

Los Angeles County Healthy Design Ordinance - Case Study Report

Many communities in the United States have begun to realize that the built environment – the place where people live, work, and play – has direct implications on their well being. In many instances, barriers for having healthier communities can reside within the community’s policies and regulations that set the standards for developing our cities. This Case Study Report takes a detailed look into the achievements of three U.S. communities that have developed guidelines, policies and ordinances that can contribute towards creating healthier and more active lifestyles in their communities.

The communities selected for this case study report are:

- The City of San Antonio, Texas, for changing its zoning ordinances to include the Unified Development Code, and Form-Based Code;
- The City of Richmond, California, for developing a progressive General Plan, that includes a Public Health element to improve the health outcomes of the community; and
- The San Joaquin Valley region in central California, for their recent efforts in addressing Smart Growth and healthy communities by design.

For each case study, this report presents a description of the notable efforts taken by the community to incorporate healthy design guidelines and development standards. In addition to reviewing and summarizing the relevant documents for each community, the project team interviewed selected individuals for each case study in order to obtain detailed information about the intent, barriers and lessons learned from their efforts to draft new policies, design guidelines and ordinances to create healthier communities. Appendix A presents the contact information for the people interviewed to complete this case study report.

This report will help to inform the preparation of the Healthy Design Ordinance (HDO) and specific changes to Titles 21 and 22 of the existing Los Angeles County Code.

1. San Antonio, Texas – Urban Case Study

The City of San Antonio is the seventh largest city in the country with a population of 1.4 million. The city serves as the seat of Bexar County, the 19th most populous county in the nation. (Los Angeles County is the most populous county in the country).

The growth trends within San Antonio follow the typical pattern of sprawl in which there are sparsely populated areas and lower population densities outside the city core. Much like the City of Los Angeles, San Antonio used to be surrounded by unincorporated county land. However, due to the flexible annexation laws of the city, by 2002 most of Bexar County was annexed by the City of San Antonio. San Antonio has a very rich history that is evident from its historic downtown and surrounding neighborhoods.

Unified Development Code

In 2001, a Unified Development Code (UDC) was adopted to replace the city's 1938 and 1965 zoning and subdivision codes. The code update was an implementation action of the 1997 San Antonio Master Plan, which provided a functional framework to guide the development and implementation of new and progressive policies in the City related to growth management, community services, neighborhoods, and urban design. However, the main goal in modifying the code was to replace the outdated policies and consolidate them all into one conveniently accessible “stand alone” document.

Although the intent of the code update was not motivated by healthy community design principles, the UDC presents a comprehensive ordinance with useful guidelines regulating development patterns that are in accordance with healthy design development standards such as Traditional Neighborhood Development, Transit-Oriented Development, and Form Based Development. The San Antonio UDC was created to consolidate in one ordinance all the regulations and legislation related to land use and development. The code also consolidates the regulations pertaining to the city's development patterns, such as conventional subdivisions, commercial centers, traditional neighborhood development, transit-oriented development, and form-based development, among others.

Process

The entire process to modify the code, including research, community outreach, documentation and approval was completed in two years. The new UDC was implemented immediately after its approval by the City Council in May 2001. A consultant group was hired to prepare a UDC document for the city. The City Council appointed an ‘Oversight Committee’ comprised of engineers, planning professionals and neighborhood groups to supervise the project team and outcomes. The project team was comprised of the consultant group, staff from the planning department, building inspection department, public works department, and City Attorney's office. In 1999, the Planning Department began an intense stakeholder driven public involvement process, with weekly public meetings, attended by industry members, neighborhood groups, environmental and design professionals, developers and community members affected by the code changes. Once the UDC document was completed, it was presented to the Zoning and Planning Commissions for review and approval. After their approval, the document was presented to the City Council for adoption, followed by immediate implementation by city departments.

Barriers

The timeline to develop and implement the UDC was two years. According to Andrew Spurgin, UDC Administrator, this relatively fast timeline was very challenging at times. Developers were preoccupied with meeting the financial expectations for their ongoing projects once the new policies were established. Also, the development staff community was in opposition to the new regulations that they did not know or understand. Mr. Spurgin noted that “there were a lot of ‘give and take’ discussions during every planning meeting.” Discussions and differences were settled by making compromises between agencies, some of which have been reviewed and amended throughout the years of the code implementation. The most significant political support came from the former Mayor (in office in 2001) who attended one of the planning meetings toward the end of the process and asked the team to settle their differences and finalize the document. The Unified Development Code was approved two weeks before the mayor left office.

Lessons Learned

Andrew Spurgin also commented that creating the Unified Development Code was an important step toward sustainable development for the City of San Antonio. It was important from the beginning to have the City Attorney's office involved to ensure that the policy changes abided with the law. An important change to the UDC was the addition of the Form-Based code standards, in the form of the addition of Form-Based Zoning District to the city's zoning "use patterns".

As a key lesson learned, Mr. Spurgin noted that the outreach process should have involved more city staff that are directly involved with customer issues. Mr. Spurgin stated that "it is also important to have good record keeping of every meeting during the development process (e.g., voice recorded memos and/or minutes) to avoid "who said what?" type of problems later on." Finally, according to Mr. Spurgin, it is very important to keep the community engaged in the process to understand their needs and desires. He also recommended that the goals and policies of the general plan be renewed before making code changes to ensure consistency.

Form-Based Zoning District

From 2006 to 2007, a Form-Based Zoning District (FBZD) was created and amended to the Unified Development Code. This code change was initially developer-driven, intending to develop a specific green-fill zone under the parameters of Form-Based Code. There were no code language changes, but a new chapter was added to Article 2 of the Unified Development Code, creating the FBZD in a portion of the city delimited by specific boundaries. In 2009, the FBZD was changed again to allow Form-Based development citywide. This change came about by the need to regulate urban infill in a more progressive way.



Source: City of San Antonio, UDC Administration

Large infill development near downtown San Antonio, which includes residential and mixed uses. This is the first large scale development project that benefited from the FBDZ

Process

The process to modify the code included the following two phases;

- Writing the code: City staff wrote the standards taking excerpts from the Form-Based Code standards that were most applicable to the city.
- Public outreach: Eight months of public outreach to the specific infill district that was going to be rezoned, including three public meetings, eight neighborhood meetings and multiple one-on-one meetings with community members.

The process was supervised by a Technical Advisory Committee, comprised of developers, real estate professionals, neighborhood groups, and city staff. The changes to the code were finally approved by City Council in 2009.

Barriers

According to city planning staffer, Andrea Guilles, the most significant challenge faced during the development and implementation of the FBZD was associated with property rights issues and concerns. Property owners and developers felt that detailed zoning codes impose government restrictions over their private property. Consequently, city staff had to spend time educating the community about the code and its value to San Antonio's public realm. Other barriers were related to a shortage of internal staff to manage the extra work associated with the new zoning approvals and construction document revisions.

Lessons Learned

Andrea Guilles identified the following lessons learned from the creation of the FBZD in San Antonio:

- Education is a major component of the code changing process. Policy makers should work together to help people understand the process and the intent of changing the city ordinances.
- Develop ordinance language that is simple and easy to understand.
- Avoid including language and regulations that do not pertain to the city.

Impacts to Healthy Design

The Unified Development Code of San Antonio contributes to healthy design by implementing a number of best practices for zoning, land use and development standards that support walking and bicycling. These practices are summarized below.

Land Use

Smart Growth

The principles of Smart Growth are included in Article II of the UDC establishing the following "Use Patterns":

- Conservation Subdivision, which permits flexibility in site and lot layouts to protect natural features.
- Commercial Center, which permits pedestrian friendly, and limited commercial nodes in any zoning category subject to design standards (façades, rear parking).
- Commercial Retrofit, which waives certain infrastructure standards (Transportation Impact Analyses, Stormwater Management) to facilitate reuse of older commercial properties. Also permits residential uses to be added above commercial storefronts.
- Infill Development, which provides flexible standards for the development and reuse of underutilized parcels within the urban core of the city. Urban design standards are required in order to maintain a

neighborhood commercial scale, to promote pedestrian activity, and to maintain the unique character of the center.¹

- Office or Institutional Campus, which requires pedestrian connectivity plans, sidewalks along any public and private street, and street parking is discouraged.
- Traditional Neighborhood Development (TND), which allows high density development around transit nodes, and waives parking requirements.
- Transit-Oriented Development (TOD), which encourages mixed-use development, and is intended to promote transit use. Pedestrian connectivity and safety is a high priority. There are no minimum parking requirements within 500 feet of a TOD development. TOD developments should be located between ¼ -½ mile of a transit station or major bus boarding location.
- Form-Based Development (FBD), which is based on regional transects, frontage typologies, street design, and sustainable design option point system. It offers density bonus points for developers based on incentive patterns such as open space, redevelopments, retail site design, and affordable housing.



