auto era, similar to Fontana's Downtown. However, there isn't as much intensity in this part of the Study Area, although Westech College will add some intensity.

Anticipate future mass transit opportunities

The relative intensity found in the Study Area also provides the concentrations of people needed to support transit and coincides with high numbers of boardings and alightings for Omnitrans buses.

The amount of activity also points toward the need for a better connection to Downtown and the Metrolink station, and the addition of major potential transit trip generating land uses like Westech start to point toward the potential of a more transit-supportive corridor along Sierra between I-10 and Downtown Fontana. Anecdotally and demographically, there appears to be demand for easier transportation between the land uses on either end of this 2-mile corridor.

Like with the walkability goal, the Study Area is challenged in creating a good environment for transit riders. A good transit environment is a good pedestrian environment, so the same urban form and transportation facilities problems for pedestrians in the Study Area challenge transit. Likewise, a good transit environment will help achieve other goals of this study connected to walking, placemaking, and potentially improve regional access to the area and support economic vitality.

Identify land uses synergistic with Kaiser Permanente

The Kaiser Permanente campus is the center of the Study Area's activity and has the potential to provide substantial support in achieving many of this study's goals. Its intensity, complexity, diversity creates what could be called an "employment center plus" – what amounts from a land use perspective to an employment center with a 24-hour day instead of an 8-hour one and a high degree of scheduled and unscheduled visitors. This results in over 5,000 employees and about 450 inpatients on average, spending time at the campus every day. The richness of this land use provides the potential for a variety of surrounding complementary land uses.

In the Study Area, some land uses are of a type that tends to synergize with and complement a medical campus and many do not. The land use types that do synergize with the Kaiser campus' "employment center plus" are the shopping centers with eating and shopping amenities that are across the street on almost every edge of the medical campus; and a series of satellite and complementary institutions that align along the Sierra corridor but that are beyond a comfortable walking distance: the Kaiser Permanente call center in Palm Court and the planned Westech College. Beyond these and the scattered motels and food establishments, however, few of the land use types in the area synergize with the medical campus. Apart from some dentistry, very few related medical land uses are present in the area – likely due to Kaiser Permanente's structure of providing most medical services to patients "in-house".

For the most part, the current lack of synergy is not a problem of land use, but of urban form and economics. Urban form isn't well suited to connect Kaiser employees and visitors to surrounding shopping centers. The market section of this report speaks more to what the match is between the Kaiser employees and visitors and the services currently offered, as well as the potential for different types of uses around the Kaiser campus.

The opportunity in the meantime, from an urban design and placemaking perspective, is to do things that increase the synergy between land uses already in the Study Area: to improve the walking environment for the uses immediately surrounding the medical campus and improving the multimodal transportation along Sierra Avenue.

Identify opportunities for new housing

The Study Area contains a variety of housing types, including single and multifamily market rate housing, mobile home parks, senior housing, and affordable housing. The single family and multifamily housing is primarily several decades old; the only new housing in the area is the affordable housing in the Paseo Verde project and the new senior housing. These are all clustered near each other.

Residential land uses are compatible and synergistic with many of the commercial uses on Sierra Avenue; many of these businesses serve the neighborhood. Many of the vacant or underutilized sites in the Study Area are in places close to both existing housing and these commercial uses. If the City desires to put more housing where density already exists, this location makes sense.

Kaiser Permanente does not feel that residential uses are synergistic with their campus in that housing and hospitals are two 24-hour uses that are not always compatible, and that it is not likely that more housing will be attractive to its employees. However, residential areas already hug the campus from the east and

north, and few or no vacant or underutilized sites are immediately adjacent to the campus. And, the study's survey of Kaiser employees showed a relatively high interest in housing near the campus. In response to the question "Would you be interested in living within walking distance of the Kaiser Permanente campus if the right type of housing was available?", 52 percent of respondents answered "Yes."

If designed in a pedestrian-supportive way, new housing could help remedy the area's urban form problems by creating active, inviting frontages.

As a land use, more housing would help achieve a many other study goals, especially walkability and transit, a sense of place, and support for additional commercial investment, although adding more housing could likely increase congestion if multi-modal options are not increased in the area.

So, from a land use perspective, more housing in this area would largely be compatible with existing land uses, especially along the amenity-rich Sierra corridor. The market section discusses this in more depth.

Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

One of the most important aspects of the Study Area is its lack of a sense of place. While there are some citywide and regionally unique land uses here, the overall feel of the area is not unique in any way. However, from a land use perspective this area is very unique: it is the most intense and busiest area of the city, has the city's largest employer, an interesting history, and has a diverse and rich mix of uses and people. And yet none of this richness and uniqueness is expressed.

The need for a sense of place is increased by the area's position as an important gateway for Fontana and for Kaiser Permanente. Neither the City nor Kaiser feels that this is currently a good gateway, see discussion on page 22, "Gateway to Fontana".

Like with other goals, the land uses here provide the raw material for good places but the auto-driven urban form prevents good authentic places from happening.

One of the problems is that the Sierra-Valley area is primarily a gateway for people arriving in cars, yet it is other modes of transportation that must create an authentic sense of place. A place's attraction is created by a visceral appeal to people, so the modes of transportation that occur at a human scale – transit, biking and most of all walking – must create a good place. A good place is also created by the act of voluntary stopping – by focusing solely on mobility, there is nowhere in the Study Area's public realm that people want to stop and be. By having catered exclusively to the scale and movement of auto mobility, the Sierra-Valley area bypassed any sense of place for the area.

There may be a tendency to want to make a gateway oriented to the automobile because cars dominate the area so much today. But a gateway should be an authentic place that makes people want to get out of their cars, not simply keep driving. Because one of the problems in the Study Area is that the activity that defines the public realm here is people with different objectives crisscrossing in cars on their way to different destinations, one of the key needs for a gateway and sense of place is a common touchstone for people coming to and passing through the area. This cannot be achieved by only creating a gateway with a visual impact to passing cars.

The land uses here present various opportunities for the creation of memorable and identifiable places: First, the place of the Fontana medical campus within Kaiser's history provides potential to bring out this history in the area's sense of place. Another opportunity is linking the land uses on the Sierra corridor—connecting the Sierra Valley uses with Downtown as Central Fontana's primary urban axis—with shopping, residential, jobs, education and medical services.

There is authentic activity happening here and it is intense, diverse and 24-hour. It just needs to be brought out into public space through better environments for people.

Land Use Policy

General Plan

The Fontana General Plan is the City's blueprint for all future development over the next 20 years. It defines goals and objectives to guide and inform development. Fontana adopted its most recent general plan in 2003. Current and future development, planning and zoning should be consistent with the General Plan's vision for Fontana.

Overview and Vision

The General Plan's Vision consists of six pieces:

- Balanced Land Use;
- Economic Vitality;
- Character and Image;
- Downtown Fontana;
- Community Connectivity and Access; and,
- Our Citizens.

The vision contains the following statements potentially relevant to this study because of its goals and geography (emphasis added):

Balanced Land Use:

- Provide a **broad range of new and infill-housing choices** to meet the needs of our diverse residents at different stages of life and with a wide range of income levels.
- Institutions of **higher education** will be drawn here.

Economic Vitality:

- With a **large amount of undeveloped land** in its incorporated boundaries and sphere of influence, our City has many opportunities for developing its economy.
- The City's existing **industrial and distribution base will be maintained** while the **economy is diversified** by promotion of growth in other job rich sectors.
- The City's **competitive advantage, related to its proximity to rail, air and truck routes** will be promoted and honed to further strengthen its appeal.
- Fontana's **aging commercial corridors** will be **transformed into thriving boulevards providing first-class shopping and dining opportunities for all income levels and retail preferences**, as well **as mixed use development** to avoid a marginal strip commercial pattern.

Our Character and Image:

- Much of **the central core area of Fontana** is made up of decades-old existing development with **enormous redevelopment and infill potential**.
- When residents, workers and visitors enter our City they will know they are in Fontana because our **major entryways are attractive and distinctive**.
- **Views of our City from freeway corridors** will be **attractive and reflect the pride** we have in our City.
- **Views from our City to the San Bernardino Mountains** on the north and to the east, as well as **the Jurupa Hills on the south**, will be **preserved** for generations to come through judicious design of public spaces and private development projects.
- Our community will also be attractive because it is **safe**, and is perceived that way by the public.
- Our development standards and regulations will allow opportunities for creative forms of **development that stimulate a sense of place** here, including selective development that mixes residential, retail, entertainment and office uses.

Downtown Fontana:

- Residents and visitors will have **easy access to our Downtown** from the conveniently located transportation hub that is our Metrolink Station.

Connectivity and Access within our Community:

- Our City's **strategic location within Southern California's transportation system is a major asset.** We are positioned at a gateway into Southern California's economy and the Inland Empire from Interstate 15, and near a gateway to the world via our neighboring Ontario International Airport.
- We can play an important role in **linking to the critical goods movement system known as Alameda Corridor** East given our City's level of rail service.

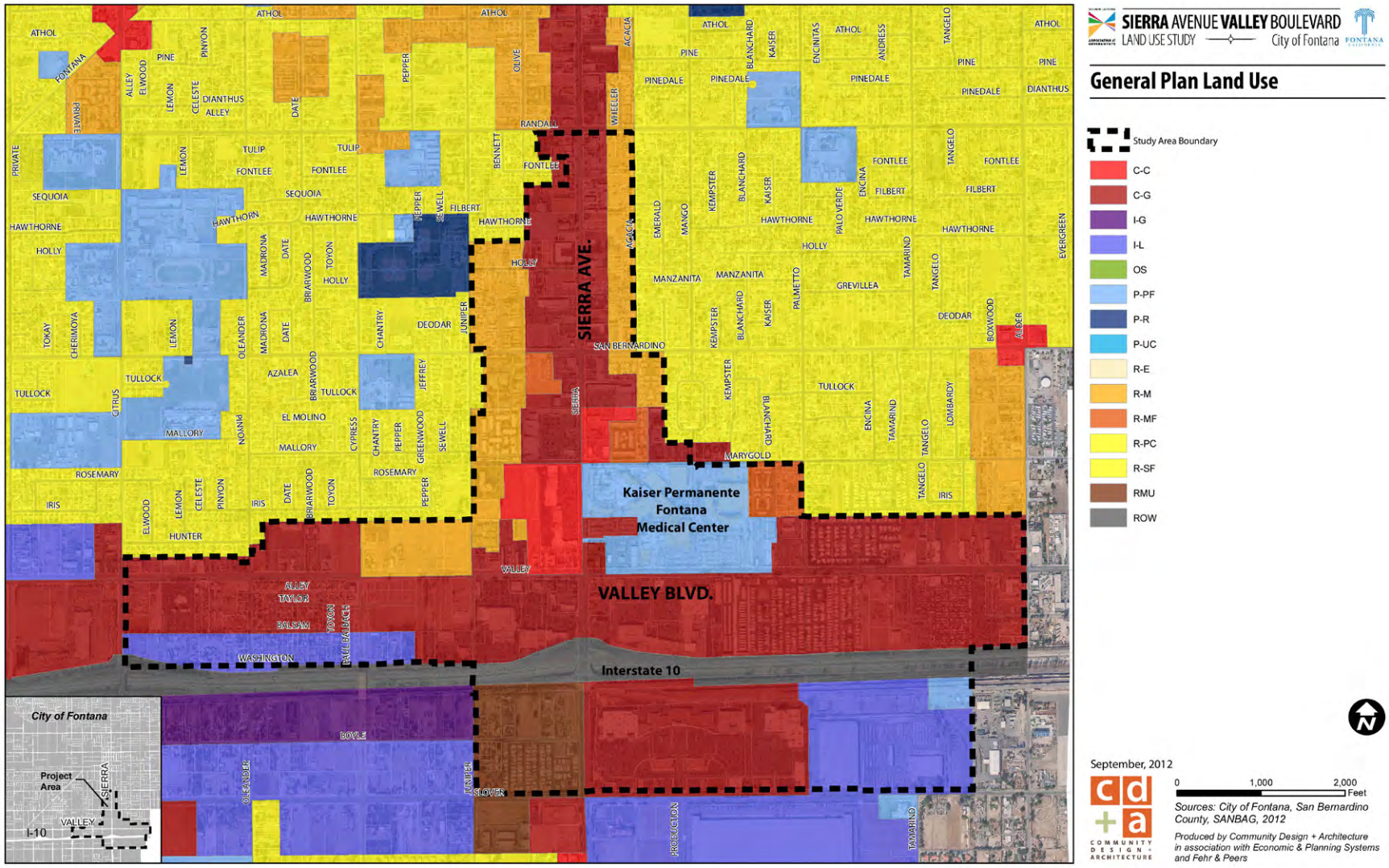


Figure 2-40: General Plan Land Use

- Our challenge is to maintain the connectivity throughout our community while **crossing over our major east-west freeway corridors**.
- **Internal circulation corridors will be enhanced** to take advantage of the City's proximity to major freeway and trucking routes, and mass transit systems, and to expand economic opportunities.
- Access to freeways will be enhanced and necessary facilities will be constructed and widened as required to **promote the free-flow of traffic, especially where heavy truck traffic** is involved.
- Our major road corridors will be attractive and well maintained with **consistent quality landscaping**.
- **Linkages will be created between north and south Fontana** and new developments as the City further develops internally and expands its boundaries.

These goals address many of the issues found throughout the Study Area, including the balance of land uses, community character and image, trucking, regional transportation access, revitalization of older commercial corridors, and infill housing. In doing so, they support many of the goals for this study — this topic is more fully discussed at the end of the General Plan section.

General Plan Land Use Element Policies

These policies in many ways mirror the Vision goals outlined above. Goals and policies that provide more specific insight into the Study Area and project goals are described below.

Goal 4 is the key Land Use Element goal relating to this project: "The quality of life and economic vitality in our City's core areas are enhanced by strategic infill of new development and revitalization of existing development." This goal speaks to the Study Area's non-Downtown place in central Fontana. Key policies and actions under this goal include:

- Infill development shall be accorded a high priority in the commitment of City resources and available funding (Policy).
- Special incentives shall continue to be applied to revitalization of deteriorated housing stock, residential neighborhoods, major business corridors and employment centers (Policy).
- Where necessary to stimulate the desired mix and intensity of development, land use flexibility and customized site development standards shall be achieved through various master planning devices such as specific plans, planned development zoning and creative site planning on individual building sites (Policy).
- Clustering of development at key points with intermediate sectors of less intensive uses should be promoted along arterial corridors (Policy).
- Assembly of parcels to allow for more efficient development patterns should be promoted wherever adjacent neighborhoods are not adversely impacted (Policy).
- Review and update the City's infill development ordinance on a regular basis to insure its effectiveness and focus its application in areas of greatest need (Action).
- Research and apply other tools that can be brought to bear on reversing deterioration, including but not limited to establishing maintenance fees on rental properties as a form of business (Action).
- Survey the area designated with the Boulevard Overlay designation to identify and set priorities on potential sites for assembly and revitalization, intensification or redevelopment (Action).
- Continue to support upgrading and replacement of the portion of the City's housing stock that is aging and deteriorating, especially where this pattern is just beginning to emerge in neighborhoods (Action)

Goal 3 is also very important to this project because of the issues in connecting it to the rest of the City of Fontana. Goal 3 is: "Our community is developing in a unified, orderly, logical, environmentally sound manner, which ensures that the City is unified and accessible to all residents, and results in economically sound commercial areas, vibrant neighborhoods, and jobs rich centers." Relevant policies and actions include:

- Areas adjacent to freeway and major arterial corridors shall be given special land use and development standards guidance (Policy)
- Land uses within freeway and arterial corridors shall be arranged around focal points of varied sizes and configurations to convey a sense of distinctiveness (Policy)
- Circulation system improvements shall continue to be pursued that facilitate connectivity across freeway and rail corridors (Policy)

- Activity centers should be linked with residential neighborhoods and be accessible by multiple modes of transportation (Policy)
- Influence and adopt provisions of the I-10 Multi-jurisdictional Land Use Strategy and Program where they contribute to improving the quality and image of Fontana through this important window on the community (Action)
- Incorporate City identity generating projects in each annual budget cycle and capital improvement program to facilitate continuous progress toward the desired City image (Action)
- Establish a signage program for determining the design, placement and financing responsibilities of City entry/welcome signs adjacent to unincorporated areas (Action)
- Work with Caltrans, San Bernardino County, and neighboring cities to ensure that functional and aesthetically pleasing design of transportation corridors is consistently implemented (Action)

Goal 5, about Downtown Fontana, relates to the Study Area in that Downtown Fontana and the Study Area affect one another. Goal 5 is "Our Downtown is a vibrant, pedestrian-friendly, economically healthy, safe, convenient and accessible district that serves as the true heart and focal point of the community." Relevant policies include:

- Downtown, its Metrolink Station and Transit Plaza, and the surrounding community shall be accessible and connected by multiple modes of transportation including pedestrian, bicycle, transit and automobile (Policy).

Goal 6 is "Develop our community in a safe, defensible, unified, orderly and, environmentally sound manner, in order to facilitate a reduction in crime, resulting in a safer community." Policies and Actions generally refer to Crime Prevention Through Environmental Design (CEPTED).

Goals 1 and 2 are also generally relevant to this study. Goal 1: "Land Use in our community is balanced between residential, commercial, industrial, open space and recreational land uses that are developed to high standards of quality and provide diverse economic, social, and cultural opportunities for our citizens and those who wish to invest here." Relevant actions include:

- Incorporate new provisions in the zoning code for mixed-use/multiple use development (Action).
- Create and adopt guidelines for mixed use development within the Activity Center overlay designation to augment the regulations provided in the Zoning Code (Action).
- Establish project review criteria that reward variety in development mix and product type, efficient use of land, high levels of amenity features, attention to quality details, and effective use of open space features as integral components of the development (Action).

Goal 2: "Quality of life in our community is supported by development that avoids negative impacts on residents and businesses and is compatible with, and enhances, our natural and built environment."Relevant actions include:

- Adopt residential infill site design guidelines for application especially where the predominant neighborhood character is well established so that infill projects contribute to that character (Action)

General Plan Community Design Policies

The Community Design Element policies largely reflect the Land Use Element policies. They emphasize unifying a diverse city through design themes and "selected design features," a strong Downtown, enhanced views both of the city from the freeways and of the mountains, and strong entries and edges.

Goal 3 specifically identifies Sierra Avenue and Valley Boulevard as two of three key corridors. This goal states that Sierra "provides additional entry statement possibilities and runs the full length of the City, including directly through Downtown," while Valley "has a strong connection to Fontana's industrial areas and trucking industry as well as the California Speedway."

This goal includes policies to "Adopt design guidelines for Foothill Boulevard, Valley Boulevard and Sierra Avenue that incorporate the unique qualities of each thoroughfare" as well as to "Initiate a program to provide landscaping, where feasible, to existing paved street medians."

Integration of commercial uses into neighborhoods and mixing of uses, like in the Land Use Element, is also a theme of the Community Design Element.

General Plan Economic Development Element Policies

The Economic Development Element's policies emphasize a balance of uses, a diversified industrial economic base that capitalizes on Fontana's "advantageous setting as a transportation hub for the Inland Empire," a revitalized Central Business District, and enhanced arterial corridors which create an attractive setting for business development.

General Plan Tools

The General Plan's primary tool for achieving these goals is its series of land use designations, which generally include commercial, residential, industrial, mixed use, and specific plan types. The Study Area includes all of these types: the General Plan designates the Sierra Avenue and Valley Boulevard corridors as General Commercial (C-G) and Community Commercial (C-C). Medium Density Residential (R-M) is primarily along Sierra, "behind" the commercial parcels fronting on Sierra, as a transition to Single Family Residential (R-SF) areas surrounding the northern edges of the Study Area. In addition, Light Industrial (I-L; parcels along the freeway), Regional Mixed Use (RMU; southeast of I-10 and Sierra), and Public Facilities (P-PF) (main Kaiser Permanente campus) are also applied to parts of the Study Area. See Figure 2-40.

Commercial land use designations

The Study Area contains all three Commercial land use designations, Community Commercial, General Commercial, and Regional Mixed Use. Both Community Commercial and General Commercial support retail, professional services such as legal and financial services, and office uses and have the same FAR of 0.1 to 1.0. They differ in that Community Commercial is targeted to provide small-scale neighborhood retail serving the needs of local residents with uses such as shopping centers and restaurants, while General Commercial provides larger-scale regional retail, warehousing, and service activities including auto dealerships and malls. The upper-end FARs are intended for office uses.

Neither Community Commercial nor General Commercial allows for residential or mixed-use development.

Almost all commercial-designated frontage along the Sierra and Valley corridors is designated General Commercial. The only Community Commercial designated sites are the Sierra Plaza South Shopping Center and Fontana Plaza East Shopping Center, both on Sierra Avenue at Marygold Avenue.

Regional Mixed Use, meanwhile, is a designation intended for "employment generating commercial and industrial uses," but can include Multi Family residential uses if being developed under a Specific Plan. The preferred mix and range of uses is 10-30% retail; 5-15% office; 15-30% light industrial/business park; 25-35% residential; 4-6% public open space. Projects developed under the Regional Mixed Use category must be minimum 20 acres in size, except if proposed east of Sierra and north of SR 210. Mixing of uses can be vertical or horizontal.

The City has applied this designation to six sites; one is just southwest of the I-10/Sierra Avenue intersection.

Residential land use designations

The Study Area contains properties designated with two of the residential designations: Medium Density and Multi Family. Of the General Plan's five residential designations, these are at the highest end of the density scale. Medium Density residential ranges from 5.1 – 12 dwelling units per acre and Multi Family Residential has a density ranging from 12 – 24 dwelling units per acre.

Medium Density accommodates a range of single-family and multi-family housing types. Multi Family includes duplexes, condominiums, townhomes and apartments. Housing greater than 12 du/ac must be supported by community amenities and would satisfy the City's vision by providing a balance of land uses.

The General Plan specifies that both Medium Density and Multi-Family Residential developments should be located along major arterial or activity centers.

Most of the residential designated sites in the Study Area are Medium Density, with the exception of three sites, two of which have multifamily housing on them and one of which is vacant. In addition, north of Valley Boulevard the Study Area is almost surrounded by the Residential Single Family designation, which calls for 2.1 to 5 dwelling units per acre and a 6,000 s.f. average lot size.

Industrial land use designations

The General Plan contains two Industrial designations: Light Industrial and General Industrial. Light Industrial specifies employee intensive uses and high quality development such as business parks, research and development (R&D), technology centers, corporate and support offices, clean industry, supporting

retail uses, and auto, truck and equipment sales and services. General Industrial, meanwhile, emphasizes manufacturing, fabrication, assembly, processing, trucking and equipment sales and services, and has less stringent design standards. Both designations have an FAR of 0.1 to 0.6.

In the Study Area, two areas have been assigned Light Industrial designations: One is comprised of parcels to the north of I-10 currently occupied largely by single family houses; the other is the Weyerhaeuser facility south of I-10 next to Palm Court. There is no General Industrial designated within the Study Area, although there is an area with this designation just to the southwest of the Study Area.

Public land use designations

The Study Area contains instances of the Public Facilities designation, which identifies the locations of properties in public or quasi public ownership, such as existing schools; the facilities of public and quasi-public agencies such as the City, County water and sewer districts, and fire protection districts; and the locations of hospitals and quasi-public institutions.

This designation has been applied to the Kaiser Permanente campus and a parcel along I-10 next to the Weyerhaeuser facility.

Boulevard Overlay

The General Plan also contains overlays which have been applied in addition to the base designations. The key overlay in the Study Area is the Boulevard Overlay district, which has been applied to the Sierra Avenue corridor. The purpose of the Boulevard Overlay is to "ensure the long-term viability and attractive appearance of these boulevards, the intent of this overlay designation is to encourage retail activity to cluster at major intersections. In the stretches between the retail nodes, non-retail uses such as offices, services, incubator/multi-tenant uses, mixed use and residential development are the preferred uses."

The specific goals are to (emphasis added):

> a. Encourage **focused commercial development at key roadway intersections**;
>
> b. Enhance **flexibility in development** by allowing for a **complementary mix** of higher density residential uses, professional offices, civic and institutional uses, and mixed-use projects that are compatible with those uses allowed by the underlying land use designation.
>
> c. Ensure **compatibility** between adjoining uses.
>
> d. Provide a **critical residential mass** to support corridor commercial uses.

The Boulevard Overlay does not change the general intensity of the commercial or residential designations, but it allows a mix of uses, specifically introducing residential uses into commercial areas. The residential component of the Boulevard Overlay is intended to locate in" mid-block locations that are not viable for commercial/activity center type development." There is a minimum lot size of six contiguous acres for residential, and a minimum project size of 100 multi-family units per project, is required for multi-family development. Single-family residential development such as townhomes or other forms of "boulevard style housing" may also be developed at a density of 5 to 24 dwelling units per acre, and for projects less than six acres in size.

The General Plan also mentions that the boundaries of the overlay designation "are not precise: they can be adjusted to allow the development of projects of optimal size and configuration."

Activity Center Overlay

The Activity Center Overlay is meant to apply to areas north of Baseline Avenue to serve newer development, but it is an interesting tool to note. The Activity Center Overlay is meant to, among other things provide a mix of uses that "should promote civic activity, define neighborhood character and provide focus, provide places for people to meet and socialize, and enhance an area's overall quality of life." The Activity Center Overlay discusses how both land uses and transportation network can support the needs of a neighborhood.

Zoning

The City of Fontana's zoning code outlines allowable uses and development standards, including building height, density, bulk, setback, coverage, landscape requirements, parking standards, and off-street loading and service requirements.

Zoning designations within the Study Area mirror its General Plan designations exactly. As was seen with the General Plan, there is an approach to layered density, where Sierra Avenue and Valley Boulevard serve as a commercial spine bordered by higher density residential and industrial. Two unique areas exist

south of I-10, an area zoned Regional Mixed-Use (R-MU) and The Empire Center Specific Plan. The latter includes a business park, community commercial area, entertainment center, neighborhood commercial area, park and ride facility, promotional center and regional mall. See Figure 2-41.

Residential zones

Sierra Avenue has the potential for an increase in multi-family housing density. A large portion of the corridor lies within the *Boulevard Overlay* district, which provides for mixed-use and higher density residential components. However, within the Study Area there exist single-family and multi-family residential zones comprised of a variety of housing densities. The Study Area includes Single Family Residential (R-1), Medium Density Residential (R-2), and Multi Family Residential (R-3) zones. The key development standards for each residential zone are shown in Table 1.

Table 1: Residential Development Standards

	R-1	R-2	R-3
Dwelling Units/Acre (Min and Max)	5	7.6 - 12	12 - 24
Lot Size (Min)	6,000 - 7,200 sf	4,000 sf - 5 ac	5 ac
Lot Width (Min)	60’	200’	200’
Lot Depth (Min)	100’	300’	300’
Lot Coverage	45%	50%	50%

Commercial and mixed-use zones

The majority of the Sierra Avenue fronting properties are zoned General Commercial (C-2). C-2 allows for most uses, with permit restrictions on alcohol related businesses, feed sales, outdoor vending, wholesaling, broadcasting studios, animal hospitals, and auto-oriented uses. C-2 lot dimensions, building heights and intensity of uses are greater than that of Community Commercial (C-1) and are suitable for high intensity commercial corridors (of which Sierra Avenue and Valley Boulevard are two). The key specifics of each commercial and regional mixed-use zone are outlined in Table 2. Areas outside of the General Plan’s *Boulevard Overlay* district have the greatest potential for mixed-use development if zoned RMU. City code describes the mix and range of uses for RMU zones as follows: “10-30% retail; 5-15% office; 15-30% light industrial/business park; 25-35% residential; and 4-6% public open space.”

Table 2: Commercial & Mixed-Use Development Standards

	C-1	C-2	RMU
Lot Size (Min)	20,000 sf	40,000 sf	-
Lot Width (Min)	100’	150’	-
Lot Depth (Min)	100’	200’	-
Lot Coverage	50%	50%	-
Building Height (Max)	35’	60’	75’
FAR (Max)	0.5	1.0	1.0

Industrial zones

When compared with commercial zones, industrial zones have a greater proportion of conditionally allowed uses, with many manufacturing and distribution uses outright or conditionally permitted. The breadth of uses available in these zones is consistent with making industrial zones employee rich provided there is a residential base. As the General Plan outlines, Light Industrial (M-1) zones are employee intense uses such as business parks, research and development (R&D), technology centers, corporate and support offices, clean industry, supporting retail uses, and auto, truck and equipment sales and services. General Industrial (M-2) allows uses such as manufacturing, fabrication, assembly, processing, trucking and equipment sales and services. The key specific development regulations for each industrial zone are outlined in Table 3.

Table 3: Industrial Development Standards

	M-1	M-2
Lot Size (Min)	20,000 sf	2 acre
Lot Width (Min)	150’	300’
Lot Depth (Min)	150’	300’
Building Height (Max)	100’	100’
Lot Coverage	60%	60%
FAR (Max)	0.5	0.5

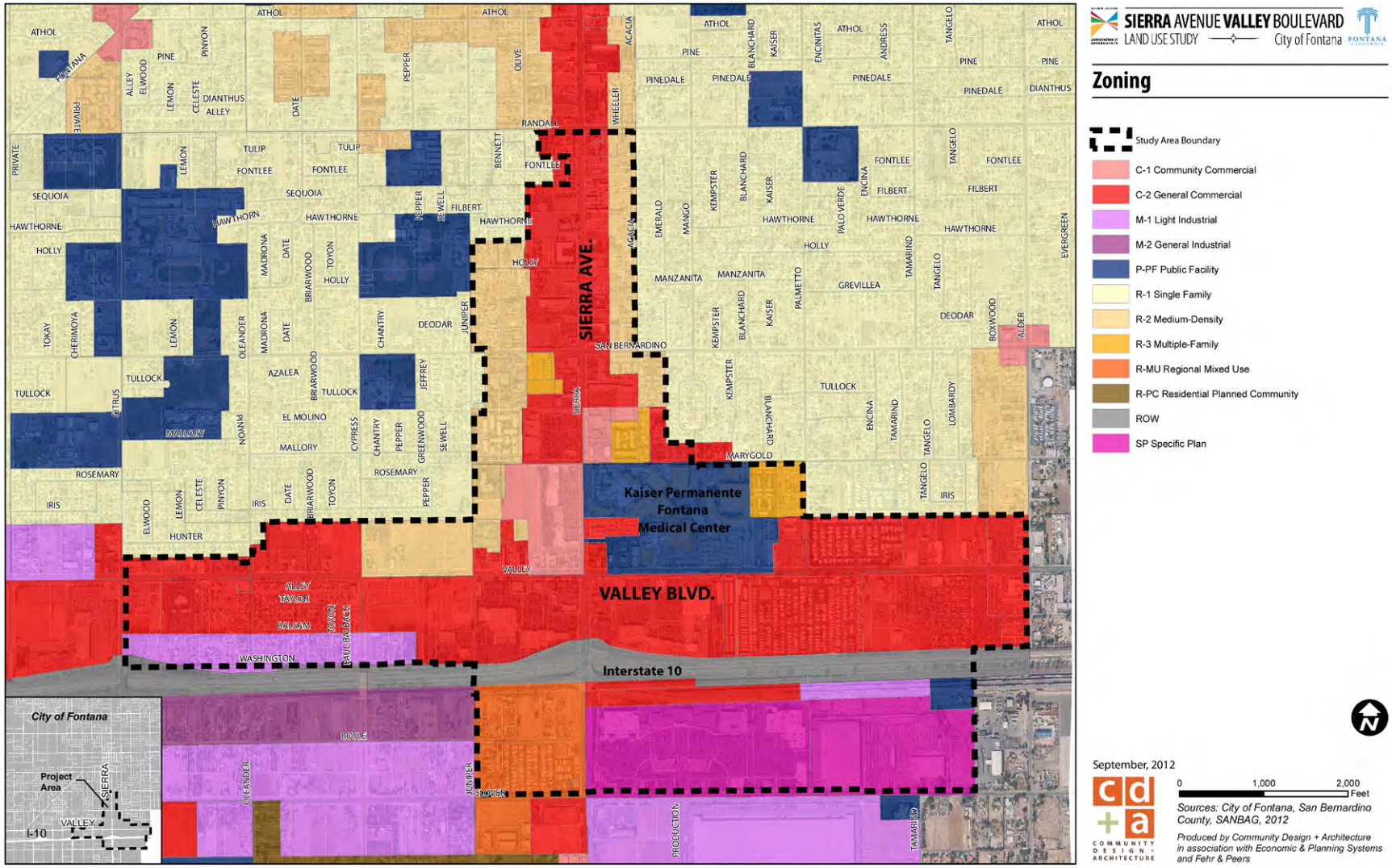


Figure 2-41: Zoning

Off-Street Parking requirements

For retail, the code requires between one space per 175 square feet of gross floor area (GFA) and 225 square feet GFA, depending on the specific retail use. For multifamily residential, the code requires between 1.5 and 2.5 spaces depending on the number of bedrooms of the unit. For professional office, the requirement is 1 space per 250 square feet of GFA.

Boulevard Overlay

The Boulevard Overlay implements the overlay of the same name in the General Plan. In the Study Area, this overlay applies to an approximately quarter-mile wide swath of properties on the Sierra corridor from Randall Avenue south to Interstate 10. The intent of the Boulevard Overlay is to "create a vibrant urban environment and associated street scene."

As described in the General Plan overview above, the Boulevard Overlay allows mixed-use projects. It alters the way residential uses are manifested. For example, within 200 feet of a major intersection it does not allow residential uses at the ground floor, and there are lower minimum parking requirements for residential units in the overlay. Residential units less than 1,000 square feet need to provide only 1 space, as compared to 1.5 (one bedroom) or 2 (two bedroom) in the Off-Street Parking and Loading regulations.

It also allows more intensity than the underlying zones typically do: Within 200 feet of a major intersection the maximum base FAR is 1.33, compared to a maximum of 1.0 in the commercial zones (0.67 past 200 feet from a major intersection). If the project is large (more than 5 gross acres) the FAR can be increased by a multiple of 1.1 or 1.5 depending on the size of the project. This overlay zone also has a minimum density of 12 dwelling units per acre for projects 6 acres or more.

The Boulevard Overlay adjusts the building setbacks for Arrow Boulevard, but for Sierra and Foothill they are the same as commercial zones.

The Boulevard Overlay also adds design requirements promoting better pedestrian orientation, including:

- For buildings not containing residential uses on the ground floor, at least 60 percent of the front facade area between two and 12 feet above grade shall be devoted to transparent windows, glass-covered display areas, or entryways.
- Blank walls of the front facade area between two and 12 feet above grade shall not extend for more than 25 horizontal feet without a window, glass-covered display area, or entryway.
- The front entrance to all buildings shall face the street.

Medical Center Overlay

This overlay currently applies exclusively to the Kaiser Permanente campus. This overlay specifies a maximum 125-foot height and a 50-foot minimum setback from the property line and 20-foot setback from the street.

The overlay emphasizes a high degree of landscaping along streets and parking facilities. The overlay specifies that there must be one tree and three shrubs per 15 feet of street frontage.

This overlay also focuses on parking, stating that medical office buildings must have one parking space per 200 square feet of medical office building space; one space per 250 square feet of administrative office building space; and one space per 2.5 beds; and one space per 2 employees on the maximum shift for the hospital.

The overlay also sets maximums on height of walls (8 feet) and notes that the wall on Marygold Avenue screening mechanical equipment has a maximum height of 15 feet.

Activity Center Overlay

This overlay does not apply to any areas within the Study Area, but its provision encourage mixing of uses, density and other characteristics that may achieve the goals of this study. These provisions include:

- a maximum FAR of 1.5 (higher than Boulevard Overlay)
- a minimum FAR of 0.25
- Zero-foot front yard minimum setbacks
- Mixed-use development shall be architecturally and thematically and/or structurally integrated

Ongoing Land Use policy challenges and efforts in the Study Area

Throughout the Study Area, the City of Fontana and other agencies have focused on some key land use challenges, summarized below.

Valley Boulevard-I-10 corridor

Throughout the last decade, the City of Fontana and other jurisdictions have identified the need for an updated development framework that will allow the combined Valley Boulevard/I-10 corridor to transition into an efficient, attractive and economically viable part of Fontana. Several studies have been conducted focusing on Valley Boulevard and I-10 in terms of transportation and development potential. The Fontana Redevelopment Agency (RDA) also identified several project areas that lie within the Study Area. In many ways, these studies attempt to resolve the vagueness of the role of the part of Valley that is near Sierra Avenue. These are informative as they frame the relationship of the portion of Valley Boulevard within this project's Study Area within the potential for the portions of Valley Boulevard that are outside of the Study Area.

The Valley Boulevard corridor has an abundance of vacant and underutilized parcels, many of which are within or adjacent to unincorporated areas of San Bernardino County. The *Valley Boulevard Corridor Study* conducted in 2002 identified that 75 percent of the parcels from Sierra Avenue west to N Etiwanda Avenue were in unincorporated areas, with 50 percent of all Study Area parcels being vacant. Occupied parcels are primarily residential and industrial with the former being classified as "blighted" and a constraint for future development. Residential areas are concentrated at the center and eastern areas of Valley Boulevard, with trucking and industrial areas also concentrated on the eastern area. West side vacancies are likely the result of the former Kaiser Steel Mill closing and de-emphasizing this area of Fontana.

The *Valley Boulevard Transition District Overlay*, as outlined in the City's *Valley Boulevard Opportunities and Constraints Analysis*, is designed to address the abundance of vacant and underutilized parcels. The District Overlay is designed to allow businesses and land uses to transition to legal, conforming uses over time while maintaining their economic vitality. This is accomplished though incentives such as creating special development standards that speak to the specific needs of the area. Parcel consolidation and shared drive approaches are two other mechanisms that the city has associated with redeveloping the Valley Boulevard corridor and allowing uses that would otherwise not be able to develop due to parcel size/shape and lack of infrastructure.

Trucking and freight is a strong industry in Fontana, resulting from the city's location along major trans-national trucking corridors, and proximity to cargo hubs such as airports and marine ports. According to the *Valley Boulevard Corridor Study*, the western end of Valley Boulevard is slated to develop a "much needed" 1,276-space truck-plaza. The Study indicates that the freight and trucking industry will experience growth in future years along with the need of additional support services. However, existing and proposed land uses are often in conflict and may prevent existing uses from operating at their full economic potential. Trucking, speedway, sales and freeway fronting uses are supported, while residential uses are not. Improvements to the I-10 freeway will continue to reinforce Fontana's trucking related land uses and service and the Valley Boulevard corridor was identified as being ideally cited to meet these needs. The *Valley Boulevard Specific Plan* currently in development takes this further by encouraging the best land uses for I-10 and trucking uses.

Valley Boulevard was identified as being fragmented and unattractive resulting from vacant, underutilized, and blighted parcels. According to the *Valley Boulevard Corridor Study*, this limits the potential for residential and traditional retail developments that rely on a unified and attractive boulevard character. Annexation of unincorporated county parcels and coordination among agencies would go a long way to unifying and revitalizing the corridor. The Study estimates that if the City were to annex county parcels, tax and fee revenues would increase by 125%, with greater revenues as revitalization occurred. According to the *Valley Boulevard Opportunities and Constraints Analysis* there are three main strategies to revitalize the corridor, create a common and unified visual theme that is both pleasing and aesthetically pleasing; implement a comprehensive infrastructure plan that identifies site information and proposed improvements; and other opportunities that provides labor development and city image enhancements.

