





FRESNO General Plan

Adopted: December 18, 2014

Development and Resource Management Department



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FRESNO General Plan

December 18, 2014

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AMENDMENTS

Adopted Date / Plan Amendment No.

12-03-15 / A-15-003

- Updated Chapter 3: Tables 3-1 and 3-3
- Updated Chapter 11: Tables 11-3, 11-4, 11-5, 11-7, 11-8, 11-9, 11-10, 11-11, 11-12 and 11-13
- Updated Chapter 12: Table 12-1

04-28-16 / A-16-001

- Added Section 3.7 regarding Disadvantaged Unincorporated Communities to Chapter 3
- Added language regarding the City's Flood Plain Ordinance to Chapter 9
- Replaced Chapter 11

10-20-16 / A-16-008, R-16-011, TA-16-002

- Updated Chapter 3: Table 3-1, Table 3-2 (removed), Table 3-3 (now 3-2), Table 3-4 (now 3-3)
- Changed language in Chapter 3 to reflect the adoption of Downtown Plans and Code
- Updated Chapter 12: Table 12-1

3-02-17 / A-16-015 ATP

- Updated Chapter 4: Table 4-3 (updated)
- Changed language in Chapter 4, 10, 12 and Glossary to match Active Transportation Plan definitions

4-13-17 / A-17-001 Housing Element Amendment

Updated Chapter 11 with the adoption of the Housing Element amendment

1-25-18 / A-17-016 PMP

Updated Chapter 5 to reflect the adoption of the Parks Master Plan

12-13-18 / P18-03553

Changed language in Chapter 7 regarding the Farmland Preservation Program

5-21-20 / P20-01529

Updated the Local Hazard Mitigation section of the Noise & Safety Element

NOTE: Information regarding updates to individual figures can be found on the figures themselves.

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1 INTRODUCTION

The Fresno General Plan articulates a vision for the city and presents a set of policies and implementation actions to achieve that vision. The Plan capitalizes on opportunities inherent in Fresno's assets and regional location—on its human and natural resources: its economic resources, and proud history. The Plan draws from the ideas and visions of the many citizens, business owners, elected officials, and City staff who participated in the planning process, under the leadership provided by the General Plan Citizens Committee (GPCC), the Advisory **Planning** Commission, the Mayor, and the City Council.

¹ This document uses the terms "Fresno General Plan," "The General Plan," "the General Plan," "this General Plan," and "The Plan" interchangeably.

CONTEXT 1.1

The City of Fresno² last comprehensively updated its General Plan in 2002. Since then, the city has undergone a significant demographic and urban transformation. The legal environment governing land use, environmental preservation, housing, and other planning issues has also changed. A major, comprehensive revision of the General Plan is therefore necessary to eliminate any obsolete elements and policies, ensure legal conformity, and address new challenges, such as the need to prudently manage growth and enhance the city's economy.

The Fresno General Plan is forward-looking, comprehensive, and long-range. It supports the community's vision to preserve the desirable qualities that make the city of Fresno an ideal place to live, work, and play. The Plan recommends strategies to address prevalent existing conditions and trends that impede achieving and maintaining greater human, community, environmental, and economic health and prosperity. The Plan envisions Fresno as a vibrant, growing city, infused with a sense of heritage and community.

The primary purpose of a general plan is to outline a long-range vision for the physical development of the city that reflects the aspirations of the community. Since economic, social, transportation, environmental, public facilities and services, and other outcomes are interrelated with land use and development and are important to the community, the Plan includes applicable policies related to these complementary areas as well. The Plan presents a blueprint to guide economic development initiatives, as well as needed investments in improvements to increase competitiveness and promote economic growth. Planning and investment partnerships among landowners, developers, public agencies, and institutions will ensure effective and collaborative planning, efficient processing, shared public facilities and services financing. Under this Plan, the City will become a role model for Central Valley communities for growth management planning, regional cooperation, resilient urban development, economic vitality, revitalization of Downtown and established neighborhoods, resource efficiency, and environmental quality. The Plan also addresses a number of important community concerns, including:

- High concentrated poverty, high unemployment, and extreme disparities in qualityof-life circumstances and opportunities in different parts of the city;
- Neglected and disinvested established neighborhoods and Downtown Planning Area;

² The term "City of Fresno" or "City" with an upper case "C" used in this document refers to the City organization and institution governed and managed by the Mayor, City Council and City Staff. The term "city of Fresno" using a lower case "c' or the word "Fresno" or "city" alone refers to the geographic urban area and built environment commonly, or the population as a whole, known as the city of Fresno.

- Poor air quality, and environmental and community health issues;
- Residential growth patterns that negatively impact natural resources and deplete strategic farmland; and
- Fiscal instability related to the city's existing spread-out urban form and land use inefficiencies.

Overarching Principles of Resilience

The theme of resilience runs throughout the Plan and its strategies to address the city's challenges and capitalize on its opportunities and assets. There are five principles of resilience that guide the intent and demonstrate the interrelationships among Plan goals, objectives, and implementing policies. These principles serve as an overarching framework for a healthy and prosperous Fresno.

- 1. Quality-of-Life and Basic Services in All Neighborhoods;
- 2. A Prosperous City Centered on a Vibrant Downtown;
- 3. Ample Industrial and Employment Land Ready for Job Creation;
- 4. Care for the Built and Natural Environment; and
- 5. Fiscally Responsible and Sustainable Land Use Policies and Practices.

The Plan describes a balanced city with an appropriate proportion of its growth and reinvestment focused in the central core, Downtown, established neighborhoods, and along Bus Rapid Transit (BRT) corridors. A successful and vibrant Downtown is necessary to attract investment needed for infill development and rehabilitation of established neighborhoods, which are priorities for the Plan. Balancing a vibrant Downtown will be self-sufficient suburban Development Areas. This will result in a city with a revitalized Downtown and established neighborhoods and with livable new suburban neighborhoods supporting one another. The Plan contemplates subsequent adoption of community and Specific Plans to further refine and guide development in the Downtown Planning Area.

The Plan is not merely a compendium of ideas and wish lists. While it is general and long-range in scope, the Plan is also comprehensive with many near-term actions. It lays out policies and implementation strategies from the date of adoption to 2035 and beyond. The defined policies, figures, standards, guidelines and actions to be undertaken by the City focus on what is concrete and achievable in order to accommodate the future population. Broad objectives such as "economic development," "quality of life," and "neighborhood character" are meaningful only if translated into actions that are tangible and can be implemented. State law requires that many City

regulations, requirements, and actions be consistent with the Plan. Therefore, regular ongoing use and updating of the Plan is essential.3



Santa Fe Depot, pictured above, is the railroad station in the Downtown that is used by Amtrak California for its San Joaquin passenger train service. The historic renovated station is a local icon for the Fresno community. Photo: Joe

Goals of the General Plan

The update process that created this General Plan was initiated to take a comprehensive look at where the city is, where it would like to be by General Plan Horizon (2035), and by General Plan Buildout beyond 2035 (see description for both on page 1-19). Some areas of Fresno may change very little in this timeframe, and others may change dramatically. This Plan focuses on current community needs, neighborhood character, economic development challenges and opportunities, mixed-use and infill development strategies, development considerations outside the current city limits, and the fiscal resources and management strategies needed to attain the City's goals. Many of the existing community conditions are displayed in a series of figures at the end of this element, including Figure 1-4: Existing Land Use and a number of figures that show the geographic distribution of the city's existing demographic conditions. Lastly, the Plan responds to residents' preferences about where different land uses such as

 $^{^3}$ As a Charter city the City's zoning ordinance does not have to be consistent with the General Plan, but the City has chosen to require consistency in its Development Code.

housing, shopping, industry, parks and recreation, and public facilities should be located and how City resources should be used to achieve the Plan's goals.

Key themes of the Plan include the strengthening of existing centers of activity and commercial corridors in the city, as well as expansion of the city's industrial capacity, retail base, and new residential neighborhoods. Thus, this Plan has been prepared to do the following:

- Establish a long-range vision that reflects the aspirations of the community and outlines steps to achieve this vision;
- Establish long-range land use development policies that will guide development
 decision-making by City departments by providing a basis for judging whether
 specific development proposals and public projects are in harmony with the
 outcomes envisioned in the Fresno General Plan policies;
- Reflect the City's current planning, resource conservation, and economic development efforts;
- Guide development in a manner that improves the quality of life for the whole community and meets future land needs based on the projected population and job growth;
- Allow the City, other public agencies, and private developers to design projects that will preserve and enhance community character and environmental resources, promote resiliency, and minimize hazards; and
- Provide the basis for establishing detailed plans and implementation programs, such as the zoning and subdivision regulations, community plans, Specific Plans, neighborhood plans, Concept Plans, and the Capital Improvement Program.

The Plan establishes 17 goals for the City. The introduction to each element of the Plan highlights which of these goals it supports:

1. Increase opportunity, economic development, business and job creation.

Use urban form, land use, and Development Code policies to streamline permit approval, promote local educational excellence and workforce relevance, significantly increase business development and expansion, retain and attract talented people, create jobs and sustained economic growth, strategically locate employment lands and facilities, and avoid over-saturation of a single type of housing, retail or employment.

2. Support a successful and competitive Downtown.

Emphasize infill development and a revitalized central core area as the primary activity center for Fresno and the region by locating substantial growth in the

Downtown, and along the corridors leading to the Downtown. Use visionbased policies in a development code specific to the Downtown, when adopted, to ensure the creation of a unique sense of place in the central core.

- 3. Emphasize conservation, successful adaptation to climate and changing resource conditions, and performance effectiveness in the use of energy, water, land, buildings, natural resources, and fiscal resources required for the longterm sustainability of Fresno.
- 4. Emphasize achieving healthy air quality and reduced greenhouse gas emissions.
- 5. Support agriculture and food production as an integral industry.

Emphasize the economic and cultural role of Fresno as a center of agriculture and food production systems by conserving farmland through a focus on developing vacant and underutilized land within the established Sphere of Influence of the City, limiting any further urban boundary expansion, and developing urban agriculture within the city and designated growth areas.

6. Protect, preserve, and enhance natural, historic, and cultural resources.

> Emphasize the continued protection of important natural, historic and cultural resources in the future development of Fresno. This includes both designated historic structures and neighborhoods, but also "urban artifacts" and neighborhoods that create the character of Fresno.

- 7. Provide for a diversity of districts, neighborhoods, housing types (including affordable housing), residential densities, job opportunities, recreation, open space, and educational venues that appeal to a broad range of people throughout the city.
- 8. Develop Complete Neighborhoods and districts with an efficient and diverse mix of residential densities, building types, and affordability which are designed to be healthy, attractive, and centered by schools, parks, and public and commercial services to provide a sense of place and that provide as many services as possible within walking distance.

Intentionally plan for Complete Neighborhoods as an outcome and not a collection of subdivisions which do not result in Complete Neighborhoods.

9. Promote a city of healthy communities and improve quality of life in established neighborhoods.

> Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.

10. Emphasize increased land use intensity and mixed-use development at densities supportive of greater use of transit in Fresno.

Greater densities can be achieved through encouragement, infrastructure and incentives for infill and revitalization along major corridors and in Activity Centers.

11. Emphasize and plan for all modes of travel on local and Major Streets in Fresno.

Facilitate travel by walking, biking, transit, and motor vehicle with interconnected and linked neighborhoods, districts, major campuses and public facilities, shopping centers and other service centers, and regional transportation such as air, rail, bus and highways.

12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.

Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure, risks to service continuity, desired standards of service to meet quality-of-life goals, and required infrastructure to support growth, economic competitiveness and business development.

Emphasize the City as a role model for good growth management planning, efficient processing and permit streamlining, effective urban development policies, environmental quality, and a strong economy. Work collaboratively with other jurisdictions and institutions to further these values throughout the region.

Positively influence the same attributes in other jurisdictions of the San Joaquin Valley—and thus the potential for regional sustainability—and improve the standing and credibility of the City to pursue appropriate State, LAFCO, and other regional policies that would curb sprawl and prevent new unincorporated community development which compete with and threaten the success of sustainable policies and development practices in Fresno.

- 14. Provide a network of well-maintained parks, open spaces, athletic facilities, and walking and biking trails connecting the city's districts and neighborhoods to attract and retain a broad range of individuals, benefit the health of residents, and provide the level of public amenities required to encourage and support development of higher density urban living and transit use.
- 15. Improve Fresno's visual image and enhance its form and function through urban design strategies and effective maintenance.

- 16. Protect and improve public health and safety.
- 17. Recognize, respect, and plan for Fresno's cultural, social, and ethnic diversity, and foster an informed and engaged citizenry.

Emphasize shared community values and genuine engagement with and across different neighborhoods, communities, institutions, businesses and sectors to solve difficult problems and achieve shared goals for the success of Fresno and all its residents.