Source: City of San Antonio, UDC Administration

Infill Development: an old gas station was converted into a restaurant and an old industrial building was converted into residential lofts.

¹ San Antonio Texas Unified Development Code, 2006, Sec 35-343.

Neighborhood pattern and block assembly

San Antonio's Code presents maximum block assemblies for all neighborhood developments and mixed-use districts. The maximum block length is based on street classification. For example, urban development should be designed with short blocks of 400 feet on average. The layout should include a shopping district, parks and open space designation. Table 1-1 shows the block dimensions established by San Antonio's UDC corresponding to the different street types.



Source: City of San Antonio, UDC Administration

Multi-family requirements: maximum set backs and maximum block size

Table 1-1: San Antonio's UDC Block Dimension Standards

Block Length	Street Type
400 feet average length, or 700 feet maximum length	<ul style="list-style-type: none"> Local type B streets (50' ROW, 40' pavement width) with houses fronting Local type A (50' ROW, 28' pavement width) which serves as an entrance street to the proposed neighborhood Part of a TND use pattern
600 feet maximum	<ul style="list-style-type: none"> Streets located within the FBDZ along urban settings
1,200 feet maximum	<ul style="list-style-type: none"> Block ends in a cul-de-sac. Local type A
N/A, unless they transition into a street with houses fronting.	<ul style="list-style-type: none"> Local type B Collector avenues Secondary arterials or main streets Primary arterials or boulevards Freeways or parkways.
Street Length	Street Type
3000 feet maximum	<ul style="list-style-type: none"> Streets with homes fronting. No limit to the street length of a street without home fronting
2400 -2000 feet maximum	<ul style="list-style-type: none"> Streets located within the FBDZ along urban settings

Active Spaces

Plazas are key design features for TND, Commercial Centers, Office or Institutional Campuses and Commercial Retrofits. Plazas should be designed to provide access from the street and from the building facing the street. Plazas should be square like, and be bounded on all sides by streets, according to the UDC standards.

The UDC also sets standards for one acre of parkland for every 114 dwelling units. Parks may be designed for active recreational use if there is a deficiency of such facilities in the neighborhood. In conservation subdivisions, open space is set forth as a minimum of 50% of total land use.

Transportation Design

Bicycle and Pedestrian Facilities

The City of San Antonio requires sidewalks as part of all their streets (with some exceptions where right-of-ways are less than 39 feet) as part of new development and also to retrofit existing streets to accommodate sidewalks that meet the American with Disabilities Act (ADA) requirements. In traditional neighborhoods, street widths are narrower, set forth as 27 feet. The code establishes that pedestrian connectivity is required throughout the city, especially in Transit Oriented Developments (TOD) and Form Based Zoning Districts (FBZD). In these districts, a pedestrian and bicycle connectivity plan is required for all developments and improvements. A direct pedestrian connection is required for every transit stop. With respect to bicycle facilities, the code stipulates that bicycle facilities are included as part of any road improvement project. Also bicycle facilities are required along main thoroughfares in the city such as avenues, main streets, and boulevards. If the bicycle facility is located along a roadway with traffic signals; the signals should be modified to be navigable by bicyclists.

Parking requirements

The UDC establishes minimum parking requirements for subdivisions, maximum parking requirements for any other zoning use, and a minimum number of bicycle spaces required in urbanized developments. In residential uses, parking storage should not exceed 20% of the site and for business uses it shall not exceed 50% of the site. Parking at the rear of buildings is required within urbanized development such as commercial mixed use, traditional neighborhoods, TOD, and FBZD. For these uses, pedestrian connectivity and safety is a priority; therefore, it is required



Source: City of San Antonio, UDC Administration

Commercial retrofit requirements: rear parking, maximum set backs, and front entrance

that all parking access is via alleys or side yards. Driveways along sidewalks are not permitted. In commercial

retrofit uses, a maximum of four rows of parking is allowed between buildings. Any open-street parking establishment shall be landscaped and include appropriate lighting. Within office and institutional campuses, street parking is not allowed; however, to minimize the impact of driveways within urban residential and mixed-uses, street metered parking is encouraged.

For any new development, bicycle parking is required at minimum equal to 10% of the number of minimum required vehicle spaces. In Downtown, and all infill development districts, the bicycle parking rate shall be equal to 25% of the minimum required vehicle spaces.

Off-Street Paths

The UDC establishes that greenways shall connect to residences and recreational areas. Greenways are to be designed incorporating natural settings such as creeks, and significant stands of trees within neighborhoods, and may contain irregular topography. Greenways may be counted as open space only if the average width is not less than 50 feet or if it consists of agricultural area of 50 acres or more.

The code also provides for greenbelts, which can run along the perimeter of a neighborhood and serve to create a buffer from surrounding non-compatible uses, such as a highway or industrial districts. Linear parks along greenbelts can be improved with trails benches and playground equipment.

Development Standards and Design

Building Orientation and Setbacks

San Antonio's UDC requires street-oriented buildings with access from the street they adjoin. The maximum front set back in urban commercial districts is five feet and buildings should be a maximum of three stories high. The requirements for public plazas call for surrounding buildings to have entrances facing toward the open space.



Source: City of San Antonio, UDC Administration

Building Treatments/Facades

The UDC explicitly emphasizes the need for human-scale development, calling for a pattern of windows, doors, and architectural features that are cohesive and aligned with adjacent facades. The code requires that commercial and mixed use facilities visually distinguish between upper and lower floors and that ground floors contain a high percentage of windows. The code also requires that for buildings exceeding given lengths (between 30 and 100 feet, depending upon location), street- and river-side facades be divided into traditionally-scaled modules, giving the appearance of separate buildings.

Design Standards: enhanced landscaping, pedestrian scale signs, and side lot parking for commercial uses

Landscaping and Screening

San Antonio has detailed landscaping ordinances that apply to all new development and redevelopment projects. The landscaping requirements include landscaping and shading of open-parking lots, enhanced streetscape along pedestrian-oriented corridors, tree preservation, native planting, and design standards along urban thoroughfares.

The code outlines screening and buffering guidelines for special uses in order to minimize visual and noise impacts. High screens (six feet) are required for uses that include mechanical equipment, loading docks, and trash disposal areas. In office or institutional campus areas, a landscaped buffer is required along adjoining residential properties.

Green Infrastructure

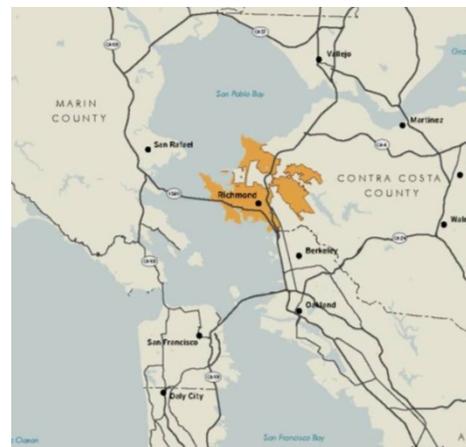
Stormwater Management

The City of San Antonio, TX established a regional stormwater management policy (contained in the UDC) that promotes better design techniques and the use of Low Impact Development (LID) techniques for the collection of stormwater, such as utilization of infiltration trenches, bioswales and rain gardens for parking lot landscapes, and landscaped roof areas for collecting stormwater.

2. Richmond, California – Suburban Case Study

The City of Richmond is located in the San Francisco Bay Area, on the western shore of Contra Costa County. Richmond is considered a residential inner suburb of San Francisco. However, due to the large presence of industrial and commercial land uses, the city also offers many employment opportunities for its residents.

The land use, demographics and cultural background of the city present a number of opportunities for healthy design. For instance, about 30 percent of the city is comprised of parks and open space, including greenways and trails. Richmond is a culturally diverse community, having representation from many different ethnic groups throughout the community.



Source: City of Richmond Planning Department

City of Richmond overview

The City of Richmond was the first city in California to include a Public Health element into its General Plan. Starting in 2007, the city began developing a comprehensive Community Health and Wellness Element for its General Plan seeking to address not only the concerns related to the built environment, but also socio-economic conditions associated with health inequalities among low-income and minority communities. This effort was funded by The California Endowment (TCE) with a \$255,000 grant for an 18-month planning process to coincide with the overall general plan update process. In December 2007, Richmond was featured as a model community for innovative community planning and urban design at the International Forum for Public Health in Shanghai, China.

General Plan Update



Source: City of Richmond Planning Department

General Plan Mobile Workshop Van

The City of Richmond's General Plan incorporates the concepts of "sustainability," "smart growth," "transit-oriented development," and "new urbanism" as guiding principles for the design and development of the community. Through the General Plan, Richmond is addressing factors that influence mental and physical health including physical activity, nutrition, bicycle and pedestrian safety, environmental quality, and neighborhood quality.