To address the anticipated growth that the freeway improvements will have on the adjacent areas in Fontana, the City is currently developing a Specific Plan for Valley Boulevard which includes the project intersection. A goal of the Valley Boulevard Specific Plan is to improve Valley Boulevard functionally and aesthetically. One such improvement is the City of Fontana Housing Department partnering with Fontana Partners LLP and is nearing completion of a 50 unit affordable housing development at Juniper Avenue and Valley Boulevard. Phase II, with 46 units, will be completed in March, 2012 followed by Phase III with 42-50 units to open early 2014. Other improvements also include the creation

of a land use planning area to support Kaiser Permanente, achieve separation, to the greatest extent possible, between semi-truck and automobile traffic, and beautify Valley Boulevard, portions of Sierra Avenue, and frontages along the I-10 Freeway. Currently, both Sierra Avenue and Valley Boulevard are impacted by both vehicles and semi-truck traffic often creating conflict between these two modes of transportation. The Specific Plan process included several workshops with the participation of over 20 stakeholders who live, work, and conduct business in the Study Area. From these workshops it was identified that mobility was a major factor along Valley Boulevard to achieve prosperity and sustainability in this important area of the City.

Sierra Avenue corridor and redevelopment

The City of Fontana's Redevelopment Agency (RDA) had identified the heart of the Study Area as being within three different project areas, the Sierra Corridor (SC) Project Area; the Downtown (DT) Project Area; and the Southwest Industrial Park (SWIP) Project Area. These plans promoted and established the same principles set forth by the General Plan and were designed to, stimulate positive change; establish a prestigious office address; create diverse, high-quality residential neighborhoods; and to provide quality employment opportunities for all residents. The main driving force behind these, as in any redevelopment plan, is to secure funds towards public improvements that will attract development.

While the Redevelopment Agency has been dissolved, the City will still be trying to implement the goals of the project areas through other means. The City has tried to shape some new development in the existing shopping centers. The City is trying to create the incentive to do development in the Sierra/Valley area. On the southeast corner, the City tried to work with shopping center, gas station, McDonalds, El Gallo Giro and Motel 6 to create a better linkage from the north and bring in other retailers. However, there were issues with the property owner not having interest but also with the perception that the City charged too high of development fees and there was too much red tape.

The stretch of Sierra Avenue between Randall and San Bernardino is one of the largest concentrations of former Redevelopment Agency owned land in the City of Fontana. The City has been active in trying to catalyze the Westech College project, which it hopes will include several phases that will stretch down the corridor. The City also hopes to see a new use for the old Rock Honda site. However the dissolution of the RDA presents challenges. The City hopes to dispose of its properties to developers that will build future phases of Westech and other projects that will provide similar development containing more office uses, moving that part of the corridor away from auto uses.

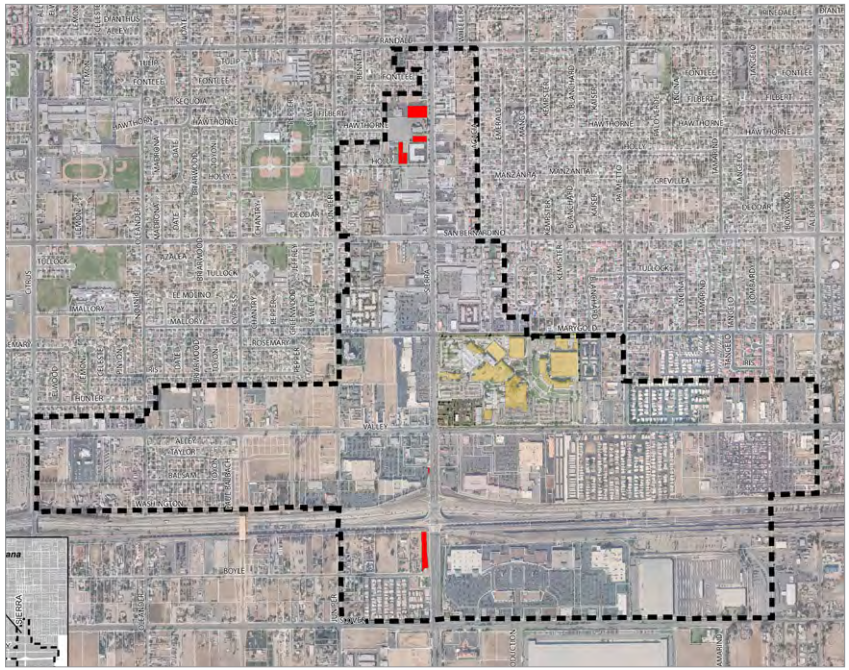


Figure 2-42: Redevelopment Agency Owned Properties in Study Area

Land Use Policy Analysis

Geography

Three Fontanas

The General Plan recognizes the challenges Fontana faces in being a unified city. The Plan refers to the freeways and other barriers that break up the city, as well as the different eras of development. "All of this lends to a diffusion of appearance," the Plan states. Several policies refer to bridging barriers like that presented by Interstate 10, and others point toward building a stronger Downtown that acts as a center for all of Fontana's different areas. This is especially relevant to the Study Area, since it is the Sierra corridor that provides one of the strongest and most direct connections to Downtown Fontana from south Fontana.

The General Plan also recognizes the specific challenges of Central Fontana, which includes the Downtown as well as the older neighborhoods and commercial strips from I-10 north to Baseline Road. "The central core of the City does not function sufficiently as a center, a heart or a draw for all of the residents of the City," the Plan states. The Plan pinpoints many of the issues facing this part of the city, including deterioration of older housing, the image of the city along Interstate 10 and the lack of a proper gateway from Interstate 10, public safety, and the challenge of redevelopment due to competition from other parts of the city or region and the difficulty of the infill sites.

It also acknowledges the potential of this part of the city. The Vision notes "Much of the central core area of Fontana is made up of decades-old existing development with enormous redevelopment and infill potential." And, "With a large amount of undeveloped land in its incorporated boundaries and sphere of influence, our City has many opportunities for developing its economy." It's not just undeveloped land: "What is more evident in those areas is that a number of land parcels are simply underutilized: activity takes place there, but a lot of land parcels and many buildings are simply not performing to their true potential. This is accentuated by the fact that many of these land uses are poorly maintained and convey an image of decline."

Some of the goals and policies seek to address both the issue of a fragmented city and the challenges faced by Central Fontana. While Goal 3 of the Land Use Element seeks to tie together the different parts of Fontana, Goal 4 specifically addresses the challenges of the older core areas of the city. The vision includes statement to "provide a broad range of new and infill-housing choices," transform Fontana's aging commercial corridors" into thriving boulevards providing first-class shopping and dining."More specific policies state that "Infill development shall be accorded a high priority in the commitment of City resources and available funding," and "Special incentives shall continue to be applied to revitalization of deteriorated housing stock, residential neighborhoods, major business corridors and employment centers," and promote "land use flexibility and customized site development standards."

The Plan addresses many of the challenges of Central Fontana through the tool of the Boulevard Overlay, which provides more flexibility to encourage infill development.

Two corridors

The visions for the two corridors that make up the Study Area are defined largely in the General Plan by the land use designations. By and large, both the Sierra and Valley corridors are designated as Commercial General, with some instances of Community Commercial at Sierra and Marygold, Paseo Verde on Valley and Juniper designated as Medium Density Residential and the Kaiser Permanente campus designated as Public Facilities.

The uniformity of the Commercial General designation, however, hides differences between the corridors. Sierra Avenue and Valley Boulevard are both designated as commercial corridors and are largely General Commercial. However, they have radically different land uses – see existing land use section. The statement that "Fontana's aging commercial corridors will be transformed into thriving boulevards providing first-class shopping and dining opportunities for all income levels and retail preferences, as well as mixed use development to avoid a marginal strip commercial pattern," is a nice vision, however it does not acknowledge these differences between corridors like Valley and Sierra.

Differences between Sierra and Valley are, like in the General Plan, not fully expressed by Zoning. Properties along both corridors are mostly C-2 except where zoning has been changed for specific uses. The only aspect of the Zoning that distinguishes Sierra from Valley is the Boulevard Overlay.

The C-2 designation on Valley holds that corridor in limbo – is its identity to be determined by the warehouse/storage/vehicle rental uses of rest of corridor or does it contribute to what's supposed to be happening on Sierra; or is it supposed to be part of special highway commercial of sites directly near the interchange?

The highway orientation of the Sierra I-10 interchange has drawn some special attention in zoning policy through the RMU designation and the Empire Center Specific Plan.

The different sets of issues belonging to each corridor, pointed out above, are addressed more indirectly in the General Plan. The General Plan acknowledges the importance of the city's place on the regionally and nationally significant transportation corridor that includes Interstate 10, the railroad, and Valley Boulevard. "Our City's strategic location within Southern California's transportation system is a major asset. We are positioned at a gateway into Southern California's economy and the Inland Empire from Interstate 15, and near a gateway to the world via our neighboring Ontario International Airport. We can play an important role in linking to the critical goods movement system known as Alameda Corridor East given our City's level of rail service." Just as important is the "industrial and distribution jobs base" that it seeks to maintain along this corridor. The Plan states: "The City's competitive advantage, related to its proximity to rail, air and truck routes will be promoted and honed to further strengthen its appeal."

The question is where Valley Boulevard, and specifically the segment within the Study Area, fits into this corridor. Existing land uses south of I-10 west of Sierra Avenue support the vision outlined above and suggest that these industrial land use designations were based on existing land uses and proximity to transportation infrastructure. This area also marks the transition into a much larger industrial area to the west, providing a unique opportunity to interface with the Study Area's multitude of uses. These industrial areas often include 'blighted' residential areas or vacant parcels resulting in incompatible and underutilized parcels. The City has worked to answer this question – see ongoing land use challenges.

Sierra is also not addressed directly in the General Plan. The "transformed into thriving boulevards providing first-class shopping and dining opportunities" statement is likely intended more for Sierra. Another indirect reference to the potential of the Sierra corridor is in the Downtown section of the Vision - "Residents and visitors will have easy access to our Downtown from the conveniently located transportation hub that is our Metrolink Station." The Sierra corridor provides the link from some of the city's densest housing, many of its shopping centers and its largest employer to Downtown and Metrolink.

However, all of the policy relating to the Sierra Avenue corridor lacks specificity. While the general goals of the General Plan support and in some cases emphasize the revitalization of aging commercial corridors, the Plan seems to lack a specific vision for how this will happen on Sierra and what the result will be.

The addition of the Boulevard Overlay ensures that future development will have the flexibility by providing mixed-use and higher density residential opportunities for the area. But there has not been a test case of a mixed use development taking advantage of the Boulevard Overlay on Sierra. What would it look like under this zoning? 60 foot building height and either 1.33 or .67 FAR.\, with more intense development encouraged closer to major intersections.

One key use

The Kaiser Permanente medical campus is not addressed in the Land Use Element. There is no vision for the Kaiser Permanente campus or the area around it. This could be problematic, since this part of Fontana ends up being defined in the Plan completely by its other two geographies - aging commercial corridors and the older core area of the city, and not by the more vital element of the hospital, the city's largest employer.

Despite the existence of the Medical Center Overlay, there is nothing in the General Plan or the zoning that addresses proximity to Kaiser Permanente campus, though the Valley Specific Plan was in the process of developing more specific land use policy for the medical center area.

Goals

In general, the General Plan indirectly supports this study's goals. This is indirect support because one can find statements in many of the goals and policies of the Land Use Element, and of the other elements that closely reflect the Land Use element, that support the broad ideas in the goals – of mixed use and revitalization.

However, in general, the General Plan lacks specific reference to the places, businesses, and intersections in the Study Area. Without other Specific Plans addressing these questions, this leaves a vacuum of guidance in the Study Area, the most underlying and important of which is the lack of a defined identity for the Sierra-Valley area despite its paramount importance to the City.

Reduce traffic congestion at Sierra/Valley intersection

The Circulation Element identifies Sierra Avenue from I-10 to San Bernardino as the "first (and most significant)" congestion point in the city. "This is the highest volume intersection in the City, experiencing more than 90,000 entering vehicles on an average day. The area has the highest concentration of commercial developments, traffic from institutions such as Kaiser Hospital and the freeway access traffic."It acknowledges that the improvements to the I-10 interchange have recently been completed upgrading this interchange to a single-point urban interchange, which should help ease congestion problems on Sierra Avenue.

The General Plan vision struggles with balancing "maintain[ing] the connectivity throughout our community" with "crossing over our major east-west freeway corridors. Internal circulation corridors will be enhanced to take advantage of the City's proximity to major freeway and trucking routes, and mass transit systems, and to expand economic opportunities. Access to freeways will be enhanced and necessary facilities will be constructed and widened as required to promote the free-flow of traffic, especially where heavy truck traffic is involved. Circulation system improvements shall continue to be pursued that facilitate connectivity across freeway and rail corridors (Policy) Congestion not addressed in the Land Use element."

The implications of the zoning on congestion are largely determined by the intensity and mix of uses that is allowed, as well as the support for a built environment that supports transportation choice. The current zoning does not require a walkable environment, but the Boulevard Overlay does provide for a mix of uses that could result in a reduction of auto trips.

Maximize walkability between land uses

The General Plan's land use scheme places a certain amount of residential, commercial and employment intensity around the Sierra-Valley intersection, which contributes toward it being walkable. However, the Euclidian-style separation of use categories of the General Plan hinders the walkability of the area. The Zoning and site planning standards have several attributes that make for poor walkability, including prevention of mix of uses and low FARs. There is a 60-foot height limit for the C-2 designation but it would be difficult to get to that height without structured parking. The parking requirements are typical to suburban locations.

Some General Plan goals and policies promote walkable places, especially in the realm of mixing of uses. The Plan calls for new provisions in the zoning code for mixed-use/multiple use development; the creation and adoption of guidelines for mixed use development within the Activity Center overlay designation to augment the regulations provided in the Zoning Code; the establishment of project review criteria that reward variety in development mix and product type, efficient use of land, high levels of amenity features, attention to quality details, and effective use of open space features as integral components of the development.

The Boulevard Overlay remedies some of this by mixing uses and possibly concentrating intensity at main intersections. Also there is some pedestrian-oriented design, including transparency of façade and orientation of building entrances to the street.

However, the lack of a build-to line and the keeping of the underlying zone's minimum setback reduce the potential for walkability resulting from projects built under this overlay. Also, neither the General Plan nor Zoning addresses other aspects of walkability of development such as design of sites and buildings.

Anticipate future mass transit opportunities

- The Circulation Element states as a goal, "A regional network of multi-modal transportation facilities including an improved citywide public transit system is provided that ensure the safe and efficient movement of vehicles, people and goods throughout the City of Fontana and to and from the region, and provides mobility to all City residents and helps reduce vehicular trips City-wide." However, the policies under this goal give little specificity. In the other elements, the only place transit is mentioned is in reference to the Metrolink station as a piece of Downtown that needs connections from the rest of the city.
- The idea of a transit hub in the Study Area is not mentioned explicitly, though its creation would achieve many of the other goals throughout the General Plan.
- Similarly to the walkability goal, the underlying zoning isn't conducive to taking advantage of the busy transit node at Sierra and Marygold. Zoning in this area could emphasize intensity and walkability and mix of use, thus making transit a viable option for the residents, employees and visitors of the surrounding land uses. The Boulevard Overlay allows for some of these transit-supportive features, but not others.

Identify land uses synergistic with Kaiser Permanente

At the level of the General Plan, the Kaiser Permanente campus is not mentioned in the Land Use Element, and only sparingly mentioned in the Circulation Element. There is no City vision for this evolving asset, which is a strategic disadvantage in capitalizing on the presence of the jobs and activity and stature of this institution. A vision for the public aspects of the Kaiser campus as well as for the area around it would be a key step in revitalizing this area.

In general, the General Plan supports the kinds of uses that would complement the Kaiser campus, but there is no specificity given to help this process along. The area surrounding it is not seen by the General Plan as a unique area. Potential complementary uses are allowed in the C-2 area surrounding the Kaiser Campus. But the General Plan and zoning do not require the site planning or mixing of uses that would make the area less auto-oriented and that could entice employees and visitors to walk.

The Medical Center overlay is a tool that could be refined to address some of these issues.

Identify opportunities for new housing

The General Plan identifies infill housing as a part of its vision and policy, stating the goal to "provide a broad range of new and infill-housing choices to meet the needs of our diverse residents at different stages of life and with a wide range of income levels."

Housing as a use is allowed in many places in the Study Area. The Boulevard Overlay makes it possible for housing to be on Sierra Avenue in a mixed use configuration. Additionally, housing would be allowed in RMU site. Housing is largely not allowed on Valley, without zone changes.

Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

It is for this goal that the General Plan perhaps provides the most explicit support. The Plan states that development standards and regulations will "allow opportunities for creative forms of development that stimulate a sense of place here, including selective development that mixes residential, retail, entertainment and office uses." The Plan calls for the City to "incorporate City identity-generating projects in each annual budget cycle and capital improvement program to facilitate continuous progress toward the desired City image"

Again, the General Plan's lack of specificity about the Study Area reduces its ability to support these goals. The Sierra-Valley area is not called out in the General Plan as a place even though the Plan identifies it as the most congested area of the city and it contains the city's largest employer. This node needs an identity as a place.

The Zoning's emphasis on auto-orientation and also prevents the creation of human-scaled and pedestrian-supportive places in the Sierra-Valley area.

One of the shortcomings of the Boulevard Overlay on Sierra is that it is generic for such an important corridor to the city as it is intended to be applied throughout the city.

Transportation Networks

Auto

Existing network

Roadways

The roadway network consists of freeways, arterials, and collectors for circulation throughout the Study Area. Roadway facilities are classified per the City of Fontana General Plan and described in detail below. Roadway classifications and number of lanes are also shown on the Circulation Master Plan exhibit (Figure 2-43). Speed limits are shown on Figure 2-44.

Interstate 10 Freeway (I-10) is an east-west freeway that extends from the City of Santa Monica in Los Angeles County to the east coast in Jacksonville, Florida. Within the Study Area, I-10 generally has eight lanes (four in each direction). Access to the Study Area is directly provided via the Sierra Avenue ramps.

The City has also invested over 60 million dollars to improve access and connectivity to Fontana from the I-10 Freeway. This includes the recently completed I-10/Sierra Avenue and I-10/Cypress Avenue overpasses and the design for the reconstruction of the I-10/Citrus Avenue and I-10/Cherry Avenue interchanges. These I-10 Freeway overpass improvements are expected to help ease congestion but, at the same time, have the anticipated effect of spurring growth along Valley Boulevard overall as well as Sierra Avenue.

Sierra Avenue is an 8-Lane Major Highway between Slover Avenue and Valley Boulevard, and a Major Highway between Valley Boulevard and Randall Avenue. The roadway runs north-south extending from Riverside Avenue to Armstrong Road and is directly connected to I-10. Sierra Avenue is a divided roadway with four lanes in the northbound direction and three lanes in the southbound direction, between Slover Avenue and I-10, three lanes in each direction between I-10 and Valley Boulevard, two lanes in the northbound direction and three lanes in the southbound direction between Valley Boulevard and San Bernardino Avenue, and two lanes in each direction between San Bernardino Avenue and Randall Avenue. On-street parking is not permitted along Sierra Avenue and the posted speed limit is 35 miles per hour (mph).

Valley Boulevard is a Major Highway and runs east-west extending from Milliken Avenue and Sperry Drive. Valley Boulevard is a divided roadway with two lanes in each direction between Citrus Avenue and Juniper Avenue, three lanes in the eastbound direction and two lanes in the westbound direction between Juniper Avenue and Sierra Avenue, three lanes in each direction between Sierra Avenue and Mango Avenue, and two lanes in each direction between Mango Avenue and Alder Avenue. On-street parking is not permitted on Valley Boulevard and the posted speed limit is 40 mph.

Slover Avenue is a Primary Highway and runs east-west extending from Commerce Parkway to Pepper Avenue. Slover Avenue is a divided roadway with two lanes in each direction between Juniper Avenue and Sierra Avenue, three lanes in each direction between Sierra Avenue and west of Palmetto Avenue, and undivided with one lane in each direction east of there. On-street parking is not permitted and the posted speed limit is 45 mph.

San Bernardino Avenue is a Secondary Highway and runs east-west extending from Towne Avenue and Cadena Drive. San Bernardino Avenue is an undivided roadway with two lanes in each direction. On-street parking is permitted and the posted speed limit is 35 mph.

Marygold Avenue is a Collector and runs east-west extending from Juniper Avenue to Linden Avenue. Marygold Avenue is an undivided roadway with two lanes in each direction between Juniper Avenue and Sierra Avenue, divided with one lane in each direction between Sierra Avenue and between Ironwood Luxury Apartments and Health Care Parkway/Mango Avenue, and undivided with one lane in each direction east of there. On-street parking is permitted between Juniper Avenue and Sierra Avenue and the posted speed limit is 30 mph west of Sierra Avenue and 25 mph east of Sierra Avenue.

Parking

All major land uses, including the shopping centers, multifamily residential complexes, and Kaiser campus, have onsite parking.

The Kaiser campus has the largest supply of parking in the Study Area. A 2008 parking study undertaken by Walker Parking Consultants for the City of Fontana and Kaiser Permanente found that the campus had 4,392 spaces among its three garages and several surface lots.

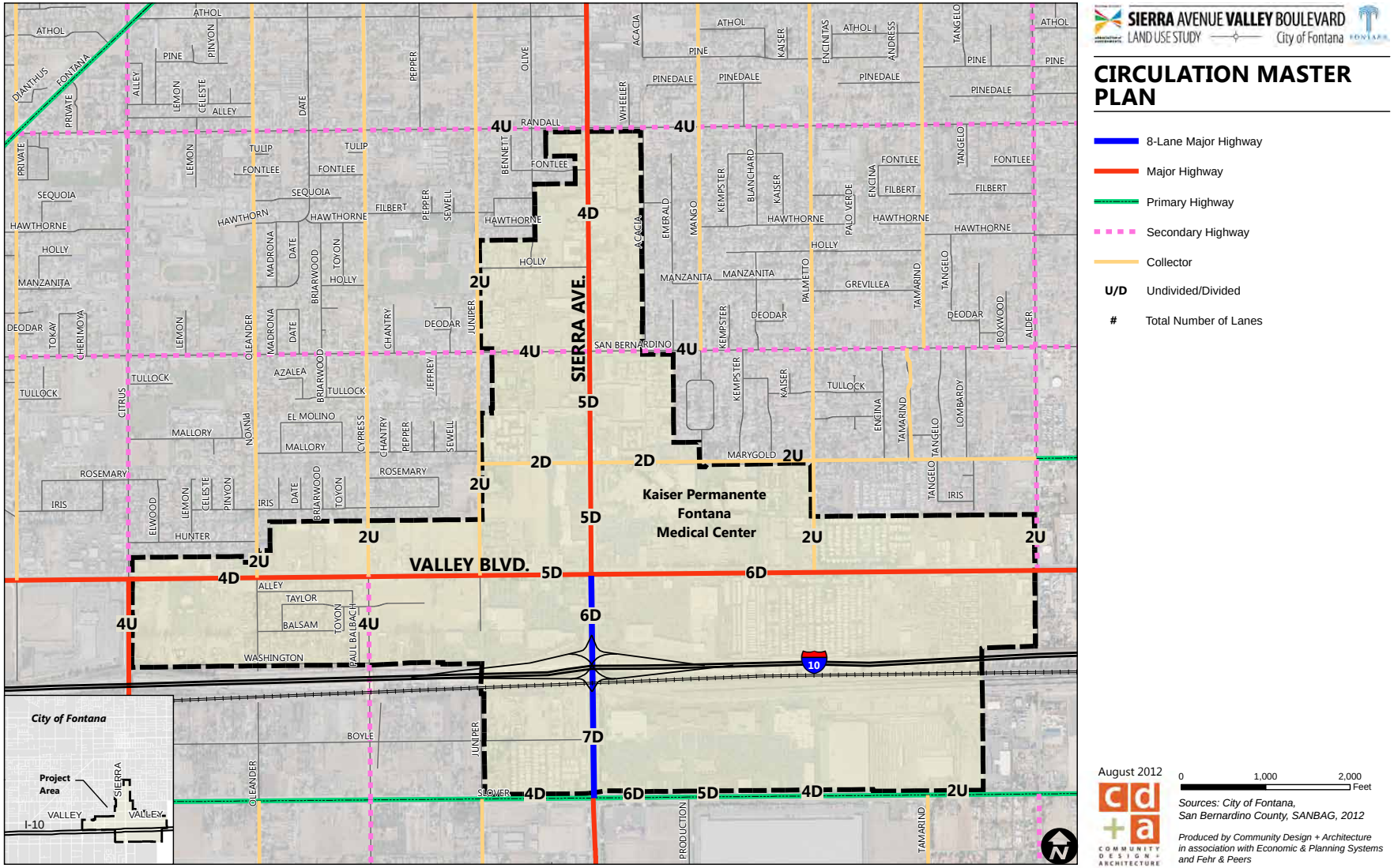


Figure 2-43: Circulation Master Plan

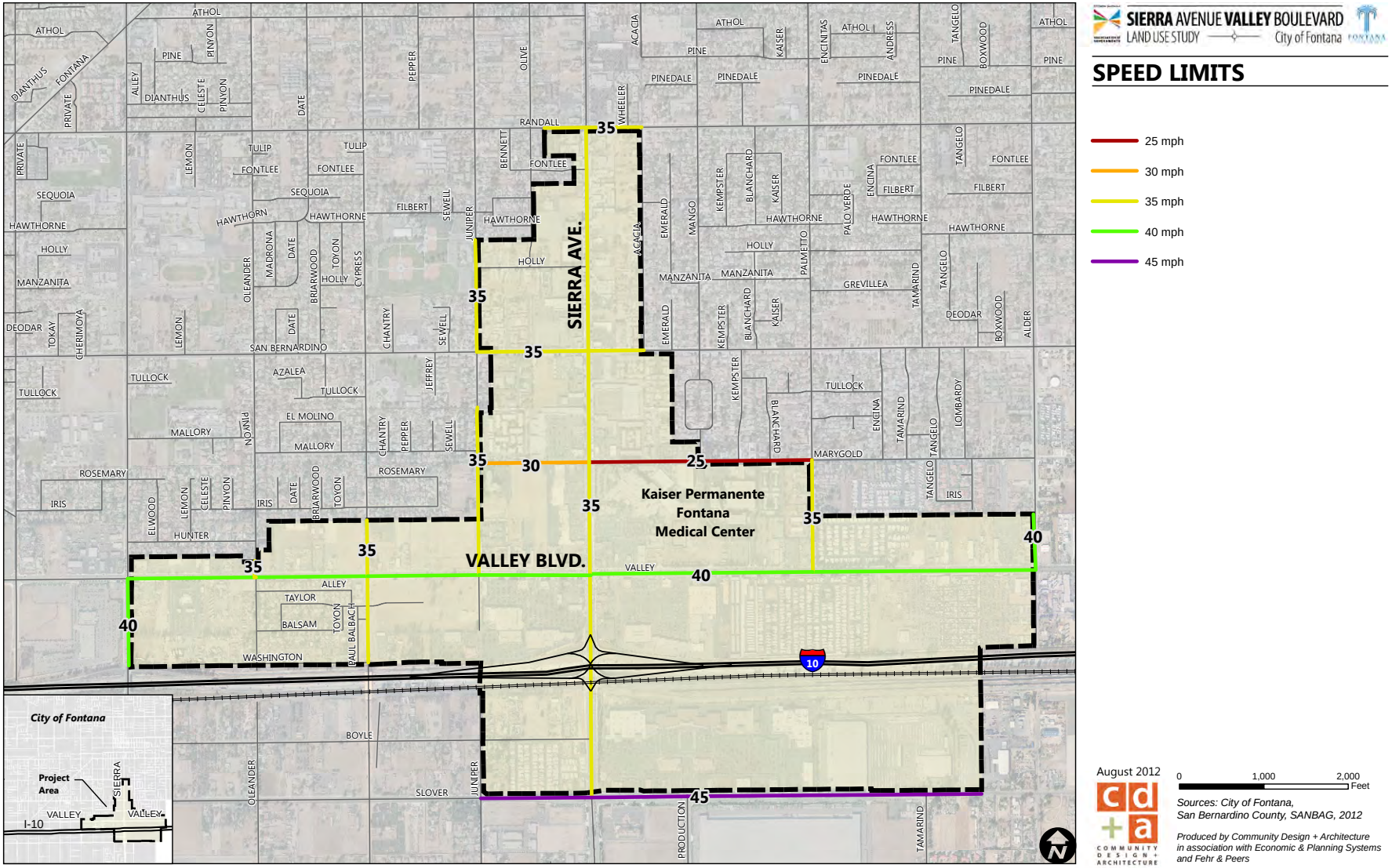


Figure 2-44: Speed Limits

Some of the older shopping centers are parked at relatively low ratios. The Sierra Plaza South shopping center, for example, has 519 spaces for approximately 140,600 square feet of floor area, meaning it is parked at a ratio of 3.57 spaces per 1,000 square feet of floor area. The center immediately to the north of it, meanwhile, is even lower, at 3.10 spaces per 1,000 square feet of floor area. These are relatively low ratios for suburban shopping centers.

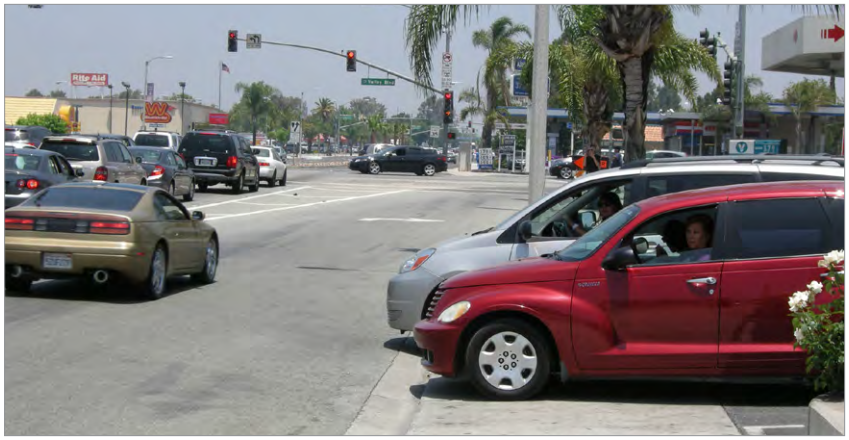


Figure 2-45: Excessive curb cuts exacerbate congestion and reduce pedestrian safety at sites near intersections

Internal circulation

A major auto network issue for this study is the function of internal circulation of large land uses such as Kaiser Permanente and shopping centers. A key concern is how the circulation within these land uses interfaces with major public streets like Sierra and Valley, which can exacerbate congestion and create unsafe conditions. For example, the Sierra Plaza South shopping center has a nearly constant curb cut along the Sierra frontage, creating many conflict points between vehicular traffic along that frontage, and there is an excess of curb cuts at many congested intersections, like Sierra-Valley; see Figure 2-45.

Planned network

Planned improvements to the auto network in the Study Area include interchanges at Alder and Beech.

Also, when the Kaiser Permanente expansion project is completed, it will redirect more traffic along Valley to the campus entrance at Health Care Parkway/Mango.

Pedestrian

Existing network

The pedestrian network in the Study Area consists of sidewalks, pedestrian crosswalks, and appropriate pedestrian crossing controls. Within the Study Area, the majority of the sidewalk network is built-out, however, there are gaps and uneven connections between segments of pedestrian facilities. In particular, there are notable gaps along significant portions of Valley Boulevard where there are worn dirt paths just outside the curbs of the street. This makes crossing small roads and driveway difficult as pedestrians and drivers may not be aware of each other along inconsistent roadways.

One interesting feature of the pedestrian network is the "midblock" signalized crossings created by the need for auto access into some of the larger land uses such as Kaiser Permanente and the shopping centers.

Figure 2-46: The Valley Boulevard sidewalk is often narrow, unshaded, and exposed to traffic moving at high speeds

In most places in the Study Area, the sidewalk lacks any amenities such as pedestrian lighting or seating, or extra buffer from moving traffic. See Figure 2-46.

See the Urban Form section for aspects of the built environment that challenge or support the pedestrian environment. Challenging aspects include the auto orientation of land uses; large city blocks; coarse land uses; lack of street definition by buildings; excessive auto access and limited pedestrian access to land uses; and internal orientation of larger land uses, including the Kaiser Permanente campus. One of the only aspects of the pedestrian environment that supports pedestrians, in addition to the wider sidewalks on some streets like Sierra Avenue, is the prevalence of street trees on some streets.

Special challenges exist in the pedestrian network within internal circulation of the larger land uses. In the Kaiser campus, some of the pedestrian routes to get out to the public streets are not direct. The project team observed some Kaiser employees crossing over landscaped berms and walking across parking areas to make their walks shorter. Within shopping centers, sidewalks often end into parking lots. Also, the lack of shade on the street often means that pedestrians will use covered walkways along shopping center buildings. See Figure 2-47.

Figure 2-47.1: Pedestrian routes in and out of the Kaiser campus are often indirect, so some employees cut through landscaped areas and parking lots

Figure 2-47.2: Sidewalks within shopping centers often end in parking lots

Figure 2-47.3: The covered walkways along shopping center facades are often the shadiest places to walk

Transit

Existing network

Omnitrans bus

There are five transit lines that currently operate in the Study Area. The lines, operated by Omnitrans, are described in detail below. The Omnitrans routes are shown on the Bus Routes exhibit.

- Route 19 – Route 19 (Fontana – Colton – Redlands) extends from the City of Fontana and generally travels east/west to the City of Redlands. Key destinations on this route include Fontana Metrolink Station Transcenter, Kaiser Permanente Hospital, and Redlands Mall. Within the project Study Area, Route 19 runs on Sierra Avenue, Marygold Avenue, Palmetto Avenue, and San Bernardino Avenue. Service is provided at 30-minute headways on weekdays and at 60-minute headways on weekends. Service runs from 4:50 AM to 10:30 PM on weekdays and from 6:00 AM to 7:35 PM on Saturday and 6:15 AM to 7:00 PM on Sunday.
- Route 20 – Route 20 (Fontana Metrolink – Via Hemlock – Kaiser) services the City of Fontana. Key destinations on this route include Fontana Metrolink Station Transcenter and Kaiser Permanente Hospital. Within the project Study Area, Route 20 runs on Randall Avenue and circles around Juniper Avenue, Marygold Avenue, and Sierra Avenue in the counter-clockwise direction. Service is provided at 30-minute headways on weekdays and at 60-minute headways on weekends. Service runs from 4:51 AM to 9:41 PM on weekdays and from 6:26 AM to 6:26 PM on Saturday and 6:56 AM to 5:56 PM on Sunday.
- Route 29 – Route 29 (Bloomington – Valley Boulevard - Kaiser) extends from the City of Fontana and generally travels east/west to the City of Bloomington. Key destinations on this route include South Fontana Transfer Center, Kaiser Permanente Hospital, and schools in Bloomington. Within the project Study Area, Route 29 circles around Valley Boulevard, Juniper Avenue, Marygold Avenue, and Sierra Avenue and Valley Boulevard. Service is provided every day except Sunday at 60-minute headways. Service runs from 6:45 AM to 6:35 PM on weekdays and from 7:45 AM to 6:35 PM on Saturday.
- Route 61 – Route 61 (Fontana – Ontario Mills – Pomona) extends from the City of Pomona and generally travels north/south to the City of Fontana. Key destinations on this route include Pomona Transit Center, Ontario International Airport, South Fontana Transit Center, Kaiser Permanente Hospital, and Fontana Metrolink Station Transcenter. Within the project Study Area, Route 61 runs on Sierra Avenue, Marygold Avenue, Juniper Avenue, and San Bernardino Avenue. Service is provided at 15-minute headways everyday from 4:20 AM to 10:04 PM on weekdays, from 5:55 AM to 10:04 PM on Saturday, and from 6:05 AM to 7:49 PM on Sunday.
- Route 82 – Route 82 (Rancho Cucamonga – Fontana – Sierra Lakes) is a U-shaped route extending from the City of Rancho Cucamonga to Fontana. Key destinations on this route include Ontario Mills Mall, Fontana Adult School, Kaiser Permanente Hospital, and Fontana Metrolink Station Transcenter. Within the project Study Area, Route 82 runs on Sierra Avenue and loops around Slover Avenue and Palm Court, and back onto Sierra Avenue. Service is provided at 60-minute headways everyday from 4:35 AM to 10:16 PM on weekdays, from 6:14 AM to 7:10 PM on Saturday, and from 6:10 AM to 7:12 PM on Sunday.
- The Marygold Transfer Center, comprised of the two stops on Marygold Avenue at Sierra Avenue, is the intersection of three routes, with two others nearby. See Figure 2-49.

The local bus fare is $1.50 for adults and $0.60 for seniors. Reduced fares are available for day and multi-day passes and to students.

Metrolink

The Fontana Metrolink Station Transcenter is also located on the southwest corner of Sierra Avenue and Orange Way. This location is a hub for train and transit commuters with direct access to the Fontana Metrolink Station and nine Omnitrans bus routes. Four of the five bus routes in the Study Area stop at the Transcenter. Increased service along these routes could better serve the Kaiser Permanente Hospital and adjacent shopping center.

The Fontana Metrolink Station is located approximately one mile north of the Study Area, on the southwest corner of Sierra Avenue and Orange Way. The train station is part of Metrolink's San Bernardino Line, extending east-west from the City of San Bernardino to Downtown Los Angeles. The Station is served by 20 trains in each direction on weekdays, 10 trains in each direction on Saturday, and seven trains in each direction on Sunday. On-site parking is provided. It is also located adjacent to the Fontana Metrolink Station Transcenter of which four of the five bus routes servicing the Study Area stop at the Fontana Metrolink Station. With direct access to the local transit network, more frequent stops could better serve commuters ranging from Riverside to Los Angeles County.

Planned Network

BRT

Omnitrans, along with the coordination of SCAG and the City of Fontana, plans to implement Bus Rapid Transit (BRT) service to the San Bernardino Valley region. BRT is designed to provide fast, high-quality bus service to attract choice riders and reduce the volume of individuals contributing to vehicular congestion. Within the Study Area, a BRT route is proposed along San Bernardino Avenue as part of the Corridor 5 Plan. The BRT route is currently under evaluation.