Key Planning and Design Features

Some of the key planning and design features in this General Plan include:

- Economic Development, Downtown Revitalization, and Neighborhood Revitalization through new initiatives, policies and programs designed to meet the city's most pressing needs.
- Updated Urban Form based upon a revitalized Downtown and established neighborhoods, enhanced corridors with BRT and vibrant Activity Centers supported by concept planned new neighborhoods.
- Maximization of Urban and Fiscal Efficiency through a new balance and integration of infill, rehabilitation, and growth area development that will benefit the city as a whole, compared to the historical near monolithic 100 percent of investment in outlying growth areas only.
- Minimization of Farmland Conversion by avoiding premature and inefficient farmland conversion, focusing development within a defined planning boundary, and seeking long-term preservation of farmland acreage.
- Complete Neighborhoods developed around parks and schools within walking distance with a mix of densities, building types, incomes, opportunities, and commercial services.
- Complete Streets, Connector Streets, Safer Routes to School, and Multi-Modal Connectivity by emphasizing neighborhood and street design that allows and encourages walking, biking, transit, and auto options.
- Measurable Results achieved by integrating design and implementing policies to produce measurable benefits related to reductions in greenhouse gas emissions, vehicle miles traveled, public health and household costs, consumption of water, energy, and land, and costs for infrastructure, operations, maintenance.

Relation of the General Plan to the Master EIR

The Fresno General Plan Master Environmental Impact Report (MEIR) will provide an analysis of the environmental impacts for the General Plan, and other projects as required by the California Environmental Quality Act (CEQA). After certification of the MEIR, the document may be used to provide the environmental analysis for individual planning approvals that implement the Plan when those "subsequent projects" are within the scope of the MEIR. CEQA Guidelines §15177 allows for limited environmental review when the lead agency determines that a subsequent project is within the scope of the MEIR. This provides for streamlining the CEQA process, saving time and money.

Under CEQA, the MEIR can provide streamlining opportunities for a variety of projects ranging from individual parcels, tract maps, and BRT Corridor to community, Specific, neighborhood and Concept Plans. A MEIR may be used for more than five years after it has been certified if it is either updated or if the City can make certain findings.

General Plan Requirements

State law requires each California municipality to prepare a general plan, which is a comprehensive, long-term vision "for the physical development of the county or city, and any land outside its boundaries which in the planning agency's judgment bears relation to its planning." State requirements call for general plans that "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency."

A city's general plan has been described as its constitution for all future development—the framework within which decisions on how to grow, provide public services and facilities, and protect and enhance the environment must be made. California's tradition of allowing local authority over land use decisions means that the State's cities have considerable flexibility in preparing their general plans.

While allowing considerable flexibility, State planning laws do establish some requirements for the issues that general plans must address. The California Government Code (Section 65300) establishes both the content of general plans and rules for their adoption and subsequent amendment. Together, State law and judicial decisions establish three overall guidelines for general plans:

- The General Plan Must Be Comprehensive. This requirement has two aspects. First, the general plan must be geographically comprehensive. That is, it must apply throughout the entire incorporated area and it should include other areas that a jurisdiction determines bears a relation to its planning, as well as the equal context of the general plan. Second, the general plan must address the full range of relevant issues that affect the jurisdiction's physical development (California Government Code Section 65301(c)).
- The General Plan Must Be Internally Consistent. This requirement means that the general plan must fully integrate its separate parts and relate them to each other

without conflict. "Horizontal," or internal, consistency applies both to figures and diagrams as well as general plan text. It also applies to data and analysis, as well as policies. All adopted elements of the general plan, whether required by State law or not, have equal legal weight. None may supersede another, so the general plan must balance and reconcile policies so there are no conflicts among the provisions of each element.

The General Plan Must Be Long-Range. Because anticipated development will affect
the jurisdiction and the people who live or work there for years to come, State law
requires every general plan to take a long-term perspective. Time frames for
effective planning may vary between elements.

Consistency Requirements within the General Plan

State law requires general plans to include seven elements. This General Plan includes the seven required elements: Land Use, Circulation, Open Space, Conservation, Safety, Noise, and Housing. The seventh required element, the Housing Element, which was adopted by the City in 2008 and certified by the State in 2009, will be updated in 2015. This Plan includes a Housing Element Consistency chapter that addresses consistency of the General Plan with the previously adopted Housing Element. Thus, all of the mandatory elements required by State law are included in this Plan.⁴

This Plan also includes optional elements⁵ that address local concerns: Economic Development and Fiscal Sustainability, Public Utilities and Services, Historic and Cultural Resources, Healthy Communities, and Implementation. Upon adoption of the Plan, these optional elements have equal weight under State law. Table 1-1 outlines how the required elements and optional elements correspond with this Plan.

⁴ Two or more mandated elements may be combined in a single element per California Government Code Section 65301(a) which has been done in this General Plan by combining into a single element the "Noise and Safety" elements.

⁵ The Government Code specifically states that the General Plan may include any other optional elements or address any other subjects that the City determines relate to the physical development of the city (California Government Code Section 65303).

	D AND OPTIONAL ELEMENTS WITH ENERAL PLAN ELEMENTS
Required and Optional Elements	General Plan Element
Optional Optional	Introduction Economic Development and Fiscal Sustainability
Land Use	3: Urban Form, Land Use, and Design
Circulation	4: Mobility and Transportation
Open Space	5: Parks, Open Space, and Schools
Optional	6: Public Utilities and Services
Conservation	7: Resource Conservation and Resilience
Optional	8: Historic and Cultural Resources
Safety	9: Noise and Safety
Noise	9: Noise and Safety
Optional	10: Healthy Communities
Housing	11: Housing Element Consistency
_Optional	12: Implementation

Source: Dyett & Bhatia, 2014.

Environmental Justice

While environmental justice is not a mandatory element in a general plan, there is a strong case for its inclusion, as State law now requires general plans to include consideration of environmental justice in preparing policies and implementation programs, and in creating the physical framework for development. The issues of environmental justice that the general plan can address include procedural inequities and geographic inequities.

Several new policies, distributed throughout this General Plan, are included to address environmental justice.

1.2 PLANNING CONTEXT

History of Fresno

Figure 1-1: Historic Growth Patterns illustrates Fresno's historic rate and pattern of growth. The city of Fresno's story begins in 1871, when the Central Pacific Railroad was selecting station sites along the Central Pacific's line through California's San Joaquin Valley. In the midst of an otherwise dry prairie, Fresno was founded in 1872 with the establishment of the Fresno station. Since the railroad followed the lay of the San Joaquin Valley from northwest to southeast, the original surveyors of Fresno laid out the town's parent grid to match the railroad tracks. Only when Fresno's original diagonal grid met the north to south grid of the outlying agricultural colonies in the 1880s would the city adjust its streets to match the existing rural roads. This distinctive 45-degree adjustment at the edge of the original downtown core is shared by many San Joaquin Valley cities today.

In 1885, Fresno was incorporated with a land area of three square miles and a population of approximately 4,000. Today, the original townsite is home to the largest concentration of historic structures and landmarks in Central California. A number of mid-rise buildings were erected in the Central Business District between 1915 and 1925, followed by a second building wave in the 1960s, giving Downtown the most distinctive skyline in the region.

Unlike the early 1890s, when it was estimated that roughly 40 percent of the city's population lived southwest of Downtown, the dominant development pattern in the post WWII era has been to extend to the north and to a lesser degree to the east. This development was partially spurred by the extended streetcar system, the rise of the automobile, relatively cheap and abundant supply of land, evolving retail trends, and federal programs that enabled people to purchase single-family homes.

In 1957, a California Department of Highways plan called for construction of State Routes 99, 41, and 180 to form a freeway loop around Downtown, redirecting traffic around the City's core rather than through it. The construction of the freeway loop system has had a devastating impact on the Downtown and its surrounding neighborhoods. Formerly unified neighborhoods were cut in two by freeways without surface crossings. Facilitated by the freeways, the City continued to stretch onto inexpensive land to the north and east, aiding the flight of people and businesses away from the center of the city.

Regional Location

The city of Fresno, located in the Central Valley, covers an area of 113 square miles. Most of the remaining land uses surrounding the city are rural residential and agricultural in nature, although the city of Clovis is adjacent to the northeast edge of Fresno. With a 2010 population of 495,000, Fresno is the largest city in Fresno County and fifth largest in California. Figure 1-2 shows the regional location.

State Route 99 runs northwest-southeast on the western edge of the city, connecting it with Sacramento, the San Francisco Bay Area, Bakersfield, and Los Angeles. It is designated as a *High Emphasis Focus Route* on the Caltrans Interregional Transportation Strategic Plan. State Route 41 runs north-south through the heart of the city, connecting it with Yosemite National Park. State Route 168 links the Downtown to Clovis, and State Route 180 runs east-west to both agricultural communities and Kings Canyon National Park.

The northern border of the city is largely defined by the San Joaquin River, which flows on to the Sacramento-San Joaquin River Delta and San Francisco Bay. No major rivers or creeks run through the city, although many irrigation canals cross Fresno.

Planning Area

The City's Planning Area is the geographic area for which the General Plan establishes policies about future urban growth, long-term agricultural activity, and natural resource conservation. The boundary of the Planning Area was determined by City staff, and initiated by City Council, in response to State law requiring each City to include in its General Plan all territory within the boundaries of the incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300).

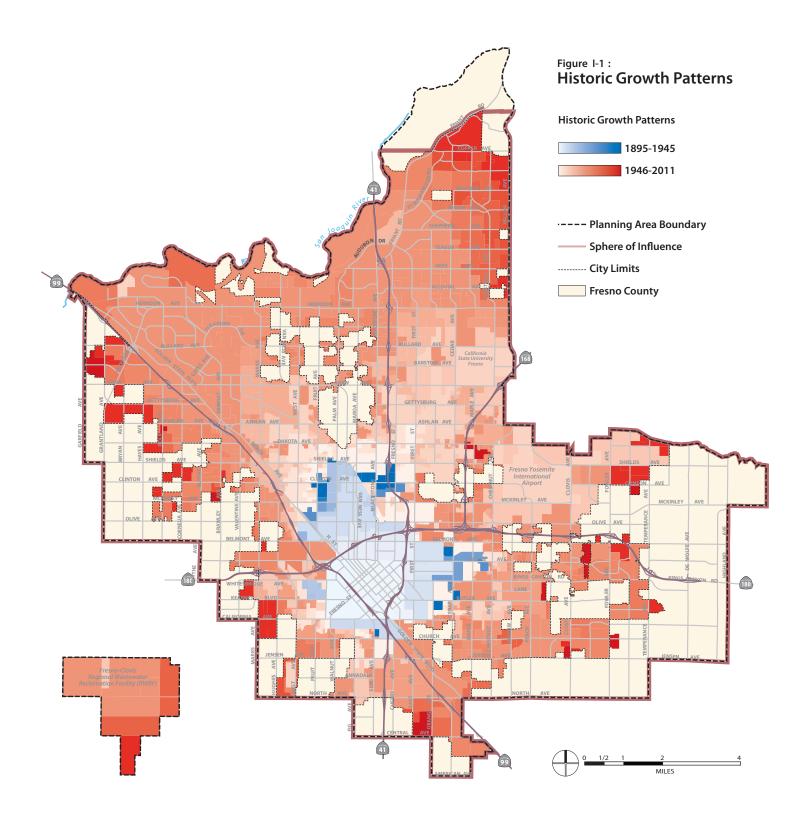
The Planning Area includes the area within the City Limits, the City's Sphere of Influence (SOI), and land to the north adjacent to the SOI that serves as a logical boundary along Willow Avenue and east of the San Joaquin River, as well as land to the southwest of the SOI dedicated to the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF). The area to the north has open space and low density residential land use designations consistent with the rural residential and open space properties that exist there now.

Sphere of Influence (SOI)

The SOI is a boundary that encompasses lands that are expected to ultimately be annexed by the City, although until annexed it falls under the jurisdiction of the County of Fresno. The City's SOI is determined by the Fresno Local Agency Formation Commission (LAFCO), which is an entity empowered to review and approve proposed boundary changes and annexations by incorporated municipalities. The City's SOI comprises all land within the City Limits (excluding the RWRF), as well as County Islands (unincorporated land entirely surrounded by the city) and land beyond the outer City Limits on all sides (see Figure 1-2). The SOI encompasses 157 square miles in total, of which 44 square miles is unincorporated land.



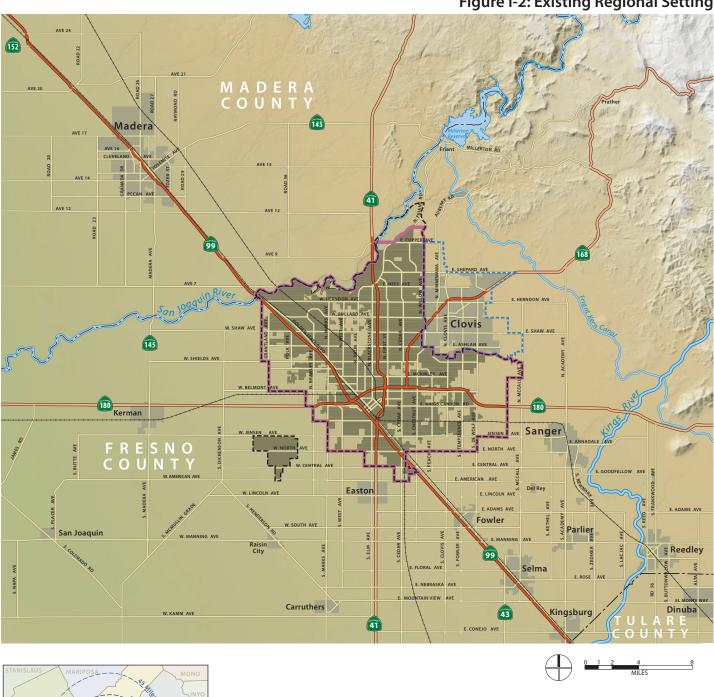
Much of the city is surrounded by agricultural and rural residential land uses, and to the east, the Sierra Nevada Mountains serve as a beautiful backdrop, as shown in this picture (looking east). Photo: Heather Heinks



Source: City of Fresno Development and Resource Management Department, 2010.