The planning process to develop the Health Element for the General Plan was guided by a group of city staff, stakeholders, community members and national health professionals. The key elements for public participation included:

1. The Technical Advisory Committee (TAC), composed of all city department directors. The TAC provided staff input and led the community outreach efforts to ensure participation from community organizations and stakeholders.
2. A Project Team formed to lead the development of the task, comprised of city staff, and state and county wide public health consultants;
3. The Technical Advisory Group (TAG) comprised of a wide range of academics, community and public agency representatives and stakeholder experts in the National Public Health arena. The TAG guided the planning process to review and develop the goals, policies and implementation actions of the General Plan's Health Element.

In order to provide a framework for including a health element into the General Plan, the City of Richmond developed *The Community Health and Wellness Policy Framework* document. The Framework includes ten community health objectives (listed below) designed to promote better lifestyle choices for the community. Four of these objectives are directly associated with active living practices².

² Richmond General Plan, December 2009 Draft, City of Richmond Planning Division. Richmond, CA

1. Access to recreation and open space
2. Access to healthy foods
3. Access to medical services
4. Access to public transit and safe active transport
5. Access to quality affordable housing
6. Access to economic opportunities
7. Completeness of neighborhoods
8. Safe neighborhoods and public spaces
9. Environmental quality
10. Green and sustainable development and practice



Source: City of Richmond Planning Department

General Plan Workshop

Intent

According to Lina Velasco, Senior Planner with the City of Richmond, integrating a health element into the General Plan was done because the city recognized that the built environment has a major impact on health equity. The main goal of the city is to improve the health outcomes in the community by creating complete neighborhoods that provide services to their residents within walking distance of their homes. To achieve this goal, the city launched a public outreach campaign where both citizen and stakeholder opinions were heard and taken into account when drafting the General Plan's policies. While the city has faced little opposition to the proposed changes, the main challenge for the project team, according to Ms. Valasco, has been collecting data associated with health outcomes, such as obesity rates, number of asthma cases, and heart disease and diabetes cases, among others. While this data is available at the regional level, it is difficult to find detailed data for each neighborhood community.

Status and Implementation

The General Plan update is currently under public review, and can be found at <http://www.cityofrichmondgeneralplan.org/>. The adoption hearings are scheduled for the first and second quarter of 2011. However, the Planning Department is currently implementing the policies of the Plan in two pilot neighborhood programs surrounding two elementary schools. City staff are working with the neighborhood associations, PTA's and School boards to develop an 'Action Plan' to improve health and safety within the selected communities. The goal is to expand these pilot programs to the entire city through the implementation of the General Plan.

Along with preparing the General Plan for its approval, the Technical Advisory Committee and consultant team are preparing a zoning ordinance update that will ensure compatibility between the General Plan's policies and the Zoning Code, the most significant change that is expected is to include mixed-use zoning as a land use type in the ordinance to allow the development of complete neighborhoods throughout the city. The proposed amendments to the Zoning Ordinance will go through public review after the approval of the

General Plan and will finally be presented to City Council for approval. Other city code updates associated with the General Plan implementation include guidelines for Senior Housing, Urban Agriculture and Crime Prevention.

Active Living Design Components of the General Plan Update

Richmond's General Plan introduces a range of innovative features intended to sustain and improve the quality of life of its residents. Each element included in the Plan reflects the community's vision and goals for the future development of the city. The following sections provide greater detail on key elements of the General Plan related to creating and designing healthier, more active communities.

Element 3 – Land Use and Urban Design

The Land Use and Urban Design Element of the General Plan expands upon the planning concepts related to land use and urban design for the city. The intent of this element is to realign the city's land use with a flexible development framework to promote community identity and active living by focusing on higher-density and mixed-use development in urban corridors. This element also promotes sustainable development patterns that enhance mobility options in the city by changing the character of streets to make them more pedestrian and community friendly.



Source: City of Richmond Planning Department

Downtown Richmond Transit Oriented Development

Table 2-1 lists the goals and policies established in this element to develop complete neighborhoods, active public places and vibrant corridors.

Table 2-1: Healthy Design Goals Associated with Land Use and Urban Design

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
<p>Goal LU1: Improve the Urban Environment</p>	<ul style="list-style-type: none"> ▪ Encourage infill development within the urban core. ▪ Redevelop key commercial corridors in the city into mixed-use, pedestrian and transit-oriented corridors. ▪ Encourage higher-density development within a half-mile of existing and planned major transit stations. ▪ Promote best practices in joint-use, universal access, sustainability, green design and safety of community facilities including schools, libraries, community centers, and human service facilities. 	<p>Infill development presents an opportunity to generate more housing options along key corridors and create mixed-used areas that are sustainable and vibrant. Mixed-use development promotes density and active lifestyles.</p> <p>Joint-use agreements allow the use of public facilities by the community to exercise and play.</p>
<p>Goal LU2: Create Healthy and Viable Neighborhoods</p>	<ul style="list-style-type: none"> ▪ Consider the development of revitalization plans for all neighborhoods. ▪ Enhance access, safety and streetscape experience for pedestrians, bicyclists and transit riders. Focus improvements in areas such as downtown, mixed-use corridors, pedestrian priority districts and multi-use trails. ▪ Address accessibility improvements in accordance with the ADA. ▪ Incorporate green street elements into the streetscape design. 	<p>Promoting the upkeep and usage of vacant lots increases the density and livability of the neighborhoods.</p> <p>Landscaping elements contribute to the safety, attractiveness and comfort for pedestrians, bicyclists and persons with disabilities.</p> <p>Green streets are a sustainable practice that not only improves environmental quality issues associated with stormwater management, but can also contribute to traffic calming and creating aesthetically pleasing streets.</p>

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
<p>Goal LU5: Encourage Balanced and Compatible Uses</p>	<ul style="list-style-type: none"> Update the Zoning Ordinance to establish development standards and guidelines for all land uses to reflect the General Plan's guidelines. Develop design guidelines and standards for all land uses and development prototypes. Create industrial use buffers to minimize impacts to residential uses. 	<p>The design guidelines promote a place-based approach to encourage mixed-use, pedestrian and transit oriented developments. Buffers can benefit the public health when they are designed to protect residents from noise, traffic impacts, and unattractive building uses.</p>
<p>Goal LU6: Promote High-Quality and Sustainable Development</p>	<ul style="list-style-type: none"> Update the Zoning Ordinance to reduce parking requirements and allow off-street parking for developments surrounding transit stations and transit corridors. Explore the feasibility of establishing parking districts to manage parking needs in commercial and residential areas close to major transit stations. Update standards and guidelines that encourage high-quality design and construction. 	<p>Reducing parking requirements can help reduce the overall number of vehicle trips when people chose alternative modes of transport for such trips.</p> <p>High quality design can include practices such as form-based code, mixed land uses and green building standards.</p>

Element 4 – Circulation

The Circulation Element of the General Plan offers a progressive vision of the transportation system, focusing on multimodal access and interconnectivity to ensure efficient mobility and access for all residents. The Circulation element defines the goals for improving the transportation system and mobility options of the city's residents, and identifies the policies to address the transportation needs required to provide safe and comfortable conditions for pedestrians and bicyclists. The City of Richmond plans to integrate transportation demand management policies into the General Plan as a strategy to create a sustainable transportation system. Also, the city supports



Source: City of Richmond Planning Department

City of Richmond Pedestrian-Friendly Streetscape

the use of low impact development practices to treat and retain stormwater, specifically in the design of pedestrian and parking amenities. The list of goals and policies are presented in Table 2-2 and reflect the active living design elements stated in the best practice research.

Table 2-2 : Healthy Design Goals Associated with Transportation Design

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
Goal CR1: Expand the Multimodal Circulation System	<ul style="list-style-type: none"> ▪ Develop citywide bicycle and pedestrian routes, and identify gaps in the networks and major travel routes. ▪ Promote walking and bicycling as safe and convenient mode of transportation. ▪ Develop a comprehensive network of multi-use trails to enhance bicycle and pedestrian connectivity throughout the city and the region. ▪ Implement the highest industry standards for bicycle and pedestrian improvements. ▪ Coordinate development with the Capital Improvement Program (CIP) to ensure completion of high-priority facility and infrastructure projects. ▪ Promote the place-based planning approach and classification system.³ ▪ Allow flexible Level of Service (LOS) standards to create streets that balance all modes of travel. ▪ Expand bus service to all neighborhoods in the evenings and late nights and for people with special needs. ▪ Work with transit operators to provide circulation options that are accessible to all members of the community. ▪ Enhance circulation linkages within the city and region. ▪ Support the expansion and enhancement of the public transit system to improve mobility options for all residents and visitors. 	<p>Providing high quality design of pedestrian and bicycle facilities is the most effective way to support active transportation in the community.</p> <p>Frequent, well connected and high quality transit operations increase the appeal of public transportation. For transit users, walking is a key part of each trip so pedestrian improvements are often needed to make public transportation more attractive.</p>

³ Place-Based Classification System, is an alternative to the standard capacity-based street classification, the place-based approach integrates the surrounding land use, function and desired character of the street to determine the allowable modes of transportation in the desired street.