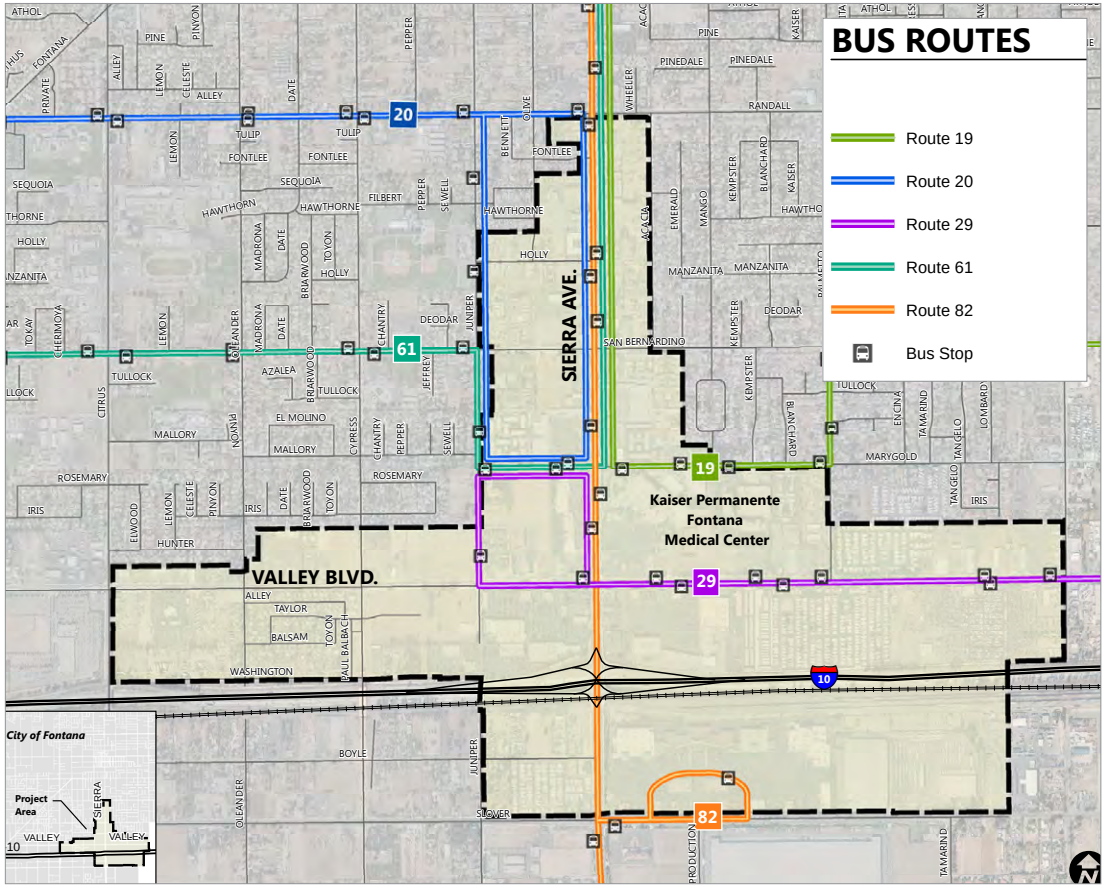


Figure 2-48: Omnitrans Routes

Figure 2-49: Marygold Transfer Center

Bicycle

Existing network

The bicycle network in the Study Area consists of dedicated bicycle facilities. The City of Fontana has three classifications of bikeways. A Class I Bike Path is separated from roadway traffic. A Class II Bike Lane delineates right-of-way for bicyclists and motorists and is usually separated by roadway striping. A Class III Bikeway is designated using signage along the roadway without special striping and provides continuity to other bicycle facilities.

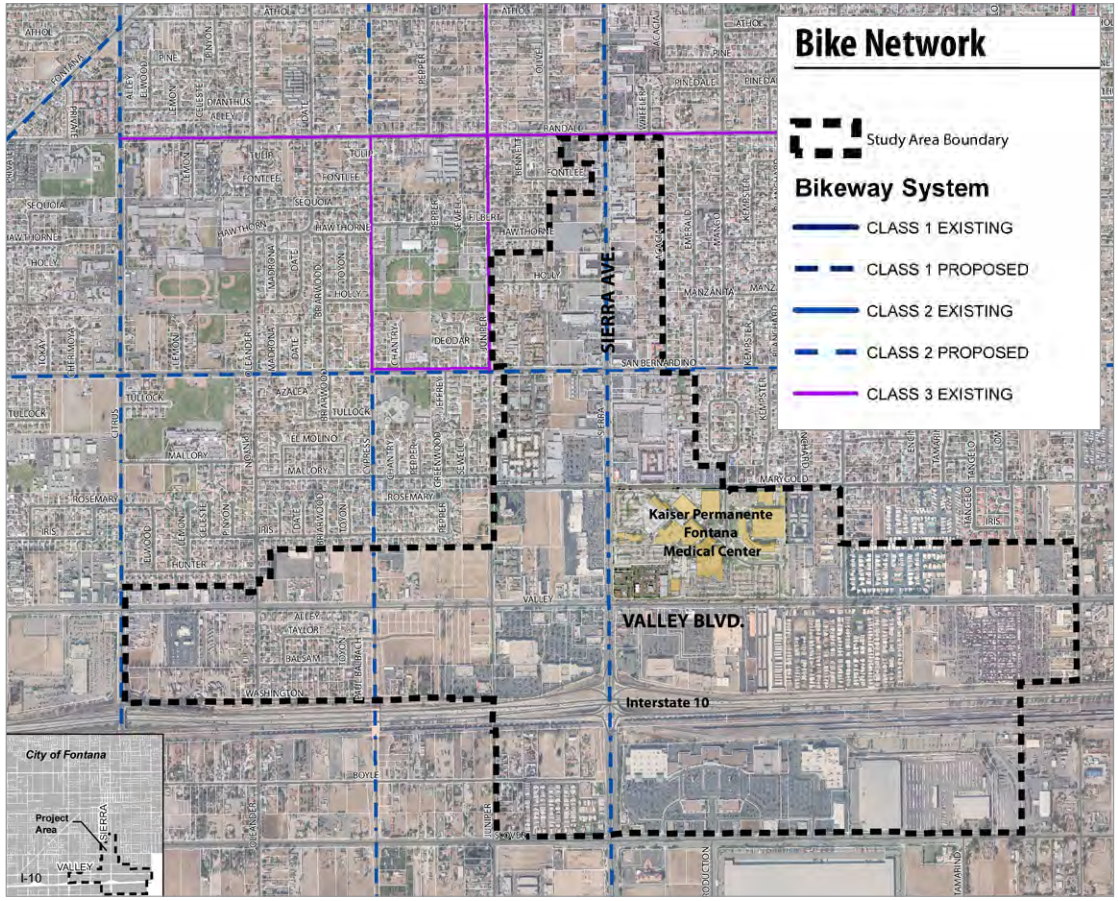


Figure 2-50: Bike Network

Planned Network

The City of Fontana General Plan identifies Cypress Avenue and Juniper Avenue, north of San Bernardino Avenue; San Bernardino Avenue, between Cypress Avenue and Juniper Avenue; and Randall Avenue as Class III Bikeways. Proposed for the Study Area are Class II Bike Lanes on Sierra Avenue, Cypress Avenue, and San Bernardino Avenue. While these planned bikeways would make for improved bicycle access and mobility in the Study Area, bikeways along less busy streets could create conditions that would be attractive to a broader spectrum of cyclists.

Key Streets

Existing conditions

The following figures show the major streets in the Study Area in cross section. While some cross sections are consistent along the length of a street, others, especially Sierra Avenue, change frequently even within the Study Area.

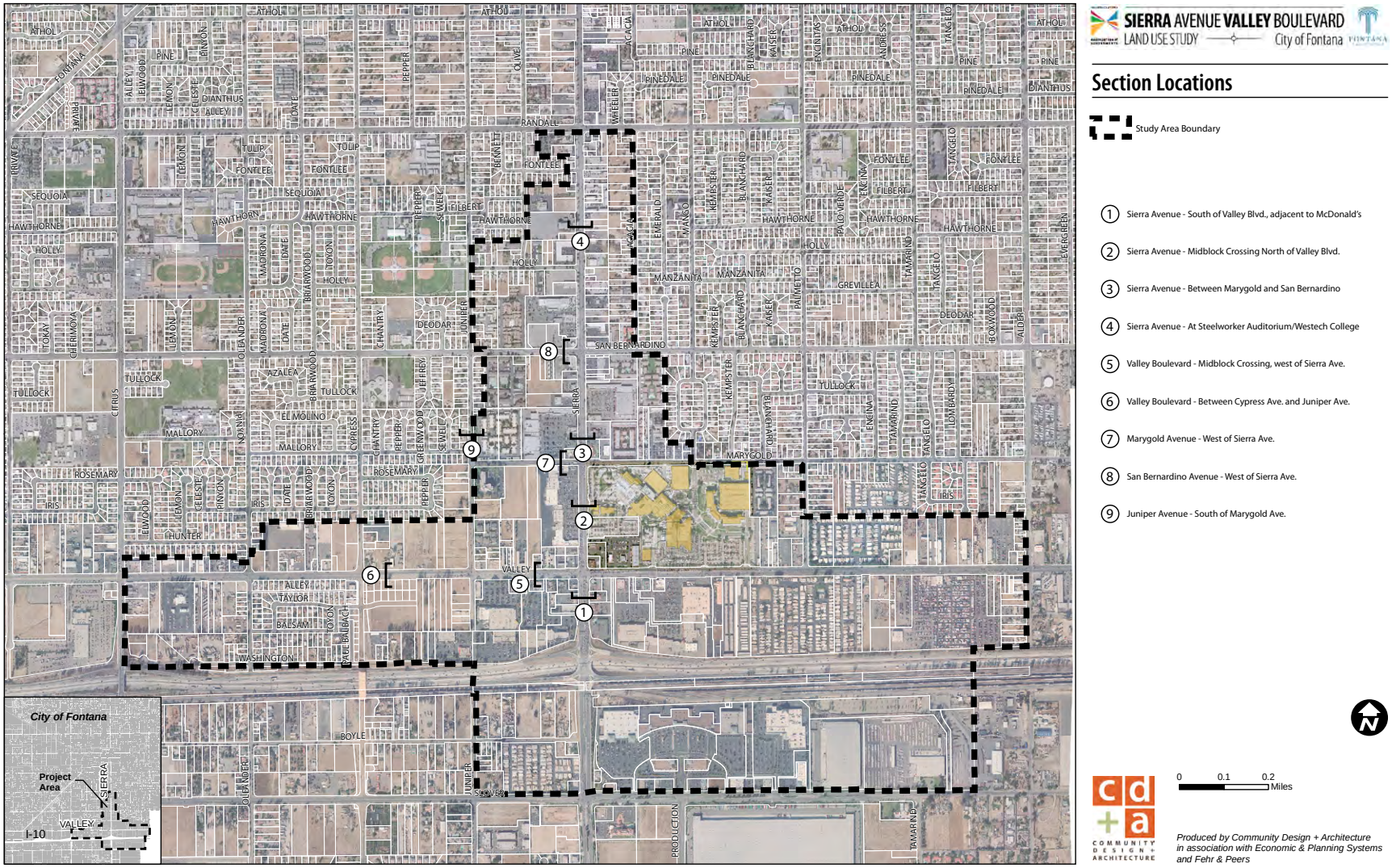


Figure 2-51: Existing Section Locations

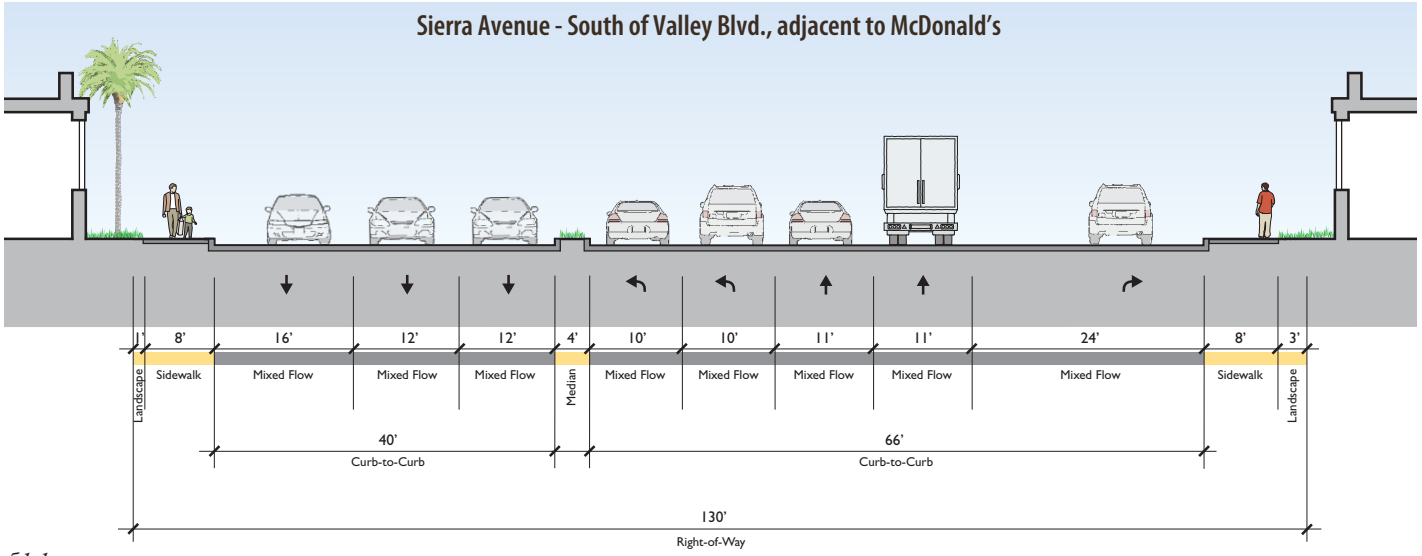


Figure 2-51.1

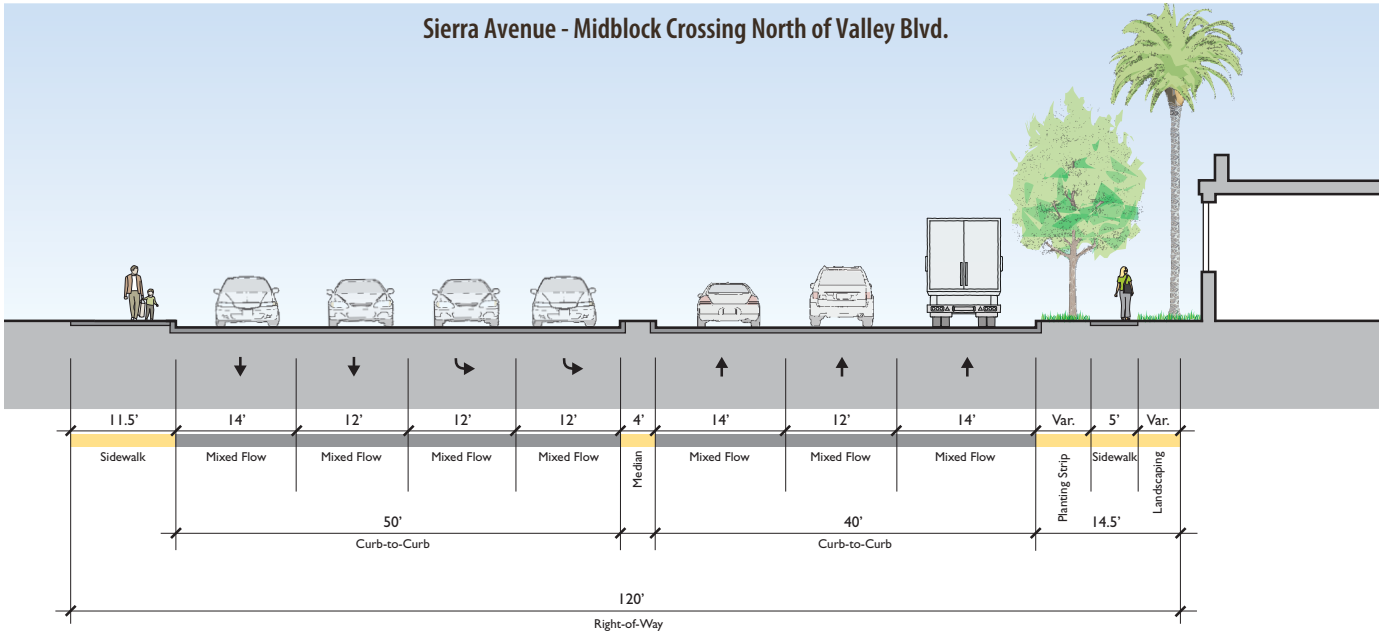


Figure 2-51.2: Exisitng Street Section: Sierra Avenue - Midblock Crossing North of Valley Blvd.

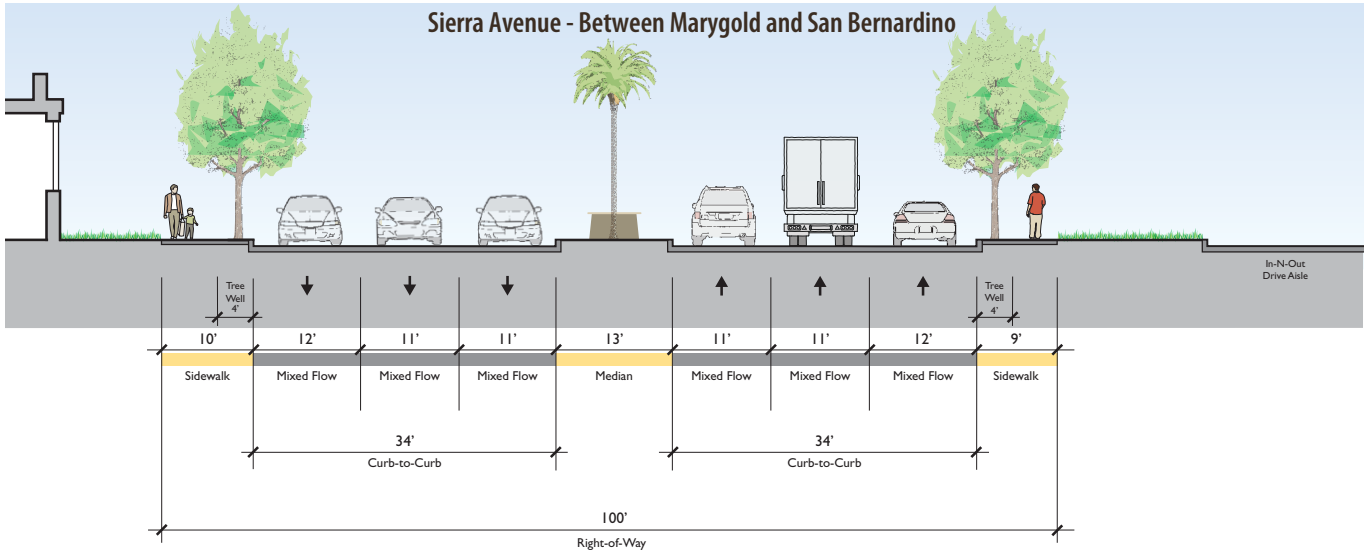


Figure 2-51.3

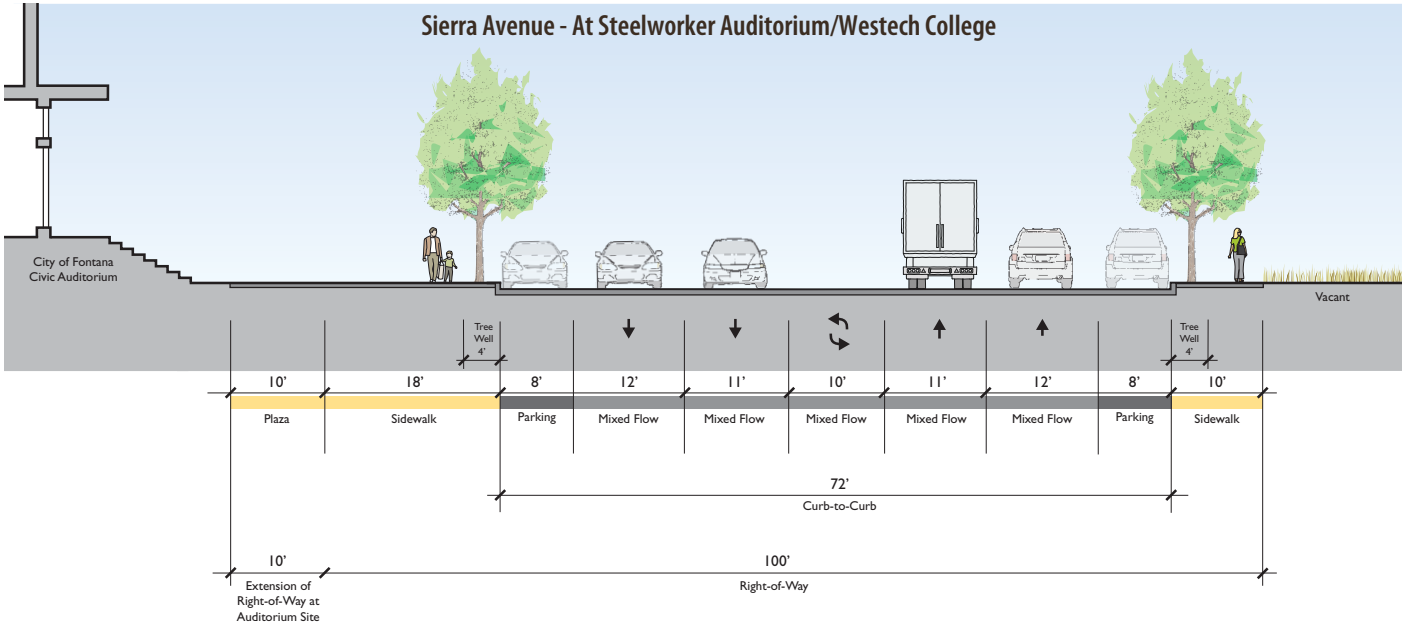


Figure 2-51.4

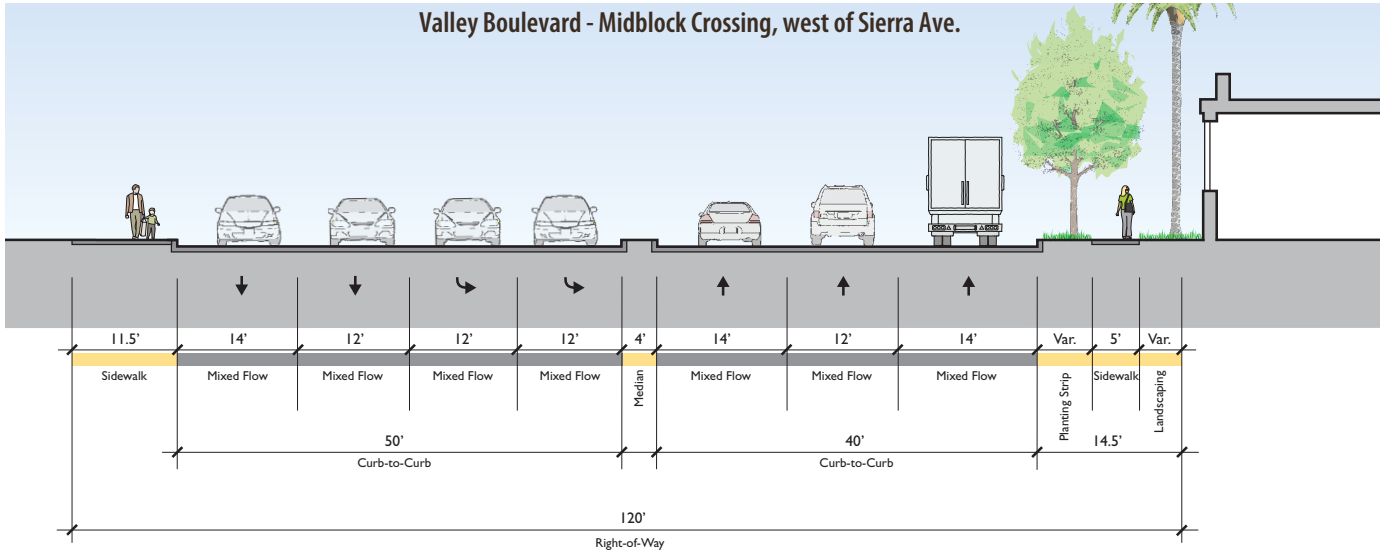


Figure 2-51.5

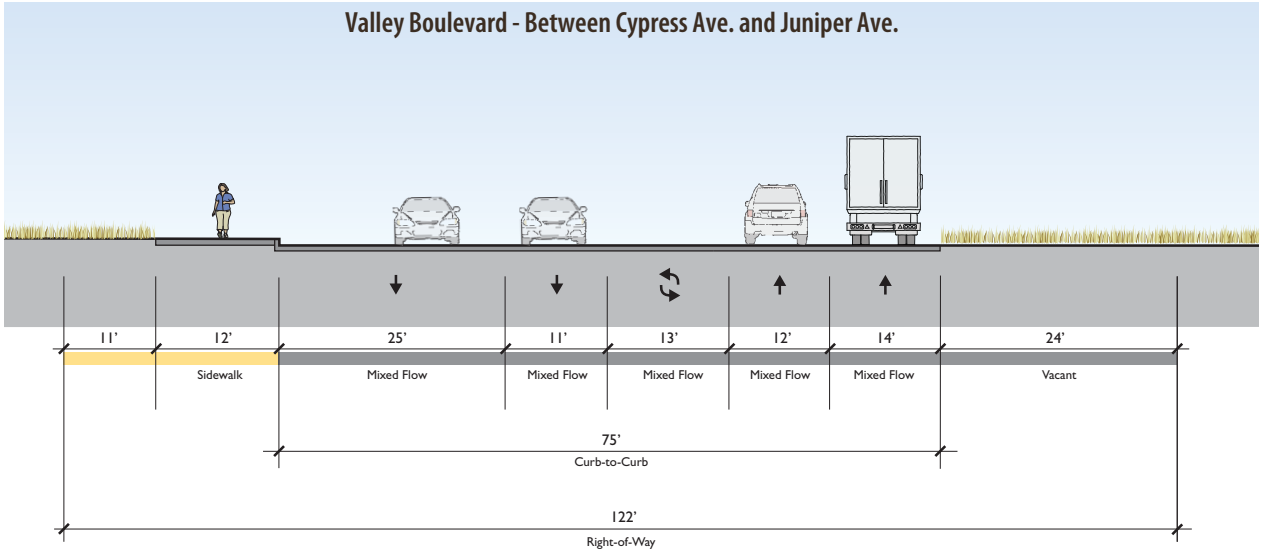


Figure 2-51.6

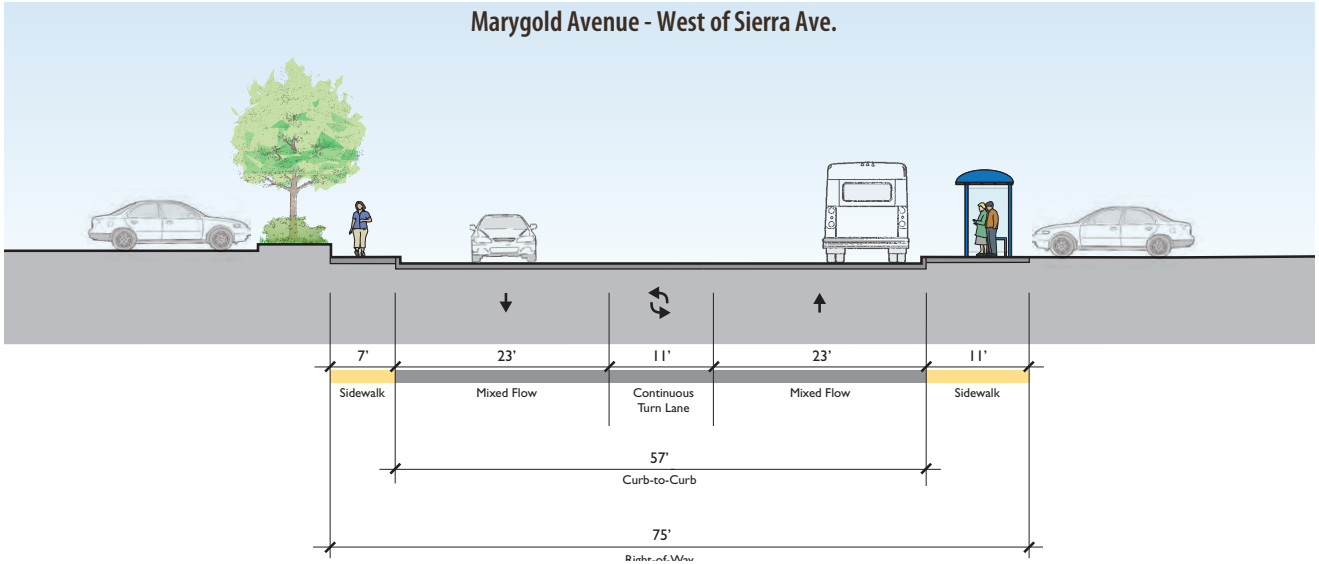


Figure 2-51.7

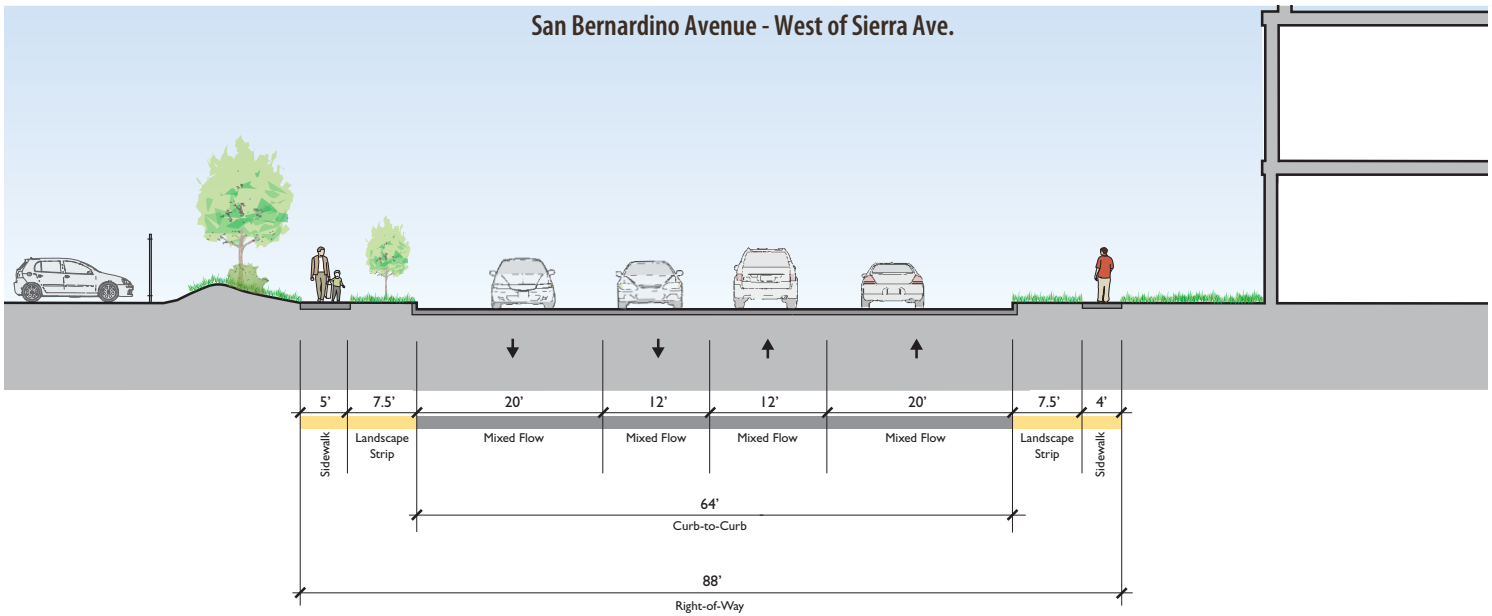


Figure 2-51.8

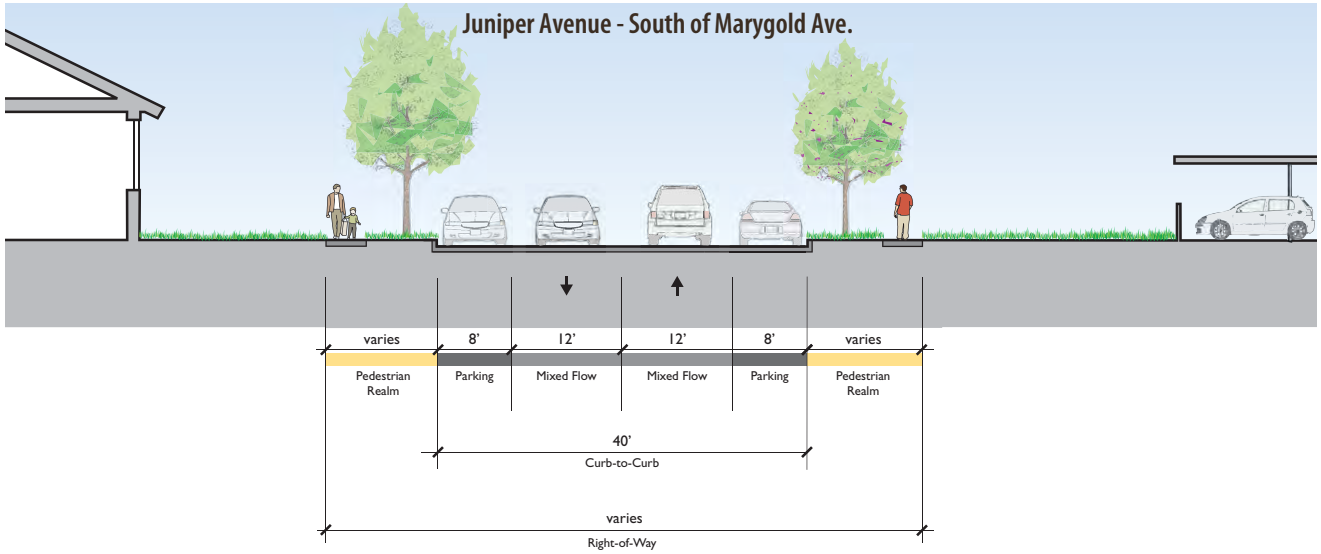

Juniper Avenue - South of Marygold Ave.
varies
8'
12'
12'
8'
varies
Pedestrian Realm
Parking
Mixed Flow
Mixed Flow
Parking
Pedestrian Realm
40'
Curb-to-Curb
varies
Right-of-Way

Figure 2-51.9

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Travel behavior

Driving

Roadways

With the absence of more current data available, existing traffic volumes and operations at a number of intersections and roadway segments within the Study Area were sourced from the Kaiser Medical Center Traffic Impact Analysis Report, VRPA Technologies, September 2008. Therefore, affects of development changes in the Study Area since September 2008, including the Kaiser Hospital redevelopment, are not reflected in the volume and LOS data provided. The data shown is indicative of travel behavior, however, and is used in this study to primarily identify circulation patterns and issues within the Study Area.

The City of Fontana accepts a minimum level of service (LOS) D condition during the peak commute hours at intersections and on a daily basis along roadway segments. Any locations operating at LOS E or F are considered deficient. According to the City of Fontana Circulation Element, divided roadways can accommodate approximately 9,000 vehicles per lane per day and undivided roadways can accommodate approximately 6,000 vehicles per day. Table 1 summarizes the LOS operations of intersections in the Study Area for Year 2008.

Intersection	Control[1]	Peak Hour	Delay	LOS
1. Marygold Avenue at Sierra Avenue	Signal	AM PM	41.8 >80.0	D F
2. Permanente Drive at Sierra Avenue	Signal	AM PM	22.8 33.2	C C
3. Valley Boulevard at Sierra Avenue	Signal	AM PM	47.5 >80.0	D F
4. Valley Boulevard at Vineyard Avenue	Signal	AM PM	35.8 35.1	D D
5. Valley Boulevard at Mango Avenue	Signal	AM PM	36.1 38.4	D D
6. Marygold Avenue at Mango Avenue	Signal	AM PM	42.6 47.3	D D

Source: Kaiser Medical Center Traffic Impact Analysis Report, VRPA Technologies, September 2008.

Figure 2-52: Intersection Level of Service

According to the City of Fontana criteria, the intersections within the Study Area operate at acceptable LOS with exception to the following locations:

- Marygold Avenue at Sierra Avenue (PM peak hour)
- Valley Boulevard at Sierra Avenue (PM peak hour)

The intersection of Marygold Avenue at Sierra Avenue has more than 300 vehicles making a westbound left turn during the AM and PM peak hour. Typically, a dedicated turn lane (left or right turn lane) can accommodate 300 vehicles per hour per lane (vphpl) before the operations of the intersection perform deficiently. These volumes could be attributed to residential traffic heading toward the Study Area or I-10.

Roadway Segment	Lanes[1]	Design Capacity[2] (Vehicles Per Day)	Average Daily Traffic[3] (Vehicles Per Day)	LOS
1. Sierra Avenue, between San Bernardino Avenue and Marygold Avenue	5D	45,000	30,970	B
2. Sierra Avenue, between Marygold Avenue and Permanente Drive	5D	45,000	33,730	C
3. Mango Avenue, north of Marygold Avenue	2U	12,000	480	A
4. Marygold Avenue, between Juniper Avenue and Sierra Avenue	2D	18,000	7,700	B
5. Marygold Avenue, between Sierra Avenue and Mango Avenue	2D	18,000	11,610	B
6. Marygold Avenue, between Mango Avenue and Palmetto Avenue	2U	12,000	9,330	C
7. Valley Boulevard, between Juniper Avenue and Sierra Avenue	5D	45,000	25,340	A
8. Valley Boulevard, between Sierra Avenue and Vineyard Valley	6D	54,000	32,420	B
9. Valley Boulevard, between Vineyard Valley and Mango Avenue	6D	54,000	26,840	A
10. Valley Boulevard, between Mango Avenue and Palmetto Avenue	4D	36,000	22,670	B

Notes:
1 – U = undivided roadway, D = divided roadway
2 – *City of Fontana Circulation Element*
3 - *Kaiser Medical Center Traffic Impact Analysis Report,* VRPA Technologies, September 2008.

Figure 2-53: Roadway Level of Service

The intersection of Valley Boulevard at Sierra Avenue experiences high traffic volumes in the northbound left, northbound right, eastbound right, and westbound left turn lane. These volumes are attributed to commuters travelling to and from I-10.

Table 2 summarizes the LOS operations of roadway segments in the Study Area for Year 2008.

According to the City of Fontana criteria, the roadway segments within the Study Area operate within design capacities.

From Table 1 and 2, we can identify that Sierra Avenue carries higher volumes of traffic than Valley Boulevard. This could be attributed to drivers going to/from I-10. Intersections on Valley Boulevard operate at LOS D or worse during the peak hours even though less traffic is observed on the roadway. Roadway segment volumes, roadway segment LOS, and intersection LOS are shown on the Roadway Network Level of Service exhibit (Figure 2-54).