Figure I-2: Existing Regional Setting

Source: City of Fresno, 2014.





Public Participation Process

The General Plan update study and formulation process was initiated by City planning staff in the summer of 2010. In order for the Plan to accurately address community needs and values, a comprehensive public process of obtaining the input of residents, businesses, and property owners, as well as City officials was initiated. The General Plan Citizens Advisory Committee (GPCC) provided leadership throughout this process, which involved the sharing of information and ideas between elected and appointed officials, City staff, the planning consultants, and residents. The following methods were used over the course of the Plan update to ensure the community's full participation:

- **Stakeholder Interviews.** Over 160 interviews were conducted with City officials and representatives of various community stakeholders and organizations.
- Stakeholder Outreach. Outreach included neighborhood meetings, focus groups
 and other agencies. City staff was invited to make over 100 presentations before
 neighborhood associations, as well as business, educational, social, and non-profit
 segments of the community to discuss the Fresno General Plan and the
 Alternatives Report.
- Community Workshops. Over 20 public workshops were held on various topics
 including visioning and guiding principles, economic development, urban form,
 healthy communities, transportation, resource conservation, and the Fresno General
 Plan conceptual alternative scenarios.
- General Plan Citizens Advisory Committee. The GPCC served as a "sounding board" for ideas and alternatives during the update process, formulating consensus and providing direction for City staff and consultant team work. The GPCC also heard public comment and participated with invited speakers in discussions on a range of planning topics. Moreover, GPCC members attended public workshops to facilitate dialogue and understand community concerns. The GPCC held 24 meetings throughout the process through May 2012.
- Planning Commission of the City of Fresno and City Council of the City of Fresno.
 City staff appeared at more than 10 Planning Commission and City Council meetings that included discussion items on the Fresno General Plan with specific issues requiring policy direction. These meetings were also open to the public.
- Other City Commissions and Committees. Other City commissions and advisory
 committees also met periodically to discuss issues and concerns pertaining to the
 Fresno General Plan and provide comments on documents prepared.
- Newsletter and Survey. The City published a newsletter in English and Spanish to
 introduce the planning process and provide details on means of participation. The
 newsletter was distributed in August 2011. The City also conducted a telephone
 survey on issues and priorities for the Fresno General Plan.

- Fresno General Plan Website. A website was created for the Fresno General Plan
 process, linked to the main City website. All meeting agendas, staff reports,
 workshop summaries, planning documents, and figures created during the update
 process were posted on the site.
- Fresno General Plan Mailing List. Those who requested to receive information and notices were placed on the Fresno General Plan email distribution list.
- Availability of Documents. Copies of the results from GPCC, Planning Commission
 and City Council meetings, workshops, and presentations were made available on
 the Fresno General Plan website and at City Hall.

Planning Process

The planning process for the General Plan update consisted of an initial phase of information gathering and correspondence that resulted in a Map Atlas of Existing Conditions Report and a Service Provider Summaries report, followed by an in-depth exploration of targeted issues and potential policy initiatives via a series of working papers reviewed with the GPCC and at public workshops. These findings, along with the GPCC's visioning process setting goals for the Plan, culminated in the alternatives phase.

Alternatives

The alternatives process explored four fundamentally different approaches to accommodate projected population and job growth while meeting the proposed vision for Fresno. The Alternatives Report for the General Plan Citizens Committee, issued in March 2012, reviewed the four options, which differed by the type, density, mix, and location of future growth. The report evaluated the alternative scenarios against one another in terms of their relative (1) ability to meet housing and job demand, (2) provision of parks and open space, (3) impact on transportation and mobility, and (4) adherence to the proposed goals. A Fiscal Impact Analysis of the Concept Alternatives was prepared that assessed the comparative fiscal impacts of four alternative scenarios, and a RapidFire scenario impact assessment was also conducted that compared alternatives in terms of relative greenhouse gas emissions; household costs; land consumption; vehicle miles traveled per capita and fuel use; public health; building energy, water consumed, and related costs; and cumulative infrastructure and operations and maintenance costs. These reports were reviewed in numerous public outreach meetings, at a community workshop, and at public hearings by the GPCC, Planning Commission, and City Council.

Alternative A with Modifications

The City Council endorsed Alternative A with modifications. Alternative A focused on rebuilding the primary corridors as a series of neighborhood and regional mixed-use

centers surrounded by higher density housing, with roughly half of future housing in the City Limits and roughly half in growth areas on the urban edge. The Council's modified Alternative A shifted more development to single-family housing and with more focus on growth west and southwest of State Route 99, but maintained a strong commitment to Downtown and major corridor revitalization, Complete Neighborhoods, and more compact development.

1.3 DEVELOPMENT UNDER THE PLAN – DWELLINGS, POPULATION, AND JOBS

General Plan Horizon and General Plan Buildout

The "General Plan Horizon" will occur in the year 2035. Complete development under the General Plan past the horizon year of 2035 is referred to as "General Plan Buildout." Designation of a site for a certain use does not necessarily mean that the site will be built/redeveloped with the designated use by Plan Horizon in 2035.

The City Council called for no expansion of the City's SOI under the General Plan Horizon. It elected not to expand the SOI in part to fully develop Development Areas west and southwest of State Route 99, and to plan for the phased development of the Southeast Development Area (SEDA), formerly known as Southeast Growth Area (SEGA), which requires its development through adoption of a Specific Plan that includes comprehensive provision of public infrastructure. Portions of SEDA are anticipated to develop by 2035, with General Plan Buildout not occurring until 2050 or beyond.

The preservation of the SOI boundary for the General Plan not only serves to promote the successful development of SEDA, which will be built out over the longer term, but also will increase the opportunity to focus needed resources in Downtown and established neighborhoods, benefitting current home and property owners. Ultimately, it will lead to thoughtfully conceived and quality development in all Development Areas. In addition, the strategic investment upgrades to the City's surface water treatment facilities and distribution system, as well as the City's wastewater reclamation facilities and distribution system needed to serve the greater development capacities called for by this Plan can only be justified by a fixed SOI boundary over the planning period as noted by goals, objectives and policies in this Plan.

Two levels of development under the Plan are described below and analyzed in the accompanying MEIR:

General Plan Horizon (2035). The General Plan has a horizon year of 2035, which
means that figures for growth in residential units, non-residential square footage,

population, and jobs under the Plan are estimated through 2035. The Plan guides future development to Established Neighborhoods and Development Areas (see Figure 1-3: Residential Capacity Allocation) that include both sites within the current city limits and sites within the growth areas that require future annexation to the city, consistent with the adopted Alternative A modified, and as described in the Urban Form, Land Use, and Design Element. Even with complete development under this Plan Horizon of 2035, it is anticipated that some areas in the City's SOI will remain undeveloped.

General Plan Buildout (beyond 2035). After the 2035 horizon year, it is anticipated that the city will continue to develop beyond the General Plan Horizon. It will grow into the remaining portions of the SOI that were not developed during the horizon of the General Plan. Full Buildout of this SOI is anticipated to occur well after 2035, under the land uses, policies, and plans of this General Plan and as shown in Figure LU-1: Land Use Diagram.

The reason that two scenarios are contemplated and discussed is because the General Plan Land Use Diagram designates land uses for the entire SOI, and it is unlikely that all the vacant and underutilized land available to develop on within the City's SOI will be developed on by the year 2035, which is the extent of this General Plan, and so additional consideration must be given to the remaining vacant and underutilized land that will be available to build on after the year 2035. This Plan has been analyzed and presented under the General Plan Horizon development level. However, the MEIR analyzes the environmental impacts of the General Plan under the Buildout of the SOI, so the complete buildout figures of the SOI were used, as opposed to the figures for the horizon year of the Plan. Figures for both the Plan and the subsequent SOI development are presented on the following pages.

Residential Development

Table 1-2 provides the existing and additional housing units expected under the General Plan Horizon and the General Plan Buildout. As shown, approximately 191,000 units currently exist in the SOI. The Plan is intended to accommodate an additional 76,000 units. In total, General Plan Horizon will result in an estimated 267,000 housing units in the SOI by 2035. Around 32,000 of these new units would be located in the existing city limits, including Downtown (see Table 1-3). After the 2035 horizon of the General Plan, development will continue to occur in the SOI raising the estimated number of residential units to be built to 145,000. Complete Buildout will result in approximately 336,000 in the SOI. Around 55,610 of these new units would be located in the existing city limits, including Downtown (see Table 1-4).

Table 1-3 details the General Plan residential buildout capacity by housing type (multifamily and townhouse, or single-family) and location (inside City Limits or requiring annexation), as shown in Figure 1-3.

TABLE 1-2: RESIDENTIAL DEVELOPMENT CAPACITY UNDER HORIZON AND BUILDOUT¹

Residential Dwelling Units	General Plan Horizon	General Plan Buildout
Existing ²	191,000	191,000
Additional Capacity	76,000	145,000
Total Capacity	267,000	336,000

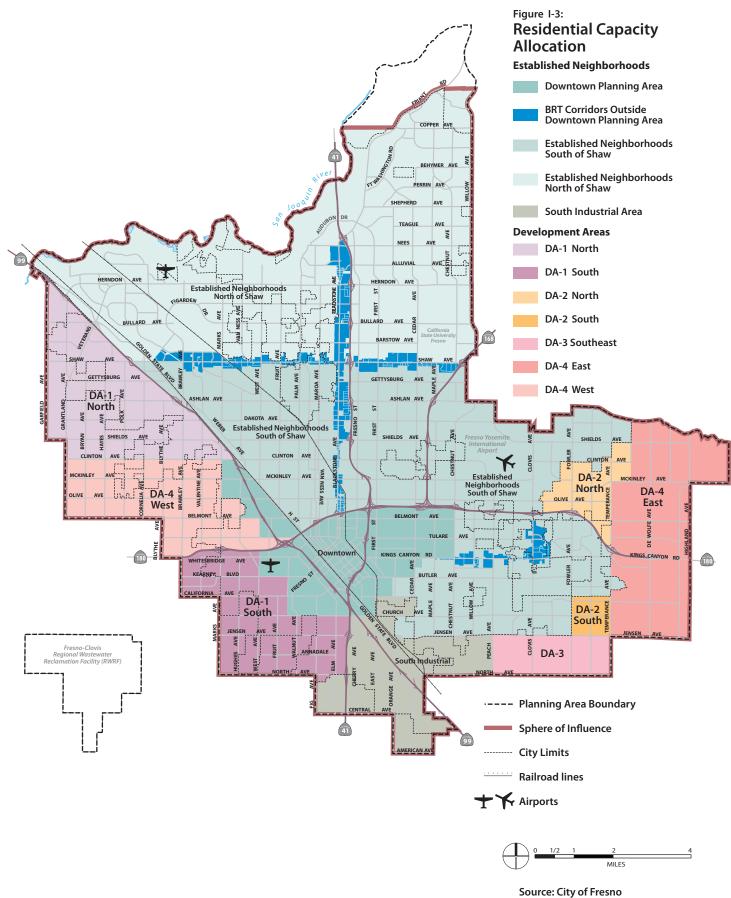
- 1. Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.
- 2. Existing dwelling unit count is based on the 2010 Census for dwelling units within the City Limits (approximately 171,000 dwelling units) added to the Fresno Council of Government informal aerial photo and census tract study estimate of 2010 population and dwelling units within the area located outside of the City Limits and inside the City's Sphere of Influence boundary (approximately 20,000 dwelling units) for a total of approximately 191,000 dwelling units.

TABLE 1-3¹: RESIDENTIAL DEVELOPMENT CAPACITY² UNDER GENERAL PLAN HORIZON

Area ³	Type of Dwelling Unit		Location of Dwelling Unit		Total	
	Multi-family and Townhouse	Single- family	Development on Sites in Current City Limits	Development on Sites in Growth Areas Requiring		
			2.222	Annexation		
Downtown Planning Area	7,800	1,200	9,000	0	9,000	
BRT Corridors	6,000	0	6,000	0	6,000	
Established Neighborhoods South of Shaw	4,700	3,000	5,700	2,000	7,700	
Established Neighborhoods North of Shaw	4,000	2,400	6,200	200	6,400	
South Industrial	0	0	0	0	0	
DA-1: North	6,500	10,500	2,600	14,400	17,000	
DA-1: South	4,000	6,500	2,500	8,000	10,500	
DA-2: North	500	2,000	0	2,500	2,500	
DA-2: South	500	1,500	0	2,000	2,000	
DA-3: Southeast	2,500	3,500	0	6,000	6,000	
DA-4: East	5,100	3,800	0	8,900	8,900	
DA-4: West	0	0	0	0	0	
Sub Totals	41,600	34,400	32,000	44,000	76,000	
Total Dwelling Units under General Plan Horizon	76,0	000	76,0	00		

- 1. Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.
- 2. The term "capacity" is intended to mean a Development Area's ability to accommodate a specified number of units and is not intended to indicate the number of actual units built.
- 3. DA is Development Area. See Figure I-3: Residential Capacity Allocation.