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
<p>Goal CR2: Promote Walkable Neighborhoods and Livable Streets</p>	<ul style="list-style-type: none"> ▪ Improve access and connectivity within neighborhoods and to major destinations in the city ▪ Develop Safe Routes to School programs. ▪ Plan, construct and maintain a safe, comprehensive and well integrated bicycle and pedestrian system. ▪ Enhance access, safety and streetscape experience for pedestrians, bicyclists and transit riders. Address accessibility improvements in accordance with the American with Disabilities Act (ADA), pedestrian scale lighting and landscaping. ▪ Install comprehensive signage and wayfinding elements that address all modes of transportation and street users. ▪ Promote mixed-use urban streets that balance public transit, walking and bicycling with other modes of travel. ▪ Explore the potential to designate streets around schools, parks and public places as safe zones, lowering speed limits to 20 miles per hour. 	<p>Interconnected streets and pathways help create a safe and viable active transportation network.</p> <p>Street signage and lighting improvements enhance the pedestrian environment by making it safer and more attractive.</p> <p>Complete street policies ensure that transportation facilities are designed with all users in mind, including persons with disabilities and pedestrians of all ages and abilities.</p>
<p>Goal CR3: Create a Safe and Well-Maintained Circulation System</p>	<ul style="list-style-type: none"> ▪ Work with the railroads to improve safety at at-grade railroad crossings. ▪ Develop strategies for traffic calming on streets that experience speeding or cut-through traffic. ▪ Ensure adequate maintenance of transportation facilities such as streets, trails, sidewalks and bicycle paths. 	<p>Enhance safety and accessibility for pedestrians, bicyclists and public transit riders.</p>

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
<p>Goal CR5: Promote Sustainable and Green Practices</p>	<ul style="list-style-type: none"> ▪ Require that newly constructed or renovated city-owned and private buildings and structures meet recognized Green Building standards. ▪ Encourage new development throughout the city to use environmentally-sound building technologies to achieve Leadership in Energy and Environmental Design (LEED) standards. ▪ Promote transportation demand management strategies among residents and business to reduce reliance on automobiles. ▪ Promote the use of renewable energy and clean technology for transportation including public transit and goods movements. ▪ Promote the development of street design elements that incorporate natural stormwater drainage and landscaping in new and retrofitted streets. 	<p>Incorporating LEED criteria into code can help support or require development of places where residents have the opportunity to be active, have access to open space, and have viable active transportation options as a result of mixed uses and shorter trip lengths.</p>

Element 6 – Community Facilities and Infrastructure Element

The Community Facilities and Infrastructure Element expands upon the development standards guidelines for the city to provide services, amenities and infrastructure for all residents. The goals, policies and implementation actions are intended to improve the physical infrastructure, public utilities and services to improve the health and overall well being of city residents and are presented in Table 2-3.



Source: City of Richmond Planning Department

Renovated Richmond Civic Center

Table 2-3 Healthy Design Goals Associated with Community Facilities and Infrastructure

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
<p>Goal CF1: Serve a Diverse Range of Community Needs</p>	<ul style="list-style-type: none"> ▪ Coordinate efforts with gas and electric companies to update and support compliance with the Electric Underground Program. ▪ Establish guidelines for above-ground telecommunication facilities to mitigate potential negative impacts to residents. ▪ Provide storm drainage in accordance with best management practices. ▪ Support a sustainable approach to stormwater drainage, groundwater recharge and landscaping. ▪ Incorporate green streets elements in all streetscape improvement projects in the city. 	<p>Utilities that are located in the public right-of-way should be sensitive to the design and use of the street and should not impede the flow of pedestrian traffic.</p> <p>Stormwater management best practice, known as Low Impact Development, provides a number of benefits to the community, including access to better water quality, additional water resources to augment potable supply, pollution reduction, groundwater recharge, and can contribute towards creating more pedestrian-friendly streetscapes.</p>

Element 11 – Community Health and Wellness

The Community Health and Wellness element of the General Plan serves as the backbone for the healthy design objectives that the city strives to achieve. This element describes the status of health and wellness in the city and defines the goals for promoting healthy living. Some of the goals, policies and implementation actions of this element are incorporated into other elements of the Plan and have already been listed in Tables 2-1 through 2-3.

Table 2-4 presents the goals, policies and action items from the Community Health and Wellness element of the General Plan. Through the incorporation of healthy design into the planning process, the City of Richmond is striving to become a leader in building healthy communities, using the following strategies which other communities may want to emulate:

- Develop standards and guidelines to evaluate the health benefits and impacts of significant development programs.
- Develop a program that measures health outcomes over time to assess the effectiveness of city policies and programs.
- Develop a marketing campaign to promote healthy lifestyle choices.
- Establish a program to recognize projects and programs that achieve multiple health objectives.

Table 2-4: Community Health and Wellness Goals

GOAL	POLICY/ACTION ITEM	HEALTHY DESIGN OPPORTUNITY
Goal HW1: Improve Access to Parks, Recreation and Open Space	<ul style="list-style-type: none"> ▪ Update the comprehensive long-range parks master plan to address the changes in recreation interests and priorities. ▪ Revise the Subdivision Ordinance to require new development and redevelopment projects to provide open space opportunities to maintain 3.0 acres of open space per 1,000 population standards. ▪ Develop incentive programs that encourages private development and public agencies to provide park and recreation facilities beyond minimum requirements. 	Parks and public spaces not only make a neighborhood more beautiful, but they also attract a variety of people at all times of the day, help break up long blocks, and encourage physical activity.
Goal HW4: Encourage Safe and Convenient Public Transit and Active Circulation Options	<ul style="list-style-type: none"> ▪ Develop access and mobility in new development to enhance physical access to community facilities. ▪ Provide Americans with Disabilities Act (ADA) access. ▪ Work with transit providers to improve access to parks and recreation facilities. 	Open space and civic spaces not only need to be available but also accessible to all residents in order to maximize their use.
Goal HW8: Improve Safety in Neighborhoods and Public Spaces	<ul style="list-style-type: none"> ▪ Update the street lighting standards to ensure that new development and redevelopment projects incorporate pedestrian-scale lighting in the design of streets, parks and public spaces. 	Street signage and lighting improvements enhance the pedestrian environment making them safe and attractive.

City of Richmond Code

As stated above, upon adoption of the General Plan by the City Council, the City Ordinances will undergo a revision process to change the language in accordance with the General Plan recommendations. Nonetheless, the City of Richmond’s Code already includes a number of ordinances that are relevant to healthy living and active transportation. The following section summarizes the opportunities for healthy design identified in the City of Richmond Code.

Article VI – Building Regulations

Article VI contains three specific ordinances that support best-practices for healthy design standards. These ordinances are the Historic Structures Code, Green Building Requirements for City Buildings, and Commercial and Residential Green Building Standards. The Historic Structures Code promotes the protection, enhancement and perpetuation of historic features of the built environment in order to enhance

the character of the city and encourage more civic engagement. Green building requirements for city buildings presents an opportunity for city government to lead by example by incorporating various sustainability practices such as conservation, energy efficiency, and health promotion into new city buildings. Finally, the Green Building Standards Ordinance, which was adopted and became effective in the spring of 2010, established that all new construction and renovation projects (with few exceptions) shall implement the U.S Green Building Council (USGBC) “Green Building Rating System” guidelines to support the city’s goal to create a more sustainable community.

Article XI – Public Safety and Welfare

Chapter 11.92 of Article XI presents the city’s Transportation System Management Ordinance (TSM). The purpose of the TSM ordinance is to give city staff the tools to promote and develop programs that encourage the use of alternative modes of transportation, including bicycling, public transportation and walking in an effort to reduce vehicle trips, vehicle emissions and traffic congestion.

Article XIV – Traffic

Chapter 14.12 of Article XIV, Traffic, includes a section pertaining to bicycle users. This section states that “every person riding a bicycle shall be granted all the rights and subject to all the duties applicable to the driver of a vehicle”. This statement legitimizes bicycling as a mode of transportation, presenting opportunities to better maintain and improve transportation facilities to accommodate and ensure the safety of bicyclists.