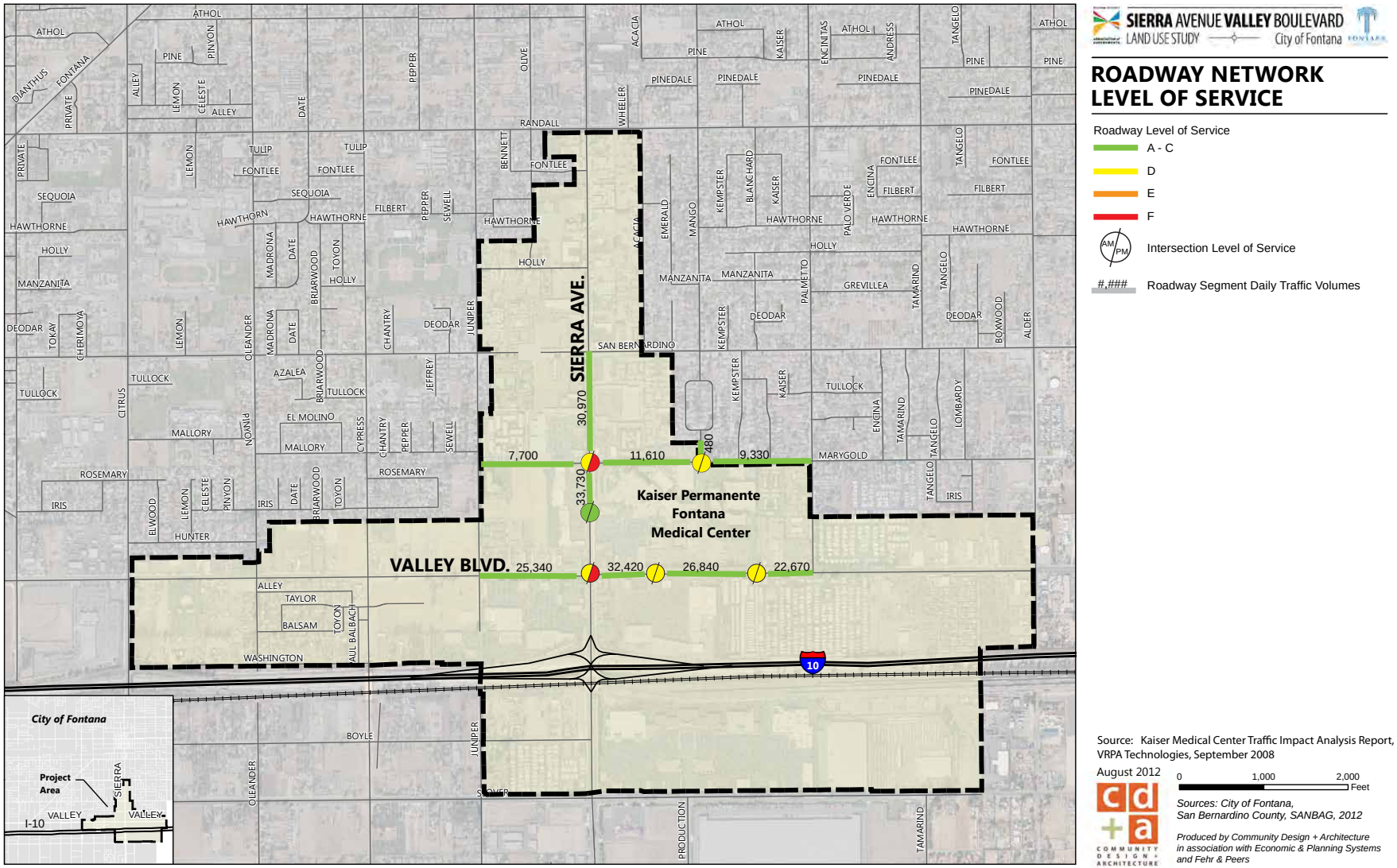

Figure 2-54: Roadway Network Level of Service

Parking

The 2008 Kaiser campus parking study indicated that the supply of parking on the campus was serving the demand. The study found that 77% of spaces were typically occupied. However, in interviews, Kaiser members and their families indicated that the process of parking on the Kaiser campus was a source of anxiety, sometimes even more than driving through traffic to the campus.

Anecdotally, tenants of the Sierra Plaza South shopping center noted that they observe Kaiser employees, members or visitors parking in the shopping center lot and walking across the street to the campus, putting an additional strain on their available customer parking.

Walking

Anecdotally, stakeholders describe high levels of pedestrian activity from several key groups. Merchants in the Sierra Plaza South shopping center such as Stater Brothers grocery store and Billy J's restaurant stated that significant percentages of their customers arrive on foot. Stater Brothers estimated that about 25 percent of their customers are nearby residents or employees who walk to the store.

The other key group is those associated with Kaiser Permanente. See the Kaiser Permanente Employees, Members, and Visitors section below.

Figure 2-55: Residents Walking to Shopping Center

To quantify non-motorist activity in the Study Area, pedestrian counts were conducted at the following six locations on August 22, 2012 during the morning (7-9 AM), midday (11 AM – 1 PM), and evening (4-6 PM) peak hours. The count locations are shown on the Pedestrian Peak Hour Traffic Volumes exhibit.

1. Sierra Avenue at San Bernardino Avenue
2. Sierra Avenue at Marygold Avenue
3. Sierra Avenue at Fontana Center/Permanente Drive
4. Sierra Avenue at Valley Boulevard
5. Marygold Avenue, between Ironwood Luxury Apartments and Kaiser Permanente Driveway
6. Vineyard Valley at Valley Boulevard

All of the study intersections have crosswalks in all four directions of travel except for at Sierra Avenue and Fontana Center/Permanente Drive in the westbound direction and at Vineyard Valley and Valley Boulevard in the southbound direction. A pedestrian signal is provided on Marygold Avenue, between Ironwood Luxury Apartments and Kaiser Permanente Driveway.

The count locations provide key connections between residential development, commercial plazas, and the Kaiser Permanente Hospital. High pedestrian volumes can be seen throughout the Study Area with midday periods experiencing the highest volume of traffic. Of the six count locations, the crosswalk on Marygold Avenue, between Ironwood Luxury Apartments and Kaiser Permanente Driveway experiences the highest activity with pedestrian volumes of 147 during the AM peak hour, 105 during the midday peak hour, and 92 during the PM peak hour. There was approximately 10 jaywalkers observed crossing Marygold Avenue, east of the crosswalk during the AM and PM peak hours. The maximum number of 17 jaywalkers was observed crossing east of the Sierra Avenue at Fontana Center/Permanente Drive intersection during the midday peak hour. The majority of jaywalkers were not seen crossing over public streets, but across private developments before entering into the crosswalk. Pedestrians could be crossing in parking areas and driveways before reaching the crosswalk, endangering them. Jaywalker volumes are combined with the nearest crosswalk volumes. Pedestrian volumes during the peak hours are shown on the Pedestrian Peak Hour Traffic Volumes exhibit.

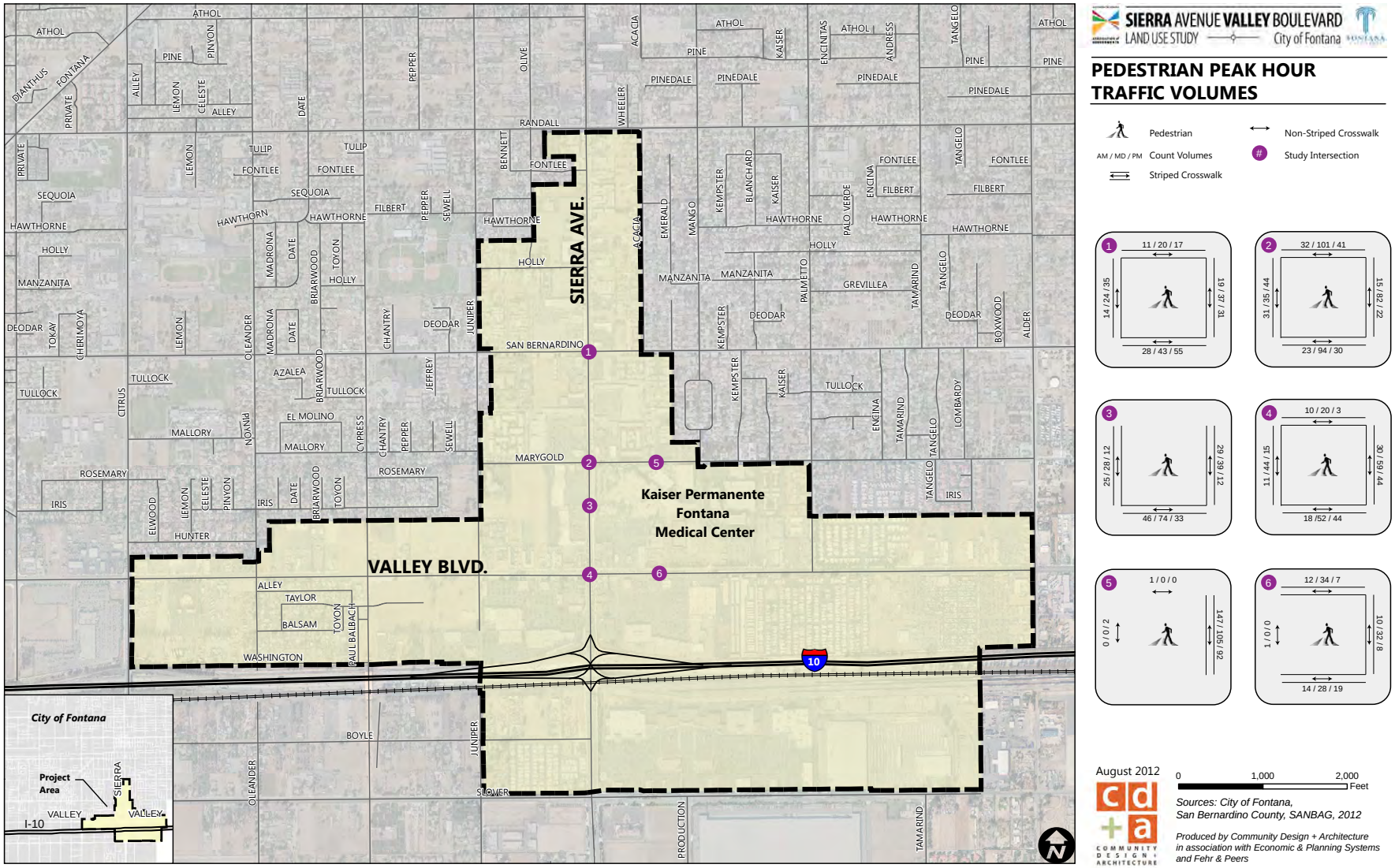

Figure 2-56: Pedestrian Peak Hour Traffic Volume

Generally, the highest levels of pedestrians occurred midday. Within two hours at the midday lunch period, there were 312 pedestrians counted at Marygold and Sierra; 139 at Sierra and the Kaiser driveway; 175 at Sierra and Valley; 105 at Marygold and the Kaiser driveway; and 94 at Valley east of Sierra, for a total of 825 pedestrians at all locations.

Kaiser-related pedestrians seem to prefer walking north and west of the campus versus the southwest. Despite more variety of shopping and eating in the Vineyard Valley and Empire Center shopping centers south of Valley Boulevard, the study's pedestrian counts showed far more pedestrians walking through the two intersections to the northwest and west (451) than the two intersections to the southwest and south (269). One reason could be more comfortable and direct pedestrian routes.

Transit Ridership

In general, Omnitrans perceives its ridership is high and growing quickly – systemwide, in Fontana, and the Sierra-Valley area. Omnitrans stated that it is beginning to see choice riders, especially in the form of affluent students attending institutions like Chaffee College. Omnitrans stated that among students, ridership is increasing 16 percent a year.

Omnitrans stated that customer satisfaction was high, especially with its network and on-time performance of buses. Omnitrans cited an 86 percent on-time performance and added that the new interchange, at Sierra, has drastically improved on-time performance. The agency said what its customers desire most is high frequency buses.

Omnitrans provided bus boarding and alighting data between September 2011 and October 2011 at bus stops along Routes 19, 20, 29, 61, and 82 in the Study Area. The information reflects the volume of passengers getting on and off at each bus stop. The bus stops located within close proximity (between Juniper Avenue and Mango Avenue) to the intersection of Sierra Avenue and Marygold Avenue experience the highest volume of transit commuters. The most frequented bus stop is located on Marygold Avenue, west of Sierra Avenue with an average of 149 people getting on buses at this location and 179 people getting off buses at this location on a daily basis. This exemplifies the high demand of retail and Kaiser Permanente Hospital commuters utilizing transit in the Study Area. With frequent boardings throughout the day near the Kaiser Permanente Hospital, additional bus service or new routes could be needed.

Within the Study Area, the maximum number of riders boarding and alighting at each of the following bus stops are listed as follows:

- Juniper Avenue, at Marygold Avenue: 8 boarding / 12 alighting
- Sierra Avenue, at San Bernardino Avenue: 72 boarding / 68 alighting
- San Bernardino Avenue, at Juniper Avenue: 15 boarding / 14 alighting
- Marygold Avenue, at Sierra Avenue: 149 boarding / 179 alighting
- Valley Boulevard, at Vineyard Valley: 9 boarding / 3 alighting

Bicycling

To quantify bicycling activity in the Study Area, bicycling counts were conducted at the same six locations and times as the pedestrian counts.

The intersection of Sierra Avenue and San Bernardino Avenue experienced the highest volume of bicycle activity, with bicyclist volumes of 10 during the AM peak hour, 15 during the midday peak hour, and 40 during the PM peak hour. Of these p.m. peak hour 40, 29 were riding on Sierra, showing a degree of demand for bicycling on this corridor. Bicycle routes and volumes in the Study Area are shown on the Bicycle Peak Hour Traffic Volumes exhibit (Figure 2-57). With train and bus services located within close proximity to the Study Area, bicycle facilities are lacking in providing the connectivity between transit hubs and key destinations.

While the bicycle provides a potentially good extension of the Metrolink system to the Kaiser campus, this does not appear to be a popular mode of transportation for Kaiser employees, although some employees do commute by bicycle.

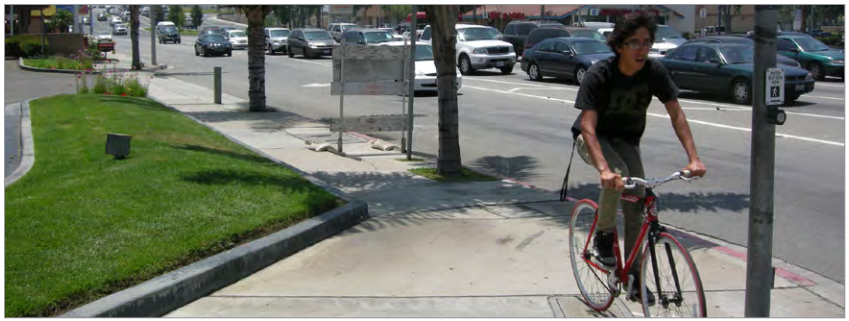

Figure 2-58: Bicylist along Sierra

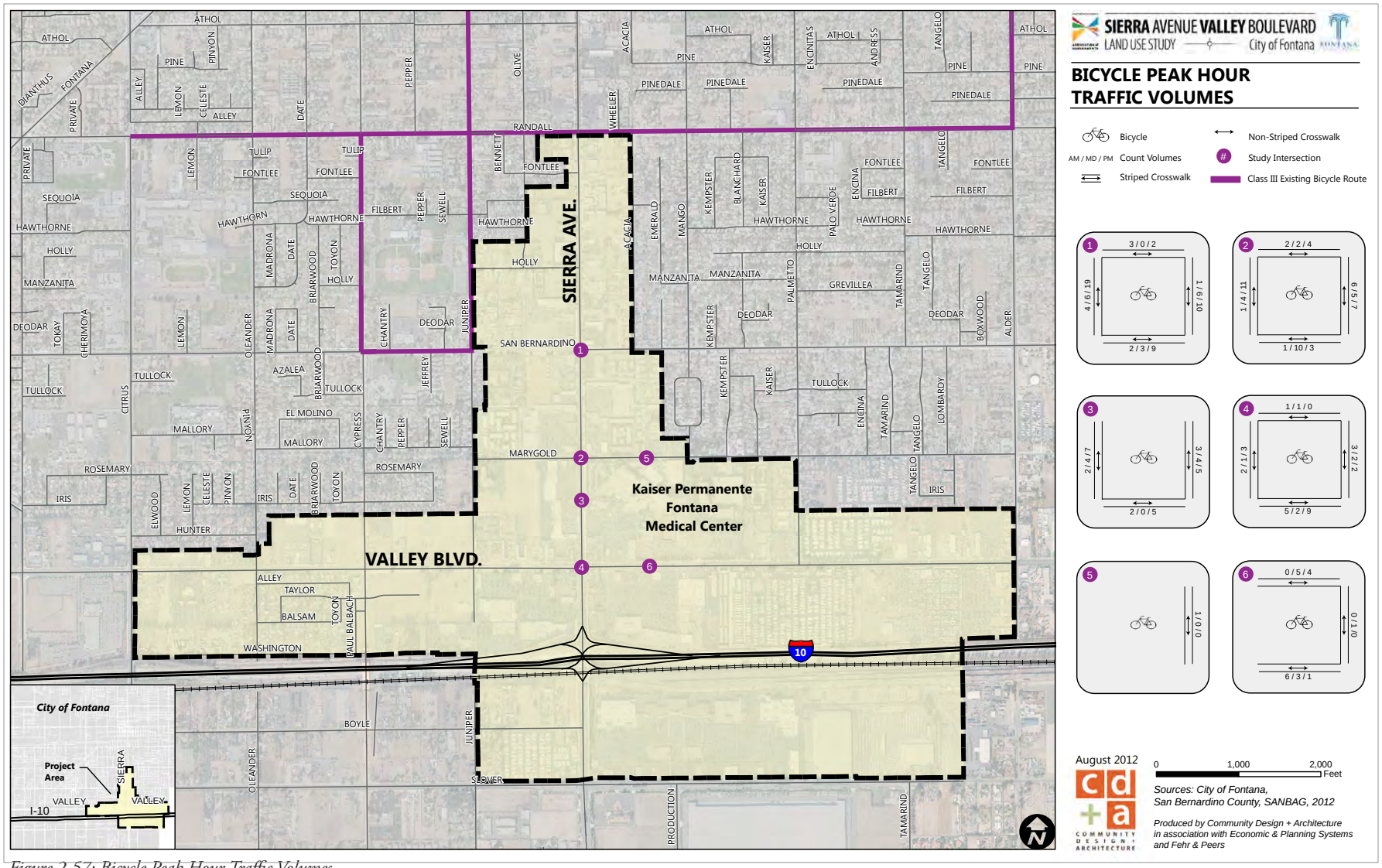

Figure 2-57: Bicycle Peak Hour Traffic Volumes

Kaiser Permanente employees, members, and visitors

The travel behavior of Kaiser Permanente employees, members, and visitors is in many ways the engine of the entire Sierra-Valley area. How employees get to work, visitors or members access the campus has a major role in the character of the area and will shape the ability to achieve project goals in the future.

In part to better understand Kaiser travel behavior, the Project Team undertook a survey of Kaiser employees and members/visitors. The Team administered the survey at three consecutive Kaiser Permanente Fontana farmers markets in August, 2012. The Team distributed different surveys to employees on one hand and visitors/members on the other hand. Some of the questions in the two surveys were different and some were the same or similar. A total of 59 people responded to the survey.

Key travel behavior findings from the survey include:

Driving, especially driving alone, is the prevalent mode for accessing the Kaiser campus: 87% of employees surveyed said they drove to work, including 78% who said they drove alone. 94% of members and visitors surveyed said they drove, however 19% of these carpooled.

The majority of people driving to the Kaiser campus come from I-10 through the Sierra-Valley intersection: 61% of all people surveyed said they used the I-10-Sierra interchange when they drove to the Kaiser campus. Smaller percentages of people used the Citrus (17.4%) and Cedar (8.7%) interchanges; and 13% of those who drive do not come via I-10.

Employees do not take transit to work for a variety of factors, some of which have the potential to be changed: Responses to the employee question asking what are the biggest factor(s) preventing them from taking mass transit to the Kaiser Permanente campus were widely distributed among the various choices: It doesn't stop in a convenient location near my home (35%); I would likely take Metrolink but it stops too far away from the Kaiser Permanente campus (35%); It is too slow compared to driving (35%); It is too expensive (13%); I don't know how to use it (4%); Personal safety (9%). Other was (17%). The most significant finding here is that 35% of respondents who would likely take Metrolink but it stops too far away from the Kaiser Permanente campus. Among the highest responses, this is an issue that could be addressed locally by improving bicycle connections between Kaiser and Metrolink, and by some combination of local or regional transit or shuttle improvements.

Short trips for shopping, eating and personal services occur frequently: 26% of employees surveyed leave the campus at least once per day to shop eat or obtain personal services, with another 39% leaving the campus at least 1 to 2 times a week. Meanwhile, over half (53%) of visitors and members surveyed said they left patronized businesses adjacent to the Kaiser campus at least 1 to 2 times a week, and 25% of respondents said they left the Kaiser campus to patronize these businesses and then returned to the Kaiser campus. This indicates that short trips around the Kaiser campus occur with a high frequency.

Employees, members, and visitors tend to drive on these trips although employees are somewhat willing to walk: 75% of members and visitors surveyed said they drove for trips to patronize adjacent businesses, while 65% percent of employees said they always or usually drove. 26% of employees said they either usually or always walked for these trips. It is possible that the high percentage of members and visitors that drive to adjacent businesses is a result of their stopping at the businesses either coming or going from the Kaiser campus.

A better pedestrian environment could increase the desire to walk to nearby amenities: Significant percentages of employees, members and visitors indicated that improving aspects of the pedestrian environment would induce them to walk

Figure 2-59: Kaiser Employees Walking Around the Kaiser Campus

to nearby eating or shopping establishments. Survey respondents said that they would walk from the campus to a nearby eating or shopping establishment more if there were wider sidewalks (25%); more shade provided along the walkways (44%); and the streets were easier to cross (25%). In the employee survey, more shade was the leading factor (along with a greater variety of eating and shopping) that would induce employees to walk to nearby amenities. Visitors seemed to want more and better signage and easier ways through the campus, while these factors were not as important to employees.

In addition to the survey, project team observations and conversations with employees found that many employees like to walk for exercise during their breaks outside of the campus.

Residential travel behavior

Data from the 2010 American Community Survey is clear that people living in and around the Study Area overwhelmingly drive to work. Analysis of the expanded Demographic Study Area used for demographic analysis in Part 1 revealed that residents of the Study Area drove to work at a higher rate (93%) than the City of Fontana as a whole (92%) or San Bernardino County (92%). Only 2% of Study Area residents took transit, and 0% biked. Figures 2-53 to 2-55 show the relative mode shares of auto, transit and bike in and around the Study Area.

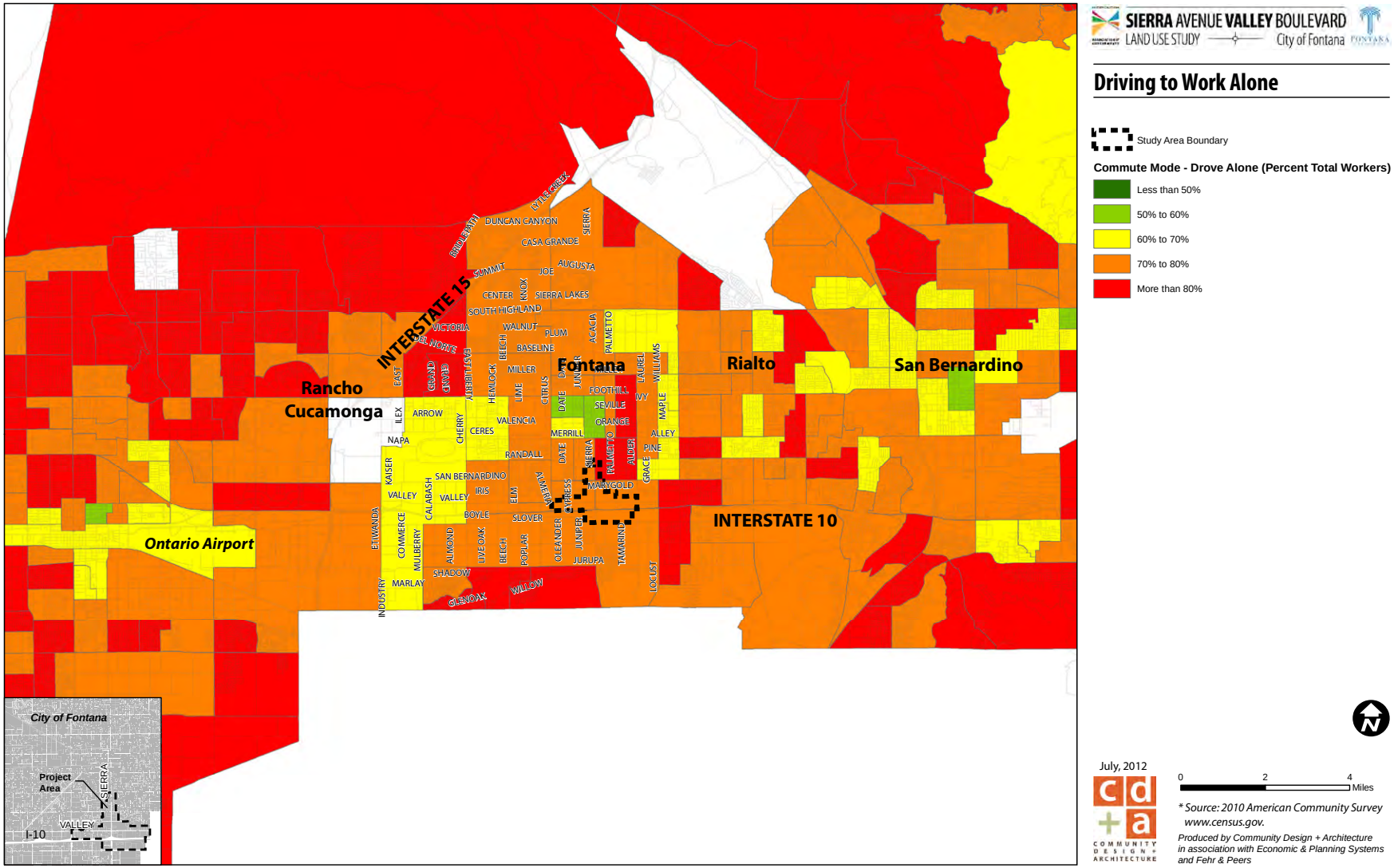

Figure 2-60: Mode Share Map: Drive Alone to Work

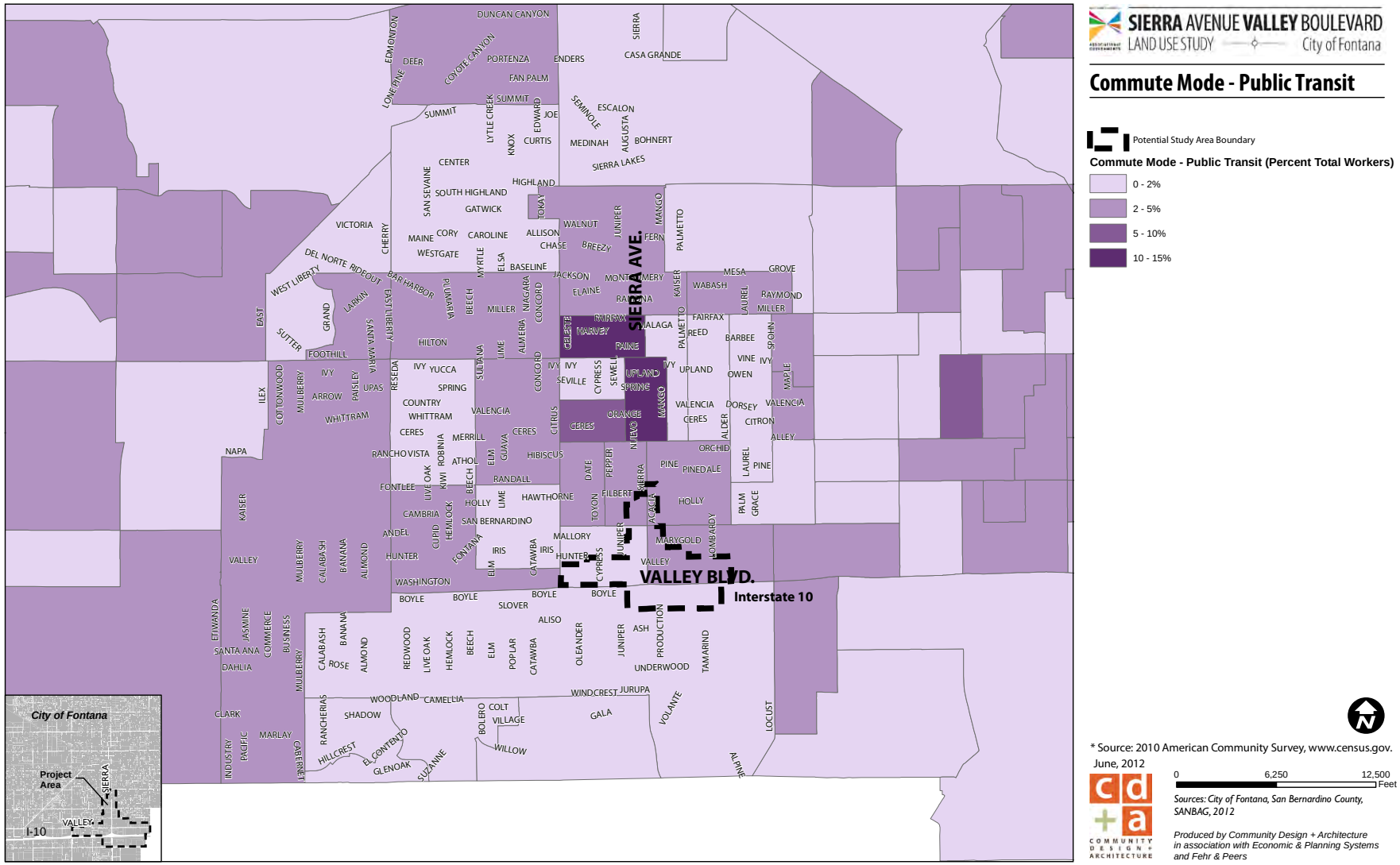

Figure 2-61: Mode Share Map - Transit to Work

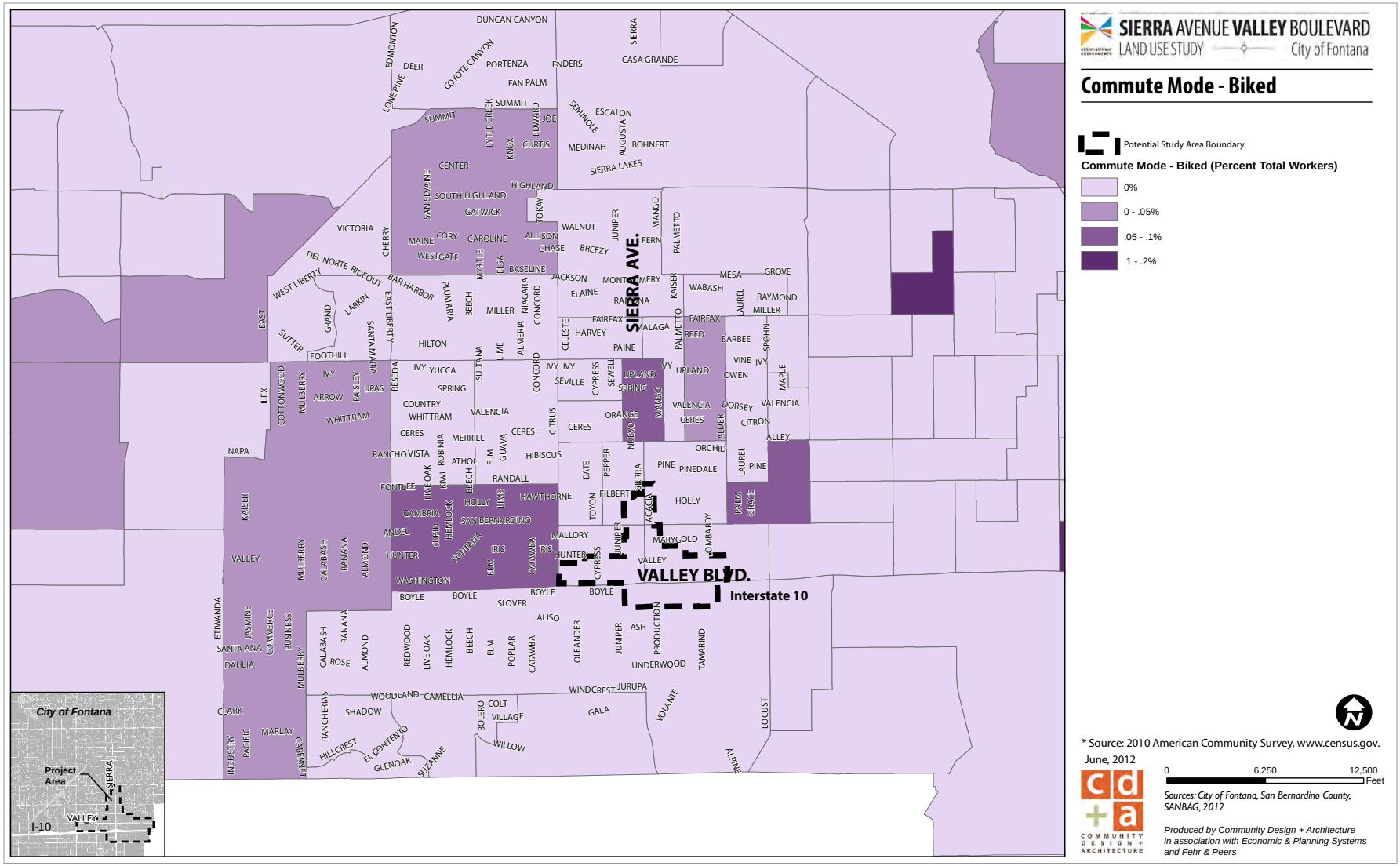

Figure 2-62: Mode Share Map - Bike to Work

Transportation Analysis

Auto network

The following **challenges** exist in the auto network:

- There is currently congestion experienced at locations within the Study Area: Marygold Avenue at Sierra Avenue and Valley Boulevard at Sierra Avenue, and the majority of other locations operating at LOS D
- There are frequent driveways on arterials in the Study Area, causing circulation delays and increasing the potential for collisions at these locations
- Frequent inconsistencies in the roadway geometries and widths are present along Sierra Avenue, Valley Boulevard, and Slover Avenue that cause unsafe driving and merging conditions
- The speed limit on Valley Boulevard is 40 mph, creating unsafe conditions for pedestrians crossing the street or potential bicyclists

The following **assets** exist in the auto network:

- Sierra Avenue, north of San Bernardino Avenue and Valley Boulevard, east of Palmetto Avenue have excess right-of-way that can accommodate additional traffic or be dedicated as bicycle facilities
- I-10 is located on the south end of the Study Area, connecting the area regionally
- The Study Area has access to the Fontana Metrolink Station and Omnitrans bus service
- The high volume of mixed-used development can adopt a shared parking policy to help reduce the number of driveways on arterials and reduce the required number of parking spaces in the Study Area
- The Study Area consists of high business/commercial with the potential to expand and generate additional traffic

Pedestrian network

The following **challenges** exist in the pedestrian network:

- Segments of Valley Boulevard, between Citrus Avenue and Juniper Avenue; and Juniper Avenue have incomplete sidewalks
- The intersections of Sierra Avenue at Fontana Center/Permanente Drive and Valley Boulevard at Vineyard Valley do not have complete crosswalks for convenient pedestrian access through the intersection
- Pedestrians are crossing streets at non-crosswalk locations, creating a dangerous situation on public roads and private development, such as at Sierra Avenue and Fontana Center/Permanente Drive
- Many pedestrian routes in and out of the Kaiser campus are indirect, leading pedestrians to cross parking lots and landscaped areas
- There is no consistency between existing sidewalks throughout the Study Area, such as with landscaping and widths
- Varying roadway widths create uneven walking paths and unsafe crossing conditions, such as along Sierra Avenue, between Marygold Avenue and I-10 Freeway

To maximize walking opportunities between the destinations and reduce traffic congestion within the Study Area, the pedestrian network could be expanded to better serve the community. The Study Area encompasses the following **assets** in providing a pedestrian-friendly environment:

- The Study Area attracts high volumes of pedestrians throughout the day
- Peak midday volumes could represent a healthy relationship between employees and food vendors
- There are many commercial/retail/office uses located within walking distance of each other
- The majority of the study has paved sidewalks with landscaping
- There is direct pedestrian access to the bus network
- The survey of Kaiser employees and visitors/members indicates that addressing some issues in the pedestrian network would induce more Kaiser-related people to walk more on short trips from the campus.
- Providing safety features such as proper lighting and emergency call boxes at high activity centers could also influence travelers' decisions to walk and bike instead of drive.