Source: City of Fresno and Dyett & Bhatia, 2014.



Note: The Corridor alon

Note: The Corridor along Shaw Avenue is to be supported by enhanced bus service. Table 1-4 presents residential dwelling unit capacity by Development Area in General Plan Buildout, which is beyond 2035. An additional 55,610 residential units are projected to develop in the City Limits, while 89,764 units are projected to develop in Growth Areas requiring annexation, for an additional 145,374 residential units in the SOI at the end of General Plan Buildout. The analysis relied on vacant land sites available for all areas of the SOI, except for the BRT corridors which relied on a residential capacity analysis of existing commercial built land on BRT corridors, and the Downtown Planning Area which is based on projections.

TABLE 1-4 ¹ : RESIDENT BUILDOUT (BEYOND 2		NT CAPACITY UI	NDER
Area ²	Number of Dwelling Units on Sites in Current City Limits	Number of Dwelling Units in Growth Areas Requiring Annexation	Total
Downtown Planning Area	10,000	0	10,000
BRT Corridors	10,471	0	10,471
Established Neighborhoods South of Shaw	8,925	2,227	11,152
Established Neighborhoods North of Shaw	9,017	486	9,503
South Industrial	7	0	7
DA-1: North	7,072	18,723	25,795
DA-1: South	9,085	11,564	20,649
DA-2: North	52	2,996	3,048
DA-2: South	206	2,238	2,444
DA-3: Southeast	0	9,092	9,092
DA-4: East	0	35,008	35,008
DA-4: West	775	7,430	8,205
Total Dwelling Units under Buildout	55,610	89,764	145,374

^{1.} Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

Source: City of Fresno.

Horizon and Buildout Population

The existing and estimated future population figures are presented in Table 1-5 for both the General Plan Horizon and General Plan Buildout.

The city's population of 495,000 in 2010 represents a 16 percent increase over its 2000 population of 428,000—an annual growth rate of 1.25 percent. The entire SOI had a 2010 population of 545,000, so around 50,000 people live in unincorporated land within the SOI. The General Plan Horizon will accommodate a population of approximately 226,000 new residents by 2035 within the SOI, resulting in a total

^{2.} DA is Development Area. See Figure I-3: Residential Capacity Allocation.

¹ Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

population of 771,000 and an average annual growth rate of 1.24 percent. Meanwhile, General Plan Buildout anticipates an additional 425,000 new residents over the existing population by an unspecified date within the SOI, resulting in a total population of 970,000.

TABLE 1-5 ¹ : POPULATION ESTIMATE UNDER HORIZON AND
BUIL DOUT

Population	General Plan Horizon	General Plan Buildout
Existing ²	545,000	545,000
Additional Estimated	226,000	425,000
Total	771,000	970,000

^{1.} Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

Source: City of Fresno.

Non-Residential Development

The amount of new non-residential development expected under General Plan Horizon and General Plan Buildout are detailed in Table 1-6. Under the General Plan Horizon, an estimated 55,000,000 square feet of non-residential use capacity is calculated as possible by 2035, while nearly 104,000,000 square feet of non-residential use capacity above current levels (approximately 49,000,000 square feet more than the 2035 horizon) is anticipated under General Plan Buildout. The new space is fairly evenly split between retail, office, and other uses (industrial, research and development, flex space, etc.).1

TABLE 1-6¹: ADDITIONAL ESTIMATED NON-RESIDENTIAL FLOOR AREA UNDER HORIZON AND BUILDOUT

	Additional Floor Area Above Current Levels In Square Feet	
Туре	General Plan Horizon	General Plan Buildout
Retail ²	10,925,293	20,613,762
Office ³	18,334,371	34,593,153
Industry and Business Parks4	25,759,611	48,603,040
Total	55,019,275	103,809,955

^{1.} Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

Source: City of Fresno and Dyett & Bhatia, 2014.

^{2.} Existing Population includes the entire SOI area population from 2010 Census Data.

^{2.} Sum of commercial floor area plus 50 percent of non-residential CMX floor area, 80 percent non-residential NMX floor area, 87.5 percent of non-residential RMX floor area, and 10 percent of BP/RBP floor area.

^{3.} Sum of office floor area plus 50 percent of non-residential CMX floor area, 20 percent non-residential NMX floor area, 12.5 percent of non-residential RMX floor area, and 60 percent of BP/RBP floor area.

^{4.} Sum of light and heavy industry land use floor area plus 30 percent of BP/RBP floor area.

¹ Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

Horizon and Buildout Employment and Jobs/Resident Balance

A city's ratio of jobs/employed residents would be 1:1 if the number of jobs in the city equaled the number of employed residents. In theory, such a balance would eliminate the need for commuting outside of the city for employment opportunities. More realistically, a balance means that in-commuting and out-commuting are matched, leading to efficient use of the transportation system, particularly during peak hours.

At the Horizon Year of 2035, the General Plan can accommodate 0.48 jobs per new resident, roughly equivalent to the current percentage of the city's population in the labor force (46 percent according to the 2010 US Census). Therefore, at General Plan Horizon, the SOI could accommodate approximately a total of 108,000 new jobs above current levels based on 0.48 jobs per 226,000 new residents anticipated by 2035 (see Table 1-5 for population). These new jobs would be roughly broken down into:

- Retail = 50,000 new jobs
- Office = 32,500 new jobs
- Other = 25,500 new jobs

At General Plan Buildout, well after 2035, it is estimated that there would be 0.45 jobs per new resident, roughly equivalent to the current percentage of the city's population in the labor force (46 percent according to the 2010 US Census). At General Plan Buildout, the SOI could accommodate approximately a total of 189,500 new jobs above current levels based on 0.45 jobs per 425,000 new residents anticipated (see Table 1-5 for population). These new jobs would be roughly broken down into:

- Retail = 87,700 new jobs
- Office = 57,000 new jobs
- Other = 44,700 new jobs

1.4 PLAN ORGANIZATION

General Plan Structure

The General Plan is organized into the following elements:

- Introduction. This introductory element includes General Plan goals, State
 requirements, and requirements for administration of the Plan. In addition, the
 projected development under General Plan Horizon and General Plan Buildout are
 summarized, and overarching themes of the Plan are presented.
- Economic Development and Fiscal Sustainability. This element addresses strategies
 for the City to boost the strength and range of existing businesses, expand

- economic opportunities for current and future residents, and ensure the long-term ability of the City to deliver a high level of public services.
- Urban Form, Land Use and Design. This element provides the physical framework
 for development in the city. It establishes policies related to the location and
 intensity of new development, citywide land use and growth management policies.
- Mobility and Transportation. This element includes policies, programs, and standards to maintain efficient circulation for vehicles and alternative modes of transportation. It creates a framework for provision of Complete Streets; identifies future street and bikeway improvements; and addresses trails, parking, public transit, goods movement, and long-term plans for the municipal airport.
- Parks, Open Space, and Schools. This element provides an inventory of existing and
 planned parks, recreation facilities, other open space, and public schools, and
 defines policies and standards relating to these services and amenities. This element
 also outlines policies relating to the preservation of open space and natural
 resources.
- Public Utilities and Services. The element addresses the provision of police, fire, wastewater treatment, drinking water, drainage, and solid waste disposal services.
- Resource Conservation and Resilience. This element provides strategies for improving critical environmental conditions regarding air quality and greenhouse gas emissions, ensuring long-term water and energy supplies, and strengthening the city for potential future changes in resource supply and climate change. The element complies with the requirements of AB 170⁶ for jurisdictions in the San Joaquin Valley to amend their general plans to include goals, data and analysis, policies and feasible implementation strategies designed to improve air quality.
- Historic and Cultural Resources. This element provides policy guidance to protect, preserve, and celebrate the city's history and its architectural and cultural heritage.
- Noise and Safety. This element addresses the risks posed by geologic hazards, wildland fire, hazardous materials, and flooding. It also discusses emergency response, safety service response standards, and evacuation routes. The element also includes policies and standards to limit the impacts of noise sources throughout the city. Future noise contours are illustrated in order to facilitate administration of noise policies and standards.
- Healthy Communities. This element focuses specifically on subjects not fully
 discussed in other elements, in particular the relationships between the built,
 natural, and social environments, community health and wellness outcomes, youth
 leadership and community engagement, healthy food access, community gardens
 and urban agriculture.

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⁶ Assembly Bill 170, Reyes (AB 170), was adopted by State lawmakers in 2003, creating Government Code Section 65302.1.

- Housing Element Consistency. This chapter provides information regarding the
 consistency between the General Plan and the adopted Housing Element, including
 a matrix showing how the General Plan consistently implements the requirements
 of the Housing Element.
- **Implementation.** The Implementation element provides an implementation and monitoring program for this General Plan.

Structure of the Elements

Each element of the General Plan typically contains:

- *Introduction* to provide a short overview of the element;
- Goals of the General Plan supported by the particular element;
- General background information and supporting narrative to provide context;
- Objectives that provide intermediate steps toward attaining the goals;
- Policies to guide decision making and commitment to particular actions to implement the objectives, which may include existing programs or call for the establishment of new ones; and
- Commentary or Policy Guidance to further discuss and clarify certain policies.

The Housing Element Consistency chapter varies somewhat from this format by focusing on how the General Plan's goals, objectives and policies are consistent with the existing Housing Element, which has already been adopted and is incorporated into this Plan. The Implementation Element also has a different format to show how each policy has an implementation measure, including an action, procedure or program or technique that carries out the policy.

Together, the goals, objectives and policies articulate a vision for Fresno that the Plan seeks to achieve. They also provide protection for the city's resources by establishing planning requirements, programs, standards, and criteria for project review.

Understanding the Plan

To help understand how this Plan is intended to be applied, consider the following when reading this document:

Mandatory and Flexible Directives: Terms in goals, objectives, policies and implementation measures such as "shall," "must," and "require" signify an unequivocal directive, which shall be narrowly construed. Any other language such as "may" or "should" signifies a less rigid directive, to be implemented in the

absence of compelling or contravening considerations. Unless clearly identified as an unequivocal directive, terms should be interpreted to be a flexible directive.

- **Consistency:** Goals, objectives, policies and implementation measures should not be interpreted so broadly or narrowly such that they become inconsistent with one another or the law. One way to do this when reviewing the Plan is to mentally add "as otherwise consistent with the Plan and as authorized by law" to every policy or other item.
- Priorities: Some objectives, policies, etc., may identify certain items as being a priority or prioritized, and sometimes multiple priorities are identified for the same subject matter. A "priority" in an unequivocal directive means the topic must be considered, along with any other priorities for the same subject matter, before a decision is reached. It does not require precedent over another item or priority for the same subject matter.
- **Commentary:** The commentary in italics following certain goals, objectives and policies is not part of the goal, objective or policy itself, but is instead advisory and informational narrative intended to further discuss and clarify the goal to help guide the objectives of the General Plan. The same applies to commentary in italics following certain objectives and policies, which is not part of the objective or policy, is instead advisory and informational narrative intended to help guide the understanding and relevancy of the General Plan.
- Narrative: Any discussion that is not a goal, objective, policy or implementation measure is considered to be narrative. Narrative includes background information, pictures, illustrations, italicized commentary and other discussion to provide basic context. Often the narrative may contain illustrations or discussions generally explaining certain principles or concepts. These are not requirements of the General Plan, unless otherwise the items are independently required by a goal, objective, policy or implementation measure. Other than the discussion in this "Understanding the Plan" section, narrative cannot be used to vary, expand or restrict any goal, objective, policy or implementation measure.
- **Glossary:** The Glossary defines terms and phrases. The narrative can potentially expand the context of terms and phrases to the extent the narrative is not inconsistent or acts to otherwise vary, expand, or restrict any goal, objective, policy or implementation measure.
- Language of Approximation: Terms such as "about," "approximately" or "roughly" are intended to be utilized flexibly, and should not be read to either represent a

⁷ The following Figures and Tables, as may be amended from time to time, are policies – even if not specifically referenced by an individual policy: Figure LU-1; Figure LU-2; Figure MT-1; Figure MT-2; Figure MT-4; Figure POSS-1; Figure POSS-2; Figure POSS-3; Figure NS-2; Figure NS-3; Figure NS-4; Figure NS-5; Figure NS-6; Figure NS-7; Figure NS-7; Figure NS-8; Figure NS-8; Figure NS-8; Figure NS-9; F 1; Figure 1M-2; Table 3-1; Table 3-3; Table 4-1; Table 9-2; Table 9-3; Table 11-3; Table 11-4; Table 11-5; Table 11-7; Table 1 8; Table 11-9; Table 11-10; Table 11-11; Table 11-12; Table 11-13; Table 12-1.

specific amount or to mandate ratios or a particular margin of variation. Further, such terms should not be read to imply a specific timeline requirement for implementation of goals and objectives. Rather, all goals and objectives are generally expected to be complete at or near the close of the General Plan Horizon in 2035.

- Titles: Titles have sometimes been provided for programs, regulations, ordinances
 or other items anticipated to be approved at some future date. These titles are for
 informational purposes only, and a different title may be used if the program or
 ordinance otherwise meets the underlying intent of the goal, objective, policy or
 implementation measure.
- Reasonableness: The Plan should be read to provide the City with the greatest
 discretion as to what is reasonable or appropriate under applicable law. For
 example, if a policy requires the City to take action "as resources are available," the
 City is solely responsible for determining what is reasonably available. In making
 this determination, the City may look at a variety of factors including this Plan and
 public health, welfare and safety.