Chapter 14.36, Pedestrian Regulations, indicates that crosswalks should be present and maintained at every intersection within the central traffic district and at any other intersections where the Director of Public Works determines a particular hazard to pedestrians crossing the roadway. Regarding special parking regulations, this chapter authorizes the Director of Public Works to provide facilities for the temporary parking of bicycles and motor scooters on public streets upon request.

Article XV – Zoning and Subdivisions

According to state law, the zoning and subdivisions ordinance must be consistent with the General Plan for the city. Therefore, once the City of Richmond’s General Plan Update is adopted, the ordinance will be changed to support the healthy design policies of the new General Plan. However, it should be noted that the existing zoning and subdivision code already supports some of the items included in healthy design best practices.

The City of Richmond’s zoning ordinance is included in Chapter 15.04 of Article XV. This chapter states that mixed-use development is encouraged in all the zoning districts in the City of Richmond. In the General Commercial district, building height regulations and setbacks requirements should follow the urban design standards specified in the General Plan. The code includes a section for Housing Density Bonus to promote dense development. This chapter also includes regulations for fence heights, lighting standards, tree preservation and sidewalk standards. Residential developments are required to provide trees as part of the street frontage. The code sets maximum fence height allowances, thus discouraging tall enclosures that compromise the aesthetics of the streets. Sidewalks are also required on all public streets.

Although the zoning code includes minimum parking requirements, parking space reductions of up to 25% may be allowed by the Planning Director in locations where transportation system management programs are

established to reduce vehicle trips. The Live/Work section of the zoning code is an ordinance to make new and existing industrial and commercial buildings available for residential mixed-use.

The City of Richmond's subdivision code is included in chapter 15.08 of Article XV. Public right-of-way (ROW) and easement dedication is part of this code, which states that the developer of a subdivision may be asked to dedicate parts of the public ROW to accommodate bicycle paths for the use and safety of the residents, as well as transit facilities if needed. All sidewalks in the subdivision must be at least 4.5 feet wide and pedestrian paths may be required for convenient access to public facilities.

Finally, this chapter includes the West County Subregional Transportation Mitigation Program (STMP). The purpose of this program is to mitigate the impacts of new trips generated by new developments by charging a fee to the developer based on the total number of new vehicle trips generated by the improvement; this fee contributes to the funds for regional transportation projects in West Contra Costa County.

3. San Joaquin Valley, California – Rural Case Study

The San Joaquin Valley (Valley) is a region in central California, south of Sacramento, comprised of 8 counties; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The Valley is California's top producing agricultural region, which serves as the economic vitality for the area's residents. In addition to priceless farmlands, the Valley is home to some of the nation's most valuable natural resources, including the San Joaquin Delta, and Yosemite, Kings Canyon and Sequoia National Parks. The rural character of the region is changing as a result of significant population growth, with considerable development anticipated throughout the next decade.



Source: Alta Planning + Design

Overview of the agricultural region of San Joaquin Valley

The San Joaquin Valley has an ethnically diverse population and contains some of the highest poverty rates in the country. The lack of resources presents substantial limitations for providing access to, developing and sustaining healthy and active communities. Other constraints to creating more active, healthy communities include poor air quality, extreme weather conditions during winter and summer months, and inadequate infrastructure. Consequently, there are high rates of asthma and obesity, particularly amongst children and youth, as well as Type 2 diabetes resulting from the large number of overweight residents. The economic costs

of these issues in California has reached the billions of dollars with regards to health care and lost productivity, with a sizeable portion of that total from the San Joaquin Valley.⁴

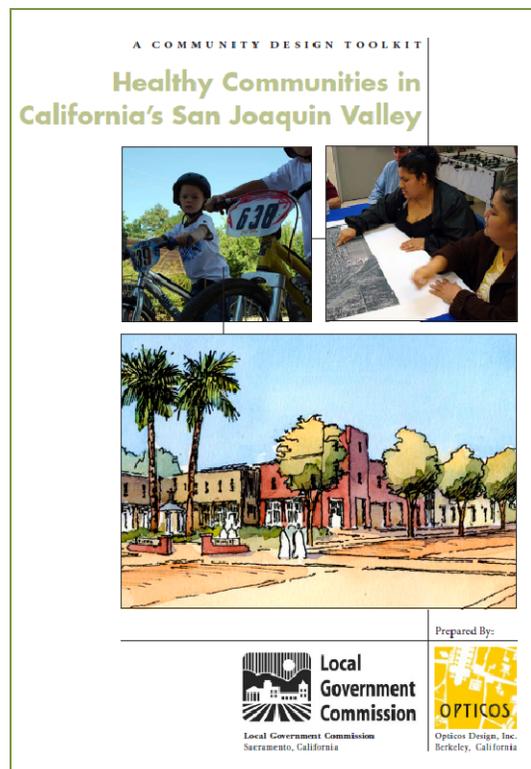
The challenges and issues discussed above reveal the need for fundamental changes to take place and to reverse these trends and move towards a healthier and improved quality of life in San Joaquin Valley. Efforts are currently underway to initiate this change, such as the Healthy Communities in California's San Joaquin Valley: A Community Design Toolkit, released October 2009. The report was commissioned by the Leadership for Healthy Communities, a national program of the Robert Wood Johnson Foundation that supports state and local government leaders in efforts to reduce childhood obesity through public policies that promote active living, healthy eating and access to healthy foods. It was also made possible through grants from the California Department of Transportation.

The following sections present an overview of reports, policies and jurisdictions pertaining to San Joaquin Valley codes and design guidelines.

Healthy Communities in California's San Joaquin Valley: A Community Design Toolkit

The Healthy Communities in California's San Joaquin Valley Community Design Toolkit (Design Toolkit) provides community design best practices, recommendations and policies to promote and create healthy communities. The report identifies the critical role of community design and policy when planning for healthy and active communities. Pedestrian and bicycle activity serves as the foundation for the development and sustainability of safe and accessible transportation networks that encourage an enduring active community. Similarly, without policy proposals, simply providing the infrastructure does not guarantee that the healthy option is the safest and most convenient. In addition to community design and policy guidelines that focus on healthy eating and access to healthy food, density driven urban design, land-use, and regulated controls that guide implementation are also important, in accordance with the recommendations set forth in the report.

While the Design Toolkit is a series of recommendations and not mandated policy for the San Joaquin Valley, the report emphasizes the need to implement the policy actions to reduce challenges to physical activity and to provide more healthy eating options. The document makes



⁴ Community Design Toolkit. "Healthy Communities in California's San Joaquin Valley" (2009). Local Government Commission, Sacramento, California; and Opticos Design Inc., Berkeley California.

reference to AB 32 and SB 375 as landmark policy for the reduction of Vehicle Miles Traveled (VMT's) and Greenhouse gases (GHG), which are of particular relevance for this agricultural region. Moreover, the report identifies strategies for potential changes in the built environment at a local level to contribute to the reduction of VMT and GHGs, such as Safe Routes to School programs.

The Design Toolkit incorporates the concepts of the Congress for the New Urbanism's Charter as a framework for community design. Specifically, the suggested design guidelines are presented in the following three sections:

- **Metropolis:** Large-scale principles to promote health and exercise are emphasized, as well as land-use and subdivision patterns that promote connectivity, pedestrian access, and providing alternative forms of transportation.
- **City:** At the neighborhood level, the importance of scale and organization are emphasized in order to promote walkability within districts and corridors.
- **Town:** At the street scale, detailed elements that promote a high-quality pedestrian environment are recommended within blocks and buildings.

Impact and Status

Currently, the document remains a series of recommendations for the San Joaquin Valley counties to incorporate into their respective general plans voluntarily. However, the recommendations are very detailed and specific to the context of the San Joaquin Valley. As the examples cited in the document illustrate, the ability to create healthy communities in a rural setting is not only possible, but can be highly successful. Design strategies for healthy communities are gradually being integrated into the San Joaquin Valley as more residents become aware of the connection between health and the built environment. Within rural communities, adopting public health components into the general plans is largely influenced by the will of the community. Therefore, it is important to involve and educate the public about healthy communities and the positive outcomes in order to drive changes in public policy.

Active Living Design Components

The 3 distinct environments discussed in the Design Toolkit report refer to the following cities as examples: Fowler (population 5,300), Kingsburg (population 11,240), Firebaugh (population 6,740), Taft (population 18,000) and Delano (population 53,972). As is evident by the small number of residents in each of these cities, the objectives of the document aim to address the design issues surrounding sparsely populated rural communities. The following sections provide further detail on the design recommendations for each of the three elements of the Design Toolkit.