Transit network

The following **challenges** exist in the transit network:

- Bus routes from the west do not provide direct access to the site. A person using these routes would have to leave the bus on Marygold Avenue to the west of Sierra Avenue and then walk across Sierra to reach the site. In particular, there are no routes accessing the site from Valley Boulevard to the west
- No direct shuttle service from the Fontana Metrolink Station Transcenter to the Kaiser Permanente Hospital exists
- There is only one primary north-south route on Sierra Avenue (Route 82)
- The existing bus stops have limited amenities
- Many of the existing bus routes provide limited night and weekend service

With increasing numbers in bus ridership and plans for redevelopment in the Study Area, the transit network could be expanded to better serve commuters. The Study Area has the following **assets** that could help provide improved mass transit service and access:

- There are 11 bus stops adjacent to or proximate to the Kaiser campus including 5 on Valley Boulevard, two on Sierra Avenue, and four on Marygold Avenue
- There are three bus routes which travel along the periphery of the Kaiser campus
- A majority of the bus routes operate with fairly frequent headways (15 to 30 minutes) during peak hours
- The existing bus routes are structured to provide several bus accesses to and from the east. These routes provide multiple stops along the boundary of the project

Bicycle network

The following **challenges** exist in the bicycle network:

- Sierra Avenue has underutilized right-of-way that can be dedicated to bicycle traffic
- Lack of bicycle amenities such as bike racks and lockers at transit hubs and retail and employment centers
- There are no bicycle facilities connecting the Study Area and Fontana Metrolink Station/ Fontana Metrolink Station Transcenter
- The 40 mph speed limit on Valley Boulevard creates unsafe traveling conditions for bicycles

With the Fontana Metrolink Station and Transcenter located approximately one mile north of the Study Area, bicycling provides the connectivity between high-level (train) and low-level (walking) commuting. To maximize the bicycling opportunities between destinations and reduce traffic congestion within the Study Area, the bicycle network could be expanded to better serve the community. The Study Area contains the following **assets** to expand its bicycle network:

- There is currently excess right-of-way on Sierra Avenue, between Randall Avenue and San Bernardino and on Valley Boulevard, between Palmetto Avenue and Alder Avenue for bike lanes
- There are many restaurants, employment opportunities, and retail stores located on Sierra Avenue and Valley Boulevard
- Bicycle lanes currently exist on streets nearby the Study Area, providing additional connectivity
- With the exception of Valley Boulevard, all of the streets in the Study Area have a maximum speed limit of 35 mph

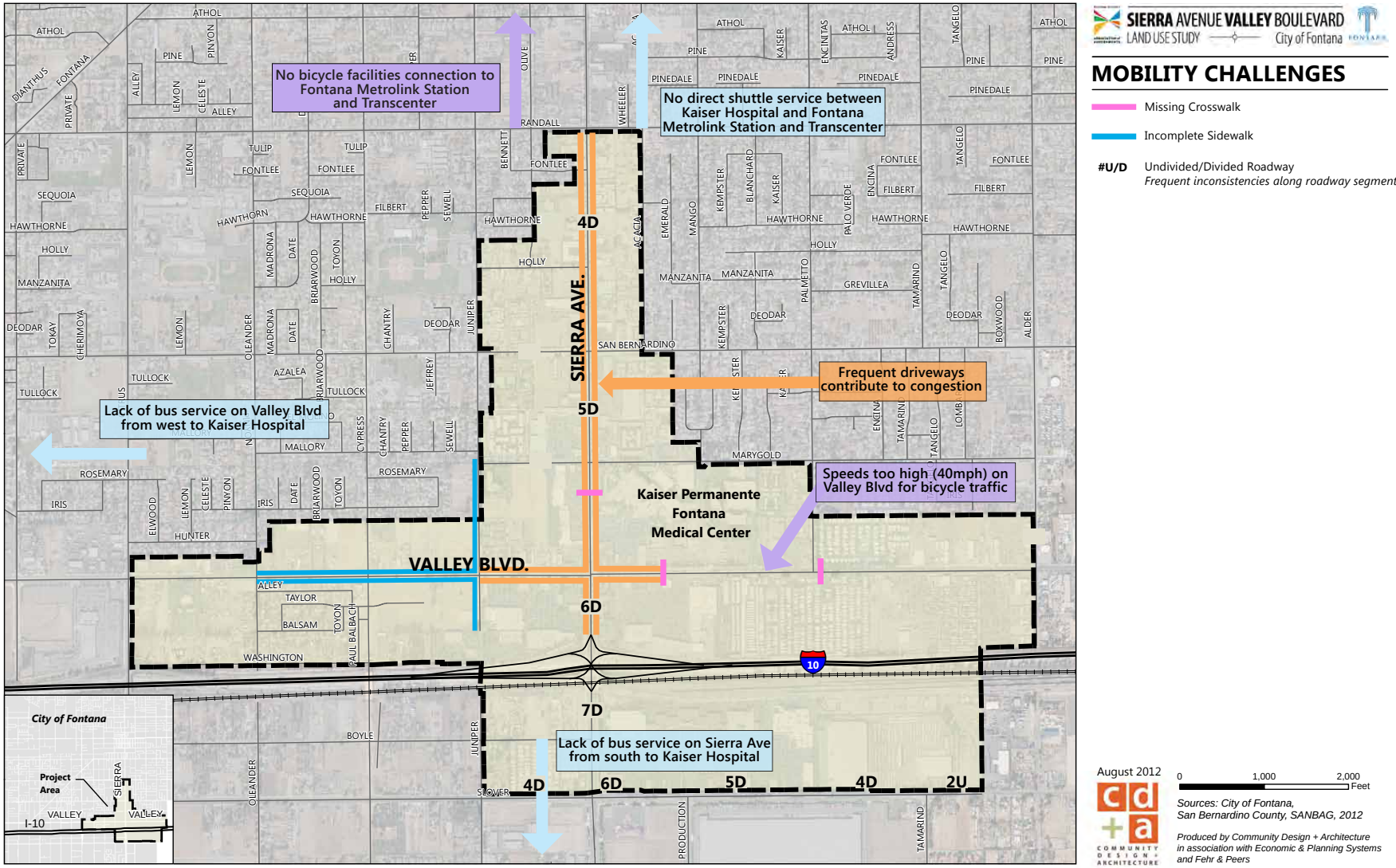

Figure 2-63: Transportation Challenges

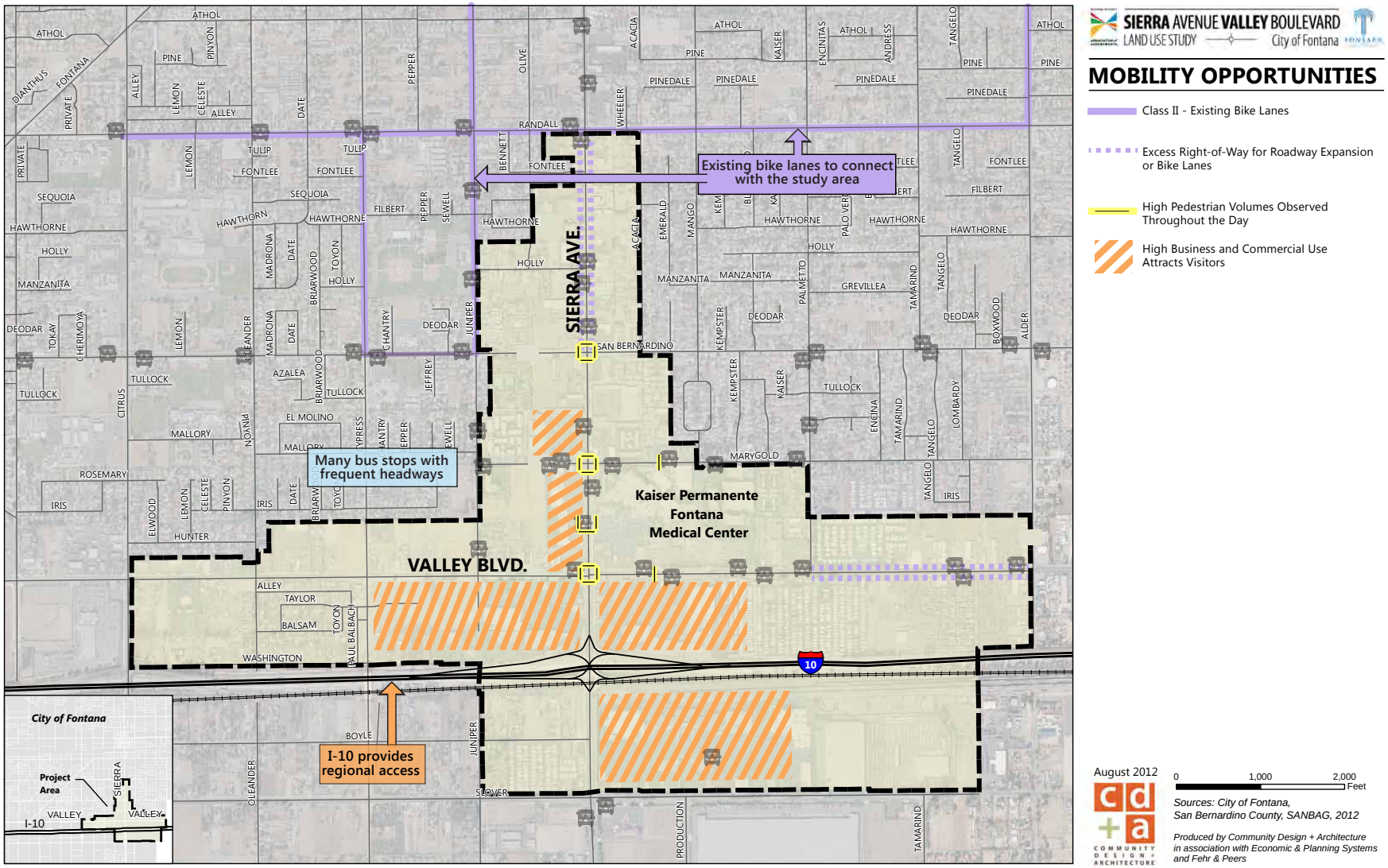

Figure 2-64: Transportation Opportunities

Project Goals

Vehicular, pedestrian, transit, and bicycle mobility and access are key aspects of achieving the project goals. Many project goals are explicitly tied to transportation, such as reducing congestion, increasing walkability, and improving transit. However the other goals, of increasing complementary uses to the Kaiser Campus, finding opportunities for new housing, and creating quality gateways and places in the area are also strongly tied to successful transportation networks, facilities and conditions.

Reduce traffic congestion at Sierra/Valley intersection

As the traffic analysis shows, congestion – in terms of an unacceptable level of service (LOS) at a given intersection – is concentrated in the Study Area in two Sierra intersections, Valley and Marygold. These are the two intersections nearest the Kaiser Permanente campus, and the heavy turning traffic toward and away from the Kaiser campus seems to indicate that traffic to and from the campus is responsible for much of the congestion. Furthermore, survey results indicated that driving is the primary mode not only for accessing the Kaiser campus, but also for short trips made out-and-back from the campus. One key to reducing traffic congestion, then, lies in travel behavior to and from the Kaiser campus for both long and short trips.

This is also the segment where the full Sierra right-of-way is not utilized due to the inability to get an easement at the northeast corner of the Sierra-Valley intersection. Resolving this issue could address congestion in these intersections performing at an unacceptable LOS.

There are also many auto access points to large land uses – curb cuts – off these major streets, exacerbating congestion and creating collision points.

This goal will likely be most effectively achieved by shifting both long and short trips connected with the Kaiser campus and other key land uses both in the Sierra-Valley area and downtown to other modes – especially transit and bicycle for longer trips and walking for shorter trips.

Maximize walkability between land uses

As the land use analysis section stated, the Study Area is full of pedestrian generators and synergies for potential pedestrian trips, including the Kaiser campus, multifamily residential, and shopping centers. However, the potential for these walking trips is largely unrealized because of the auto-dominated environment both in the street right-of-way and on private property.

Even with this environment, the analysis has found existing pedestrian demand and pedestrian trips. These appeared to be of two main types. The first was trips made by people associated with Kaiser Permanente to surrounding shopping and eating destinations. The second was by residents of the nearby neighborhoods, including seniors, to shopping and eating in the Sierra-Valley area.

To maximize walkability, the routes for these existing trips can be improved, potentially encouraging others to make the same trips on foot. The study's survey indicated that the quality of the pedestrian environment could allow more Kaiser employees, members, and visitors to walk more frequently to nearby destinations.

Anticipate future mass transit opportunities

Transit opportunities in the Study Area appear to be of four main types. The first is the existing Omnitrans lines that run through and converge in the Sierra-Valley area. These lines and the relative frequency of boardings at the Sierra-Marygold stop lend this area the potential to be a better public place.

The second opportunity is better connecting the existing Metrolink station. In the study's survey of Kaiser employees, about a third of those surveyed said the biggest factor preventing them from taking Metrolink to work was the distance between the Fontana Metrolink and the Kaiser campus.

The third transit opportunity is comprised of the BRT services that Omnitrans and SANBAG are developing to run east-west to connect the Inland Empire communities and the potential to link it strongly to the Study Area.

Finally the fourth transit opportunity is the potential for a high frequency, fast service on the Sierra corridor that could better connect the origins and destinations in the Sierra-Valley area with those in Downtown Fontana and the Metrolink station.

In this sense, the City can capitalize on present opportunities as well as anticipate future ones.

Anticipating future transit opportunities also means considering how the other transportation modes can support the transit network, such as how bicycles can connect Sierra-Valley to the Metrolink, or how better street crossings could create better pedestrian access to bus stops as well as provide Kaiser employees and visitors with access to services during the day without the need for a car.

Identify land uses synergistic with Kaiser Permanente

The transportation analysis shows that Kaiser-generated trips occur in a duality of long trips (accessing the campus) and short trips (shopping, service, or eating trips from the campus and back). Potential synergistic land uses should fit within this framework, and address the needs of each type of trip, whether the challenge of an overnight stay by a visitor to the hospital or the dining needs of an employee, or even the housing choices of an employee.

Complementary land uses should also support the study's three transportation goals by reducing traffic volumes and not exacerbating congestion; fitting within walking distance and orienting to and improving the pedestrian network; and considering access from and to transit. Because the Kaiser campus has such large implications on all transportation modes in the Sierra-Valley area, any complementary land use should improve the overall transportation conditions.

Also, an improved multi-modal transportation network can set the stage for increased market interest in the Sierra-Valley area.

Identify opportunities for new housing

Likewise, an improved multi-modal transportation network can also expand the possibilities for new housing. Providing better walking environment for shorter trips, a better bicycle network for medium-length trips, and better transit for both medium and long trips will help leverage the location of Sierra-Valley into a more connected, desirable place to live.

Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

In the short term, achieving this goal will likely have to happen through the improvement of street rights of ways, and especially making a better pedestrian environment. Creating a better sense of place and gateway should not be viewed as separate from the pedestrian environment: achieving a more comfortable, shady, safe, and human-scaled pedestrian environment will inherently create a better gateway to and impression of the city.

Market Analysis

This section provides an overview of economic and market conditions influencing the revitalization and real estate potential of the Sierra-Valley Study Area in the City of Fontana, as well as a specific analysis of land use and market impacts of hospitals on the areas surrounding them.

Regional and Project Area Overview

The following provides an overview of regional economic and demographic trends as a basis for understanding the broad parameters affecting opportunities for revitalization in the Sierra-Valley Study Area.

Regional Context

Fontana is located in San Bernardino County in the middle of the "Inland Empire," an area encompassing the major population and employment centers of San Bernardino and Riverside Counties. (See Figure 2-65 for a Map of the Inland Empire.) In a common pattern in late 19th century Southern California, Inland Empire settlement centered on agricultural production, which followed from the introduction of Colorado River water.

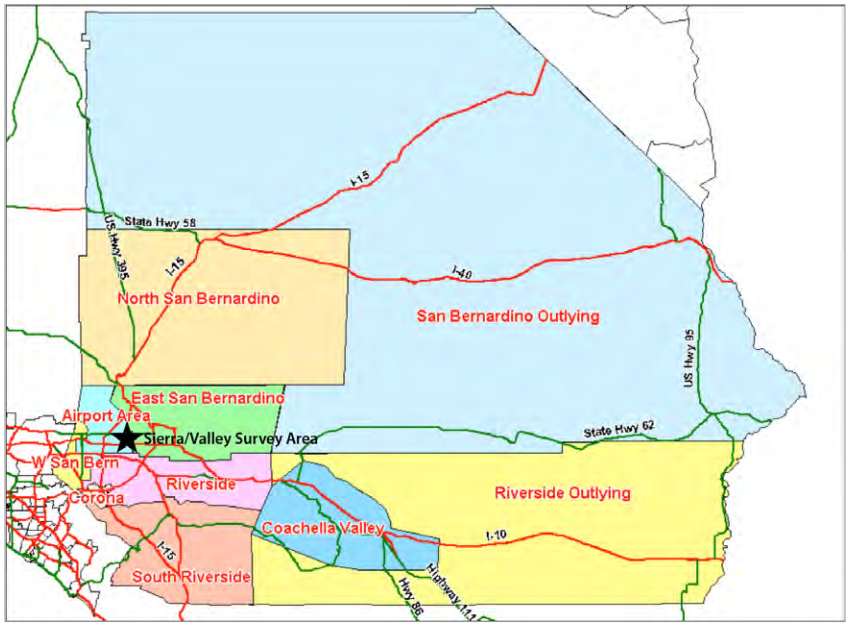

Figure 2-65: Inland Empire

Suburban development in Southern California grew rapidly after the Second World War, following a longer-term California trend of eastern population migration from increasingly expensive and built-out coastal counties. Intensive suburban development arrived in the Inland Empire in the 1980s and 1990s, as relatively cheap land and strong highway connections led to the construction of bedroom communities serving job centers in Los Angeles, Orange, and San Diego Counties. Additionally, a strategic location at the confluence of several major state highways allowed the Inland Empire to take advantage of international trade growth from the Ports of Long Beach, Los Angeles and San Diego to develop economic clusters in warehousing and logistics. These factors enabled the Inland Empire to become the fastest-growing California region over the last 20 years.

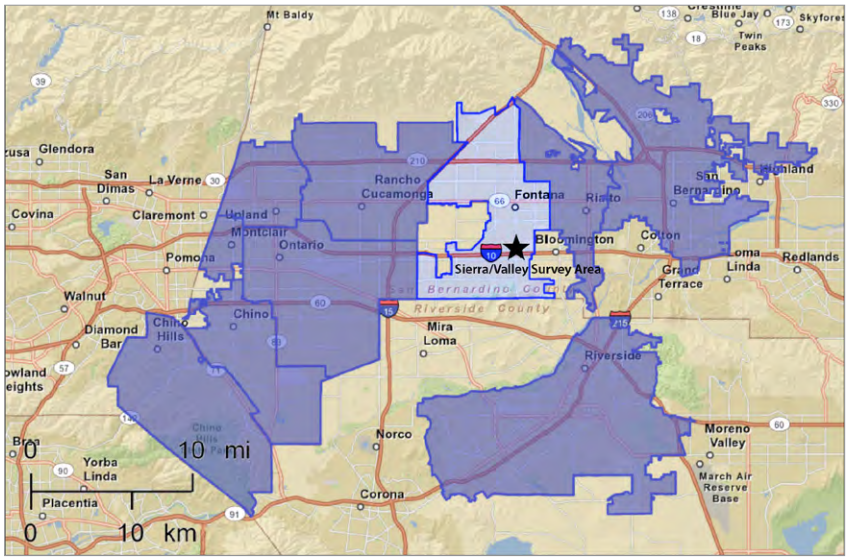

Figure 2-66: Fontana trade area

Fontana and Competitive Trade Area

Fontana's competitive trade area is located in the most densely populated part of the Inland Empire. As depicted in Figure 2-66, the trade area includes urban areas extending from the Los Angeles County line east to the City of San Bernardino and south to 215 Freeway. An extensive highway matrix, including the 10, 210, 15, 215, and 60 highways, enables a large and fluid market for residential, retail, and industrial uses. All cities in the competitive area, including Chino, Chino Hills, Montclair, Ontario, Rancho Cucamonga, Rialto, Riverside, San Bernardino, and Upland, are within 25 highway miles from the Fontana Sierra-Valley Study Area.

Most of the cities in the Competitive Trade Area were founded during the early agricultural period, when citrus orchards and pastureland covered the areas on either side of the original Route 66 (today's Foothill Boulevard). Later, proximity to Los Angeles and Orange Counties placed them at the forefront of Inland Empire residential and industrial growth. These trends can be observed in the existing Fontana land use patterns, which, as noted in the Introduction, divide the city into the three distinct sub-areas of Central, North, and South Fontana.

Together, North and South Fontana have captured most of the residential and service retail growth during the expansion years, as developers—abetted by an aggressive city land annexation program—rushed to exploit the large areas of highway-served open space. During this period, Fontana began transitioning from an industrial city to a bedroom community serving job centers in adjacent cities and counties.

The impact of these development trends on the three Fontana sub-areas is reflected in. Figure 2-67, which maps current land uses, shows warehousing, manufacturing, and retail centers distributed along the 10 and 15 freeways, neighborhood and service retail along the major boulevards, and vast areas of single-family residential between the corridors. Figure 2-68, which maps the age of the residential stock, shows the civic and residential core of Fontana dates from the 1950s and 1960s. The city's residential transition is indicated by the construction boom in southern Fontana during the 1990s and in northern Fontana during the 2000s. Figure 2-69 maps median household income and shows how the new residential developments effectively partitioned the city into higher- and lower-income areas.

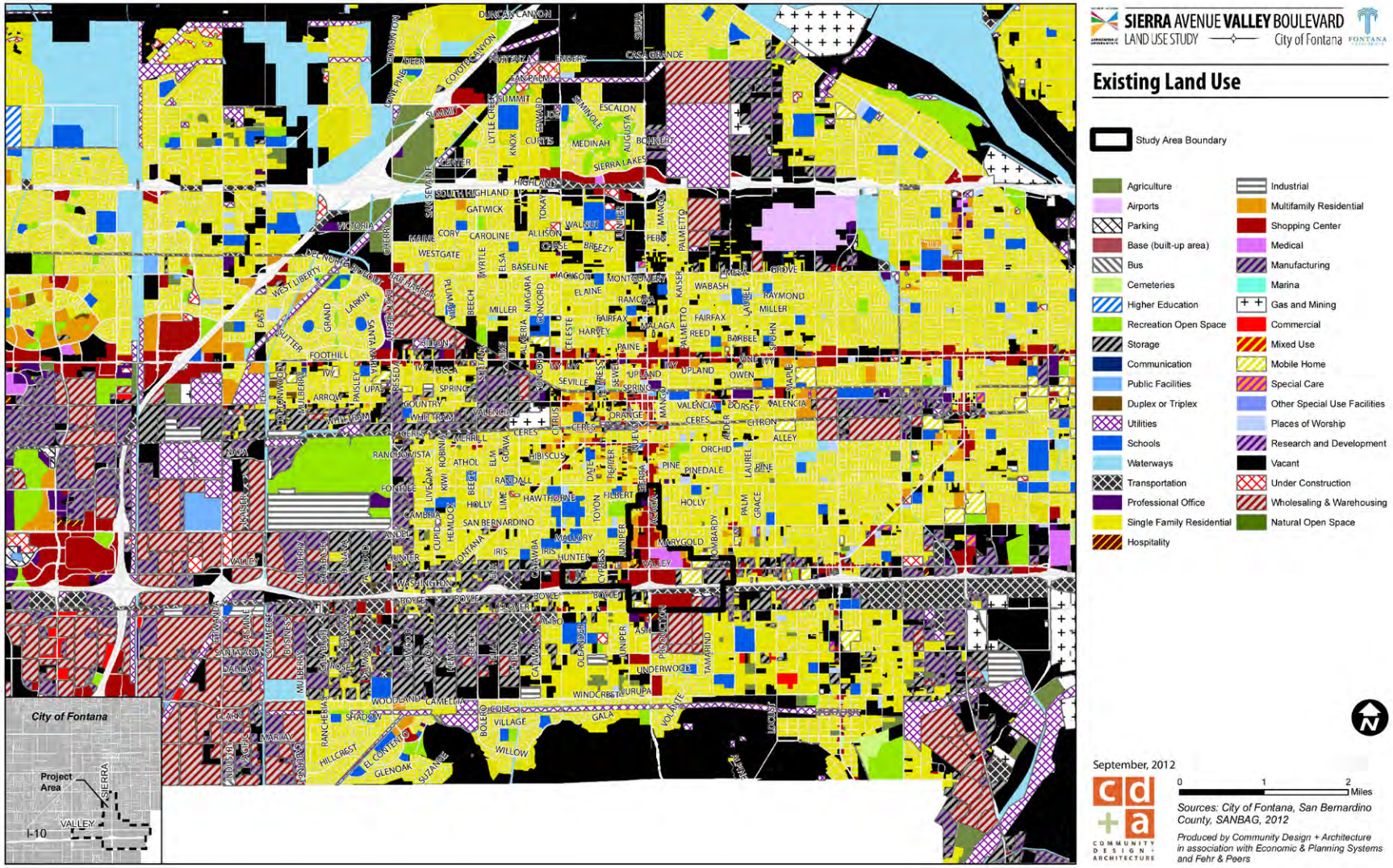

Figure 2-67: City of Fontana Existing Land Use

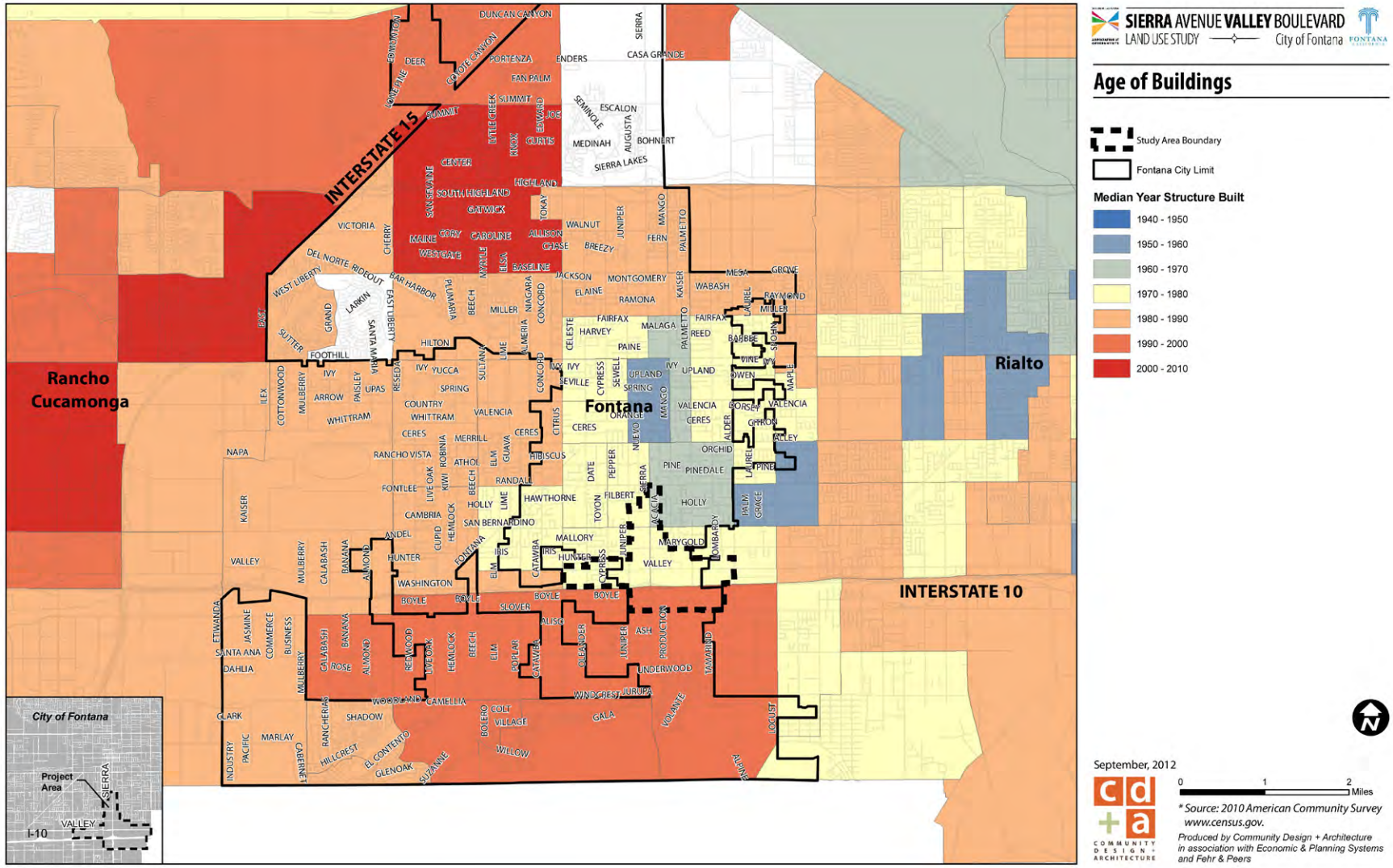

Figure 2-68: Fontana Building Age

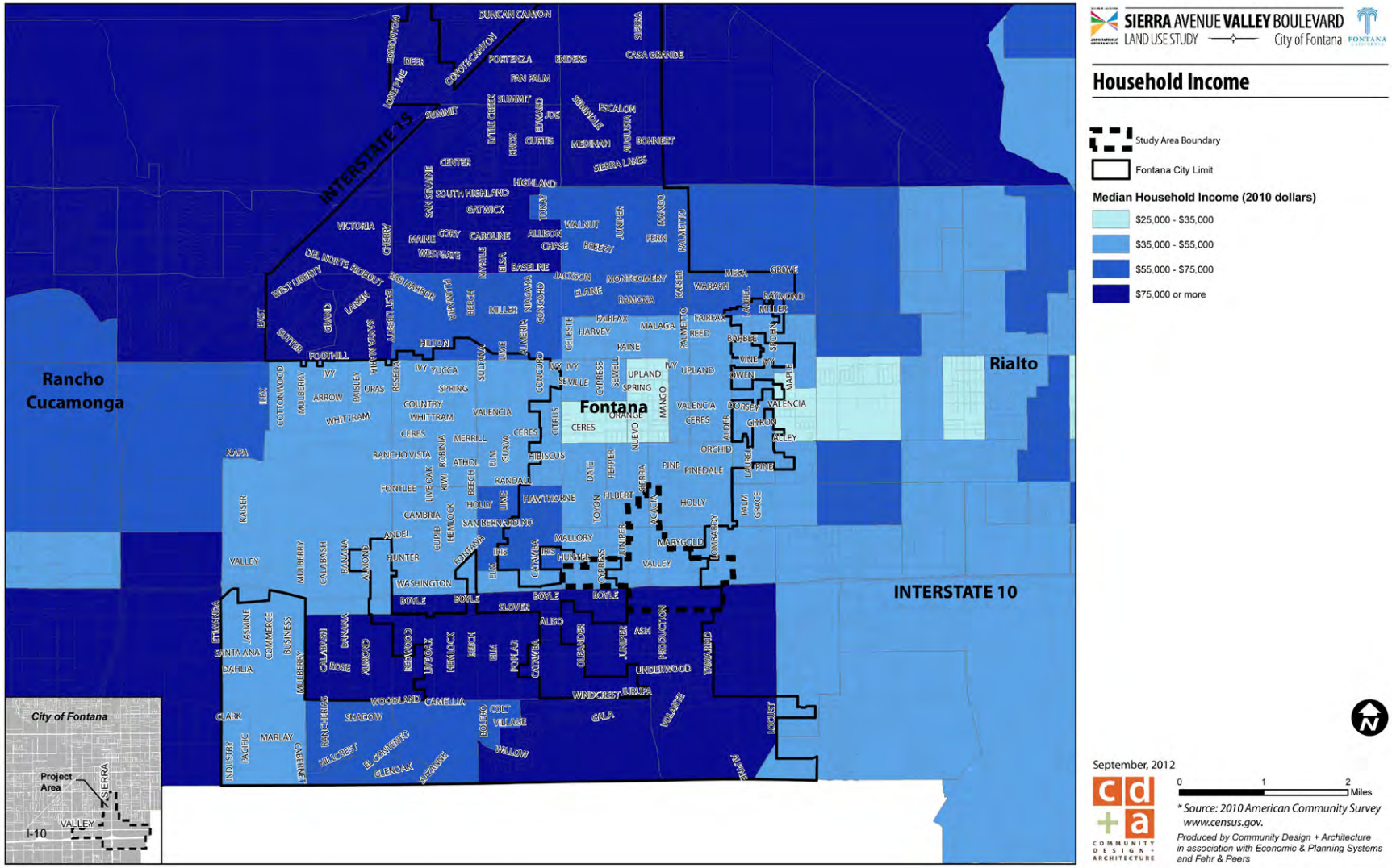

Figure 2-69: Fontana Household Income

Study Area Overview

As shown in Figure 2-70, the Study Area encompasses primarily commercial land uses on either side of the main corridors. Most of the Study Area is situated in Central Fontana, but a small portion is located below Interstate 10 in South Fontana. This study considers both areas, but their distinctive characteristics imply that future land use planning and economic development should treat them discretely.

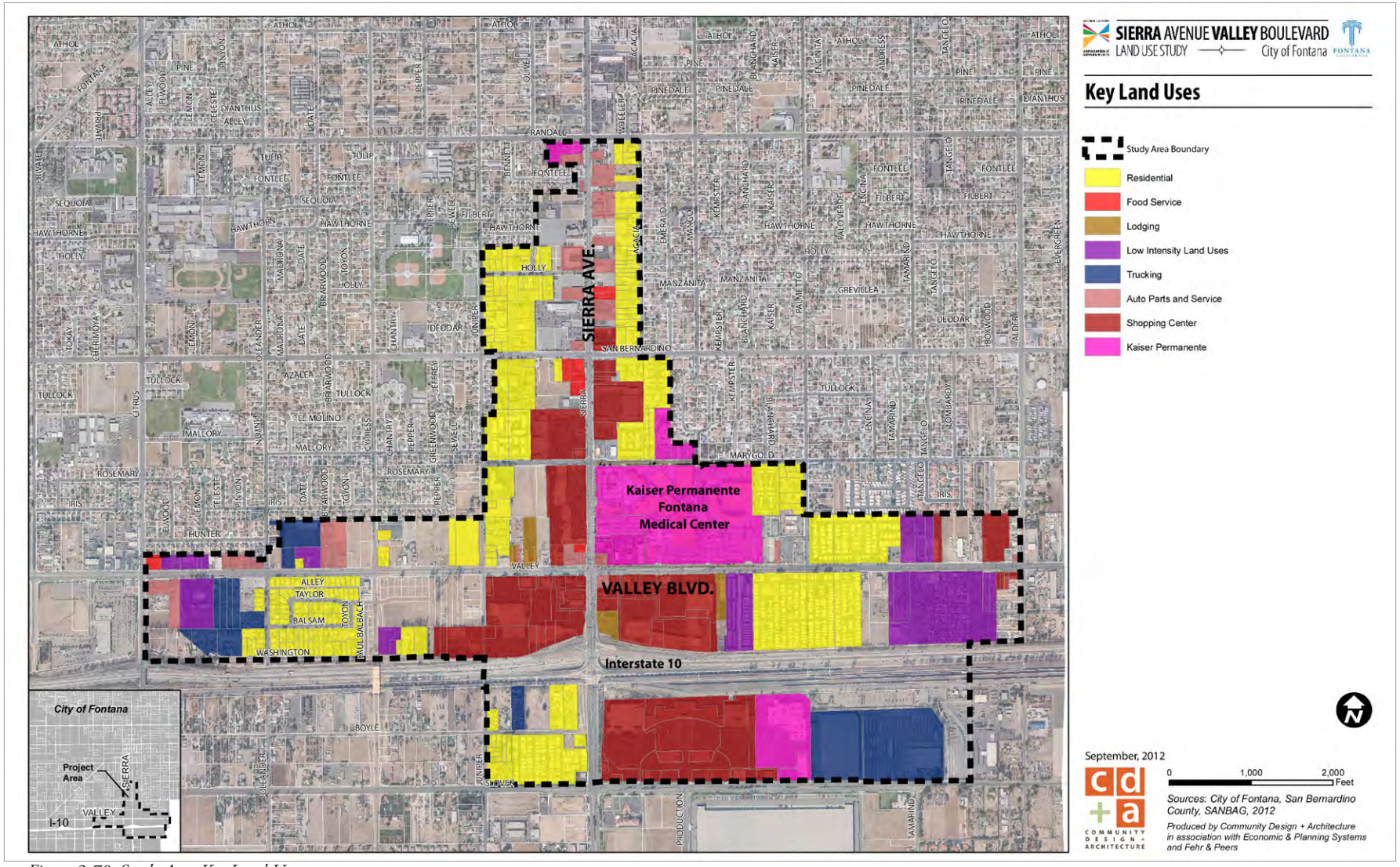

Figure 2-70: Study Area Key Land Uses

Socio-Economic Trends

Demographic Trends

Region

As noted, the Inland Empire has been the fastest-growing region in California for over 20 years. The combined population of San Bernardino and Riverside Counties grew 63 percent between 1990 and 2010, compared with 25 percent for California as a whole, as shown in Figure 2-71. The proportion of Hispanic residents in the Inland Empire grew from 27 percent in 1990 to 47 percent in 2010, compared with 26 percent and 32 percent for California as a whole. Put another way, Hispanics contributed 80 percent of all new population growth in the Inland Empire during this period. Growth in this cohort is attributable to several factors, including immigration to lower cost labor markets combined with high birth rates and the fact that Hispanic migrants often cluster in destinations that include extended family and cultural networks.

	1990		2000		2010		Change					
							1990 - 2000		2000 - 2010		1990 - 2010	
	#	%/Tot	#	%/Tot	#	%/Tot	%	%/Yr	%	%/Yr	%	%/Yr
Inland Empire [1]												
Population	2,588,793		3,254,821		4,224,851		26%	2.3%	30%	2.6%	63%	2.5%
Households	866,804		1,034,812		1,278,524		19%	1.8%	24%	2.1%	47%	2.0%
Housing Units	1,026,179		1,185,933		1,500,344		16%	1.5%	27%	2.4%	46%	1.9%
Average Household Size	2.92		3.07		3.19		5%	0.5%	4%	0.4%	9%	0.4%
Median Household Income	$34,418		$44,287		$56,842		29%	2.6%	28%	2.5%	65%	2.5%
Population by Race												
Non-Hispanic	1,902,697	73%	2,025,859	62%	2,228,449	53%	6%	0.6%	10%	1.0%	17%	0.8%
Hispanic	686,096	27%	1,228,962	38%	1,996,402	47%	79%	6.0%	62%	5.0%	191%	5.5%
California												
Population	29,760,021		33,871,648		37,253,956		14%	1.3%	10%	1.0%	25%	1.1%
Households	10,381,206		11,502,870		12,577,498		11%	1.0%	9%	0.9%	21%	1.0%
Housing Units	11,182,882		12,214,549		13,680,081		9%	0.9%	12%	1.1%	22%	1.0%
Average Household Size	2.79		2.87		2.90		3%	0.3%	1%	0.1%	4%	0.2%
Median Household Income	$40,559		$53,189		$60,883		31%	2.7%	14%	1.4%	50%	2.1%
Population by Race												
Non-Hispanic	22,072,083	74%	22,905,092	68%	23,240,237	62%	4%	0.4%	1%	0.1%	5%	0.3%
Hispanic	7,687,938	26%	10,966,556	32%	14,013,719	38%	43%	3.6%	28%	2.5%	82%	3.0%

[1] San Bernardino and Riverside Counties combined
Source: US Census, Economic & Planning Systems, Inc.

Figure 2-71: Inland Empire Demographics 1990-2010

Fontana

In recent years, Fontana's population has grown even more dramatically than the rapidly expanding region, due to opportunistic residential development and an aggressive city program to annex unincorporated county land. From 1990 to 2010, as shown in Figure 2-72, city population grew by 124 percent, compared with 63 percent for the Inland Empire and 25 percent for California. During this period, the city annexed nearly 4,400 new acres of land, a 19 percent increase in total land area.

Median household income in Fontana grew rapidly relative to the Inland Empire and California as well. In 1990, Fontana's median income was $35,000, compared with $34,000 for the Inland Empire and $41,000 for the state. By 2010, Fontana's median income surpassed both at $63,000, compared with $61,000 for California and $57,000 for the Inland Empire. Such growth can largely be attributed to the fact that most new Fontana housing since 1990 was aimed at relatively affluent buyers.

The ethnic transformation of Fontana since 1990 also echoes and exceeds that of the region and state. In 1990, Fontana had a higher proportion of Hispanic residents than the Inland Empire and California, with 36 percent compared to 27 percent in the Inland Empire and 26 percent in the state. From 1990 to 2010, Fontana's Hispanic population grew faster than either with an average annual growth rate of 7.3 percent, compared with 5.5 percent for the Inland Empire and 3 percent for California. By 2010, Fontana was 67 percent Hispanic, compared with 47 percent for the Inland Empire and 38 percent for the state.

Study Area

On the whole, Study Area residents are younger, more Hispanic, and less affluent than the city average. As shown in Figure 2-73, approximately 30,000 people live in the Study Area [7], which contributes approximately 15 percent of the city's population, households, and housing units. Compared with the city average, Study Area residents earn 29 percent less (median income of $44,852 compared with $63,252 for the city), and live in homes valued at 32 percent less (median household value of $235,545 vs. $346,700).

7 *From Census Tracts 31.01, 31.02, 32, 33.01, and 33.02, which cover an area slightly larger than the Project Study Area.*

	1990		2000		2010		1990 - 2000		2000 - 2010		1990 - 2010	
	#	%/Tot	#	%/Tot	#	%/Tot	%	%/Yr	%	%/Yr	%	%/Yr
Population	87,679		128,929		196,069		47%	3.9%	52%	4.3%	124%	4.1%
Households	26,427		34,014		49,116		29%	2.6%	44%	3.7%	86%	3.1%
Housing Units	29,386		35,908		51,857		22%	2.0%	44%	3.7%	76%	2.9%
Average Household Size	3.32		3.79		3.99		14%		5%		20%	
Median Household Income	$35,357		$45,748		$63,252		29%	2.6%	38%	3.3%	79%	3.0%
Population by Race												
White Alone	59,119	67%	58,006	45%	92,978	47%	-2%	-0.2%	60%	4.8%	57%	2.3%
Black or African American Alone	7,329	8%	15,255	12%	19,574	10%	108%	7.6%	28%	2.5%	167%	5.0%
American Indian or Alaskan Native Alone	837	1%	1,450	1%	1,957	1%	73%	5.6%	35%	3.0%	134%	4.3%
Asian Alone	3,521	4%	5,618	4%	12,948	7%	60%	4.8%	130%	8.7%	268%	6.7%
Pacific Islander Alone	319	0%	427	0%	547	0%	34%	3.0%	28%	2.5%	71%	2.7%
Some Other Race Alone	15,898	18%	41,185	32%	58,449	30%	159%	10.0%	42%	3.6%	268%	6.7%
Two or More Races	657	1%	6,988	5%	9,616	5%	964%	26.7%	38%	3.2%	1364%	14.4%
Hispanic	31,925	36%	74,424	58%	130,957	67%	133%	8.8%	76%	5.8%	310%	7.3%
Population by Age												
Age 0 - 9	20,135	23%	28,358	22%	34,043	17%	41%	3.5%	20%	1.8%	69%	2.7%
Age 10 - 19	13,974	16%	24,613	19%	37,915	19%	76%	5.8%	54%	4.4%	171%	5.1%
Age 20 - 29	16,565	19%	19,117	15%	29,730	15%	15%	1.4%	56%	4.5%	79%	3.0%
Age 30 - 39	16,987	19%	22,286	17%	28,981	15%	31%	2.8%	30%	2.7%	71%	2.7%
Age 40 - 49	8,784	10%	17,083	13%	28,101	14%	94%	6.9%	64%	5.1%	220%	6.0%
Age 50 - 64	6,477	7%	11,359	9%	26,215	13%	75%	5.8%	131%	8.7%	305%	7.2%
Age 65+	4,756	5%	6,113	5%	11,084	6%	29%	2.5%	81%	6.1%	133%	4.3%
Median Age	26.5		26.2		28.7		-1%		10%		8%	

Source: US Census, Economic & Planning Systems, Inc.