Administration of the Plan

The General Plan is intended to be a dynamic document. As such, it may be subject to more site-specific and comprehensive amendments over time, including mandatory amendments to update the Housing Element as required by law, amendments that may be needed to conform to State or federal law passed after adoption, or to eliminate or modify policies that may become obsolete or unrealistic over time due to changed conditions, such as the completion of a task or project, development on a site, or adoption of an ordinance or plan.

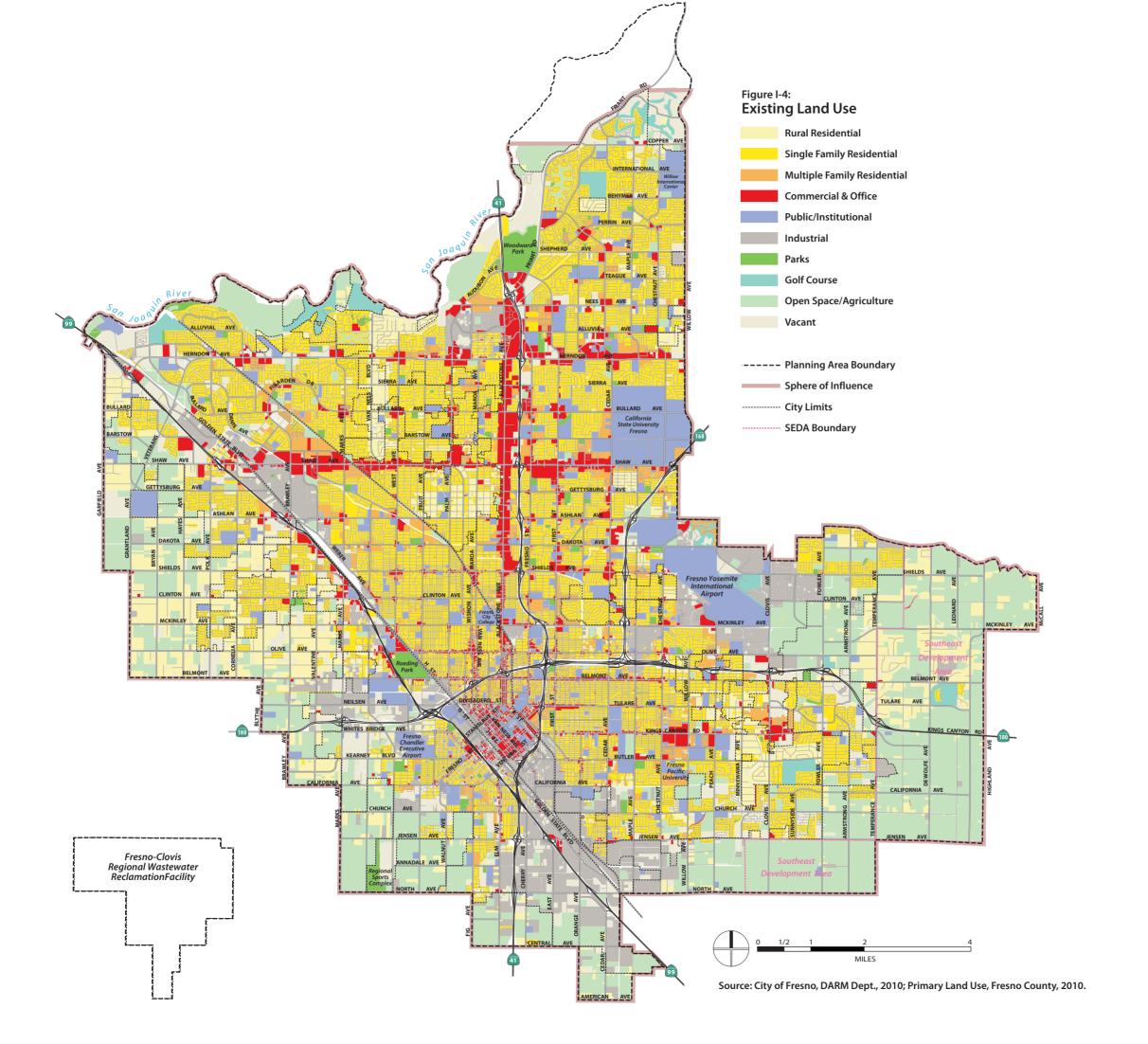
Annual Report

It is good planning practice to provide an annual report to the local legislative body on the status of the General Plan and progress in its implementation. This report provides an opportunity to investigate and make recommendations to the legislative body regarding reasonable and practical means for implementing the Plan, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the Plan. The report should include a summary of all Plan amendments adopted during the preceding year, as well as a work program for the upcoming year. The work program should outline upcoming projects and any Plan issues that need to be addressed.

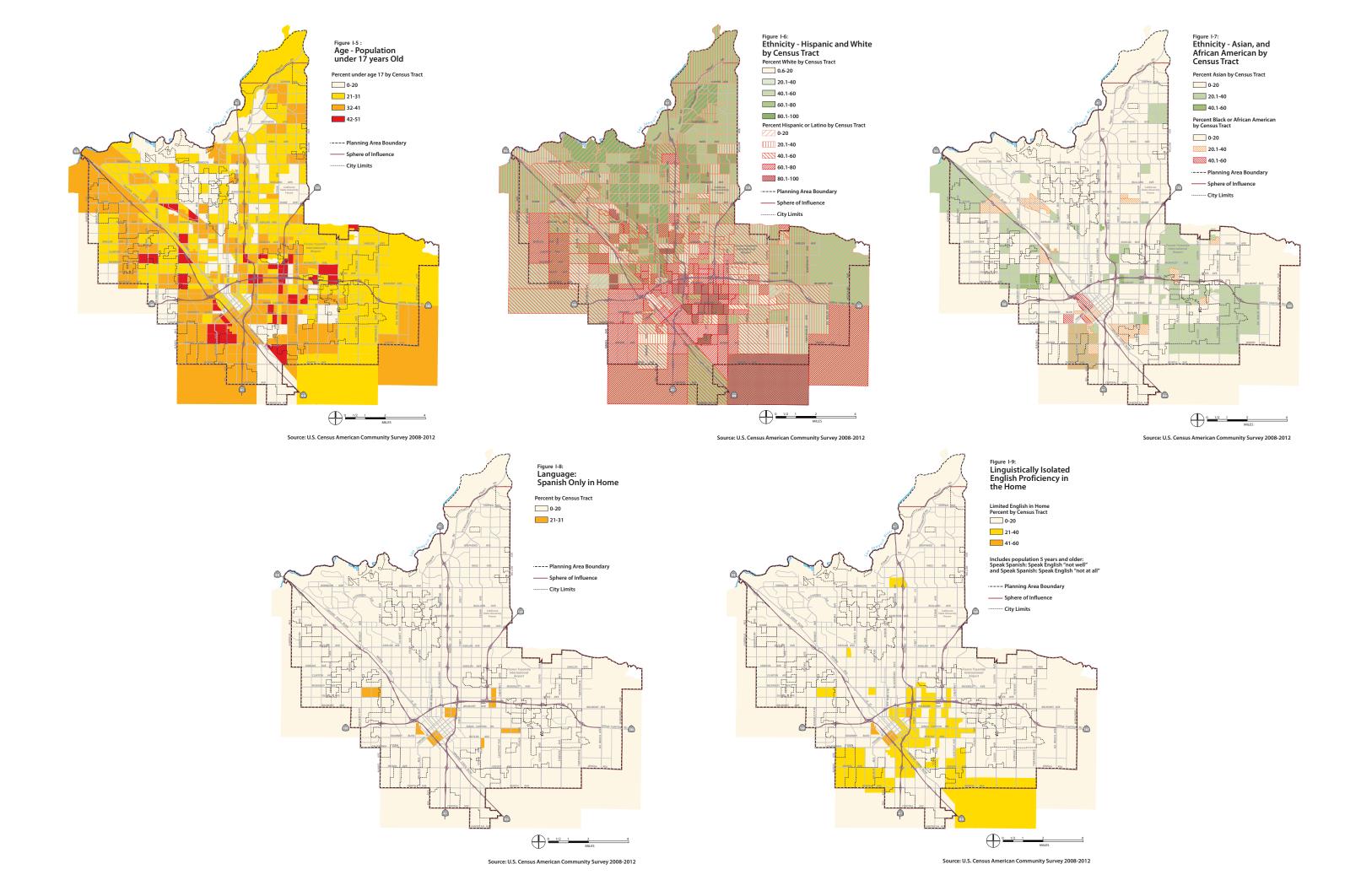
All cities must submit an annual progress report to the State on Housing Element implementation, which must include an analysis of the progress in meeting the city's share of regional housing needs and local efforts to remove governmental constraints to maintenance, improvement, and development of workforce housing (California Government Code Sections 65583, 65584). City staff will continue to submit the Housing Element report to the State annually.

1.5 PLANNING FACTOR FIGURES

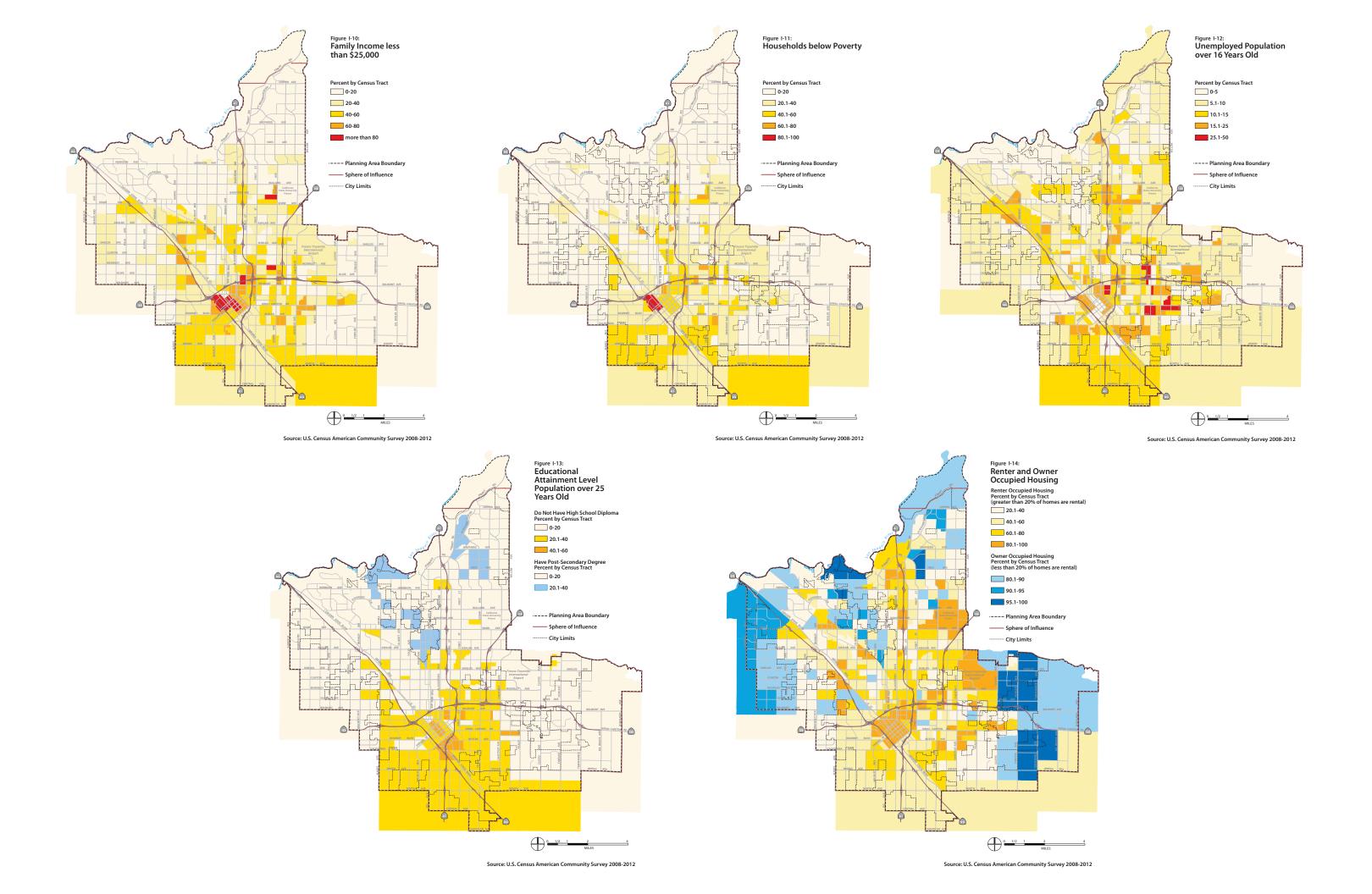
On the following pages are figures (Figures 1-4 through 1-14) showing key planning factors that guided policy development for this General Plan, including existing land use, socioeconomic factors, and housing ownership.