Source: Alta Planning + Design

Example of multimodal connectivity in San Joaquin Valley

Metropolis

Ensuring large-scale connectivity and maximizing internal connectivity are important at the Metropolis scale. Three of the case study cities were looked at within this context (Fowler, Kingsburg and Firebaugh). While they are all historically compact, continued growth is anticipated into the periphery farmlands. Recommendations include:

1. Set aside open spaces and greenways within neighborhoods and subdivisions as portions of larger networks to improve environmental conditions, manage storm water, filter air and buffer nearby industrial and agricultural, as well as serving as expanded mixed-use exercise loops.
2. Join downtown with major bicycle and pedestrian connections to outlying neighborhoods, facilitating convenient travel to and from downtown.
3. Facilitate neighborhood centers of activity that are oriented and well-connected to their surrounding residents. Locally-serving nodes, new services and institutions such as schools should also serve as central gathering places that ensure that residents walk and bike, including trips to school.
4. Provide a high-quality system of “green streets” that can assist in providing a comfortable outdoor environment during periods of high temperatures.
5. Design with appropriate pedestrian-scaled lighting to ensure safety for night activity.

Table 3-1 lists implementation strategies established to integrate pedestrian connectivity and walkability at the citywide scale.

Table 3-1: Metropolis Implementation Recommendations

SOURCE	POLICY/ACTION RECOMMENDATION	HEALTHY DESIGN OPPORTUNITY
General Plan updates	Emphasize the creation of place with regards to land use in new areas to ensure that mixed-use development can occur as neighborhoods.	An approach to land use can be integrated with changes to zoning that can legalize and implement healthy mixed-use areas, and large-scale frameworks and greenways can be established through the Circulation Element.
Zoning Regulations	Promote better development patterns through the adoption of subdivision ordinances that utilize traditional neighborhood development (TND) design principles and require minimum standards of connectivity, neighborhood organization and land-use mix.	Replace older subdivision ordinances and related public works standards (i.e. street design) that fail to support healthy lifestyles and walkable urban form when developing new land at the periphery.

City

The most significant healthy community issue that can be addressed at this scale is the development of pedestrian-friendly neighborhoods with viable transit options. San Joaquin Valley communities have a large and growing number of residents who do not drive (the very young or the very old) and many low income residents who are sensitive to transportation costs. Revising zoning regulations and utilizing Form-Based Codes can be useful ways to promote more walkable, transit oriented communities. Specific improvements within the cities of Firebaugh, Fowler and Taft are referenced in the Design Toolkit to assist in developing the following design recommendations:

1. Address new developments at the periphery as well as the revitalization of historic areas.
2. Rural downtowns can function as small-scale mixed-use neighborhoods with a variety of housing and services by incorporating urban design improvements that encourage walking and bicycling to downtown.
3. Convert under-utilized or obsolete infrastructure, such as a railways to multi-use trails through the Rails-to-Trails program, to create a first-rate off-street trail corridor that connects outlying neighborhoods to the downtown core.
4. Design considerations for improving connections to downtown; include Class II bike lanes, tree streets for shade, landscaped medians, wider sidewalks and intersection improvements to facilitate crossings.
5. Providing open space networks facilitates additional health and exercise within proximity to downtowns while also serving as “green bands” for wildlife habitat, air-filtering plants and shade.
6. Regarding land use organization, mixed-use environments, with residential and neighborhood amenities such as markets, can provide opportunities for residents to walk or bicycle.
7. A variety of building types provides sufficient densities that support a mix of uses and neighborhood services while maintaining an urban form that is pedestrian-oriented and familiar.

Implementation strategies are presented in Table 3-2 to integrate pedestrian connectivity and walkability at the neighborhood level.

Table 3-2 : City Implementation Recommendations

SOURCE	POLICY/ACTION RECOMMENDATION	HEALTHY DESIGN OPPORTUNITY
The Specific Plan	Provides a powerful tool for California communities that can be used to ensure the implementation of a very precise and predictable vision for neighborhoods and districts. However, specific plans can represent a significant investment for small Valley towns. Therefore, the incorporation of zoning amendments, such as Form-Based Coding, provides another simpler vision option.	Many pedestrian/bike improvements can be incorporated into a Community Specific Plan.

SOURCE	POLICY/ACTION RECOMMENDATION	HEALTHY DESIGN OPPORTUNITY
<p>Form-Based Coding (FBC)</p>	<ul style="list-style-type: none"> Existing zoning and land-use can serve as an impediment to development that encourages healthy behavior. Segregated suburban sprawl land-use promotes automobile usage while mixed-use zoning has been superseded. Excessive parking standards and setback requirements impede compact, walkable design. Access to healthy foods, such as farmer's markets or community gardens, are often not allowed with conventional zoning. The regulations and standards FBC, presented in both diagrams and words, are keyed to a regulating plan that designates the appropriate form and scale (and character) of development rather than only distinctions in land-use types. In contrast to conventional zoning's focus on the segregation of land-use types, permissible property uses, and the control of development intensity through simple numerical parameters (e.g., FAR, dwellings per acre, height limits, setbacks and parking ratios). FBC can regulate frontage type, which defines the way new buildings address the street. Proper frontage ensures a well-scaled pedestrian environment. Parking Standards: Conventional parking standards represent a significant barrier to walkability. Excessively high parking ratios for most projects hinders new investment within historic cores and requires large parking lots in new development that by their very nature discourage walking and non-automobile trips. Communities should consider lowering minimum parking requirements, particularly in downtown areas that can support moderate densities and alternative trips. A more aggressive consideration is maximum parking requirements to ensure that new projects are built with very little parking and a subsequent high-quality pedestrian environment. 	<p>Whether within a specific plan or as part of a standard zoning ordinance, Form-Based Coding can be used to provide the community with a set of clear, predictable standards and well-calibrated land uses that together promote a mixed-use, pedestrian-oriented environment.</p> <p>FBC address the relationship between building façades and the public realm, the form and mass of buildings in relation to one another and the scale and types of streets and blocks. FBC are based on the concept that different types and intensities of development are appropriate in different parts of the city, which suggests that places can be organized in varying degrees of intensity, from least urban at the rural edge, to most urban at the center.</p> <p>FBC can be used as an effective tool for determining what new development should be like in order to ensure that it is both appropriate for its location and compatible with the existing community.</p> <p>FBC typically include detailed standards regulating building placement, general use, building height, parking, allowable encroachments and frontage types, and allowable land uses.</p>

Town

The design of streets and buildings is critical to the development of a healthy community. Safe, pleasant, well-organized streets encourage pedestrian activity, and improve the overall character of a city. Street design plays a critical role in encouraging people to walk and bicycle. The quality of streets, including factors such as traffic speeds and volumes, visual interest, and safety considerations, influence whether people will choose an alternative to driving, as well as how far they are willing to walk or bike.

The City of Delano is referenced for its efforts to transform itself into a healthy community. City officials have recently guided the development of a mixed-use development project on former industrial land. The project, called the “Paseo,” promises to bring new pedestrian activity and increase the necessity for a well-designed public environment. Design strategies for the “Paseo” project included the following:

1. Context-sensitive approach to bicycle travel, including the implementation of Class II bicycle lanes, the utilization of the Class III route with shared lane markings and strong connections to other important routes in the larger, citywide bicycle plan.
2. The use of curb extensions at key intersections to effectively narrow the distance pedestrians must travel to safely cross the street.
3. Encouraging sensitive infill in key locations with well-designed frontage in order to increase the number of “eyes on the street” and encourage a pedestrian-friendly environment.
4. Wider sidewalks to facilitate pedestrian travel and the accommodation of street trees.
5. The use of roundabouts at key intersections to facilitate safe and slow turning movements for vehicles and to help ensure safe crossings for pedestrians.



Source: Alta Planning + Design

Bike route and pedestrian -friendly street in San Joaquin Valley

Overall, communities should consider implementing street standards that can accommodate and encourage the development of complete streets. Standards for complete streets that provide facilities for all users are well developed and many communities nationwide have adopted new street standards as part of, or to complement, a TND subdivision ordinance. Moreover, general and comprehensive plans, municipal public works standards, and zoning regulations should be updated and altered to encourage complete streets, as presented in Table 3-3.