Figure 2-72: Fontana Demographics 1990-2010

Economic Trends

City and Region

Cheap land and the associated low cost of housing attracted new immigrants and existing Californians priced out of the more mature and expensive areas of the State. Rapid growth of global trade through the Ports of Los Angeles, Long Beach, and San Diego triggered construction of warehouse and distribution facilities on highway corridors passing through the Inland Empire on route to other areas of the state and nation. Manufacturing as a share of jobs declined concurrently with international trade growth, mirroring the national trend towards off-shore manufacturing. Finally, as a direct consequence of population growth, consumer demand for products and services increased, leading to a significant expansion of retail area.

These trends in the Inland Empire economy are reflected by historical jobs numbers and jobs mix from 1990 to 2010, as indicated in Figure 2-74. Overall, jobs increased a net 55 percent. Service-sector jobs increased from 78 percent of total jobs to 86 percent with significant gains in wholesale trade, retail trade, and warehousing, and small gains in professional categories such as financial services, education, and healthcare. Total jobs in the goods-producing sectors also grew during this period, but overall share fell from 19 percent to 13 percent.

	2010			
	Survey Area (1)		City of Fontana	
		% Fontana		% IE (2)
Population	29,389	15.0%	196,069	4.6%
Households	7,444	15.2%	49,116	3.8%
Housing Units	7,984	15.4%	51,857	3.5%
Average Household Size	3.94		3.98	
Median household income ($)	44,852		63,252	
Median Home Value ($)	235,545		346,700	
Residents at/below povertly level	21.3%		12.5%	
Population By Race		%/ total		%/ total
White	14,155	48%	92,978	47%
Black or African American	1,336	5%	19,574	10%
American Indian and Alaska Native	374	1%	1,957	1%
Asian	451	2%	12,948	7%
Native Hawaiian and Other Pacific	105	0%	547	0%
Some Other Race	11,642	40%	58,449	30%
Two or More Races	1,326	5%	9,616	5%
Hispanic or Latino (of any race)	23,075	79%	130,957	67%
Population by Age				
Age 0 - 9	5,568	19%	34,043	17%
Age 10 - 19	5,459	19%	37,915	19%
Age 20 - 29	4,842	16%	29,730	15%
Age 30 - 39	4,112	14%	28,981	15%
Age 40 - 49	3,777	13%	28,101	14%
Age 50 - 64	3,609	12%	26,215	13%
Age 65+	2,022	7%	11,084	6%
Median age (years)	27.5		28.7	

(1) Includes Tracts 31.01, 31.02, 32, 33.01, 33.02
(2) San Bernardino and Riverside Counties
Source: US Census 2010

Figure 2-73: Demographic Comparison: Study Area vs. City vs. County

	Riverside and San Bernardino Counties												
						Net Change in Jobs				Share of Total			
	1990	2000	2007(1)	2010	2018	'90-'07	'07-'10	'90-'10	'10-'18	1990	2007(1)	2010	2018
Total Jobs	**735,200**	**1,010,300**	**1,287,300**	**1,140,900**	**1,336,100**	**75%**	**-11%**	**55%**	**17%**				
Jobs by NAICS Industry Sector													
Goods Producing	**138,800**	**200,900**	**232,300**	**145,800**	**193,600**	**67%**	**-37%**	**5%**	**33%**	**19%**	**18%**	**13%**	**14%**
Mining and Logging	1,400	1,300	1,300	1,000	1,100	-7%	-23%	-29%	10%	0%	0%	0%	0%
Construction	59,100	79,900	112,500	59,700	95,200	90%	-47%	1%	59%	8%	9%	5%	7%
Manufacturing	78,300	119,700	118,500	85,100	97,300	51%	-28%	9%	14%	11%	9%	7%	7%
Service Providing	**573,800**	**787,600**	**1,038,600**	**980,100**	**1,127,300**	**81%**	**-6%**	**71%**	**15%**	**78%**	**81%**	**86%**	**84%**
Trade, Transportatio, and Utilities	148,600	211,500	301,900	270,800	317,000	103%	-10%	82%	17%	20%	23%	24%	24%
Information	13,500	14,300	15,400	15,800	15,000	14%	3%	17%	-5%	2%	1%	1%	1%
Financial Activities	33,200	35,700	49,800	41,000	45,400	50%	-18%	23%	11%	5%	4%	4%	3%
Professional and Business Services	59,100	96,800	145,200	123,400	152,500	146%	-15%	109%	24%	8%	11%	11%	11%
Education and Health Services	69,300	101,900	127,200	133,800	161,500	84%	5%	93%	21%	9%	10%	12%	12%
Educational Services	9,500	11,100	15,000	15,600	19,900	58%	4%	64%	28%	1%	1%	1%	1%
Health Care and Social Assistance	59,800	90,700	112,200	118,200	141,600	88%	5%	98%	20%	8%	9%	10%	11%
Leisure and Hospitality	75,700	100,600	132,600	122,800	144,200	75%	-7%	62%	17%	10%	10%	11%	11%
Other Services	24,200	34,800	41,200	38,200	44,400	70%	-7%	58%	16%	3%	3%	3%	3%
Public Administration	150,200	192,100	225,300	234,300	247,300	50%	4%	56%	6%	20%	18%	21%	19%
Agriculture, Forestry, Fishing, Hunting	**22,600**	**21,700**	**16,400**	**15,000**	**15,200**	**-27%**	**-9%**	**-34%**	**1%**	**3%**	**1%**	**1%**	**1%**

(1) The peak of the housing bubble

Sources: CA EDD (March 2011 Benchmark for historical 1990-2010, March 2009 benchmark for 2018 projection); Economic & Planning Systems, Inc.

Figure 2-74: Historical and Projected Employment by Sector: Inland Empire

The Fontana jobs mix during this period generally mirrors that of the Inland Empire. As shown in Figure 2-75, the Fontana rate of goods-producing jobs is similar to the Inland Empire, with 12 percent compared to 13 percent for the Inland Empire. Fontana's service sector contains two key distinctions. Warehousing contributes 17 percent of jobs in Fontana, compared with 6 percent in the Inland Empire, and Health Care/Social Assistance contributes 17 percent of jobs in Fontana, compared with 10 percent for the Inland Empire. The warehousing sector is a function of Fontana's strategic location along three major highways: the 10, 210, and 15 freeways. The healthcare sector is attributable mainly to the Kaiser Permanente facility in the Sierra Valley Study Area, as will be discussed further below.

	Study Area Jobs (1)			Fontana Jobs	
	2010	%/Study Area	%/City	2010	%/tot
Total Jobs	10,731	100%	23%	46,248	100%
Jobs by NAICS Industry Sector					
Goods Producing	**112**	**1%**	**2%**	**5,470**	**12%**
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%	0%	18	0.0%
Utilities	27	0.3%	6%	457	1%
Construction	38	0.4%	3%	1,443	3%
Manufacturing	47	0.4%	1%	3,552	8%
Service Providing	**10,617**	**99%**	**26%**	**40,638**	**88%**
Trade, Transportation, and Utilities	1,328	12%	8%	16,670	36%
Wholesale Trade	108	1%	4%	2,859	6%
Retail Trade	1,173	11%	20%	5,991	13%
Transportation and Warehousing	47	0.4%	1%	7,820	17%
Information	105	1%	48%	219	1%
Financial Activities	225	2%	23%	965	2%
Professional and Business Services	678	6%	17%	3,896	9%
Education and Health Services	6,904	64%	57%	12,131	26%
Educational Services	561	5%	13%	4,179	9%
Health Care and Social Assistance	6,343	59%	80%	7,952	17%
Arts, Entertainment, and Recreation	34	0.3%	13%	271	1%
Accommodation and Food Services	938	9%	30%	3,136	7%
Other Services (excluding Public Administration)	299	3%	15%	1,977	4%
Public Administration	106	1%	8%	1,373	3%
Agriculture, Forestry, Fishing and Hunting	**2**	**0%**	**1%**	**140**	**0%**
Jobs by Earnings					
<$15,000/year	2,051	19%	19%	10,688	23%
Between $15,000 and $40,000/year	3,011	28%	18%	17,123	37%
>$40,000/year	5,669	53%	31%	18,437	40%
Jobs by Worker Educational Attainment					
Less than high school	1,294	12%	16%	7,869	17%
High school or equivalent, no college	1,445	14%	18%	7,945	17%
Some college or Associate degree	2,916	27%	26%	11,120	24%
Bachelor's degree or advanced degree	2,914	27%	36%	8,139	18%
Educational attainment not available (workers <age 29)	2,162	20%	19%	11,175	24%

(1) Area consists of San Bernardino Tracts 33.01, 33.02, 31.01, 32, 31.02
Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics, EPS

Figure 2-75: Job Characteristics: Fontana and Study Area

It should be noted that 2010 jobs figures may be misleading, as they reflect severe declines that resulted from the housing bubble bursting. The recession, which began in 2007, caused significant net job loss and hit key industries particularly hard, causing an 11 percent job loss between 2007 and 2010, which amounts to 20 percent of all new jobs created during the boom from 1990 to 2007. The biggest hits were sustained in construction and manufacturing, which fell by 47 percent and 27 percent in the Inland Empire and 25 percent and 30 percent in Fontana, to levels nearly equivalent with 1990.

The resulting rates of unemployment in the Inland Empire were some of the nation's highest. As shown in Figure 2-76, unemployment in the Fontana Competitive Trade Area shot up to mid-double-digits, hitting a Fontana peak in 2010 of 14.7 percent. In the region, only Rancho Cucamonga, which has a relatively diversified economy and longer-tenured resident communities, outperformed the average California rate. This regional job-loss and a legacy of risky home mortgage borrowing led to high foreclosure rates. As shown in Figure 2-77, the Inland Empire's estimated foreclosure rate of 12.7 percent is double the rate for California, already one of the worst hit states in the U.S., while Fontana's at 18.6 percent is triple.

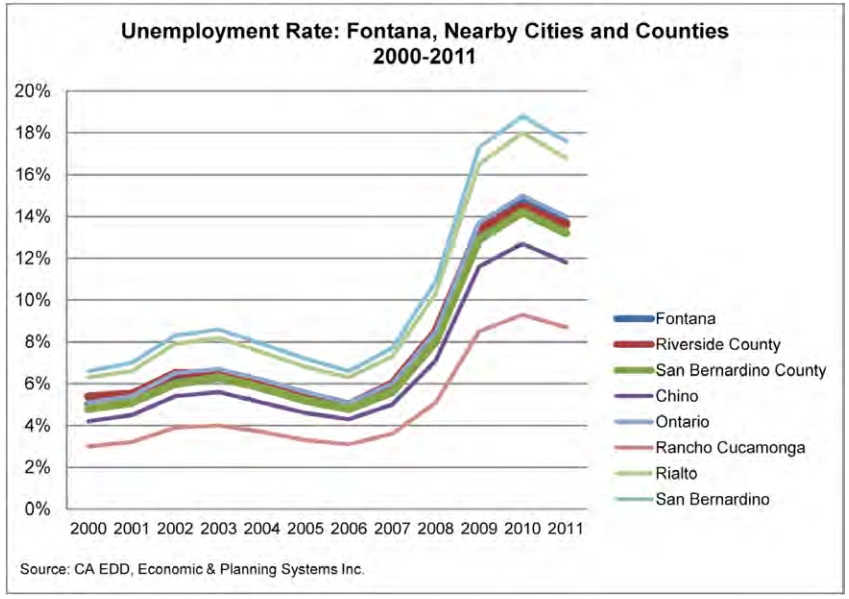

Figure 2-76: Unemployment Rate

While recent data such as declining foreclosure and unemployment rates indicate a slow recovery has begun in the Inland Empire, full recovery is expected to lag the state. Foreclosed homes and homes with under-water mortgages will continue to drag on consumer spending for some time. Strong population growth and a rebound in residential construction is expected, as the region's advantages in plentiful cheap land and highway access will continue to be important, but the low level of educational attainment by Inland Empire workers may limit earnings potential for residents. As shown in Figure 2-78, Inland Empire residents are less likely than the California average to have GEDs and hold bachelor's degrees, with Fontana's level of educational attainment is even lower. Recent studies suggest that a majority of future jobs in the United States—and certainly good-paying jobs—will require higher-than GED-level education.[8]

8 *Carnevale, Hanson, Jayasundera: "Along the Way to a BA," September 2012, Georgetown Public Policy Institute: By 2020, approximately 64 percent of U.S. jobs will require higher-than GED-level education.*

	Fontana	San Bernardino County	Riverside County	Inland Empire (1)	California
Foreclosures Per Year					
2002	378	3,526	1,703	5,229	16,500
2003	143	1,715	849	2,564	9,435
2004	39	687	349	1,036	4,725
2005	21	380	317	697	2,963
2006	110	967	1,779	2,746	12,878
2007	1,021	7,742	12,535	20,277	85,733
2008	3,308	23,540	32,620	56,160	238,396
2009	2,278	19,649	25,552	45,201	189,792
2010	1,690	16,496	20,719	37,215	169,657
2011	1,347	14,170	17,495	31,665	154,519
2010 Housing Units	51,857	699,637	800,707	1,500,344	13,680,081
Estimated 2007-2011 Foreclosure Rate (2)	18.6%	11.7%	13.6%	12.7%	6.1%

(1) Combined San Bernardino and Riverside Counties
(2) Computed as 2007-2011 total foreclosures divided by 2010 Housing Units

Source: RAND, US Census, Economic & Planning Systems

Figure 2-77: Estimated Foreclosure Rates

Level of Attainment	Population Share (25 and Over)			
	Fontana	Riverside County	San Bernardino County	California
Less than 9th grade	18%	10%	10%	10%
9th to 12th grade, no diploma	13%	11%	12%	9%
High School Graduate Only	25%	26%	27%	21%
Some college, no degree	23%	26%	26%	22%
Associate's degree	8%	7%	8%	8%
Bachelor's degree	11%	13%	12%	19%
Graduate or professional degree	3%	7%	6%	11%
Less than High School graduate	31%	21%	22%	19%
High school graduate or higher	69%	80%	78%	81%
Bachelor's degree or higher	14%	20%	18%	30%

Source: 2011 American Community Survey

Figure 2-78: Educational Attainment

Growth Projections

Inland Empire projected growth, as shown in the SCAG 2012 adopted forecast in Figure 2-79, indicates that the region will continue to lead Southern California in areas of population, household, and job growth through 2035.Population growth in the Inland Empire of 47 percent between 2008 and 2035 exceeds the 16 percent and 14 percent projections for Los Angeles and Orange Counties significantly. Projections also indicate that fastest growth will take place in Riverside County and outside of the Competitive Trade Area as build-out continues to move in a north-west to south-east direction.

Household growth will follow a similar pattern, with the strongest rates in Riverside County, followed by San Bernardino County and the Competitive Trade Area. Household growth in Fontana will exceed that of the Competitive Area, 37 percent to 35 percent, reflecting the availability of large developable land tracts in the city and its sphere of influence. Nonetheless, large households in Fontana, currently at 3.99 people per household, will remain high compared to the trade area and the County.

Inland Empire Job growth will also lead the region, with a 69 percent increase projected for 2035, compared with 10 percent and 11 percent for Orange and Los Angeles Counties. If this projection occurs, the jobs-per-household ratio in the Inland Empire will grow from 1.06 to 1.19, indicating a shift from being predominantly a bedroom community for job destinations in Los Angeles, Orange, and San Diego Counties, towards being a job center in its own right.

The Fontana Competitive Trade Area will continue to lead the Inland Empire as a jobs center, growing from a jobs/household ratio of 1.5 in 2008 to 1.63 in 2035.[9] Fontana, on the other hand, will maintain its position largely as a bedroom community, with 0.98 jobs per household in 2008 growing only slightly to 1.03 by 2035.

9 *The cities of Ontario and Chino are and will continue to be the strongest Inland Empire job magnets, with jobs/household ratios of 2.6 and 2.4 in 2008 declining only slightly in 2035 to 2.5 and 2.3.*

	Projected Growth						% Change 2008 - 2035			Pop/HH		Jobs/HH	
	Population		Households		Employment								
	2008	2035	2008	2035	2008	2035	Pop	HH	Emp	2008	2035	2008	2035
Fontana	**193,900**	**259,100**	**48,600**	**66,700**	**47,600**	**69,000**	**34%**	**37%**	**45%**	**3.99**	**3.88**	**0.98**	**1.03**
Competitive Area[1] plus Fontana	**1,382,700**	**1,812,800**	**400,300**	**538,600**	**602,300**	**880,000**	**31%**	**35%**	**46%**	**3.45**	**3.37**	**1.50**	**1.63**
Fontana Share	14%	14%	12%	12%	8%	8%							
Inland Empire													
San Bernardino County	2,016,000	2,750,000	606,000	847,000	701,000	1,059,000	36%	40%	51%	3.33	3.25	1.16	1.25
Riverside County	2,128,000	3,324,000	679,000	1,092,000	664,000	1,243,000	56%	61%	87%	3.13	3.04	0.98	1.14
	4,144,000	**6,074,000**	**1,285,000**	**1,939,000**	**1,365,000**	**2,302,000**	**47%**	**51%**	**69%**	**3.22**	**3.13**	**1.06**	**1.19**
Orange County	**2,989,000**	**3,421,000**	**987,000**	**1,125,000**	**1,624,000**	**1,779,000**	**14%**	**14%**	**10%**	**3.03**	**3.04**	**1.65**	**1.58**
Los Angeles County	**9,778,000**	**11,353,000**	**3,228,000**	**3,852,000**	**4,340,000**	**4,827,000**	**16%**	**19%**	**11%**	**3.03**	**2.95**	**1.34**	**1.25**

[1] Includes Chino, Chino Hills, Montclair, Ontario, Rancho Cucamonga, Rialto, Riverside, San Bernardino, Upland
Source: SCAG, Economic & Planning Systems

Figure 2-79: SCAG Growth Projections 2008-2035

Sierra-Valley Study Area

The Sierra-Valley Study Area[10] is one of the most significant job centers in the city, contributing 23 percent of all Fontana jobs. Primary uses are healthcare, with 59 percent of area jobs, retail, with 12 percent of area jobs, and food services at 9 percent of jobs. The city's largest employer Kaiser Permanente-Fontana, with 5,300 employees,[11] is also located in the Study Area. As shown in Table 7, Study Area jobs pay better than elsewhere in Fontana, with 53 percent of area jobs in the top tercile (over $40,000 per year), compared with the 40 percent Fontana average. The Area also hosts better-educated workers than elsewhere in Fontana, with 54 percent of jobs held by workers with a college or better education, compared with the Fontana average of 42 percent.

However, there is almost no overlap between Study Area residents and Study Area workers. As shown in Figure 2-80, out of 10,731 jobs located in the Study Area, 325 jobs—or 2.9 percent—are held by Study Area working residents. Looked at another way, of the 11,200 Study Area residents who work, just 2.9 percent work locally while the remaining 97.9 percent commute out. The home and work destinations of Study Area Residents and workers shown in Figure 2-81 indicate that roughly 10 percent of in- and out-commuters circulate within Fontana while the remainder traveling sometimes great distances to and from work.

This misalignment of residents and jobs is one of the key factors contributing to congestion at the Sierra-Valley intersection. The worker profile in Figure 2-82, which compares Study Area Workers with Study Area Job holders, illustrates some of the demographic factors underlying this mismatch. Comparatively, Study Area Residents are more likely to hold blue-collar jobs, to be low-wage earners, and to have relatively low levels of educational attainment. Fully 42 percent of Study Area Residents work in construction, manufacturing, and trade, compared with 13 percent of Study Area job holders. Likewise, 33 percent of Area residents earn over $40,000 per year, compared with 53 percent of area job holders. While the job opportunities provided by the Survey Area retail centers in general match the educational qualifications of Survey Area residents, the relatively high-skilled and high-paying Kaiser Permanente jobs draw a different worker demographic than those who live in the Study Area.

10 The analysis is based on a data set from San Bernardino Tracts 33.01, 33.02, 31.01, 32, 31.02, which encompass all commercial uses of the Study Area above Interstate 10, as well as some additional residential uses. The Empire Center, a retail center below the 10 with 450,000 retail square feet, is thus excluded.

11 Fontana CAFR 2010

	2010
Jobs in the Area (1)	10,731
Area Residents Who Work	11,200
Net Outflow of Area Jobs	-469
Outflow as a share of Area Residents Who Work	-4%
Area Residents with Area Jobs	325
Share of Area Residents with Area Jobs	2.9%
Share of Area Jobs Held by Area Residents	3.0%

(1) Area consists of San Bernardino Tracts 33.01, 33.02, 31.01, 32, 31.02
Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics, Economic & Planning Systems, Inc.

Figure 2-80: Study Area Worker Inflow and Outflow

Job Locations of Study Area (1) Residents	2010	Share	Home Locations of Study Area (1) Employees	2010	Share
Total All Jobs	10,731	100%	**Total All Jobs**	11,200	100%
Fontana city, CA	1,073	10%	**Fontana city, CA**	1,051	9%
Los Angeles city, CA	806	8%	Los Angeles city, CA	982	9%
Riverside city, CA	573	5%	Ontario city, CA	763	7%
San Bernardino city, CA	459	4%	San Bernardino city, CA	578	5%
Rialto city, CA	406	4%	Rancho Cucamonga city, CA	511	5%
Rancho Cucamonga city, CA	400	4%	Riverside city, CA	371	3%
San Diego city, CA	262	2%	Pomona city, CA	266	2%
Ontario city, CA	204	2%	Anaheim city, CA	209	2%
Moreno Valley city, CA	202	2%	Chino city, CA	189	2%
Corona city, CA	185	2%	Rialto city, CA	188	2%
All Other Locations	6,161	57%	All Other Locations	6,092	54%

(1) Area includes San Bernardino Tracts 33.01, 33.02, 31.01, 32, 31.02
Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics, Economic & Planning Systems, Inc.

Figure 2-81: Commute Patterns: Study Area Home and Work Destinations

	Survey Area Residents Who Work		Survey Area Jobs	
	2010	%/total	2010	%/total
All Jobs	11,200	100%	10,731	100%
Jobs by NAICS Industry Sector				
Goods-Producing	**2,007**	**18%**	**112**	**1%**
Mining, Quarrying, and Oil and Gas Extraction	17	0.2%	0	0.0%
Utilities	97	1%	27	0.3%
Construction	596	5%	38	0.4%
Manufacturing	1,297	12%	47	0.4%
Service-Providing	**9,086**	**81%**	**10,617**	**99%**
Trade, Transportation, and Utilities	2,828	25%	1,328	12%
Information	180	2%	105	1%
Financial Activities	512	5%	225	2%
Professional and Business Services	1,499	13%	678	6%
Education and Health Services	1,954	18%	6,904	64%
Educational Services	713	6%	561	5%
Health Care and Social Assistance	1,241	11%	6,343	59%
Arts, Entertainment, and Recreation	145	1%	34	0.3%
Accommodation and Food Services	920	8%	938	9%
Other Services (excluding Public Administration)	524	5%	299	3%
Public Administration	524	5%	106	1%
Agriculture, Forestry, Fishing and Hunting	**107**	**1%**	**2**	**0%**
Jobs by Earnings				
<$15,000/year	2,682	24%	2,051	19%
Between $15,000 and $40,000/year	4,855	43%	3,011	28%
>$40,000/year	3,663	33%	5,669	53%
Jobs by Worker Educational Attainment				
Less than high school	2,321	21%	1,294	12%
High school or equivalent, no college	1,889	17%	1,445	14%
Some college or Associate degree	2,394	21%	2,916	27%
Bachelor's degree or advanced degree	1,521	14%	2,914	27%
Educational attainment not available (workers <age 29)	3,075	28%	2,162	20%

(1) Area consists of San Bernardino Tracts 33.01, 33.02, 31.01, 32, 31.02
Source: U.S. Census Bureau, LEHD Origin-

Figure 2-82: Worker Profile: Study Area Residenta and Employees

Real Estate Market Conditions

This section describes the existing market conditions for the real estate products relevant to the potential revitalization of the Sierra-Valley Study Area. It also discusses how these trends relate to realization of the study's six goals to reduce traffic congestion, maximize walkability between uses, anticipate future mass transit, identify uses synergistic with Kaiser Permanente, identify opportunities for new housing, and create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center.

Taken as a whole, the six objectives imply a land-use strategy that features corridor-oriented development with increased residential density, medical office space, upgraded retail options to better serve area residents and workers, and parking options that encourage non-motorized circulation throughout the area. This strategy is consistent with the goals articulated in the Fontana General Plan Land Use Element, which stipulates that uses within arterial corridors be organized around focal points to convey distinctiveness, encourage economic development, and balance uses.

Consequently, the three major land use types entailed by this strategy are considered. They include retail, multifamily residential, and office uses. In each section, market factors, regional socioeconomic trends described above, and information on existing properties and future projects are reviewed to investigate the extent to which the real estate market within the Sierra Valley Study Area may support the strategy.

Where applicable, preliminary findings from an assessment of land uses induced by Kaiser facilities elsewhere in California will be integrated into the discussion. (For more on this analysis, see Land Use Impacts of Hospitals Section.)

Retail

The strong regional population and employment trends described above have had a positive impact on the retail sector of the Inland Empire. The last 20 years has witnessed significant new development of regional-serving malls as well as power centers anchored by national tenants such as Wal-Mart, Home Depot, and Best Buy, changing the landscape from a series of neighborhood shopping districts to a more suburban and regionally dominated market.

The Inland Empire region is home to several major shopping centers, including Victoria Gardens in Rancho Cucamonga, Ontario Mills in Ontario, The Shoppes at Chino Hills in Chino Hills, and Montclair Plaza in Montclair. These centers, all located within the Fontana Competitive Trade area, are illustrated in Figure 2-83. Accounting for 6.3 million square feet within 27 miles of Fontana, these centers include some of the most notable examples of the national trend of "lifestyle centers," which are built around aesthetic appeal, open-air pedestrian walkways, upscale merchants, and a strong (if not historically authentic) sense of place.

The success of lifestyle centers in the Inland Empire reflects the demand for destinations that provide an alternative to suburban environments and give visitors an attractive locale for relaxation and socialization. Their success in attracting visitors from significant distances has created competition for local shopping and entertainment districts. In interviews, Fontana residents consistently cite Victoria Gardens (7 miles away) and Ontario Mills (10 miles away) as places they go when they want to shop or have a night out.

Shopping Center	City	Opened/ Latest Renovation	Distance from Fontana	Gross Leasable Square Feet
Victoria Gardens	Rancho Cucamonga	2005	7 miles	1,500,000
Ontario Mills	Ontario	1996	10 miles	1,491,884
Montclair Plaza	Montclair	1968 / 2008	17 miles	1,372,095
Galleria at Tyler	Riverside	1970 / 1991	25 miles	1,200,000
The Shoppes at Chino Hills	Chino Hills	2008	25 miles	375,000
The Shops at Dos Lagos	Corona	2006	27 miles	350,000
MARKET AREA TOTAL				**6,288,979**

Source: Company Websites, Economic & Planning Systems, Inc.

Figure 2-83: Major Inland Empire Lifestyle Centers and Malls

Fontana has not been involved in this trend of developing lifestyle centers, which may partially explain why the city has underperformed most of the cities in its competitive trade area on a sales-per-capita basis. As illustrated in Figure 2-84, Fontana's sales-per-capita performance in 2010 is 11 percent lower than the County average, 179 percent lower than the city of Montclair, 131 percent lower than Ontario, 23 percent lower than Upland, 16 percent lower than Rancho Cucamonga, and 15 percent lower than the City of San Bernardino. The most significant retail leakage categories, shown in Figure 2-85, include apparel stores, general merchandise, and restaurants and bars—all categories well represented in the region's lifestyle centers.

	2010 Per Capita Retail							
			Trade Area Cities					
	Fontana	San Bernardino County	Montclair	Ontario	Rancho Cucamonga	Rialto	San Bernardino	Upland
Retail Categories								
Apparel Stores	252	512	3,476	1,725	728	156	479	226
General Merchandise	1,273	1,402	5,506	751	1,936	0	1,767	1,726
Grocery	559	497	340	461	520	436	568	562
Restaurants and Bars	889	1,084	1,877	1,689	1,629	685	1,249	1,185
Home Furn. and Appliance	81	478	1,246	1,691	799	38	451	382
Building Materials	570	526	347	696	511	412	697	1,387
Auto Dealers/Supply	1,528	1,169	4,997	3,642	189	224	1,299	1,057
Service Stations	1,318	1,296	822	2,188	943	1,980	1,090	1,031
Other Retail Stores	826	1,139	1,732	4,016	1,233	1,227	756	1,418
Total	7,294	8,101	20,342	16,858	8,489	5,158	8,356	8,975

Source: California Retail Survey 2011, Economic & Planning Systems, Inc.

Figure 2-84: Fontana Retail Competition

	2010 Per Capita Retail				
	Fontana	Trade Area (1)	San Bernardino County	Leakage Categories	
				Vs. Trade Area	Vs. SB County
Retail Categories					
Apparel Stores	252	897	512	(646)	(260)
General Merchandise	1,273	1,525	1,402	(252)	(129)
Grocery	559	504	497	54	62
Restaurants and Bars	889	1,387	1,084	(498)	(194)
Home Furn. and Appliance	81	790	478	(709)	(397)
Building Materials	570	668	526	(98)	44
Auto Dealers/Supply	1,528	1,588	1,169	(60)	359
Service Stations	1,318	1,401	1,296	(83)	22
Other Retail Stores	826	1,777	1,139	(951)	(313)
Total	7,294	10,537	8,101	(3,243)	(807)

(1) Trade Area Includes Cities of Montclair, Ontario, Rancho Cucamonga, Rialto, San Bernardino, and Upla
Source: California Retail Survey 2011, Economic & Planning Systems, Inc.

Figure 2-85: Fontana Retail Leakage Categories

	Study Area	Fontana	Study Area %
Total Retail Sq.Ft. 1Q 2006	2,214,437	6,340,493	35%
Total Retail Sq.Ft. 3Q 2012	2,211,243	7,389,407	30%
New Retail Sq.Ft. Constructed Since 2006	0	1,443,336	0%
Retail Sq.Ft. Retired/Demolished Since 2006	3,194	394,422	1%
Net New Retail Sq.Ft.	-3,194	1,048,914	0%
Retail Sq.Ft. Growth	0%	16.5%	

Source: CoStar, Economic & Planning Systems Inc.

Figure 2-86: Fontana Retail Area: Study Area vs. City, 2006-2012

Overall, Fontana has about 7.4 million square feet of retail. For the most part, Fontana's retail consists of neighborhood-serving convenience and discount stores and big-box centers. The major retail centers are generally situated near residential developments along Foothill Boulevard, the 210 Freeway, on Summit Boulevard, and within the Sierra-Valley Study Area. Since 2006, the City has added a net 1 million square feet of retail, an increase of 16.5 percent. However, as shown in Figure 2-86, all the growth has taken place outside of the Study Area in north Fontana near new subdivisions.

With 2.2 million square feet, or 30 percent of total Fontana retail, the Sierra-Valley area is one of the city's primary retail nodes. Most of the retail is contained within four contiguous shopping centers north of I-10, and one center south of I-10 (the Palm Court), as illustrated by Figure 2-87. The centers north of the I-10 contain a mix of value retail, grocery, and fast-food vendors and serve a primarily Hispanic, low-to-moderate income, customer base. The retail mix does not seem oriented towards the Kaiser employee demographic, despite the fact that 5,300 employees represent significant potential demand. The Palm Court center south of the I-10is more geographically convenient for South Fontana residents, who are generally more affluent than their northern neighbors. Additional street retail is located along the Sierra corridor, including a cluster of car-related uses (auto parts and auto repair stores) located on the east side of Sierra between San Bernardino and Randall.

Visually, the centers north of the I-10 look dated, and maintenance of the facades, paving, and landscaping is inconsistent, contributing to a degraded appearance. Some of this is due to fragmented parcel ownership within each center, which impedes coordinated revitalization. The owners of the Inland Empire Center, for example, have recently renovated facades and upgraded landscaping, but the improvements are partially blocked by independently owned pads that line the periphery of the center on Sierra and Valley. Similarly, the Vineyard Valley Center is almost completely hidden from motorists driving up Sierra from the I-10 by the Valero, McDonald's, and Motel 6.

Additional Study Area retail activity is provided by the Bel-Air swap meet, an open-air flea market located two city blocks west of the Vineyard Valley Center on Valley Boulevard. The swap meet, which is open Wednesday and Friday-Sunday each week, has stalls for 675 vendors and typically attracts between 3,500 and 5,000 customers during the week and 8,000-10,000 customers during the weekend.

Shopping Center	Leasable Square Feet	Major Tenants
Inland Empire Center	350,940	Toys R Us, Famsa, Cardenas, Pep Boys
Palm Court	503,740	Target, Ross Dress For Less, 24 Hour Fitness
Sierra Center	320,901	In and Out Burger, Western Dental
Sierra Plaza South	140,602	Stater Brothers, Dollar Tree, Rite Aid
Vineyard Valley	350,215	Kmart, Food4 Less, Big Lots
SURVEY AREA TOTAL	**1,666,397**	

Source: County Assessor, Economic & Planning Systems,Inc.

Figure 2-87: Study Area Shopping Centers

As noted earlier, automobile congestion in the Study Area is the highest the city, especially during rush hour commute on swap-meet market days. At its worst, Sierra and Valley congestion spills onto feeder streets and acts as an impediment to shopping, according to area residents.

Yet despite the centers' dated design and the challenges to access presented by congestion and circulation, retail north of the 1-10 in the Study Area performs extremely well, as indicated by owners and available market data. Study Area vacancy rates, as shown in Figure 2-88, have been consistently below the Fontana average since 2006 and currently sit at 3.1 percent. (High vacancy rates at Palm Court are due in part to the bankruptcy in 2008 of Mervyns'.) Likewise, Study Area rents (in the area above the I-10) have outperformed the city average, as shown in Figure 2-89. Anecdotally, the El Gallo Giro, La Familia, and Wienerschnitzel restaurants in the Study Area are among the highest-performing their respective chains. Similarly, the auto parts and auto repair uses on Sierra perform well, and from the City's perspective, are good sales tax generators. In short, the retail centers in the Study Area are "cash cows", and so long as occupancy and rents stay high, owners have little short-term incentive to invest in and redevelop their properties in a manner that will help advance the revitalization of the Sierra Valley area.

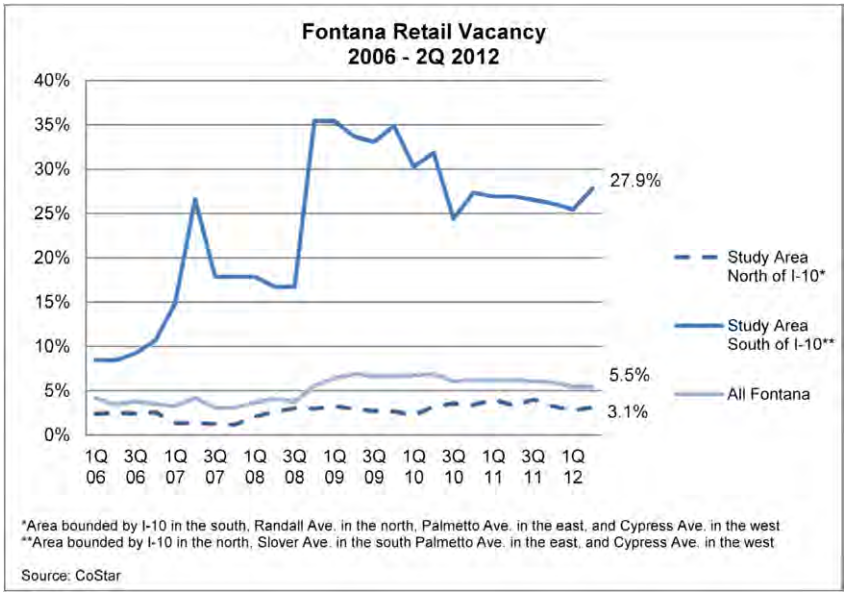

Figure 2-88: Fontana Retail Vacancy

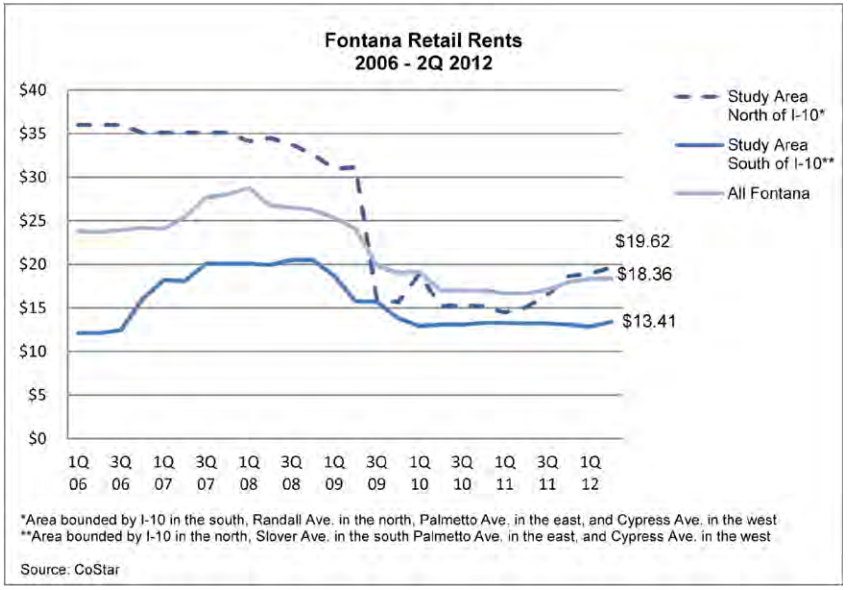

Figure 2-89: Fontana Retail Rents

Residential

As discussed previously, the relative affordability and availability of land compared with coastal counties has been a major growth driver for the Inland Empire. In Fontana, most of this new growth took place in newer areas of the city outside the Sierra Valley Study Area. As shown in Figure 2-90, 42 percent of all residential units in Fontana were built since 1990. In the Study Area, on the other hand, only 9 percent of units date from that period. Conversely, 65 percent of all Study Area units date from between 1950 and 1980. Ideally, future revitalization of the Study Area would include recycling and upgrading of this aged housing stock.

In 2000, as shown in Figure 2-91, Fontana's median home price of $130,400 was approximately 6 percent below the Inland Empire average. However, home values experienced appreciation of 166 percent between 2000 and 2010 based on sales data, yielding a median sales price of $346,700 in the city, 8 percent above the Inland Empire average. This suggests that the desirability of living in new Fontana residential units has increased since 2000 relative to the Inland Empire average.