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2 ECONOMIC DEVELOPMENT AND FISCAL SUSTAINABILITY

Fresno's economy plays a crucial role in the physical development of the Planning Area and the City's ability to support implementation of General Plan policies and programs. The City is committed to economic development and fiscal sustainability. In fact, the outcome of many other General Plan initiatives is tied to the city's economic success. More specifically, to further this commitment, this element focuses on improving the business climate, retaining local businesses, developing a high-skilled labor force, attracting new industries, supporting the tax base, and sustaining the City's ability to provide public services for current and future residents.

2.1 INTRODUCTION

Fresno has a substantial array of opportunities to act upon for long-term economic development and job creation potential. These include its strategic geographic location within the California market, world-class agriculture industry, urban water resources, and the ability to capitalize on renewable energy and energy efficiency opportunities, as well as further the initiatives that the Swearengin Administration has put into place. There are, however, a growing number of severe conditions and challenges that must be addressed and successfully overcome to realize Fresno's future economic potential and ensure fiscal sustainability over the long term. These opportunities and issues represent major themes for this element and will involve:

- Responding to the city's relatively low household income and high rates of poverty, and the related importance of education and workforce development for raising income and quality of life in the long term;
- Expanding the export oriented industry sectors that build on Fresno's inherent strengths, such as agricultural and food value industries, and the potential of leveraging key assets, such as the Downtown, California State University, Fresno, and similar institutions of higher education;
- Understanding the relationship between the City's fiscal health, capacity for action, and economic development policies in the General Plan; and
- Formulating appropriate economic development policies to support job creation for all Fresno residents.

This General Plan recognizes that solutions to current fiscal problems must be structural and long-term, as opposed to merely deferring costs or increasing debt. The policies in this element are intended to support the City's fiscal health and the long-term viability of employment, housing, education, civic and cultural programs in Fresno - all of which require the delivery of efficient and effective municipal services from the City of Fresno.



Entertainment and recreation facilities, such as Chukchansi Park pictured above, are some of the key assets that play an important role in improving the quality of life in Fresno and the economic vitality of the city. Photo: Don Davis

Relationship to City of Fresno General Plan Update Goals

The objectives and policies in this element support a wide range of General Plan goals. In particular, this element supports the following General Plan goals:

- 1. Increase opportunity, economic development, business, and job creation.
 - Use urban form, land use, and Development Code policies to streamline permit approval, promote local educational excellence and workforce relevance, significantly increase business development and expansion, retain and attract talented people, create jobs and sustained economic growth, strategically locate employment lands and facilities, and avoid the over-saturation of a single type of housing, retail or employment.
- 12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.

¹ The commentary in italics following certain goals is not part of the goal itself, but is instead advisory and informational language intended to further discussion, clarify the goal, and help guide the objectives of the General Plan.

Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure, risks to service continuity, desired standards of service to meet quality-of-life goals, and required infrastructure to support growth, economic competitiveness and business development.

Key Economic Factors

The city and surrounding areas are expected to continue experiencing high rates of population growth over the planning horizon of this General Plan, although this growth is expected to be at half of the rate as that of the past 30 years. The overall county population, including that of the city, is projected to increase in age and become increasingly Hispanic or Latino in composition, trends that create new leadership opportunities and economic possibilities.

Fresno's population has low rates of income in comparison to the rest of California. In fact, Fresno has a poverty rate twice as high as the State and 14 percent higher than Fresno County. Its extreme poverty (family income less than \$10,000) rate is more than double that of the State. In addition, the percentage of families receiving food stamps is significantly higher in the city than that of the state. Table 2-1 provides details.

Related, the city also has a relatively low level of education attainment, as shown in Table 2-2, with fewer than six percent of the labor force holding graduate or professional degrees, about half the statewide rate. The proportion of the labor force with bachelor's degrees is about two-thirds that of the State average. In addition, one quarter of the city's labor force never graduated from high school. This is 25 percent higher than the State percentage. These characteristics are reflected in Fresno's low median household income and per capita income that are both 35 percent below the State average. These linked factors impact the City's main revenues—sales tax and property tax—and directly affect economic development. To put it in actual dollars, per capita, city residents have \$9,910 less to spend yearly compared to their State counterparts, and \$995 less than Fresno County residents. Per family, the amount is \$23,172 less per year compared to their State counterpart.

TABLE 2-1: INCOME COMPARISONS				
Family/Per Capita Income	City of Fresno	Fresno County	California	
Median Family Income	\$44,286	\$49,177	\$67,458	
Families with Income Below Poverty Level	25.1%	22.0%	12.3%	

Family Income Less than \$25,000	30.2%	26.4%	16.6%
Family Income Less than \$10,000	10.0%	8.4%	4.6%
Families with Food Stamp Benefits	21.2%	18.4%	8.3%
Per Capita Income	\$18,666	\$19,621	\$28,576

Source: U.S. Census 2010-12 American Community Survey

TABLE 2-2: EDUCATION LEVEL COMPARISONS				
Education Level	City of Fresno	Fresno County	California	
Less than 9 th Grade	14.3%	16.3%	10.3%	
9 th to 12 th No Diploma	11.2%	10.7%	8.6%	
No High School Diploma (Total)	25.5%	27.0%	18.9%	
High School Diploma or Equivalent	23.6%	22.8%	20.8%	
Bachelor's Degree	13.7%	13.0%	19.4%	
Graduate or Professional Degree	5.7%	6.1%	11.1%	

Source: U.S. Census 2010-12 American Community Survey.

Labor Force

Fresno's labor force as a percentage of the total population remained relatively steady over the past decade, then began slightly declining after the 2008 recession, indicating that many adults have been dropping out of the work force or are no longer searching for work. At the same time, the city has suffered job losses and watched its unemployment rate markedly increase, which has contributed to discouragement amongst the labor force. However, as of September 2014, the unemployment rate in the City has fallen to 8.9 percent.

A contributing factor to Fresno's declining labor force appears to be the mismatch between available jobs and the skills of the available labor force. The recent economic downturn has not had an equal effect on all sectors of the economy. In many cases, the sectors suffering the most losses are those that require low-skill labor—jobs that fit the educational attainment of many of Fresno's workers. A February 2011 article in the Washington Post reported that while Fresno's unemployment was then at 16.9 percent, "managers at the 7,000-employee Community Medical Centers say they cannot find enough qualified technicians, therapists, or even custodians willing and able to work with medical waste. The situation is much the same at Jain Irrigation, which cannot find all the workers it wants for \$15-an-hour jobs running expensive machinery that

spins out precision irrigation tubing at 600 feet a minute, 24 hours a day, 7 days a week."²

One positive aspect of this trend is that the city is still adding jobs that pay living wages, are career-oriented positions, and require specialized skills or training. Ultimately, it is precisely these types of jobs that will buoy the city's long-term economic base. At the same time, much of the current workforce is not equipped for these positions, pointing to the need for a significant and long-term focus on workforce training and education. Fresno Regional Workforce Investment Board, California State University, Fresno, Fresno Pacific University, State Center Community College District (SCCCD), West Hills Community College District (WHCCD), the local school districts, and the many private technical and educational institutions are among the region's most important assets. Together, they are providing training beyond high school to almost 100,000 Fresno Area residents each year (See Table 2-3). The Fresno Area is the "education capital" of the Central San Joaquin Valley because of its education and training infrastructure. These institutions are doing a significant amount to address the region's "skills gap" issue, but this must continue to be the area's top economic development priority for the next decade or more.

TABLE 2-3: VALLEY HIGHER EDUCATION IN	ISTITUTIONS
Institution	Number of Students
California State University, Fresno	21,728
Fresno Pacific University	2,649
State Center Community College District (SCCCD)	
Fresno City College	33,763
Reedley College	8,839
Willow International	8,155
Madera Center	4,118
Oakhurst	1,033
SCCCD Sub Total	55,908
West Hills Community District (WHCCD)	
Coalinga	3,830
Firebaugh	2,860
Lemoore	7,557
Lemoore/NAS	170
WHCCD Sub Total	14,417
Grand Total	94,702

Source: Fresno Works. Expression of Interest for CAHSR, Heavy Maintenance Facility. 15 January 2010.

² Fletcher, Michael. "Why does Fresno have thousands of job openings – and high unemployment?" *The Washington Post.* 2 February 2011.

Jobs and Employment

The growth potential for Fresno's major employment sectors was an important economic factor used for programming land use and development under this General Plan. Table 2-4 shows employment projections by economic sector for the city as well as Fresno County.

The current and future health of the real estate market to support those sectors is important, as well as the fiscal impact of those uses on the City's budgetary ability to maintain high levels of services and overall quality of life for residents. Generally, jobs in health and professional services, educational services, manufacturing (including water technology and food manufacturing), information technology, government, and finance are relatively high-income jobs that support a growing economy. In contrast, lower skill jobs in retail, wholesale trade, and hospitality services may also support the economy, but are characterized by much lower pay scales.

	ISONS	COMPAR	TABLE 2-4: ECONOMIC SECTOR
Difference +/-	Fresno County	City of Fresno	Economic Sector
4.8	10.7%	5.9%	Agriculture
0.4	5.7%	5.3%	Construction
0	6.8%	6.8%	Manufacturing
0.4	4.1%	3.7%	Wholesale trade
-1.0	11.0%	12.0%	Retail trade
0	5.1%	5.1%	Transportation and warehousing
-0.1	1.4%	1.5%	Information
-1.0	5.1%	6.1%	Finance and insurance
-0.7	8.4%	9.1%	Professional, scientific, and management
-1.2	22.7%	23.9%	Educational services, and health care
-1.7	8.4%	10.1%	Arts, entertainment, and food services
-0.3	4.8%	5.1%	Other services, except public administration
0.2	5.8%	5.6%	Public Administration
	5.1% 1.4% 5.1% 8.4% 22.7% 8.4% 4.8%	5.1% 1.5% 6.1% 9.1% 23.9% 10.1% 5.1%	Transportation and warehousing Information Finance and insurance Professional, scientific, and management Educational services, and health care Arts, entertainment, and food services Other services, except public administration

Source: U.S. Census 2010-2012 American Community Survey.

Direct and indirect employment in production agriculture and finished food products remains the economic base of the San Joaquin Valley—the most productive food and beverage producing region in the country and a critical area for the nation and world's food supply. Fresno County is at the heart of the Valley and still sees a significant number of its jobs in the agricultural sector—both in direct farming and in related food processing, storage, and shipping. Total farm employment in Fresno County in 2013 was 49,200 jobs.³ While employment in this industry is projected to decrease to approximately 11.7 percent of total jobs by 2020, because of its job multiplier effect, the

³ State of CA. Employment Development Department, Labor Market Information, Fresno County, 2013.

sector still retains its importance and is expected to remain an important driver of related industries moving forward.

A balance of jobs across all industry sectors throughout the county ensures that jobs are offered across the income spectrum and support all aspects of a healthy local economy. The strong industries identified above—government, healthcare, and others—provide a range of middle-class, living wage jobs. Table 2.5 shows a range of other industries that generally pay high salaries and provide opportunities for career advancement are Financial Activities (3.7 percent of jobs in 2010), Information (0.9 percent), Education Services and Healthcare (11.2 percent), Professional and Business Services (7.3 percent), and Manufacturing (6.6 percent). While this data is for the entire county and these sectors do not currently represent a very high percentage of total jobs, except for manufacturing and financial activities, all are projected to increase its share over the next decade. Since the large majority of the county's job base is located in the city, this is an encouraging statistic for the city. Fresno's challenge will be to continue to attract high-skilled workers—and to improve training of workers already here to be able to meet the demands of these jobs.

Fresno still must seek to diversify its economic base into other sectors to meet job creation goals, keep revenue local, and fully serve the population. One of the primary factors for doing this, and a critical contingency in expanding existing industries and developing new ones, is the education and skill level of the local workforce. The General Plan includes policies and implementation strategies that support expanding economic activity, but the quality and wage levels of the jobs will be related to the capacities and competencies of the workforce to meet the demands of business and industry.

TABLE 2-5: EMPLOYMENT PROJECTIONS BY TYPE, FRESNO COUNTY ¹				
Total	Annual Average Employment		Growth	
	2010	2020		
Total Employment	364,200	423,100	58,900	
Self-Employment	28,400	30,900	2,500	
Unpaid Family & Private Household Workers	10,300	11,700	1,400	
Total Farm	46,000	49,400	3,400	
Total Nonfarm	279,500	331,100	51,600	
Industry		Percent of Total Employment		
	2010	2020		
Construction	3.3%	4.4%	1.1%	
Manufacturing	6.6%	6.2%	-0.4%	
Trade, Transportation, and Utilities	15.1%	15.5%	0.4%	
Information	0.09%	0.09%	0%	
Financial Activities	3.7%	3.5%	-0.2%	
Professional and Business Services	7.3%	8.0%	0.7%	
Education Services, Health Care, and Social Assistance	11.2%	12.0%	0.8%	
Leisure and Hospitality	7.4%	7.9%	0.5%	
Other Services	2.7%	2.7%	0.0%	
Federal and State Government	5.8%	5.2%	-0.6%	
Local Government	12.6%	11.9%	-0.7%	
Subtotal	76.7%	78.2%	1.5%	
Self-Employment, Family Workers, and Private Household	10.6%	10.1%	-0.5%	
Total Farm	12.6%	11.7%	-0.9%	
Subtotal	23.3%	21.7%	1.6%	
Total	100.0%	100.0%		
Totals may not sum precisely due to rounding.				

Source: California Employment Development Department, 2013.