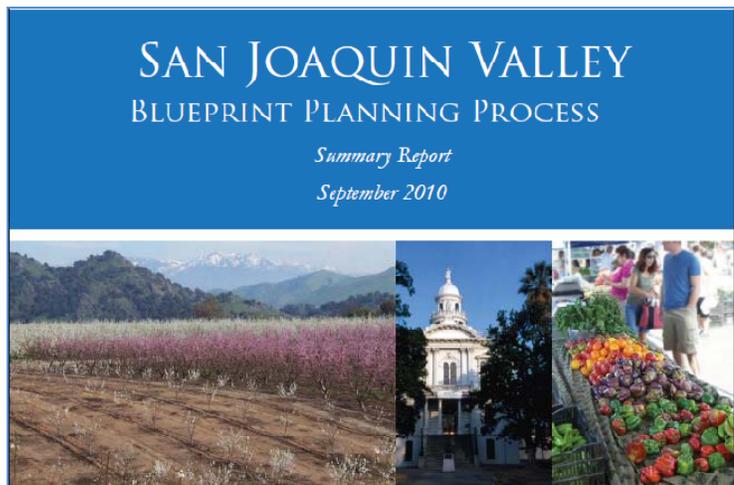
Table 3-3 : Town Implementation Recommendations

SOURCE	POLICY/ACTION RECOMMENDATION	HEALTHY DESIGN OPPORTUNITY
Safe Routes to School (SRTS)	The National Center for Safe Routes to School's SRTS programs aims to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school.	SRTS programs examine conditions around schools and conduct projects and activities that work to improve safety and reduce traffic and air pollution in the vicinity of schools. As a result, these programs help make bicycling and walking to school safer and more appealing transportation choices.
Complete Streets	<ul style="list-style-type: none"> ▪ Many street standards are outdated, requiring overly wide cross sections that encourage high vehicle speeds and little or no pedestrian environment. This becomes particularly important in the development of new subdivisions, as outdated or obsolete street standards in many communities promote auto-oriented patterns that are simply not conducive to pedestrians and bicyclists. ▪ Maintain a set of complete streets that facilitate and encourage pedestrian and bicycle activity. In the case of existing urban arterials, these techniques often include a "road diet," which can include reductions in vehicle lane width, reductions in total number of travel lanes, increased sidewalk widths and pedestrian amenities ▪ Separate sidewalks from the street edge to provide a safer and more comfortable environment for pedestrians. The consolidation of curb cuts and the installation of raised medians is recommended. At intersections, curb extensions can reduce crossing times for pedestrians and tighter turning radii can reduce vehicle right turn speeds. ▪ Curb cuts provide driveway access and also interrupt pedestrian flow along the 	<p>Complete streets focus on design techniques that reduce traffic speeds in order to make environments more compatible for pedestrians and bicyclists .</p> <p>Increased pedestrian connectivity within and around the downtown area as a result of implemented Complete Streets strategies maintains centrality, which is critical as cities grow. Facilitate a community-driven process that analyzes the existing conditions for pedestrians.</p> <p>Respond to the unique character of the particular location with context-sensitive solutions.</p>

SOURCE	POLICY/ACTION RECOMMENDATION	HEALTHY DESIGN OPPORTUNITY
Complete Streets	sidewalk. Planting strips provide a consistent line of landscape and street trees along sidewalks help to provide a more pleasing environment, and the increased separation helps to maintain a flat and level surface. On-street parking can help to further separate pedestrians from the roadway.	

San Joaquin Valley Blueprint Planning Process: Summary Report

The San Joaquin Valley Blueprint provides an overview of the extensive development process involved in creating a collaborative Valley-wide planning document. The San Joaquin Valley Blueprint planning process began in 2006 with funding from the California Regional Blueprint Planning Program. Participants from the 8 counties that constitute the San Joaquin Valley prepared individual county blueprints, which were then consolidated into a Valley-wide Blueprint.



The report is a vision for the future of the San Joaquin Valley. According to project manager interviewed for this report, Ted Holzem from Mintier Harnish-Consultants, the document’s guiding principles aim to achieve the following: reduce development driven land consumption, preserve resources, enhance communities, and provide more transit options. The planning process also considers the “Three Es ” of sustainable communities: prosperous economy, quality environment, and social equity. As a result of these objectives, in April of 2009, the San Joaquin Valley Regional Policy Council, the decision-making body for the Valley-wide process, approved the 12 Smart Growth Principles in addition to an Alternative Growth Scenario.

Impact and Status

At present, the Blueprint is in the development stages of the second phase, which will build on the work from Phase 1 with the additional use of modeling systems and data programs. Mr. Holzem also stated that this implementation document will provide a model for municipalities to adopt the guidelines into local ordinances. Upon completion, a Statewide Integrated Interregional Transportation, Land Use and Economic model will be available to MPOs, providing information on GHG assessments, multi-modal travel needs, and land use strategies. Although the guidelines provided are not intended to be implemented into codes, they

create the ideal framework for the implementation of SB 375, and will assist the San Joaquin Valley in achieving its targets for reduced GHGs and VMT. Therefore, developing design guidelines for healthy communities is complementary to SB 375 and the adoption of these principles into city and county planning documents will lead to a healthier, more active San Joaquin Valley.

Smart Growth Principles

Representing the core values of the Valley, the 12 Smart Growth Principles serve as the framework for future planning and implementation in the region. According to Becky Napier, these principles were intended to reflect a regional perspective using the goals and objectives of each county. The adopted 12 Smart Growth Principles are:

- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Encourage community and stakeholder collaboration
- Foster distinctive, attractive communities with a strong sense of place
- Make development decisions predictable, fair, and cost-effective
- Mix land uses
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Provide a variety of transportation choices
- Strengthen and direct development towards existing communities
- Take advantage of compact building design
- Enhance the economic vitality of the region
- Support actions that encourage environmental resource management

According to Deputy Director of Fresno's Council of Governments (COG), Barbara J. Steck, the 12 Smart Growth Principles were included in the document as a result of public input. Residents stated their concerns for such issues as air quality, access to water, and walkability. From their findings, it was made apparent that the majority of communities were aware of the relationship between VMT reduction and pedestrian and transit oriented development. Similarly, county and city planning staff are recognizing the importance of developing and strengthening relationships with public health entities for reasons of funding, efficiency, improved coordination and implementation.

Scenario B+

Scenario B+ is the Preferred Blueprint Growth Scenario for the San Joaquin Valley to the year 2050. This adopted scenario will provide guidance to the Valley's local jurisdictions with land use authority as they update their general plans.

Public Outreach

To ensure that the diversity of counties was sufficiently represented, County residents, stakeholders, environmental justice communities, tribal governments, and resource agencies all played an integral role in shaping the Blueprint. COG staff, Becky Napier, also commented that the success of adopting the Blueprint was largely due to the inclusion of business owners, city planners, and residents alike in the planning process, as it allowed for the different entities to better understand each other's priorities and move towards

consensus. Moreover, this outreach demonstrated the need to continue to educate and involve community members to obtain feedback as well as to capitalize on existing networks for improved overall effectiveness. For the final phase of the document, a web-based model is being developed that will allow residents to observe the projected impact of the Smart Growth principles.

Agricultural Impacts for Healthy Design

Agricultural Zoning Codes

With regard to fostering healthy communities, the designation and maintenance of agricultural lands can reinforce and support higher density and Smart Growth development within the city. Although the San Joaquin Valley's agricultural lands are a valuable resource, they are located on the outskirts of growing cities and are increasingly viewed as prime land for developers to expand outward. Fresno COG's Deputy Director, Barbara Steck, stated that in addition to promoting and implementing Smart Growth concepts within the urban core, facilitating and developing a successful framework for healthy communities also requires creating a limit to the growth that should occur around the cities. This serves to preserve the agricultural nature while supporting density and in-fill for an overall more active and connected community.

In predominantly rural San Joaquin County, the current code addresses the needs of a growing County, while also addressing the special nature of the agricultural farmlands. Several sections of the County Code, including Title 9, Development Title, Division 10, Development Regulations, Chapter 9, Agricultural Mitigation, aim to implement the agricultural land conservation policies contained in the San Joaquin County General Plan related to permanently protecting agricultural land within the County. The preservation of these lands and specific provisions established in the code are referenced as follows:

- **9-1080.2 – FINDINGS: The Board of Supervisors finds this Chapter is necessary for the following reasons:**
 - (a) San Joaquin County is losing farmland at a rapid rate;
 - (b) San Joaquin County farmland is of exceptional productive quality;
 - (c) The loss of farmland to development is irreparable and agriculture is an important component of the County's economy;
 - (d) The loss of farmland will have a cumulatively negative impact on the economy of the County and the cities located within it;
 - (e) The continuation of agricultural operations also preserves the landscape and environmental resources;
 - (f) Permanent preservation of farmland is consistent with the policies of the San Joaquin County General Plan;
 - (g) New development benefits from the preservation of farmlands that support the overall economy of the County; and
 - (h) Using only zoning and other regulatory mechanisms has been a useful, but inadequate, approach to preserving farmland.