The Study Area includes approximately for 7,800 housing units, approximately 16 percent of the Fontana total. In 2000, the median home price for Study Area housing units was $112,230, approximately 14 percent below the Fontana average. From 2000 to 2010, median Study Area home values appreciated 110 percent to $235,500, 32 percent below the Fontana average. Relative to the city as a whole, Study Area housing values experienced stagnant growth.

The housing stock in Fontana is dominated by single-family detached units, which make up 80 percent of all units in the city, as shown in Figure 2-92. By comparison, in the Inland Empire and the Study Area, 69 percent and 59 percent of all units are single-family-detached. Fontana's multifamily share of 15 percent is consistent with the Inland Empire rate of 16 percent, but multifamily units in the Study Area contribute a far higher 29 percent share, of which 22 percent are in structures of five or more units. This pattern suggests that the existing condition of the Study Area may have the appropriate urban form for new residential density to encourage walkable urbanism.

	2010					
	Study Area (1)		City of Fontana		Inland Empire	
	Units	*Share*	*Units*	*Share*	*Units*	*Share*
Date Constructed						
Built 2000 to 2010	405	5%	11,787	24%	292,656	20%
Built 1990 to 1999	344	4%	9,149	18%	222,606	15%
Built 1980 to 1989	1,529	20%	13,172	26%	345,996	24%
Built 1970 to 1979	2,052	26%	5,414	11%	248,603	17%
Built 1960 to 1969	1,607	21%	3,401	7%	143,865	10%
Built 1950 to 1959	1,515	19%	4,906	10%	133,085	9%
Built 1940 to 1949	186	2%	1,365	3%	45,117	3%
Built 1939 or earlier	184	2%	773	2%	42,509	3%

(1) Includes Census Tracts 31.01, 31.02, 32, 33.01, 33.02, forming an area that is bounded in the south by the 10 Freeway, in the North by Merrill Avenue, in the West by Citrus Avenue, and in the east by Locust between the 10 and San Bernardino, by Alder between San Bernardino and Merrill
Source: US Census ACS

Figure 2-90: Age of Housing Stock

In summary, the Study Area's residential market has lagged behind other areas in the city. This, in theory, could mean that the relatively cheap land might support a next wave of residential development. In fact, rents in the Study Area are not yet sufficient to support market-rate multi-family housing, and with the demise of the Redevelopment in California, it may be challenging to develop a subsidized product (i.e. low-income and/or publicly supported).

Given current market demand and supply conditions, this dynamic is not likely to change in the short-term. There is still considerable residential development capacity in the city's favored residential areas in North Fontana, which will continue to draw most of the developer energy. For higher-density product, (e.g. condos or apartments), Fontana competes in an environment that includes successful multi-family community developments in Rancho Cucamonga and Ontario, both of which provide more urban amenities and a stronger sense of place than the Sierra Valley Study Area currently offers. In addition, there does not currently appear to be substantial demand from Kaiser employees for worker housing in the Study Area, as their level of pay has buying power in the Inland Empire, and strong freeway access (even with congestion at Sierra and Valley) allows an easy commute from many competitive areas.

Over a longer time frame the above dynamic may improve, especially if the Study Area begins to offer a distinctive sense of place and stronger set of amenities. In addition, evolving commute patterns (driven by increasing energy prices and congestion, for example), may also improve the marketability of the Project Area for high density residential over time, especially as employment levels at Kaiser and surrounding properties continue to expand. About half of the employees surveyed by this study's survey indicated that they would be interested in living in housing within walking distance of the Kaiser campus.

Location	2000	2010	2000-2010 Growth
Study Area (1)	$112,230	$235,545	110%
Fontana	$130,400	$346,700	166%
Inland Empire (2)	$138,796	$322,300	132%

(1) Includes Census Tracts 31.01, 31.02, 32, 33.01, 33.02, forming an area bounded in the south by the 10 Freeway, in the North by Merrill Avenue, in the West by Citrus Avenue, and in the east by Locust
(2) San Bernardino and Riverside Counties

Source: US Census, Economic & Planning Systems, Inc.

Figure 2-91: Median Home Values: 2000-2012

	2010					
	Study Area (1)		City of Fontana		Inland Empire	
	Units	Share	Units	Share	Units	Share
Total housing units	7,822	100%	49,967	100%	1,474,437	100%
Occupied housing units	7,521	96%	46,708	93%	1,263,031	86%
Type						
1-unit, detached	4,584	59%	40,067	80%	1,022,040	69%
1-unit, attached	283	4%	1,187	2%	74,808	5%
2-4 Units	552	7%	1,915	4%	82,674	6%
>4 Units	1,739	22%	5,315	11%	174,671	12%
Mobile home	664	8%	1,483	3%	117,207	8%
Own/Rent						
Owner-occupied	3,842	51%	32,825	70%	855,253	69%
Renter-occupied	3,679	49%	13,883	30%	387,349	31%
Value						
Median Value (dollars)	235,545		346,700		322,300	
Rent						
Median (dollars)	977		1,083		1,087	

(1) Includes Census Tracts 31.01, 31.02, 32, 33.01, 33.02, forming an area that is bounded in the south by the 10 Freeway, in the North by Merrill Avenue, in the West by Citrus Avenue, and in the east by Locust between the 10 and San Bernardino, by Alder between San Bernardino and Merrill
Source: US Census ACS

Figure 2-92: Housing Type and Value

Office

In some respects, office is a more appropriate vehicle for Sierra Valley Study Area revitalization than residential uses, because expanded office would reinforce and expand the Study Area's role as a jobs center and fully utilize highway and transit links. While the self-contained and vertically integrated Kaiser facility has no need for medical or office space, there may be indirect co-location benefits for some medical service providers from being nearby. For example, Westech medical school is building a facility on Sierra between San Bernardino and Randall Avenues and may induce complementary product and service development.

With 1.5 million square feet of office space, totaling 2 percent of total, Fontana is currently a relatively small contributor to the Inland Empire office market, especially when compared to neighbors in Rancho Cucamonga and Ontario. This second-tier status is reflected in an average rent that at $17.80 per square foot is lower than the regional average (as indicated in Figure 2-93).

	Second Quarter 2012						
	Existing Inventory		Vacancy	YTD Net	YTD	Under	Quoted
	# Blds	Total RBA	%	Absorp.	Deliveries	Const. SF	Rates
Total Office							
Fontana	218	1,507,417	10.0%	-5,109	0	0	$17.80
Airport Area [1]	783	11,765,454	20.4%	-118,876	0	0	$18.86
Inland Empire West [2]	3,871	47,700,447	14.3%	443,500	153,500	24,587	$18.08
Total Inland Empire [3]	5,912	68,913,403	14.6%	388,691	153,500	28,067	$18.23

[1] Sub-Market that includes Fontana, Ontario, and Rancho Cucamonga

[2] Sub-Market that includes the Airport Submarket (Fontana, Ontario, and Rancho Cucamonga) plus Upland, Chino, Montclair, Rialto, and San Bernardino

[3] Includes San Bernardino and Riverside Counties

Source: CoStar

Figure 2-93: Regional Office Snapshot

Nonetheless, Fontana has been fairly active in building office space, adding 11.3 percent in new area between 2006 and 2012, as shown in Figure 2-94. The Study Area contributes a 32 percent share of the city's office space, which is generally older than the new developments that have been constructed in North Fontana. As shown in Figures 2-95 and 96, Survey Area vacancy rates are lower for the Study Area than the city average, but also command lower rents. New office space in the Study Area should be able to achieve the same rents as elsewhere in the city.

	Study Area	All Fontana
Total Office Area 1Q 2006	484,724	1,354,382
Total Retail Area 3Q 2012	496,336	1,507,417
New Office (constructed or converted) Since 2006	11,612	199,577
Office Area Retired/Demolished	0	46,542
Net New Office Area	11,612	153,035
Growth in Office Area	2%	11.3%

Source: CoStar, Economic & Planning Systems Inc.

Figure 2-94: Fontana Office Area 2006-2012

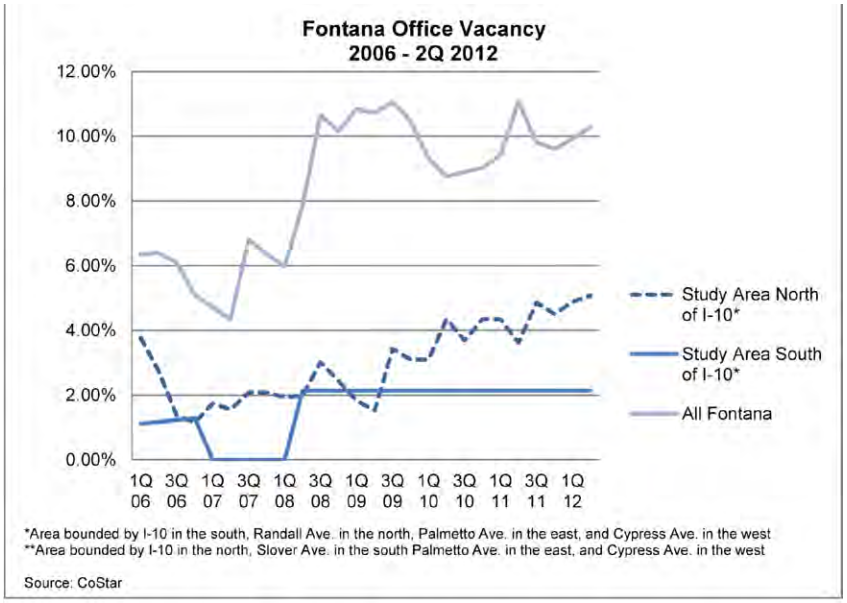

Figure 2-95: Fontana Office Vacancy

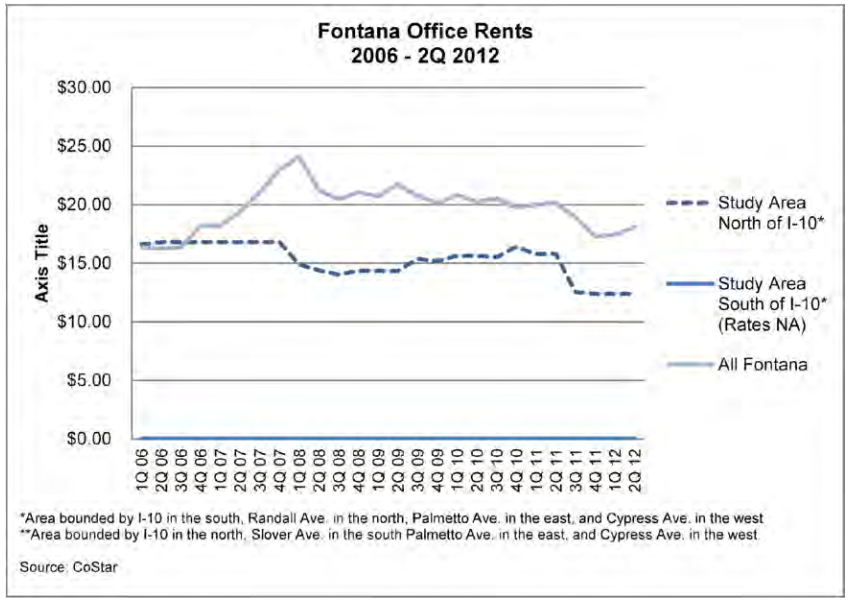

Figure 2-95: Fontana Office Rents

Land Use and Market Impacts of Hospitals

Large medical campuses can have far-reaching impacts on the real estate market in which they are located, affecting demand for residential, commercial, and even industrial property in both positive and negative ways. However, the significance of these impacts can vary widely depending on the specific context and factors, including but not limited to, pre-existing land use conditions, local demographic and economic conditions, availability of real estate, local regulatory and zoning policies, and the orientation/reputation of the institution itself.

When the current Kaiser Fontana campus was built in 1955 to replace the smaller hospital at the Kaiser Steel Mill, the City was a sparsely populated yet located with a rapidly growing region. Consequently the evolution and maturation of the campus occurred more or less concurrently with the surrounding community. Under these circumstances, it can be difficult to disentangle the features of the local land use context that are attributable to the Kaiser hospital (versus those that have evolved independently). However, the campus adjacency to two heavily traveled commercial corridors as well as a number of opportunity sites in the Project Area, suggests that existing and potential hospital-related land use relationships warrant further consideration as part of this planning process. The discussion below distinguishes between commercial and residential land use relationships.

Commercial Land Uses

Large hospitals are widely observed to spur demand for a variety of healthcare-related office and retail uses within immediately adjacent neighborhoods. Office uses often cater to spill-over demand created by hospitals from both patients seeking complimentary services and healthcare tenants that provide them. Specific tenants in these environments often include physicians and other medical practitioners (e.g., dentists and optometrists), nursing and assisted living facilities, imaging and diagnostics service providers, rehabilitation centers, testing labs, medical supply companies, pharmacies, and others. On the retail side, large hospitals can be significant generators of traffic from patients, staff, and visitors who often seek a variety of consumer related items and services (food, lodging, convenience goods, etc.) associated with their stay.

Although the existence of retail and medical-related clusters adjacent to hospitals is a common phenomenon, very little empirical research has been conducted on the factors that influence size or nature of these clusters. Perhaps one of the most relevant rigorous studies on this subject was conducted in 2006 on

seven randomly selected hospitals in Los Angeles County. The study involved a detailed parcel-level land use census within one-mile of the subject hospitals.[12] A summary of the nonresidential land use categories identified and the relative proportion of each is illustrated in Figure 2-97.

Not surprisingly, the study found a relatively high proportion of medical-related land uses within a 1-mile radius of each hospital. Specifically, the study found about 12 percent of the non-residential uses near the hospitals to be medical-related. Of course, the absolute number of commercial uses depended, among other things, on the presence of residential uses, which ranged from 68 to 87 percent of the total (an average of 77 percent). Among the healthcare tenants, non-surgical specialists (e.g., pediatricians, OB/gyn) were the most predominant at 22 percent, followed by dentists at 19 percent, and primary care providers (e.g., internal medicine, immunization clinics) at 14 percent (see Figure 2-98).

Although a comparable survey of the uses surrounding the Kaiser Fontana campus has not been conducted, preliminary research suggests that the proportion of commercial tenants focused on healthcare-related services is well below the 12 percent average found around the surveyed Los Angeles hospitals. Although the nearby retail environment, by contrast, is quite robust, it is unclear

12 See, "The Neighborhood Dynamics of Hospitals as Large Land Owners," by Raphael Bostic, LaVonna Lewis, and David Sloane. . Prepared for the Lincoln Institute for Land Policy, October, 2006.

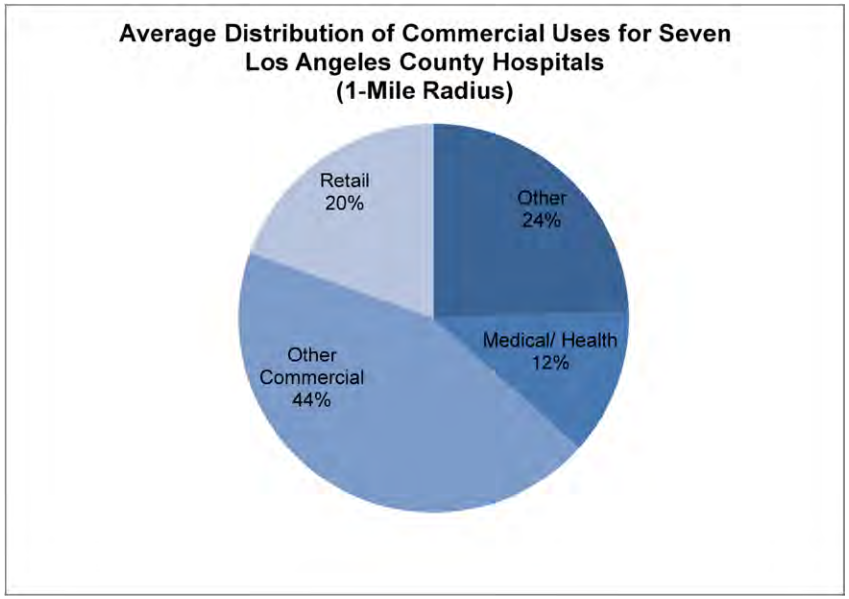

Figure 2-97

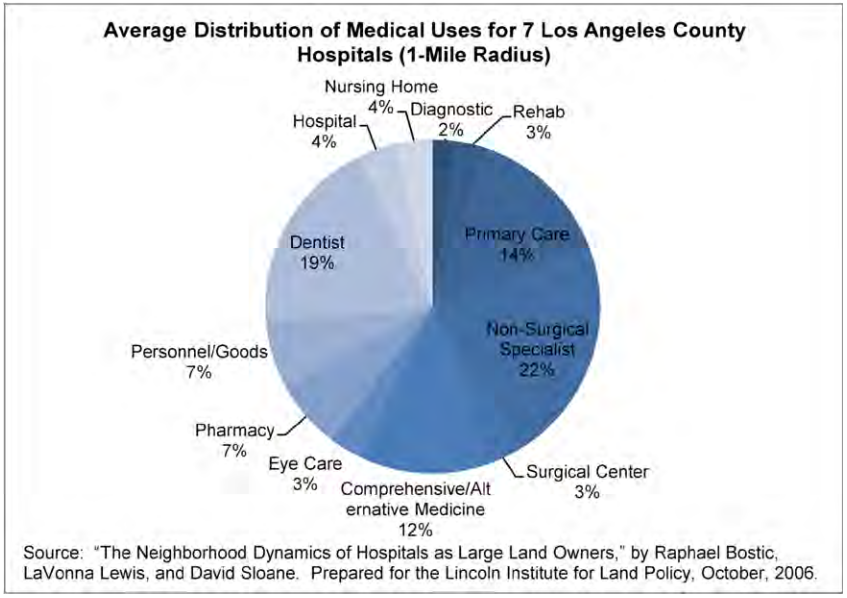

Figure 2-98

the degree to which these centers cater to and or depend on the Kaiser campus as a source of demand. Judging from both the tenant mix and anecdotal discussion with property owners, it would appear that the broader neighborhood is a more significant driver.

A variety of factors may account for the rather limited number of hospital-related office or retail tenants adjacent to the campus, some of which can and others that are unlikely to be affected by local planning efforts. These include, but are not limited to:

- Self-contained nature of the hospital: The Kaiser Fontana campus is relatively enclosed and buffered from nearby commercial and residential areas with limited entry points and pedestrian crossing opportunities. The large size and self-contained nature (including its own cafeteria) may deter staff and visitors from leaving for meals, errands, or other activities.
- Surrounding urban form: In addition the configuration of the campus itself, both Valley Boulevard and Sierra Avenue function as traditional auto-oriented corridors with wide and heavy, fast-moving traffic. The overall urban form along these corridors may not be conducive to the formation of an inter-connected, pedestrian friendly commercial or mixed-use corridor.
- Kaiser business model and service orientation: Unlike many other hospitals, Kaiser operates as a full service, vertically integrated medical care institution. Most Kaiser members do not have an alternative primary care or specialty providers outside the system. Likewise, the physicians are all in-house and do not operate private practices. This service orientation does not support the same level of ancillary medical uses as more traditional hospitals with significant referrals and relationships with outside doctors. In addition, Kaiser is solely focused on providing medical services and as such its property acquisitions and capital improvements do not include non-medical real estate investment or development.

Going forward, the planning process may seek to further evaluate the relative importance of the factors above and identify opportunities to further improve linkages with surrounding neighborhoods.

Residential Land Uses

Major hospital campuses can have both positive and negative impacts on nearby residential communities. On the positive side, large, stable employers such as medical campuses often serve as economic anchors that stabilize or even boost local housing values, including a source of demand from employees seeking shorter commutes. They also provide convenient access to health care services (an important consideration in aging communities). On the negative side, around-the-clock operations and noise associated with the facilities (e.g., from ambulances, helicopters, etc.) can be a nuisance or inconvenience and potentially depress property values.

Based on interviews and data analysis conducted as part of this study, the Kaiser campus does not appear to have had a significant impact on the local residential community. Specifically, because the campus is relatively well buffered, with the primary access points facing commercial areas and/or wide arterial streets, effects on nearby residential communities appear limited.

Moreover, available data suggest that the Kaiser campus employees are generally unlikely to be residents of the local residential community. Specifically, commute patterns for residents in the Study Area indicate that a very small proportion of workers live locally, as described earlier. Given that Kaiser is by far the largest employer in the neighborhood, the data suggest that almost all of the Kaiser jobs are held by workers who live elsewhere. Although, as mentioned earlier and contradictory to historic data and an understanding of existing conditions, about half of the employees surveyed by this study's survey indicated that they would be interested in living in housing within walking distance of the Kaiser campus.

Comparison with Other Kaiser Hospitals

Given the unique nature of Kaiser-Permanente business model, EPS has sought to conduct an "apples-to-apples" comparison of the Fontana campus and surrounding neighborhood with other Kaiser hospital. Specifically, EPS has gathered a range of data from the neighborhoods surrounding six other Kaiser hospitals, as illustrated in Figure 2-99 and summarized in Table 2-100. The goal of this analysis is to identify potential relationship and urban form characteristics that might shed light on the potential for Sierra-Valley Project Area.

Generally speaking the neighborhoods surrounding the six other Kaiser Hospital campuses demonstrate a wide range of land uses and development, many of which are likely due to pre-existing and/or unrelated factors. Nevertheless, this initial analysis does illustrate a number of interesting trends may guide future inquiry, as summarized below:

- With a few exceptions, most Kaiser Hospitals appear to be located in commercial areas with more jobs than residents within a one-half mile radius and the Fontana campus appears to be near the top in this regard. Only the

Figure 2-99: Location of Selected Kaiser Hospitals Surveyed

Attribute	Fontana (Siera Ave. @ I-10) #	%	Ontario (S. Vineyard Ave. @ Hwy. 60) #	%	Los Angeles Medical Center (W. Sunset Blvd. @ Vermont on Redline) #	%	Woodland Hills (Ventura Blvd. @ Hwy. 101) #	%	Riverside Medical Center (Magnolia Ave. & Hwy. 91) #	%	Panorama City (Roscoe Blvd. off Hwy-170) #	%	Foundation Hospital (@ I-605 & I-10, Baldwin Park) #	%
Size[1]														
# of Employees	2,882		na		4,980		1,247		3,634		1,444		1,023	
Patient Visits / Admissions[2]	136,724		na		2,146,427		68,914		62,181		284,411		65,892	
# of beds	350		na		464		175		215		218		238	
Demographics (½ mile radius)														
Population	5,704		2,893		21,288		1,714		5,690		9,292		5,692	
Median HH Income	$33,687		$55,304		$25,911		$89,440		$41,821		$49,463		$51,298	
Renter-Occupied Housing	62%		38%		88%		21%		65%		44%		39%	
Employment (½ mile radius)														
Healthcare	6,235	*76%*	316	*13%*	14,150	*71%*	3,438	*32%*	4,207	*58%*	2,355	*70%*	3,791	*51%*
Retail	601	*7%*	136	*6%*	873	*4%*	459	*4%*	937	*13%*	30	*1%*	297	*4%*
Other	1,404	*17%*	1,889	*81%*	4,795	*24%*	6,686	*63%*	2,171	*30%*	961	*29%*	3,317	*45%*
Total	8,240	*100%*	2,341	*100%*	19,818	*100%*	10,583	*100%*	7,315	*100%*	3,346	*100%*	7,405	*100%*
Jobs / Resident (½ mile)	1.4		0.8		0.9		6.2		1.3		0.4		1.3	
Commute Patterns (1 mile radius)														
Jobs held by Local Resdents	169	*1.6%*	86	*0.7%*	2,844	*8.6%*	453	*1.6%*	315	*2.2%*	593	*7.8%*	358	*2.9%*
Jobs held by non-Local Residents	10,508	*98.4%*	11,978	*99.3%*	30,256	*91.4%*	27,045	*98.4%*	14,201	*97.8%*	7,058	*92.2%*	11,996	*97.1%*
Total	**10,677**	*100%*	**12,064**	*100%*	**33,100**	*100%*	**27,498**	*100%*	**14,516**	*100%*	**7,651**	*100%*	**12,354**	*100%*
Share of Jobs held by Local Residents	*1.6%*		*0.7%*		*8.6%*		*1.6%*		*2.2%*		*7.8%*		*2.9%*	

(1) Based on American Hospital Association data available at http://www.ahadataviewer.com/.
(2) Includes both admission plus outpatient visits, excluding ER.

Figure 2-100: Profile of Kaiser Permanente Facilities and Surrounding Neighborhoods

Woodland Hills campus has a higher job per resident ratio than Fontana. In most cases, however, a preliminary review of existing land use suggests only a marginal relationship between the tenants in adjacent or nearby commercial areas and the respective Kaiser facilities.

- The neighborhood surrounding the Fontana campus appears less affluent than those surrounding other Kaiser facilities as indicated by median household income and percentage of renter occupied housing.
- Healthcare appears to be the predominant industry sector surrounding most, but not all of the Kaiser hospitals, but this appears to reflect the predominant role of Kaiser itself as a job provider rather than ancillary healthcare uses. For example, preliminary estimates of Kaiser on-site jobs account for a large share of total healthcare related employment in most of the neighborhoods. The Los Angeles Medical Center is a noteworthy exception as this area appears to have evolved as a highly clustered medical district.
- Most Kaiser Hospitals appear to employ a relatively low number of local residents as indicated by the high proportion of jobs held by residents living outside a one-mile radius from the campus. The two Kaiser hospitals located in neighborhoods with the highest overall density, based on the number of total jobs and residents within a one-half mile radius, also appear to have the highest level of internal commutes (i.e. proportion of residents who work near their home).

As noted, these initial surveys are designed guide future case studies and help identify potential campuses and economic or programmatic variables worthy of more detailed analysis. Based on subsequent input and discussion, EPS intends to conducts more detailed case studies of select comparable locations to better understand "best practices" and models for future revitalization efforts.

Survey of Kaiser Permanente employees, members, and visitors

In part to further explore the potential for synergistic land uses, the Project Team conducted a survey of Kaiser Permanente Fontana employees, members, and visitors. The Team administered the survey at three consecutive Kaiser Permanente Fontana farmers markets in August, 2012. The Team distributed different surveys to employees on one hand and visitors/members on the other hand. Some of the questions in the two surveys were different and some were the same or similar. A total of 59 people responded to the survey.

Key market findings from the survey include:

Employees frequently leave campus to eat or shop: nearly half of those surveyed – 48 percent – said they left the Kaiser Permanente campus during a typical day for a trip related to shopping, eating or personal services at least 3 to 5 times a week. A quarter of respondents said they left every day.

Visitors and members frequently make stops in the immediate area to eat or shop: 53 percent of those surveyed indicated they patronized businesses adjacent to the Kaiser campus as part of a visit to the campus.

Fast food was the highest desired service or goods category desired by employees: Almost half – 48 percent – indicated that they would patronize fast food restaurants near the campus. This could be because of the short amounts of time employees have for breaks. However, fast casual and sit-down restaurants were also popular, with 30 and 44 percent, respectively.

Visitors and members want food near the campus, especially sit-down restaurants: 80 percent of members/visitors surveyed indicated they purchased food near the Kaiser campus. Over 50 percent said they would patronize sit-down restaurants, though fast casual and fast food were also popular.

Employees want a greater variety of eating and shopping amenities: 44 percent of employees surveyed indicated that they would walk from the campus to a nearby eating or shopping establishment more of there were a greater variety of eating and shopping next to the campus, the top answer.

Both employees and visitors/members expressed interest in a wide variety of types of goods and services: Employees and /visitors /members indicated they would patronize many different types of goods and services, including grocery stores, drugstores, banks, specialty shops, and gyms.

Employees indicated that they would be interested in housing near the Kaiser campus: 52 percent of employees surveyed indicated that they would be interested in the right kind of housing within walking distance of the Kaiser campus.

Infrastructure

The project team reviewed the existing sewer system relevant to this project. Figure 2-101 shows the pipes, structures and laterals in and around the Study Area.

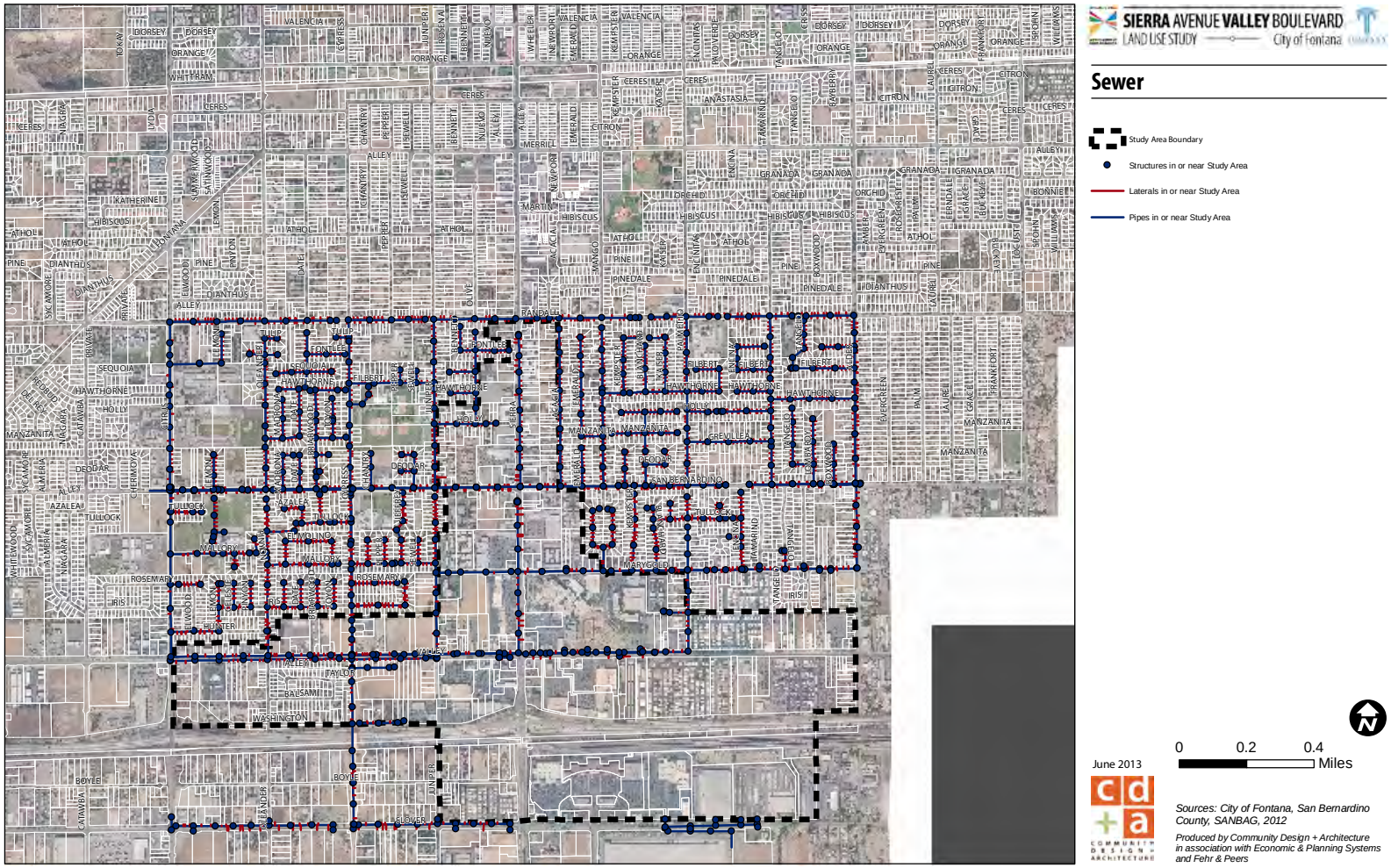

Figure 2-101: Existing sewer system in and around the study area

Part 3: Opportunities

The opportunities for this project are ways to accomplish the project's six goals:

- Reduce traffic congestion at Sierra/Valley intersection
- Maximize walkability between land uses
- Anticipate future mass transit opportunities
- Identify land uses synergistic with Kaiser Permanente
- Identify opportunities for new housing
- Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center

Many of these goals are interrelated, so there are opportunities to address several goals at once. Opportunities exist at large and small scales and everything in between. The following opportunities are listed from "large" to "small," and many could be seen as "nested" opportunities where the smaller opportunities implement the larger ones. Table 3-1 provides a listing of the opportunities and how they relate to the six goals, and if their affect on meeting the goals would likely occur in the short or long term.

General Opportunities

1. Change the geography of the Sierra-Valley area

The Sierra-Valley area is defined by three different geographic forces described in the Introduction: Three Fontanas, Two Corridors, and the One Key Land Use. These describe the social implications of the area's location in the older, lower-income Central Fontana; the area's place at the intersection of two very different corridors; and the importance of the Kaiser Permanente Fontana Medical Center as the City's largest employer and a complex land use that draws employees, patients and visitors and creates demand for transportation access and complementary services.

Currently, each of these geographies inhibits and challenges the Sierra-Valley area in different ways. The reputation of Central Fontana obscures the uniqueness of the area as Fontana's most intense, active and diverse place and hides the investment occurring at the Kaiser campus; the intersection of the Sierra and Valley corridors confuses the area's identity as a regional-scale trucking and shopping destination or a neighborhood-serving place; and the medical campus does not currently create the types of good public places and gateways that would give the campus a quality public face.

Creating a new geography that works off and refines the existing geography could occur through the following three opportunities:

2. Create an identity for the Sierra-Valley area that transcends Central Fontana

That the Fontana General Plan does not set out a clear identity for the Sierra-Valley area is representative of the area's lack of identity. An opportunity exists to communicate the area's unique level of activity, history, advantageous location, land use diversity, and potential in a new identity both in the real estate market and in land use and transportation policy. Sierra-Valley could be redefined as a unique area in Fontana that is relevant to the whole city and the Inland Empire, is connected to Downtown Fontana, contains diverse activity, and has the potential to develop into a vital, mixed-use place.

3. Orient the Sierra-Valley area to the city's spine of the Sierra corridor and plan Sierra as a central multi-modal corridor connecting Fontana's key destinations and centers

Given the goals for this study, orienting the area to the Sierra corridor is a larger opportunity than orienting to Valley. Orienting the area more to the Sierra corridor would begin to achieve many of the study goals. Sierra Avenue could be remade into a multimodal corridor that connects the Kaiser Permanente campus with Downtown and everything in between. This could be a "spine" for Fontana that would emphasize walking, biking, and frequent transit connecting a diverse array of destinations and mixed use places. This multimodal corridor could emphasize the common thread of Sierra Avenue but could also emphasize different districts along it, including, in the Study Area:

- A "transition area" at Valley and I-10;
- A center of activity at Kaiser Permanente campus with the shopping centers and housing around it; and,
- An opportunity area from San Bernardino to Randall incorporating Westech College, the Rock Honda site, and vacant and underutilized sites.

4. Recognize the Kaiser Permanente campus as a major activity center that has a large potential to revitalize the Sierra-Valley area if better connected to it.

The Kaiser campus is the primary generator of activity in the Sierra-Valley area. Currently much of this activity is contained within a campus largely surrounded by parking lots, walls, berms, and streets that are unpleasant or dangerous to walk along or cross. Through complementary land uses such as retail and food service, public spaces, new housing, and multimodal transportation improvements, encourage and allow the activity from the campus to expand to the area around it. From the market perspective, the Kaiser campus holds latent demand for goods and services immediately around the campus.

5. Partner with agencies and organizations with shared interests and goals

The City of Fontana shares the goals of this study as well as other goals concerning the Sierra-Valley area, with other public and private entities, such as Kaiser Permanente, Omnitrans, and shopping center and other property owners. The City has the opportunity to work with these entities to pursue common goals such as reduced congestion or a better gateway to the city.

6. Catalyze the intense and diverse activity happening here into authentic places through better environments for people.

The intense and diverse activities occurring in the Sierra-Valley area provide the potential for great urban places. However, the relentless auto orientation of both the public and private realms prevent this activity from converting into quality places. By creating better environments for people, including better pedestrian infrastructure and public spaces, the activity currently manifesting itself in auto trips and congestion could instead manifest in walking and transit and create safe, attractive, unique, and lively public places.

7. Illuminate the history of Kaiser Steel and Kaiser Permanente in the public realm of Sierra-Valley area

The Sierra-Valley area is full of the history of both Kaiser Steel and the large health care company that it helped to spawn. While the Fontana Medical Center contains the rebuilt first Kaiser Permanente hospital, the area also contains a senior center started by Kaiser Steel workers and neighborhoods with retired Kaiser Steel employees. However, none of this history is apparent to the person entering Fontana from Interstate 10, coming through the Sierra-Valley area, or even when visiting the Kaiser campus. A clear opportunity exists to help define the area's identity with this history.

Land Use Policy Opportunities

8. Define a role and vision for the Kaiser Permanente campus within Fontana

The City of Fontana does not define a vision for the role of its largest employer within its city. Creating a vision and policy for the Kaiser campus within the context of the city could provide the foundation for developing more detailed land use policy or economic development tools to implement a vision for strengthening the physical and economic ties between the city and the campus.

9. Prepare land use and zoning policy to promote walkability, transit and good places

When redevelopment of sites in the Sierra-Valley area does occur it is important for the City of Fontana to have a vision and the policy that implements it already in place. With this redevelopment likely in the mid- to long-term, the City has the opportunity to create this vision and policy so when redevelopment of shopping centers and other land uses occurs, it fits within the City's plan. This could be accomplished through new planning tools or building on the following existing tools:

10. Explore development of a Specific Plan for the Sierra corridor or the Sierra-Valley area

A Specific Plan could achieve project goals and General Plan policies by setting a vision for the area and accomplish it with aspects of urban form, land use, transportation, and implementation strategies customized for the area. A Specific Plan also provides the opportunity to develop a clearer implementation strategy and possibly to support the creation of funding mechanisms to support implementation of area-wide improvements and other investments in the public realm that can support the creation of a stronger identity for the area and improve the potential for economic revitalization.

11. Refine Boulevard Overlay in the Sierra-Valley Study Area

The Boulevard Overlay is a tool in the Fontana General Plan and the Zoning Code that has the potential to bring a more mixed use environment to major street corridors in Fontana, including Sierra Avenue and portions of Valley near Sierra. However, this overlay could be refined to include more measures for pedestrian support, and could be tailored for the specific conditions in the Study Area.

12. Refine Medical Center overlay

The Medical Center Overlay is a tool in the Zoning Code that currently exclusively applies to the Kaiser medical campus. It primarily serves to buffer the activities of the medical campus from the surrounding area and define customized standards such as parking ratios for the more complex use of the medical campus. However, the City could explore also using this overlay to encourage and induce positive and complementary activity and uses around the Kaiser campus, and multi-modal circulation improvements within the campus.

13. Adapt Activity Center Overlay to Sierra-Valley Study Area

The Activity Center Overlay is a tool in the Fontana General Plan and Zoning Code that seeks to add neighborhood-serving retail areas within walking distance of residences in Fontana's new growth areas north of Baseline Avenue. However, this concept could be adapted for revitalizing nodes along the city's older commercial corridors like Sierra Avenue and portions of Valley at the intersection with Sierra.

14. Serve Kaiser Permanente patient and visitor need for overnight stays through innovative means that also fulfill other study goals

Currently, the need of Kaiser visitors or patient families to stay in the area overnight is accommodated through various means, including area motels and RVs. Interviewees for this study have expressed the desire for Ronald McDonald House type accommodations, and this may become more viable as Kaiser implements their program to increase the tertiary role of this hospital. Other ways to fulfill this need could be explored, focusing on those that also support placemaking, walkability, and transit.

Transportation and Public Realm Opportunities

15. Invest in public realm and multi-modal transportation improvements to catalyze land use change farther in the future.