Obstacles to Job Creation

The 2012 Fresno County Employment Study included input from 4,937 area employers within seven industry and two occupational clusters and documented numerous obstacles that employers identified as constraints to doing business, expanding business, and creating more jobs. Twenty-four percent of respondents cited "market conditions" as an impediment, including a tight banking climate, low sales, and customers' difficulty in accessing financing. Labor availability and cost was identified by 18 percent of respondents, including lack of qualified workers for technical and high-skill positions, high turnover, job seekers' poor skills and lack of training, lending support to some of

the trends described earlier surrounding the labor force. Regulatory constraints were identified by II percent of respondents, including issues such as the permitting process, regulations continuing to change with no efficient way to stay informed, difficulty attaining air quality and emissions standards, and licensing and certification requirements. Sixteen percent felt constrained by the cost of doing business, mentioning cost of compliance, and costs associated with taxes, workers' compensation, healthcare, utilities, and labor.

Opportunities for Action

This General Plan seeks to improve Fresno's overall economic competitiveness by supporting employment opportunities for residents and maintaining and improving community livability. Expanding, retaining, attracting and creating businesses is one of the greatest challenges facing the city today.

Providing for Professional, High-Paying Jobs

There is a connection between the education level of the work force and our ability to support the economy required for resilient land use and a healthy built environment. The lack of high-tech, professional, high-paying jobs is leading to the departure of educated people from the city. Young people often leave Fresno for higher education or career opportunities and do not come back. Recent efforts to stem this outflow and retain local talent have been successful, including the Creative Economy Council, Creative Fresno, FLYP (Fresno's Leading Young Professionals), Creative Fresno's Boomerang Project, and Bitwise, a private business incubator.

Traditional and Emerging Industries

Industries well-suited to Fresno's location and workforce include agricultural technologies, supply chain management, agricultural services (brokering and export), food innovation and processing facilities, water technology, and other precision manufacturers. A recent boost in medical industries is a trend worth supporting, as is the developing concentration of green industries in the region, such as solar, biofuels, recycling and other forms of alternative energy. Another bright spot are tech start-ups. Bitwise Industries opened in the summer of 2013, and as of 2014, its 8,000 square-foot building is filled with 24 small tech companies on its first floor, with 26 more on a waiting list. Their Geekwise Academy on the second floor has trained over 100 students in the basics of software coding and website development. From 2009 to 2014, the annual competition "59 Days of Code" provided an opportunity for Valley coders to access a world-class network of advisors to help with every aspect of business, to directly connect to seed and venture capital, and to show off the creative programmers located here in Fresno and the San Joaquin Valley.



The revitalization of Downtown Fresno is anticipated to boost the economic health and vitality of the city. Photo: Fresno Bee

Downtown Revitalization: A Positive Impact

Ongoing Downtown revitalization efforts have potential for a significant positive impact on the city's economy. A healthy and vibrant Downtown boosts the economic health and quality of life in a community. Specifically, it helps the city attract and retain "knowledge workers" who prefer a vibrant, urban center for their live/work/play spaces. A revitalized Downtown creates jobs, incubates small businesses, reduces sprawl, protects and improves property values, and increases the community's options for goods and services. In the case of Fresno, it will also increase the property values of currently vacant or underutilized land, thereby increasing tax revenues. In other vibrant cities, downtowns are a symbol of community pride and history.

As shown in Table 2-6, the magnitude of reinvestment in Downtown is projected to account for about 31 percent of the city's total office growth, 21 percent of total retail growth, and 14 percent of total housing unit growth within the 2035 planning horizon for the General Plan. This General Plan anticipates and supports the revitalization of Downtown by targeting infill development in Downtown and along the major corridors within the city. It is anticipated that a subsequent community plan, such as the proposed Downtown Neighborhoods Community Plan and the Fulton Corridor Specific Plan, may further refine and implement a strategic development and regulatory plan for Downtown to support this projected growth.

TABLE 2-6: LAND USES IN 2035 - PERCENTAGE OF FLOOR AREA IN DOWNTOWN AND THE BROADER PLANNING AREA

Development Type	Downtown	Planning Area Outside Downtown
Office	31 %	69 %
Retail	21 %	79 %
Residential	14 %	86 %

Source: City of Fresno.

Role of the City

Overall, Fresno possesses a number of assets that make it attractive to business and industry. These include its central location on the West Coast and access to major transportation corridors; airports; affordability; good neighborhoods; and training and educational opportunities that occur at institutions such as California State University, Fresno. The key to capitalizing on these assets is to market them effectively.

Looking ahead, the City needs to continue to take an active role in supporting local businesses and expanding and attracting both traditional and emerging industries. Cities throughout the Western U.S. are competing for employers. So, Fresno needs to be aggressive in marketing itself and be accommodating to businesses, with development permitting processes that are easy to navigate, streamlined, predictable, and priced competitively with other comparative cities. One way to support expanding industry in Fresno is to identify and reserve large areas of land with state route and railroad access for industrial development and provide infrastructure to these areas: water, sewer, roads, and Information Technology (IT) capability, including fiber connectivity.

Priorities set in the General Plan include creating new, large employment areas targeted for development, as shown on Figure LU-I: Land Use Diagram. There are an estimated 3,625 acres of vacant land in six clusters within the planning area, out of a total of approximately 5,000 acres of vacant industrial and business park designated land, which are being assessed as to the cost of major street and utility infrastructure improvements. Existing industrial areas also need to be cleaned-up; in some cases, physical and technology infrastructure need to be improved and landscaped so there is better "curb appeal" and productivity capabilities. This will help attract research and development and other professional industries.

Defining an Economic Development Strategy

A coordinated economic strategy is essential to support the City's economic development objectives. Such a strategy includes initiatives targeted to specific economic sectors of the local economy, a managed program of fiscal development,

strategic public improvements, and a balanced approach to land use, consistent with the goals, objectives and policies of the Plan.

In 2010 and again in November 2013, Mayor Swearengin outlined the City's economic development plan to the City Council. The plan notes the difference between "primary" and "secondary" industries in the Fresno region. Primary industries are defined as those that export products and services outside the local economy and, as a result, have the highest job multiplier effect and best economic impact on the city. Secondary industries are defined as "people serving" industries (e.g. residential development, retail, etc.) that generate a level of economic activity, but do not tend to drive the major improvements needed in the local economy, such as lowering unemployment or improving wage levels.

The City's economic development plan recognizes that different strategies are needed to support differing types of industry segments, whether they are "exporting" or "people serving." Table 2-7 provides a useful description of targeted, export-oriented businesses, which are the primary focus of the City's economic development plan.

TABLE 2-7: SCREENING CRITERIA FOR TARGETED INDUSTRIES		
Economic Characteristics	Business Firm Characteristics	
Above average wages	High value added; may include training for workers	
Employs local residents	Labor-intensive	
Basic sector or primary engine of growth ¹	Purchases local goods and services	
Labor or service driven Requires minimal public investment		
Large investment per employee ²		

Basic sector and primary growth businesses typically generate secondary uses and are export oriented. They
cater to the region, rather than just the local market. For example, a company manufacturing automobiles would
require suppliers and distributors (thus generating secondary businesses), while a car dealership is local
serving and generates few (if any) secondary uses. Earnings generated are forwarded outside the region.

Source: Dyett & Bhatia, 2014.

The components of the City's economic development plan include:

Strategies to Support the Expansion of "Export Oriented" (Primary) Industries

O Preparation of Industrial Land and Infrastructure. Activities include prioritizing industrial land in the General Plan; ensuring the City's water, wastewater and transportation capital improvement plans are aligned with servicing targeted industrial parts of the city; and supporting the private development of industrial parks, particularly with a focus on providing on-site, affordable, clean and renewable energy to the park locations. Financing for infrastructure

^{2.} Businesses with larger local investment tend to be more permanent.

will need to be secured, and major public infrastructure improvements can be made to achieve "shovel ready" sites that will attract desired and targeted industry and business park uses.

- Industrial Business Expansion and Retention. This is the "bread and butter" of a solid economic development program for any City. The City of Fresno has lacked regular communication with its major industrial businesses and, as a result, has missed opportunities to support the expansion of our existing industrial businesses. The City has now begun a communications program to make contact with industrial firms in the city to let them know of incentives that exist to expand their operations in Fresno. This effort was initiated on a pilot basis in March 2013 and has already yielded several expansion opportunities. If the City does nothing else in terms of economic development, this outreach to our existing industrial businesses must continue. It will most certainly reap opportunities for business expansion and job creation.
- O *Incentives.* Incentives for industrial expansion are difficult to come by in the State of California. However, the City of Fresno collaborated with Pacific Gas & Electric to establish a very powerful incentive in the Enhanced Economic Development Rate approved by the California Public Utilities Commission in early 2014. The incentive can be used to support business expansion, retention, and location. In addition, the City of Fresno has adopted an impact fee waiver for industrial development within city limits, which provides another tool to incentivize business expansion. Lastly, the State of California announced in April 2014 the *New Employment Credit* (NEC), which is a hiring credit for businesses in California communities with the highest rates of unemployment and poverty. Fresno was selected as one of the five Pilot Areas for this tax credit.
- o *Integrating the "Food Value Chain."* Following the example of several agricultural communities elsewhere in the state, the City will be taking its industry targeting one step further to capitalize on its strategic edge in agricultural-related employment. The idea is to more closely integrate businesses involved in food production, processing, storage, distribution, and marketing by working with current and potential employers to identify shared needs and resources. This will help support the expansion of Fresno's existing food "cluster" and the attraction of new businesses.
- O Business Trade Show. An early initiative to further enhance Fresno's food related industry is the launch of a trade show to support local food producers and manufacturers. Known as the Fresno Food Expo, the trade show attracts hundreds of buyers from retail, wholesale, and industrial markets all over the United States and several international locations. Now in its fourth year, the Fresno Food Expo has grown each year and provides area businesses the opportunities to pitch their products to some of the biggest food buyers in the

- world. As the Fresno Area food manufacturers are successful in growing their businesses and expanding their customer bases, the City of Fresno benefits from the additional jobs those businesses will create.
- Export Commission. The City's economic development plan also calls for the creation of an "export commission," which would be tasked with helping local businesses gain access to export markets they are not currently serving. This initiative is in development and will rely on involvement from the business community and local economic development organizations to be successful.
- O Investing in Human Capital: Workforce Development and Adult Education. The City's economic development plan recognizes the critical importance of workforce development and adult education to support economic development. The City works with the Adult Education Task Force, the Fresno Housing Authority, the Fresno Regional Workforce Investment Board, the Fresno County Economic Opportunities Commission, area school districts and community colleges, and local universities on a number of initiatives, including Learn2Earn to promote the expansion of adult education and job training.
- Efficient and Effective Development Processes. The City of Fresno has a direct role in how efficiently and effectively development applications are processed in the City. While a number of agencies and utilities are involved in approving and processing development within the city limits, the City of Fresno is the lead agency on the process and, as a result, can either add value to industrial and other types of development with its application process, or create road blocks that hinder job creation. Ensuring an efficient and effective development process is a key strategy for supporting the expansion of both "export oriented" industries, as well as "people serving" industries. Business Friendly Fresno (BFF) initiative is aimed at providing high quality customer service for development applications. Business Friendly Fresno was initiated in October 2013 with the first major report from the work delivered to the City Council in summer 2014. While there is much work to be done to ensure the successful implementation of the BFF work, significant changes are under way.

Strategies to Support the "People Serving" (Secondary) Industries

Several of the strategies listed above as being a support to exporters actually also benefit "people serving" businesses and industries in Fresno, namely Workforce Development and Adult Education and establishing Efficient and Effective Development Processes. In addition, the City's economic development plan includes the following strategies that are specifically focused on supporting retail and real estate-related industries.

- Development Code Changes. In conjunction with the General Plan update in 2014, the City has conducted a comprehensive review of its development code. In that process, several opportunities to streamline CUP processes for retail establishments have been identified.
- O Buy Local Initiative: Small, Local, and/or Owned by Historically Underrepresented Groups. The City's economic development plan includes a focus on supporting small and local businesses as well as those that are owned by historically underrepresented groups, including women and people of color. Planned efforts include providing City Hall procurement briefings to ensure these entities know about opportunities to bid on City projects. The City also offers an excellent certification program for small businesses and businesses owned by women and minorities in accordance with the United States Department of Transportation Disadvantaged Business Enterprise Program. Lastly, the City has committed to tracking progress on diversifying its supply chain and reporting those efforts to the public.
- Infill & Revitalization. A major focus of the City's economic development plan includes supporting and incentivizing investment in parts of the city that have experienced significant decline and neglect over the last 50 years. This is an important aspect of the City's economic development plan, not just because of the importance of improving sales and property tax revenues in distressed parts of the city, but because attracting and retaining the human capital needed to compete in a knowledge-based economy depends on the creation of an attractive, urban environment. Local work by the Creative Economy Council and Creative Fresno, along with national and international publications, all point to the trend of young, creative professionals and "empty nest" professionals (the fastest growing segments of the population with discretionary income), desiring walkable, mixed-use urban neighborhoods.