- Agricultural land conservation policies and resources stated in the San Joaquin County General Plan include:

- 9-1080.1(a) - Intergovernmental Coordination
 - 9-1080.1(b) - Habitat Mitigation Plan
 - 9-1080.1(c) - Delta Protection Commission
- Additional policies relevant to the preservation of agricultural lands include the following:
 - 9-1080.7 (a)(4) - It shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land, as determined by the Agricultural Technical Advisory Committee and approved by the Board of Supervisors. However, all activities or land uses currently allowed under the County's AG-40 zoning designation would be allowed on mitigation land.
 - 9-1080.7 (a)(5) - It shall prohibit new residential and/or commercial development on agricultural mitigation land that is not directly needed for agricultural production, regardless of existing zoning.
 - 9-1080.7 (a)(6) - It shall protect the existing water rights and retain them with the agricultural mitigation land.
 - 9-1080.8(a) - Creation. An Agricultural Technical Advisory Committee, as defined in Section 9-110.4, is hereby created to carry out the functions authorized by this Chapter.
 - 9-1805.1 - The intent of this Chapter is to provide a method for establishing, disestablishing, or altering the boundaries of agricultural preserves, as provided in the Williamson Act as set forth in the California Government Code. (Ord. 3675)

San Joaquin Valley Air Pollution Control District: Annual Report 2010

Air quality is an important issue with regards to creating and fostering active and healthy communities within San Joaquin Valley. A record number of days that exceed the state and federal health-based standards for ozone and particulate matter have been reported for the region. Mrs. Steck commented that as result of these air quality problems, along with the growing number of asthma cases, residents are becoming increasingly concerned about improving the air quality of the San Joaquin Valley.

The San Joaquin Valley Air Pollution Control District is a regional government agency responsible for air quality management in the eight counties in the San Joaquin Valley Air Basin. The District works with local, state and federal government agencies, the business community and the residents of the Valley to reduce emissions. This document highlights the success from continued efforts on a policy and public involvement level to reduce GHG's, as well as future progress for improving conditions.

In December 2009, the Valley Air District Governing Board, a 15-member Board that consists of representatives from all eight counties, adopted the first comprehensive regional policy and guidance on addressing and mitigating GHG impacts caused by industrial, commercial and residential development in the San Joaquin Valley. These documents are designed to assist municipal permitting agencies and businesses in addressing GHG impacts under CEQA. Since adoption of the proposed methodology, the District has developed several Best Performance Standards for specific classes and categories of industrial equipment.

The District has written several State Implementation Plans (SIPs) over the years that serve as recommendations for new measures needed to achieve cleaner air, including the following provisions:

- Employer-Based Trip Reduction program (eTRIP) to reduce commute trips by their employees.

- Charbroiler Incentive Program (CHIP): to fund the installation of PM2.5 controls on underfired charbroilers and further investigate the economic feasibility and availability of such controls
- Rule 4695: requires controls to reduce VOC emissions generated from larger wine and brandy aging operations
- Rule 4684: these measures incorporated new federal Control Technique Guideline requirements for lower-VOC coatings and adhesive materials, as well as emission reducing work practices
- Rule 4601: amendment reduced the VOC content limits of several coating categories to make them consistent with ARB's Suggested Control Measures
- Rule 4308: requires new and replaced units to meet lower NOx limits
- Rule 4103: this measure incorporates the language of SB 705 (Florez, 2003) regarding open burning of certain agricultural materials
- Rule 4570: this amendment lowered the applicability threshold for dairy and poultry confined animal facilities, and strengthened rule requirements, including new requirements to reduce emissions from silage

Additional policy level achievements to improve air quality for include:

- The Valley Air District adopted the non-regulatory Fast Track Strategy to complement the District's legally-binding ozone attainment plan and accelerate the attainment of the federal ozone standard
- The Valley's eight metropolitan planning organizations (MPOs) updated their Federal Transportation Improvement Program (FTIP) lists and their Regional Transportation Plans (RTP).
- The District will continue to work collaboratively with the eight Valley counties MPOs and the Air Resource Board to set and achieve the GHG reduction targets established in response to SB 375.

Impact

In summary, when speaking with Mrs. Steck, she emphasized that the last two documents are important because residents of San Joaquin Valley are becoming more knowledgeable regarding the poor air quality in the region. In fact, the basis for deciding whether or not to participate in outdoor activities is often gauged on daily air quality reports from the news. Mrs. Steck noted that regardless of code and ordinance changes to develop healthy community design within the region, if residents do not feel that the air quality is conducive to their overall health, then the infrastructure improvements become irrelevant.

4. Case Studies Summary

Table 4-1 shows a comparison overview of each the case studies and their contributions to healthy community design. In general, each community presents valuable lessons for implementing new regulatory policies that can lead toward healthier and more active communities. Each of the documents summarized in this report presents valuable information regarding healthy community design and will help guide the preparation of the Healthy Design Ordinance (HDO) and specific changes to Titles 21 and 22 of the existing Los Angeles County Code.

Table 4-1: Opportunities for Healthy Design from Each Case Study

San Antonio, TX	Richmond, CA	San Joaquin Valley-CA
Code and Policies		
<p>Unified Development Code</p> <ul style="list-style-type: none"> • Consolidates the zoning and land use ordinances in one “stand alone document”. • Implemented since 2001. • Includes healthy design development standards such as Traditional Neighborhood Development, Transit Oriented Development, and Form-Based Development. 	<p>City of Richmond Code</p> <ul style="list-style-type: none"> • Supports sustainable building design standards through the Historic Structures Code, Green Building design ordinance. • Transportation System Management Ordinance provides tools to promote and develop alternative transportation programs. • States that every Person riding a bicycle has right to the roadway and shall obey the traffic laws as any other vehicle. 	<p>Agricultural Zoning Codes</p> <ul style="list-style-type: none"> • Calls for creating a limit to the growth that occur around the cities, in order to preserve the agricultural nature of the region while supporting density and in-fill development.
<p>Form-Based Zoning Code</p> <ul style="list-style-type: none"> • Amended to the UDC in 2007. • Created a new zoning district that allows Form-Based Development citywide. • Based on regional transects, frontage typologies, street design, and sustainable design option point system. • Implementation: two major Form-Based developments are currently under construction, (1) a green-fill development in the city suburbs and (2) an in-fill development in downtown San Antonio. 	<ul style="list-style-type: none"> • The zoning and subdivisions code encourages mixed-use development. Includes a section for Housing Density Bonus to promote dense development. • West County Subregional Transportation Mitigation Program, designed to subsidize the regional transportation projects through new development fees. 	<p>Air Pollution Control District-Annual Report</p> <ul style="list-style-type: none"> • Highlights the district’s efforts to reduce GHG’s. • In 2009 the Valley air district government adopted the first comprehensive regional policy to address and mitigate GHG impacts caused by new development. • Air quality control is important for the valley’s residents as a way to validate their choice to participate in outdoor activities. The air quality should be conducive to the overall community’s health. <p>Form-Based Code</p> <ul style="list-style-type: none"> • Included in the Design Toolkit as an strategy to improve the quality of living and design standards of the communities in the valley. • Status: not included in the code of ordinances yet.

San Antonio, TX

Richmond, CA

San Joaquin Valley-CA

General Plan, Design Guidelines and Other Reports

The code update to include UDC was an implementation action of the 1997 San Antonio Master Plan.

Richmond General Plan Update

- First City in California to include a Public Health Element into the General Plan update.
- The goal of the Plan is to improve the health outcomes of the community by creating complete neighborhoods.
- Status: to be approved in summer 2011.
- Implementation: two pilot projects are currently undergoing.
- Promotes sustainable development patterns, transit oriented development, mixed use, and higher density development.
- Addresses the transportation needs required to provide safe and comfortable conditions for pedestrians and bicyclists.
- Promotes open space facilities and green infrastructure.
- Upon its approval the City's code of ordinance will be changed to reflect the goals and policies of this General Plan.

Healthy Communities in

California's San Joaquin Valley (Design Toolkit)

- Provides community design best practices, recommendations and policies to promote and create healthy communities.
- Each county in San Joaquin valley can choose to incorporate these recommendations into the general Plan.
- Incorporates concepts of the Congress for New Urbanism's Charter such as high connectivity-multi-modal networks and high quality pedestrian environment.
- No implementation strategies have occurred yet.

San Joaquin Valley Blueprint

Planning Process

- Provides an overview of how to develop a collaborative Valley-wide planning document.
- Provides guiding principles to reduce development land consumption, preserve natural resources, enhance communities, and provide more transit options.
- Based on Smart Growth Principles such as walkable neighborhoods, mixed land uses, preserve open space, and provide transportation options, among others.
- Status: the report is completed and moving toward implementation phase, which will provide a model for municipalities to adopt the guidelines into local ordinances.

Appendix A:

Interview Acknowledgments for Preparation of the Los Angeles County Healthy Design Ordinance - Case Study Report

In addition to reviewing and summarizing the relevant documents for each community, the project team interviewed the following individuals for each case study.

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