Currently, the area's shopping centers and other commercial land uses appear to be stable without a market catalyst for redevelopment. However, improvement of the walking environment, transit service, and public space could create the amenities that could help increase access for customers, from Kaiser and the surrounding residential areas, raising retail support, and thereby the value of property to the point that redevelopment could make sense in the market.

16. Create urban public spaces

Despite the high level of activity and mix of uses in the Sierra-Valley area, there are no public spaces. Any open space in the area is on private property and is enclosed on the interior of large land uses like the Kaiser campus and multifamily apartment complexes. Urban public spaces like plazas, promenades and small parks could serve a demand expressed by Kaiser employees, patients, visitors, and by residents for open space. These spaces could be privately owned and maintained if there were retail or other uses that could orient to the spaces and take advantage of the amenity to attract customers. Public open spaces could also be a unifying feature of an area that has many different groups going different places.

17. Improve environment for walking trips already occurring

Despite the poor walking conditions, many pedestrian trips already occur in the Sierra-Valley area, by Kaiser Permanente employees and visitors and seniors and other residents. Targeting the improvement of these trips to make the walking environment more safe and comfortable is a starting point for improving the walkability of the larger area.

18. Complete the basic pedestrian network.

To provide a basic level of pedestrian service, it should be a priority to build out complete sidewalks and crosswalks along Sierra Avenue and Valley Boulevard.

19. Augment the wide sidewalks and street trees of Sierra Avenue with additional trees and streetscape amenities

Much of Sierra Avenue north of Valley Boulevard has wide sidewalks and relatively frequent street trees. These assets could be the basis for a walkable street in the future, if they could be augmented by more pedestrian improvements, more landscape, and eventually buildings that front and open onto the street. In the survey of Kaiser employees and visitors, shade was one of the top factors in whether respondents would walk more to eat and shop.

20. Consider "midblock" crossings as unique opportunities

Midblock crossings, i.e. signalized pedestrian crossings of major streets not at intersections, are major opportunities for pedestrian safety and comfort as well as placemaking. Because they are not located at major intersections, midblock areas do not tend to have as auto-heavy uses like gas stations and as many curb cuts. Likewise, because the pedestrian crossing itself becomes a reason for a signal, it is a reason for an activity node that is not auto-focused like a major intersection. While Sierra-Valley does not have any "pure" pedestrian midblock crossings, it does have a few "quasi" midblock crossings on three sides of the Sierra-Valley intersection. Improving these crossings, where vehicular traffic pressure is not as acute as at the major intersections, could be a good strategy for improving walkability and placemaking.

21. Consider multimodal improvements at Sierra-Valley and Sierra-Marygold intersections

These intersections were the most congested when the Kaiser traffic study was undertaken in 2008. The pedestrian count indicated that the Sierra-Marygold intersection had large volumes of pedestrians. Multi-modal improvements could ensure safety for all modes.

22. Add a pedestrian crossing near Westech College

There is no pedestrian crossing of Sierra Avenue for the half mile between Randall and San Bernardino Avenues. Especially near Westech College, there is no way for people to get across Sierra Avenue. A signalized crossing here would allow people to cross the street , particularly transit riders who use the stops to the north and south of the Holly Drive intersection, and would also reduce the scale of the blocks to make the environment more human-scale in general.

23. Reduce curb cuts to manage access to major streets and improve pedestrian environment

The highly frequent curb cuts along both Sierra and Valley exacerbate both a poor pedestrian environment and vehicle traffic congestion and safety (i.e. rear-end accidents). Look for opportunities to reduce the numbers of curb cuts along both streets.

24. Reduce the speed limit on a section of Valley Boulevard

The speed limit is currently 40 miles per hour on Valley Boulevard, potentially creating unsafe conditions for pedestrians. Lowering this speed limit especially near land uses that generate or attract pedestrians could make walking safer, and if planned correctly should not significantly reduce corridor travel time of vehicles.

25. Create a substantial transit hub at Marygold-Sierra

The Omnitrans transit receives a relatively high level of use, especially at the Sierra-Marygold transfer center, which is the intersection of several regional-serving and local-serving routes. A better waiting environment and better access could complement Omnitrans increasing service on both the Sierra and San Bernardino/Valley corridors and potentially convert it into a "hub" and better public place that augments the area as a whole.

26. Create fast, reliable, frequent transit service on Sierra Avenue

The string of destinations along Sierra Avenue (Downtown Civic Center; Library; Metrolink Station; Chaffey College; Westech College; over 1.5 million square feet of shopping; the Kaiser Permanente Fontana Medical Center), the dense residential land uses within an easy quarter mile walking distance, and potential within the street section of Sierra Avenue make the case for a high-level transit service along Sierra Avenue that makes riding transit an attractive option over driving. This kind of service could be a key piece of developing a revitalized Sierra corridor. High quality north-south service could complement and serve the east-west service provided by Metrolink and planned BRT routes. Omnitrans is studying the potential for such a high-frequency service and Kaiser employees have expressed an interest in using this type of service to get to services and as a part of their commute.

27. Integrate Bus Rapid Transit into current and planned land uses

The Bus Rapid Transit line planned for San Bernardino/Marygold Avenues could help achieve many of the project's goals, especially if the line's stations are oriented toward major land uses and opportunity sites along Sierra Avenue.

28. Make the bicycle connection between the Fontana Metrolink Station/Fontana Metrolink Station Transcenter to the Kaiser Permanente Hospital.

These destinations should also be encouraged to offer locker and changing rooms for commuters on bike and foot.

29. Evaluate Juniper Avenue and Marygold Avenue as a bikeway alternatives to Sierra Avenue and other arterials

Currently, the fastest way to get from Downtown Fontana and the Metrolink station on a bike is down Sierra. However, the levels of traffic and the lack of bicycle improvements make this route uncomfortable and perhaps dangerous. Juniper Avenue parallels Sierra Avenue a quarter mile away and could provide a safer, more pleasant alternative bike route that could also help connect the Sierra-Valley area with the Metrolink station.

30. Investigate improvement of turning movements at failing intersections

Turning vehicles are the source of much of the congestions in Sierra's intersections with Valley and Marygold. Addressing the congestion of cars and trucks turning could potentially ease congestion.

31. Work with Kaiser Permanente to develop a Transportation Demand Management (TDM) strategy.

Changing the demand of Kaiser employees and members/visitors for the transportation network could have a major effect on reducing congestion, as well as supporting walking and transit. TDM strategies can be comprised of several components, including shuttles, information, a TDM coordinator, and other aspects.

32. Improve wayfinding from Kaiser campus to surrounding shopping and eating destinations

Develop ways to educate and inform Kaiser employees and visitors how to find amenities and services outside the campus on foot. This could include signage, brochures or other means.

33. Accommodate exercise routines of Kaiser Permanente employees, patients, and visitors in the area surrounding the campus

This study has documented that Kaiser employees, patients, and visitors use the surrounding streets for exercise. However, these streets are often uncomfortable to walk or jog on and uncomfortable to cross. The opportunity exists to improve areas where people can exercise around the Kaiser campus.

34. Make use of extra right of way in sections of Sierra Avenue

The existing cross sections of Sierra Avenue north of Valley Boulevard show some potential to narrow lanes and improve conditions for pedestrians, transit, and potentially cyclists.

35. Make use of extra right of way in Marygold Avenue, especially at transfer center

There is space within Marygold Avenue to improve conditions for pedestrians, transit riders, and cyclists, especially at the location of the transfer center (the current bus stops), in the block between Sierra and Juniper.

Market opportunities

36. Use better pedestrian connectivity to incent retail tenants to cater to Kaiser employees, members and visitors

Pedestrian and public realm improvements could also create short-term change in the form of retail tenants realizing the opportunities to re-orient their businesses to customers related to the Kaiser campus. These could be small, cosmetic urban design improvements to the public right-of-way, the Kaiser campus, or the shopping center sites that could make a difference.

37. Reduce mutual exclusivity between Study Area residents and employees

Roughly 90 percent of Study Area residents work outside Fontana, while roughly 90 percent of Study Area employees live outside Fontana. This mutual exclusivity of people in the Sierra-Valley area frustrates many project goals, especially reducing congestion, increasing walkability, and placemaking. While there are economic reasons for this situation, planning policy and transportation and public realm improvements described in other opportunities could help create more of a long-term overlap between Sierra-Valley residents and employees.

38. Explore workforce housing in the Sierra-Valley area

While the current market will likely not support market-rate housing in the Sierra-Valley area, and the demise of Redevelopment in California reduces available funding for subsidized housing, it is likely that sources of funding could return to support a subsidized product like workforce housing. Finding a way to add more housing, especially multifamily, to the Sierra-Valley area would help achieve many project goals like walkability, support of transit, and placemaking.

39. Explore housing that is attractive to Kaiser Permanente employees

Over 50 percent of Kaiser employees who responded to the study's survey stated they would be interested in some type of housing near the Kaiser campus. This, along with the availability of vacant land and the potential to revitalize existing single-family neighborhoods in and around the Sierra-Valley area, indicates that it may be worth studying further the potential for serving this demand. In addition to the potential of single-family neighborhoods in the Study Area, there is the potential of making better multimodal transportation connections to newer neighborhoods in North Fontana.

40. Explore attracting office development to complement Kaiser Permanente and Westech

In some respects, office is a more appropriate vehicle for Sierra Valley Study Area revitalization than residential uses, because expanded office would reinforce and expand the Study Area's role as a jobs center and fully utilize highway and transit links. While the self-contained and vertically integrated Kaiser facility has no need for medical or office space, there may be indirect co-location benefits for some medical service providers from being nearby.

41. Explore development of a business improvement district in the Sierra-Valley area

A business improvement district (BID) could provide a forum for property and business owners to discuss common issues and a potential funding source to address them.

Specific Site Opportunities

42. Develop the west side of Kaiser Permanente campus as a pedestrian gateway and pedestrian promenade

The west side of the Kaiser campus is the most important to the goals of this study because that is where the campus interfaces with Sierra Avenue and its shopping centers and multifamily housing. This is where many employees and visitors leave the campus to go to eat and shop across Sierra and Marygold Avenues. The western edge of the campus also contains a primary pedestrian entrance and the one place where human-scale buildings approach the street. The potential exists here to redefine this edge and in doing so create a pedestrian gateway for the campus which would in turn strongly influence the character of the Sierra corridor and the character of the gateway into Fontana.

43. Develop the northeast corner of Sierra-Valley as a pedestrian-oriented gateway and complementary use to the Kaiser Permanente campus

The northeast comer of the Sierra-Valley intersection is currently defined by an AM/PM gas station and Baja Burger restaurant. However, there are several ideas and proposals for this comer. The City of Fontana would like an easement to expand Sierra Avenue; an interest expressed by Chipotle for a Chipotle restaurant and a Starbucks; and the desire of Kaiser Permanente to purchase the property, with different ideas for an office building or possibly a Kaiser museum. These ideas provide the opportunity to develop this comer into a pedestrian-scale entry to Fontana and the Kaiser campus that would counter the current environment of gas stations and drive-throughs at the intersection and to the south, and could signal the beginning of a multi-modal corridor along Sierra Avenue.

44. Explore creation of informal mobile food plaza

While attracting different food service tenants to the shopping centers may be a challenge in the near term, an alternative could be to build on the food truck trend and create a space for mobile vendors in a place near to the Kaiser campus. In lieu of attracting retail tenants, gathering mobile food trucks or carts could serve the demand for more exciting or different food options and could be a way to create lively public space, that could be programmed for other periodic uses like a farmers market or seasonal mercado.

45. The vacant parcel between the Sierra Plaza South shopping center and the senior housing

This is a major opportunity site for a use that could synergize with the Kaiser campus and/or commercial uses in the area. While well-designed multifamily housing would help achieve many project goals, office development could also be a positive use here.

46. Rock Honda site

The old Rock Honda site would be a major piece of a revitalized Sierra corridor that could synergize with Westech College with office or residential development.

47. Bel-Air swap meet

The planned development at the Bel-Air Swap Meet site is also an opportunity site.

These sites could be examined further in the next phase of the study.

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
General opportunities	1	Change the geography of the Sierra-Valley area						
	2	Create an identity for the Sierra-Valley area that transcends Central Fontana						
	3	Orient the Sierra-Valley area to the city spine of the Sierra corridor, and plan Sierra as a central multi-modal corridor connecting Fontana's key destinations and centers						
	4	Recognize the Kaiser Permanente campus as a major activity center that has a large potential to revitalize the Sierra-Valley area if better connected to it						
	5	Partner with agencies and organizations with shared interests and goals						
	6	Catalyze the intense and diverse activity happening here into authentic places through better environments for people.						
	7	Illuminate the history of Kaiser Steel and Kaiser Permanente in the public realm of Sierra-Valley area						
Land Use Policy opportunities	8	Define a role and vision for the Kaiser Permanente campus within Fontana						
	9	Prepare land use and zoning policy to promote walkability, transit and good places						
	10	Explore development of a Specific Plan for the Sierra corridor or the Sierra-Valley area						
	11	Refine Boulevard Overlay on Sierra						
	12	Refine Medical Center overlay						
	13	Adapt Activity Center Overlay to Sierra-Valley area and/or Sierra corridor						
	14	Serve Kaiser Permanente patient and visitor need for overnight stays through innovative means that also fulfill other study goals						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
Transportation and Public realm opportunities	15	Invest in public realm and multi-modal transportation improvements to catalyze land use change farther in the future.						
	16	Create urban public spaces						
	17	Improve environment for walking trips already occurring						
	18	Complete the basic pedestrian network						
	19	Augment the wide sidewalks and street trees of Sierra Avenue with additional trees and streetscape amenities						
	20	Consider "midblock" crossings as unique opportunities						
	21	Consider multimodal improvements at Sierra-Valley and Sierra-Marygold intersections						
	22	Add a pedestrian crossing near Westech College						
	23	Reduce curb cuts to manage access to major streets and improve pedestrian environment						
	24	Reduce the speed limit on a section of Valley Boulevard						
	25	Create a substantial transit hub at Marygold-Sierra						
	26	Create fast, reliable, frequent transit service on Sierra Avenue						
	27	Integrate Bus Rapid Transit into current and planned land uses						
	28	Make the bicycle connection between the Fontana Metrolink Station/Fontana Metrolink Station Transcenter to the Kaiser Permanente Hospital						
	29	Evaluate Juniper Avenue and Marygold Avenue as a bikeway alternative to Sierra Avenue and other arterials						
	30	Investigate improvement of turning movements at failing intersections						
	31	Work with Kaiser Permanente to develop a Transportation Demand Management (TDM) strategy						
	32	Improve wayfinding from Kaiser campus to surrounding shopping and eating destinations						
	33	Accommodate exercise routines of Kaiser Permanente employees and patients in the area surrounding the campus						
	34	Make use of extra right of way in sections of Sierra Avenue						
	35	Make use of extra right of way in Marygold Avenue, especially at transfer center						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

		Opportunity	Project Goals directly addressed					
			Reduce traffic congestion at Sierra/Valley intersection	Maximize walkability between land uses	Anticipate future mass transit opportunities	Identify land uses synergistic with Kaiser Permanente	Identify opportunities for new housing	Create places that provide positive gateways to Fontana and the Kaiser Permanente Medical Center
Market opportunities	36	Use better pedestrian connectivity to incent retail tenants to cater to Kaiser employees, members and visitors						
	37	Reduce mutual exclusivity between Study Area residents and employees						
	38	Explore workforce housing in the Sierra-Valley area						
	39	Explore housing that is attractive to Kaiser Permanente employees						
	40	Explore attracting office development to complement Kaiser Permanente and Westech						
	41	Explore development of a business improvement district in the Sierra-Valley area						
Specific Site opportuinities	42	Develop the west side of Kaiser Permanente campus as a pedestrian gateway and promenade						
	43	Develop the northeast corner of Sierra-Valley as a pedestrian-oriented gateway and complementary use to the Kaiser Permanente campus						
	44	Create informal mobile food plaza						
	45	Vacant parcel between the Sierra Plaza South shopping center and the senior housing						
	46	Rock Honda site						
	47	Bel-Air swap meet						

= *long-term opportunity to achieve goal*

= *short-term opportunity to achieve goal*

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APPENDIX

Kaiser Permanente employee, visitor and member survey results

Sierra-Valley: Kaiser Permanente Fontana Member/Visitor Survey

1. How do you typically get to the Fontana Kaiser Permanente campus?

	Response Percent	Response Count
Drive alone	**75.0%**	**27**
Carpool	19.4%	7
Ride an Omnitrans bus	0.0%	0
Ride Metrolink and an Omnitrans bus	0.0%	0
Walk	0.0%	0
Bicycle	0.0%	0
Other	5.6%	2
	Other (please specify)	3
	answered question	**36**
	skipped question	**4**

2. How often do you patronize businesses adjacent to the campus as part of a visit to the campus?

	Response Percent	Response Count
At least once per day	11.1%	4
3-5 times per week	13.9%	5
1-2 times per week	**27.8%**	**10**
Once per month	16.7%	6
Less than once per month but at least once per year	22.2%	8
Never	8.3%	3
	answered question	**36**
	skipped question	**4**

3. What types of goods and personal services do you purchase near the Fontana Kaiser Permanente campus? Please check ALL that apply.

	Response Percent	Response Count
Food	**80.6%**	**29**
Groceries	44.4%	16
Drugstore goods	30.6%	11
Personal care such as salons	16.7%	6
Banking	36.1%	13
I do not make purchases near the campus	0.0%	0
Other	5.6%	2
	Other (please specify)	2
	answered question	**36**
	skipped question	**4**

4. At what point in your visit do you usually patronize these businesses?

	Response Percent	Response Count
On the way to the Kaiser Permanente campus	**38.9%**	**14**
During the visit – I leave the Kaiser Permanente campus and return	25.0%	9
One the way from the Kaiser Permanente campus	36.1%	13
I do not patronize these businesses	0.0%	0
	answered question	**36**
	skipped question	**4**

5. What mode of travel do you use to patronize these businesses?

	Response Percent	Response Count
Always drive	**75.0%**	**27**
Usually drive, sometimes walk	8.3%	3
Drive and walk equal amounts	0.0%	0
Usually walk, sometimes drive	5.6%	2
Always walk	8.3%	3
I do not patronize these businesses	0.0%	0
Other	2.8%	1
	Other (please specify)	2
	answered question	**36**
	skipped question	**4**

6. What types of goods and personal services would you patronize near the Kaiser Permanente campus? Please check ALL that apply.

	Response Percent	Response Count
Fast food (such as McDonald's, Taco Bell)	47.2%	17
Fast casual (such as Chipotle, Panda Express)	36.1%	13
Sit-down restaurants	**50.0%**	**18**
Coffee	27.8%	10
Grocery stores	33.3%	12
Drugstores	27.8%	10
Specialty stores like bookstores, clothing stores, and gift stores	27.8%	10
Dry cleaning	2.8%	1
Gyms	13.9%	5
Personal care such as salons	5.6%	2
Banks	41.7%	15
Day care	5.6%	2
Other	11.1%	4
	Other (please specify)	8
	answered question	**36**
	skipped question	**4**

7. Please complete the following sentence with ALL statements that apply. I would walk from the campus to a nearby eating or shopping establishment more if:

	Response Percent	Response Count
There was a greater variety of eating and shopping next to the campus.	**72.2%**	**26**
There were higher-quality eating and shopping next to the campus.	52.8%	19
There were wider sidewalks.	22.2%	8
There was more shade provided along the walkways.	44.4%	16
It was easier and safer for me to cross the street.	25.0%	9
There was more lighting along the street in the morning and evening.	16.7%	6
There was better signage along the nearby roadways and paths.	11.1%	4
It was easier to walk through the Kaiser Permanente campus to the surrounding streets.	55.6%	20
Other	2.8%	1
	Other (please specify)	1
	answered question	**36**
	skipped question	**4**

8. If and when you drive to the Fontana Kaiser Permanente campus, what intersections do you drive through? Select ALL that apply:

	Response Percent	Response Count
I-10 Sierra interchange	**66.7%**	**24**
I-10 Citrus interchange	13.9%	5
I-10 Cedar interchange	13.9%	5
Sierra-Valley intersection	44.4%	16
Sierra-Marygold intersection	50.0%	18
Healthcare Parkway (Mango Ave) - Valley intersection	11.1%	4
Healthcare Parkway (Mango Ave) - Marygold intersection	16.7%	6
Other	0.0%	0
	Other (please specify)	0
	answered question	**36**
	skipped question	**4**

9. If you or your family must make overnight visits to the Fontana Kaiser Permanente campus, where do you stay?

	Response Percent	Response Count
other	**38.9%**	**14**
In a hotel or motel near the Kaiser Permanente campus in Central Fontana	25.0%	9
In a hotel or motel in an area further away	0.0%	0
In an RV parked nearby	5.6%	2
With a friend or relative	30.6%	11
	Other (please specify)	11
	answered question	**36**
	skipped question	**4**

Sierra-Valley: Kaiser Permanente Fontana Employee Survey

1. How often do you leave the Kaiser Permanente campus during a typical day for any trips related to shopping, eating or personal services?

	Response Percent	Response Count
At least once per day	**26.1%**	**6**
3-5 times per week	21.7%	5
1-2 times per week	17.4%	4
Once per month	17.4%	4
Less than once per month but at least once per year	4.3%	1
Never	13.0%	3
	answered question	**23**
	skipped question	**2**

2. What mode of travel do you use to make these trips?

	Response Percent	Response Count
Always drive	**43.5%**	**10**
Usually drive, sometimes walk	21.7%	5
Drive and walk equal amounts	8.7%	2
Usually walk, sometimes drive	13.0%	3
Always walk	13.0%	3
Other	0.0%	0
	Other (please specify)	0
	answered question	**23**
	skipped question	**2**

3. What types of goods and personal services would you patronize near the Kaiser Permanente campus? Please check ALL that apply.

	Response Percent	Response Count
Fast food (such as McDonald's, Taco Bell)	**47.8%**	**11**
Fast casual (such as Chipotle, Panda Express)	30.4%	7
Sit-down restaurants	43.5%	10
Coffee	26.1%	6
Grocery stores	34.8%	8
Drugstores	21.7%	5
Specialty stores like bookstores, clothing stores, and gift stores	21.7%	5
Dry cleaning	13.0%	3
Gyms	30.4%	7
Personal care such as salons	8.7%	2
Banks	43.5%	10
Day care	13.0%	3
Other	0.0%	0
	Other (please specify)	1
	answered question	**23**
	skipped question	**2**

4. Please complete the following sentence with ALL statements that apply. I would walk from the campus to a nearby eating or shopping establishment more if:

	Response Percent	Response Count
There was a greater variety of eating and shopping next to the campus.	**43.5%**	**10**
There were higher-quality eating and shopping next to the campus.	34.8%	8
There were wider sidewalks.	30.4%	7
There was more shade provided along the walkways.	**43.5%**	**10**
It was easier and safer for me to cross the street.	26.1%	6
There was more lighting along the street in the morning and evening.	13.0%	3
There was better signage along the nearby roadways and paths.	0.0%	0
I had more time for lunch and breaks.	26.1%	6
It was easier to walk through the Kaiser Permanente campus to the surrounding streets.	26.1%	6
Other	4.3%	1
	Other (please specify)	2
	answered question	**23**
	skipped question	**2**

5. What types of open space amenities do you most want to have near the Kaiser Permanente campus? Please check up to TWO (2).

	Response Percent	Response Count
Walking or jogging route for exercise	52.2%	12
Open space for quiet activities like reading and relaxing	**69.6%**	**16**
Tables for eating	56.5%	13
Open space for socializing	8.7%	2
Recreational amenities like tennis courts or play fields	4.3%	1
Other	0.0%	0
	Other (please specify)	0
	answered question	**23**
	skipped question	**2**

6. How do you typically get to the Kaiser Permanente campus?

	Response Percent	Response Count
Drive alone	**78.3%**	**18**
Carpool	8.7%	2
Ride an Omnitrans bus	4.3%	1
Ride Metrolink and an Omnitrans bus	0.0%	0
Walk	4.3%	1
Bicycle	0.0%	0
Other	4.3%	1
	Other (please specify)	2
	answered question	**23**
	skipped question	**2**

7. If and when you drive to the Kaiser Permanente campus, what intersections do you drive through? Select ALL that apply:

	Response Percent	Response Count
I-10 Sierra interchange	**52.2%**	**12**
I-10 Citrus interchange	17.4%	4
I-10 Cedar interchange	8.7%	2
Sierra-Valley intersection	43.5%	10
Sierra-Marygold intersection	13.0%	3
Healthcare Parkway (Mango Ave) - Valley intersection	13.0%	3
Healthcare Parkway (Mango Ave) - Marygold intersection	4.3%	1
Other	8.7%	2
	Other (please specify)	2
	answered question	**23**
	skipped question	**2**

8. Please complete the following sentence with any statements that apply. The biggest factor(s) preventing me from taking mass transit to the Kaiser Permanente campus are (Mass transit includes but is not limited to bus, Metrolink commuter rail, and shuttles):

	Response Percent	Response Count
It doesn't stop in a convenient location near my home.	**34.8%**	**8**
It is too expensive.	13.0%	3
It is too slow compared to driving.	**34.8%**	**8**
I don't know how to use it.	4.3%	1
I would likely take Metrolink but it stops too far away from the Kaiser Permanente campus.	**34.8%**	**8**
Personal safety.	8.7%	2
Other	17.4%	4
	Other (please specify)	6
	answered question	**23**
	skipped question	**2**

9. Would you be interested in living within walking distance of the Kaiser Permanente campus if the right type of housing was available?

	Response Percent	Response Count
Yes	**52.2%**	**12**
No	47.8%	11
If yes, what type of housing would be right for you:		10
answered question		**23**
skipped question		**2**

APPENDIX: OUTREACH SUMMARY

MEMORANDUM

Date: 11/05/2012

To: Shannon Casey, City of Fontana

From: Tim Sullivan, Community Design + Architecture

Re: Sierra-Valley Land Use Study (1202) – Public Meeting 1 Summary

COMMUNITY DESIGN + ARCHITECTURE

Philip Erickson, Architect, AIA
Timothy Rood, AICP, LEED AP ND

Public Meeting #1 Summary

On October 17, 2012, the project team of the Sierra Avenue Valley Boulevard Land Use Study conducted a public meeting at Jurupa Hills High School. The objectives of the meeting were to introduce the public to the project; summarize the findings of the team in its Land Use and Transportation Analysis; and obtain comments and other feedback from the public on the findings and other aspects of the project.

The team developed a format for the meeting that included a brief presentation about the project, its goals, and the findings of the report, followed by an open house. The team set up stations around the room, each of which described a common "trip" in the Study Area. Each trip included an origin, one or more destinations, a mode choice, and a route. Each trip also included the project team's analysis of existing conditions of the trip, as well as suggestions of opportunities to improve the trip. These trips were meant to be a vehicle to convey the overall activity, challenges and opportunities of the Study Area (see appendices of this memorandum for copies of the exhibits and photos of the meeting).

Seven people signed in to the open house, though approximately 12 people were counted at the event.

The following summarizes the comments received from members of the public, organized by each "trip" presented.

Public comments

Trip 1: Drive to Kaiser Medical Center

- Parking at Kaiser's facility is so limited and difficult that myself, friends and neighbors often request or arrange to be dropped off or picked up in Kaiser's "circle drive." If we drove ourselves, we may continue our activities and shopping around the medical facility. As it is we tend to return home without additional stops.
- The interior landscaping of the Kaiser facility is beautiful!

Trip 2: Transit to Kaiser Medical Center

- Sidewalks need to be wider with more shade
- A central transit/bus station would be beneficial. Must be well-lit.

350 Frank Ogawa Plaza, 5th Flr
Oakland, California 94612
Telephone 510.839.4568
Facsimilie 510.839.4570
www.community-design.com

Trip 3: Walk from Kaiser to eat or shop

- Pedestrian space needs to be safer and better defined. Crossing through parking lots without crosswalks or pedestrian routes is dangerous.
- There is a need to improve the timing of pedestrian crossing signals.

Trip 4: Employee & resident exercise & leisure

- Access to/from Valley Blvd for landlocked non-conforming residential homes/parcels
- Safety, EVA vehicles
- Blight because of apartment
- Homeless problem
- Graffiti
- Jaywalking
- It would be nice to se established (well-lit) walking routes with mile markers

Trip 5: Resident drive to shopping & parks

- Establish small parks/ green resting public spaces along major routes. Example: Turn vacant lot at Mango and San Bernardino into a green space with pull through bus loading/stop. Provide water fountain and shade structure.
- Establish open air dining spaces that encourage residents to walk and allow them to gather and socialize and eat.
- Make it a dog-friendly environment.

Trip 6: Resident walk to shopping & dining

- ADA compliance needs to be better: more curb cuts and ramp pitch too steep in places
- Safety and quality of vacant site on Marygold near senior center
- "Ditto" ADA is very important to our aging residents and disabled residents
- No place to rest on walking routes
- As this part of Fontana builds up, transportation should follow

Trip 7: Ride transit to Sierra destinations

- Access to shopping center south of 10 freeway is limited as the bus runs hourly and has limited time route. Walking is dangerous and there is always freeway traffic.

Trip 8: Bike to work and school

- Add bike lanes
- Connect bike lanes and routes
- Not having [good bike connectivity and facilities] causes my family to bike less or load the bikes in cars/trucks bypassing businesses to go park closer to the Pacific Trail.

Where do *you* go and how do you get there?

- As I enter or exit the city of Fontana I avoid Sierra and Valley Boulevard unless I plan to make a stop on either street. I use Palmetto Ave, Mango Ave, Marygold Ave, San Bernardino Ave and Miller Ave as alternative routes.

Kaiser Permanente Open House, March 18, 2013

- EMPLOYEE: I rode a bike, but I stopped because it was too steep. The traffic was too bad. I live 5 miles away.
- PATIENT: Kaiser is just beautiful – it would be great to have a walkway along Sierra.
- MEDICAL DIRECTOR, liked pedestrian promenade. Problem will be the center of gravity on campus is shifting away from Sierra. I'd take a train every day if I could.
- EMPLOYEE: Breaks are one hour or 30 minutes, so you have to clock it. If the break is 30 minutes, you have to walk.
- EMPLOYEE: idea for flashing bollards when pedestrians walk through pedestrian refuge.
- EMPLOYEE: Walking is how we get around. [Simulation image] That would be really nice.
- EMPLOYEE: I get my exercise by walking up and down Sierra

Dino Papavero Presentation

~03/18/13

Sierra Valley Land Use Study Preliminary Recommendations

On March 18, 2013, a presentation was provided for the residences at the Dino Papavero Senior Center in regards to the preliminary findings and recommendation for the Sierra Valley Land Use Study Compass Blueprint project.

Below are listed points the residences were concerned with:

- The signal lights at Sierra and Marygold were not timed long enough to make it safely across the street.
- Would like to see the signal lights at Sierra and Marygold provided with blinker lights as well as noise for those that are hard of hearing.
- Would like to see signage at the pedestrian crosswalks indicating that there are people in wheelchairs crossing.
- Infrastructure (sidewalks, crosswalks, asphalt areas) needs to be resurfaced and fixed.
- How does the City address homeless people with added bus stops and shelters?
- Need more lighting at the bus stops and shelters.

The residents were explained the concept of Crime Prevention through Environmental Design (CPTED) design concepts and review to address some of the above listed concerns.

In concluding the meeting the consensus from the residents is that they were very supportive of the "linear park" idea on Marygold, and would like to see these changes implemented sooner rather than later.

CITY OF FONTANA

PLANNING COMMISSION
REGULAR MEETING MINUTES
MARCH 19, 2013

A regular meeting of the City of Fontana Planning Commission was held on Tuesday, March 19, 2013, in the Grover W. Taylor Council Chambers, 8353 Sierra Avenue, Fontana, California. Vice Chairperson Cothran called the meeting to order at 6:03 p.m. Following the Invocation given by Commissioner Meyer, the Pledge of Allegiance was led by Commissioner Slowik.

ROLL CALL

Present: Vice Chairperson Cothran, and Commissioners Hall, Meyer and Slowik

Absent: Chairperson Garcia

Also Present: Director Don Williams, AICP; Attorney Alison P. Gomer; Senior Planner Shannon Casey, AICP; Assistant Planner Jon S. Dille; Assistant Planner Dawn Rowe-Clement; Community Policing Technician Wendy Ratcliffe; City Clerk Tonia Lewis; and Planning Commission Secretary Ysela Aguirre

PUBLIC COMMUNICATION: **PC**

None. **NONE**

CONSENT CALENDAR: **CC**

A motion was made by Commissioner Meyer and seconded by Commissioner Hall to approve the minutes of the February 19, 2013, Planning Commission Meeting. Motion passed by a vote of 3-0-1 with Commissioner Slowik abstaining. **FEB 19, 2013 VOTE: 3-0-1**

PUBLIC HEARINGS: **PH**

A. A Public Hearing was opened regarding: **Tentative Tract Map No. 18859 (TTM No. 12-003), and Design Review No.12-021.** Filed by Forestar Fontana, LLC. A tentative tract map request to subdivide approximately 62 adjusted gross acres into 376 lots for the purpose of single-family residential development' and a design review for site design and architectural review of 376 single-family homes. The project site is a rectangularly-shaped property consisting of 25 parcels totaling approximately 62 adjusted gross acres located on the southwest corner of Walnut Avenue and Sierra Avenue, and having a frontage of approximately 1,170 feet on the **PH A TTM NO. 18859 (12-003) DR NO. 12-021**

CONTINUED VOTE: 4-0

expanding the restaurant, but only the area in which alcohol will be sold.

Discussion was held on the parking analysis.

Commissioner Slowik disclosed that he made a field visit to the site with no reportable action.

Discussion was held on live entertainment being prohibited and the CUP being revoked if this condition is violated.

Applicant read, understood, and agreed to the conditions of approval.

Applicant can apply for a live music permit at a future date.

No member of the public spoke in favor or opposition.

The public hearing was closed.

A motion was made by Commissioner Meyer and seconded by Commissioner Slowik to 1) Determine that the project is Categorically Exempt pursuant to Section No.15301, Class No. 1 (Existing Facilities) of the California Environmental Quality Act and direct staff to file a Notice of Exemption; and, 2) Approve Conditional Use Permit No. 95-21R3 subject to the attached findings and conditions of approval with a correction to the address and with direction to staff to conduct quarterly inspections over the next year and report to the Planning Commission. Motion carried by a vote of 4-0.

RECESS 7:46 PM

A recess was called at 7:46 p.m.

RECONVENE 7:57 PM

The meeting was reconvened at 7:57 p.m.

NEW BUSINESS **NB**

Compass Blueprint Demonstration Project Update **COMPASS BLUEPRINT DEMO PROJECT UPDATE**

Tim Sullivan of Community Design + Architecture (CD+A) presented and requested comments from the Planning Commission and the public regarding the Compass Blueprint Demonstration Project underway for the areas around the Sierra Avenue and Valley Boulevard intersection.

The Planning Commission received and will file the report. No other formal action is recommended or required.

Discussion was held on the area of study.

Discussion was held on how the pedestrian count was calculated; if the

pedestrian traffic on Sierra and Marygold Avenue was attributed to Kaiser Hospital; and if the pedestrian traffic on Sierra Avenue and Marygold Avenue was higher than the traffic on Sierra and Valley.

Discussion was held on the new Kaiser building facing Valley Blvd. instead of Sierra Avenue and the possibility of fewer cars on Marygold Avenue.

Discussion was held on the new Sierra Avenue improvements being incorporated into this plan.

Discussion was held on the landscaping plans.

Rohan Kuruppa, Omni Trans representative, spoke on this study helping Omni Trans with their planning of the east/west corridor along Valley Blvd. Their plans are focused first on Valley Blvd., then Foothill Blvd., then Sierra Avenue.

Discussion was held on the focus for urban design concepts to slow traffic down.

Discussion was held on Fontana's population growing exponentially and its urbanization. Fontana will be crossed by Omni Trans Bus Services more than any other local city and these types of solutions are necessary.

Karina Nielson spoke on encouraging residents and business owners about the long term and short term vision of the city. She was disappointed at a recent public hearing that only seven community members were present. She encouraged everyone to get involved and keep an eye on things.

DIRECTOR COMMUNICATIONS: **DC**

The Planning Commission reviewed an update of future City Council Agenda items for the March 26, 2013, meetings for the Planning Commission's information; and an update of future Planning Commission items for the April 2, 2013, and April 16, 2013, meetings for the Planning Commission's information.

CC AGENDA MAR 26, 2013

PLANNING AGENDA APR 2, 2013 APR 16, 2013

COMMISSION COMMENTS: **COMMENTS**

Commissioner Hall thanked staff for their information that assists in making decisions for the community. **HALL**

Commissioner Hall thanked Director Williams for his assistance in understanding everything.

Commissioner Hall challenged her fellow Commissioners to participate in the 58th Annual Fontana Days Run.

MEYER

Commissioner Meyer welcomed Commissioner Slowik to the Planning Commission.

Commissioner Meyer wished former Commissioner Lee well and thanked her for her years of service on the Planning Commission.

Commissioner Meyer wished friends who are getting ready to celebrate Passover, St. Patrick's Day, St. Joseph's Day, Palm Sunday, Holy Thursday, Easter Vigil, and Easter well on their feast days.

Commissioner Meyer announced that Sacred Heart had a Mass in commemoration of the appointment of the new Pope.

Commissioner Meyer wished everyone a good evening.

SLOWIK

Commissioner Slowik thanked Commissioner Meyer for welcoming him back.

Commissioner Slowik thanked supporters of the fundraisers he was involved in.

Commissioner Slowik reminded drivers to be aware of new signal street lights at Mango and Merrill.

Commissioner Slowik reminded the community of the Fontana Days Festival events that will be held from May 30 to June 2, 2013, and the Fontana Days Parade on Saturday, June 1, 2013, with Grand Marshall Sammy Hagar. The festival will include live bands, quilt contest, mariachi and folklorico contest as well as many other events. Local business partners can contact City Clerk Tonia Lewis at 909.350.7655 to purchase a banner to be posted at Veteran's Park.

Commissioner Slowik announced the Hen Derby being held before the Fontana Days events hosted by the Fontana Lions Club and the Rotary Club

Commissioner Slowik wished everyone a happy Easter.

COTHRAN

Commissioner Cothran asked about an upcoming workshop that will be held jointly with the City Council regarding the North Proposal and South

Proposal.

Commissioner Cothran declined Commissioner Hall's Fontana Days Marathon challenge due to volunteering with the Fontana Police Department.

Commissioner Cothran announced he will be volunteering at the NASCAR event at Fontana Speedway on Friday, Saturday and Sunday, March 22-24, 2013 and anyone interested in volunteering is welcome.

Commissioner Cothran announced that the date of the Miss Fontana Pageant was misprinted in the guide and it is being held on May 25, 2013. There are 100 young ladies already signed up and registered to compete. Sponsors are always welcome. More information is available at www.MissFontana.com.

Director Williams announced that the election of Planning Commission Officers and a workshop on tract maps will be agendized for a future Planning Commission agenda.

PUBLIC FORUM **PF**

None. **NONE**

ADJOURNMENT **ADJOURN P.M.**

By consensus, the Planning Commission adjourned at 9:33 to the next Regular Planning Commission meeting on Tuesday, April 2, 2013, at 6:00 p.m. in the Grover W. Taylor City Council Chambers, located at 8353 Sierra Avenue, Fontana, California.

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Ysela Aguirre
Commission Secretary

_____

Phil Cothran
Vice Chairperson