The General Plan objectives and policies are a tool the City uses to implement this part of its economic development plan. The City recognizes that much work has to be done in order to see investment flow back into the established neighborhoods south of Herndon Avenue, along the Bus Rapid Transit (BRT) corridors, and in Downtown. There are clearly major barriers to investment in these parts of the city; if there weren't, then there would already be investment dollars flowing to these neighborhoods. The changes recommended in the Fulton Corridor Specific Plan, Downtown Neighborhoods Community Plan, General Plan Update, Downtown Development Code, and Development Code are intended to line up the City's policies and zoning code to create a better environment for investing in older parts of the city. Furthermore, the incentives described in this plan and in the Implementation chapter are designed to help change the investment environment in infill and revitalization parts of our city.

In addition to the above, the City of Fresno's economic development work needs to include expanded efforts in the following areas:

- Marketing. Marketing is more than just a mere promotion of place. Marketing can
 define Fresno's image and increase its visibility to potential investors and the world
 at large, stressing opportunities for innovation. The City will work to create a
 stronger web presence and make more information available online (since this is
 the most economical way of marketing), in addition to the marketing efforts listed
 under ED-3-b, Commentary.
- Improving quality of life to attract and retain professionals to live in Fresno. The City will work in partnership with Creative Fresno, FLYP, the arts community, and other business and professional groups to create programs to attract and retain professional class workers to Fresno. This can be accomplished through measures such as ensuring there are enough housing and neighborhood choices for both mid-career and young professionals and their families, partnering with local schools to improve school quality, and ensuring there are enough retail, entertainment, and recreation facilities that cater to families. Additionally, as indicated above, creating land use opportunities for higher intensity development types will attract young professionals (the "creative class") who are more attracted to active urban environments than single family neighborhoods.
- Developing a strategy for the City's own real property assets. One of the City's firmest investments is in its own land. Using City-owned property for "catalyst projects" will be a key tool for enabling physical development of a desired type and spurring further development in the surrounding area. The City's economic development strategy will strive to include taking stock of, evaluating the potential of, and planning for its own real estate assets.
- Working regionally. The current operating environment for cities is increasingly being impacted by the need to create cooperative processes and solutions to problems region-wide. Because cities do not exist by themselves but always in close proximity to others, many issues are best approached with a "think globally, plan regionally, act locally" mindset. This is especially true for issues that require cooperation with other jurisdictions in the greater metropolitan area, such as traffic flow, unemployment, crime prevention, and air quality. Good practices include keeping communication lines open with peer cities, surrounding and adjacent counties, non-profits and other agencies, as well as participating in regional economic alliances to ensure that the city's needs and interests are adequately represented.

Fiscal Sustainability

The Great Recession wreaked havoc on our nation and its communities over the last five years. The City of Fresno was particularly hard hit as the foreclosure crisis

impacted more families in Central California cities than other cities in the state. The Great Recession revealed long-term, structural imbalance in the City's General Fund, as well as the lack of a cash reserve. As a result of lessons learned from the Great Recession, ensuring fiscal sustainability over the long term is imperative. The City cannot repeat the mistakes of the past. Despite extensive and painful cuts, the most recent five-year projections demonstrate the continuing need for fiscal prudence, including incorporating long-term objectives and policies for fiscal sustainability in the General Plan. Those objectives and policies include: (1) restoring the City's overall financial health; (2) achieving financial targets; (3) ensuring that new development pays its way; and (4) matching ongoing expenditures to ongoing revenues and identifying options to build an adequate reserve. This discussion provides a context and describes the concepts and benefits of fiscal sustainability. The specific Economic Development policies are found in Section 2.2.

Background

The City is at an important juncture in its efforts to control costs and maintain essential public services. Given the effects of the recent economic recession, the long-term structural imbalance of the City's General Fund, and increasing expenses, it is increasingly difficult for the City to deliver services that are critical to the health, safety, and well-being of Fresno residents: police protection; fire protection; street and traffic system maintenance; and maintenance and operation of parks.

In fact, the largest General Fund costs are associated with employee salaries, fringe benefits (including health benefit costs), and pension and other post-employment benefit costs. Eighty percent of the General Fund is dedicated to covering personnel expenses. Currently, essential City services are at a minimum level, and further reductions could have an adverse impact on the overall health and safety of residents. Less-essential City programs have been eliminated or severely curtailed, including parks maintenance and operations that come out of the City's General Fund. Many of these changes are likely for the foreseeable future. Similarly, Fresno's aging utility infrastructure has suffered from deferred maintenance. Utility rates had not been kept current to help cover costs.

The City has sought opportunities to increase revenues, including adoption of Commercial Solid Waste and Commercial Recycling franchises, an increase in the PG&E gas service franchise fee, increased building permit fees, and an aggressive Business License Tax audit program. Local revenues have been weak the past five years and are expected to rebound gradually, while longer-term prospects are stronger, based on the fiscal impact analysis and financial modeling done for the City.

With this in mind, in order for the City to achieve and support long-term fiscal sustainability, the following steps could be included in implementing Objective ED-5: Achieve Fiscal Sustainability and its associated implementing policies:

- Improve the City's Credit Rating. The most current five-year projections indicate the City is on track to address its structural imbalance and pay off remaining internal loans. If the City continues down the path outlined in the five-year projections, by 2019, the City will have paid off internal loans, begun to restore public safety services, and have a minimum cash reserve.
 - The recent poor financial health of the City has resulted in significant downgrades in the City's bond rating by all major bond rating agencies. Good credit ratings ensure access to debt markets at competitive rates and improve the City's ability to do lease-purchase acquisition of police and fire vehicle replacements and safety equipment. Restoring the City's financial health will depend on the City's ability to achieve positive fund balances in its accounts, have a long-term operating balance in the General Fund, and rebuild emergency cash reserves to levels appropriate for a City with a budget the size of Fresno's. The Reserve Management Act adopted by the City Council in 2011 provides the policy framework needed to ensure that reserves are at appropriate levels and that our credit rating improves. This would include maintaining appropriate financial reserves in Enterprise Funds to provide necessary bond debt coverage ratios and emergency reserves for these essential utilities.
- Achieve Long-Term Fiscal Sustainability. In March 2012, the City Council adopted the Fiscal Sustainability Policy, which provided a path for the City to achieve financial health. Future City Councils and Administrations need to remain committed to implementation of the Fiscal Sustainability Policy in order to address the underlying, structural drivers of the City's financial problems. In addition, the City should remain committed to the following: 1) proactive management, 2) eliminating developer subsidies for infrastructure (primarily transportation infrastructure funded through the local sales tax transportation program which has historically paid for roads to growth areas), and 3) reducing public service and maintenance costs in growth areas.

In sum, the objectives and policies in this element provide a viable framework for fiscal sustainability by restructuring operations to match expenditures to available revenues and restoring General Fund reserve fund balances. The City exists to provide core services to the public. In 2014, there are very few remaining service level cuts possible without the possibility of serious effects on public health, welfare, and safety. For this reason, the General Plan's policies for fiscal sustainability are a priority.

Link between Land Use and Fiscal Condition of the City

The fiscal analysis conducted by Economic & Planning Systems demonstrates the link between land use characteristics and the economic and fiscal well-being of the City. Land use and public policy priorities in the General Plan have broad implications for Fresno's economic and fiscal well-being. As such, land use and physical development decision-making needs to be understood within this broader context of interdependence with many different and related outcomes and impacts. While this has always been true, it is particularly important in these times of economic stress and volatility in California. In the face of such challenges, the major question is whether future land use planning will continue historical expansionist patterns or whether a focus on distinct urban boundaries, infill development, and revitalization of existing urban areas is adopted.

Specifically, if this General Plan succeeds in improving Fresno's quality of life by supporting strong public safety, other municipal services, good schools, an efficient transportation system, improved air quality, diverse housing opportunities, and attractive recreational and commercial amenities, it will attract and retain residents and employers who might otherwise choose other locations in the San Joaquin Valley or beyond. An improving employment base can, in turn, create a positive feedback loop by boosting property values and household incomes, and improving economic and social conditions. Achieving these quality of life factors will also boost the City's tax base and enable further investment in the type of public services and infrastructure needed to maintain economic growth and quality of life.

Of course, the City's economic and fiscal health are also affected by a variety of factors outside of its control, including the national business cycle, State and federal budget decisions, business climate, international trade, and the performance of key local industries. Thus, a key challenge during recessionary periods is to guard against a negative economic and fiscal spiral triggered by declining tax revenues and further exacerbated by disinvestment in critical public services and infrastructure that in turn reduces quality of life and ultimately the loss of valuable jobs and employed residents.

As part of General Plan implementation, the City should continually treat its land use, economic, and fiscal performance as fundamental and integrally linked components that over the long run will rise and/or fall together. The City, through the General Plan, will be able to approach, analyze, and evaluate contingent and related items holistically, rather than as distinct or independent items. For example, an over-emphasis on creating additional capacity for revenue generating land uses, such as "big-box" retail, will not necessarily improve the City's long-term fiscal health if household incomes do not support growth in consumer demand or if new store sales "cannibalize" existing retail areas. Likewise, overly permissive land use or development standards may result

in an urban landscape that is unappealing, one-dimensional, discontinuous, or neglectful of established neighborhoods.

In this context, the focus of this General Plan is on improving Fresno's quality of life and related social and economic fabric through interrelated land use strategies, even if immediate budget constraints make the desired investments and municipal service standards difficult in the short-term. In the long-run, Fresno cannot win the economic and fiscal interplay by "competing for the bottom" (being a low-cost provider) or expecting a "silver bullet." A balanced and integrated approach to planning future land use and investing in municipal services and facilities that improves quality of life for existing and future residents is the best way to ensure viable growth and the City's economic and fiscal well-being.

2.2 OBJECTIVES AND POLICIES

OBJECTIVE

ED-I Support economic development by maintaining a strong working relationship with the business community and improving the business climate for current and future businesses.

IMPLEMENTING POLICIES

- ED-1-a Economic Development Strategy. Ensure the City of Fresno has appropriate resources in place to implement its economic development strategy and work in close coordination with other public agencies, private entities, the nonprofit-sector, and multicultural communities to coordinate of economic development efforts on a region-wide basis.
- **ED-1-b Monitor Trends.** Conduct bi-annual monitoring of economic trends in the economic base to identify emerging industries, new market opportunities, and the performance and mix of businesses in the city to allow the City to be proactive and adjust to market changes.
- **ED-1-c Buy Local.** Promote, educate, and market the benefits of a "Buy Local" campaign. Explore a "Buy Local" requirement for Public Works and other City purchasing decisions.
- ED-1-d Strategic Land Regulation. Explore increasing the amount of land properly zoned, consistent with the General Plan, and ready to be expeditiously developed, redeveloped, and/or revitalized for economic

development and job creation purposes. Establish a priority infill development program for sites and districts.

- **ED-1-e Ready-to-Go Sites.** Establish a list of "ready-to-go" or "shovel-ready" sites in consultation with property owners, and provide the list to interested developers and businesses seeking sites in the city.
- **ED-1-f Economic Base Profile.** Maintain a detailed description of the economic base of the city and metropolitan statistical area which identifies businesses by type of firm, number of employees, total payroll, and location, and make this database available to all interested parties for an appropriate fee that covers cost of preparation and maintenance.
- **ED-1-g Economic Development Communication Plan.** Ensure the City of Fresno develops and executes a strategic communications plan for economic development that targets the city's existing businesses for expansion, as well as businesses with the potential to open new facilities in Fresno. The plan should include the development of all tools needed to most effectively support economic development and positively brand the Fresno Region.
- **ED-1-h Regional Coordination.** Work with regional economic development organizations and surrounding cities on job creation programs of mutual interest.
- **ED-1-i Economic Progress Report.** Submit an economic development progress report to the City Council, as part of the annual General Plan Report.
- Permit Streamlining and Incentives. Continue implementation of the BFF initiative endorsed by the City Council, including needed technology upgrades. Monitor the BFF initiative and make modifications as needed. Monitor effectiveness of the impact fee waiver for industrial development, Enhanced Economic Development Rate, and other incentives and advocate for their extension if proven to be successful. Continue to identify any additional incentives for projects that are consistent with City plans and policies; that encourage increased business development, business expansion, utilization of existing vacant industrial and commercial buildings; and that increase job creation.

OBJECTIVE

ED-2 Support local business start-ups and encourage innovation by improving access to resources and capital and help overcome obstacles hampering economic development.

IMPLEMENTING POLICIES

ED-2-a Technical and Financial Support. Support efforts that provide technical and financial assistance for start-up businesses.

Commentary: There are a number of entities in the Fresno Region that provide support to early stage businesses, including the Central Valley Business Incubator, the Water Energy Technology Center, the Fresno Area Hispanic Chamber of Commerce's Downtown Business Hub, the Lyles Center for Innovation and Entrepreneurship, the Small Business Development Center, the University Business Center, and the Fresno County Economic Opportunities Commission. In addition, Bitwise is a private business incubator in Downtown Fresno that provides space for early stage technology businesses.

ED-2-b

Revolving Loan Program and Other Partnerships for Initial Capital.

Seek private sector or grant support for existing revolving loan programs and other types of micro-lending and start-up capital for Fresno-based businesses needing temporary financial assistance.

OBJECTIVE

ED-3 Attract and recruit businesses and offer incentives for economic development.

IMPLEMENTING POLICIES

ED-3-a Business Expansion and Attraction Program. Create, adopt, and implement programs to expand existing businesses and attract new businesses.

Commentary: This program will focus on desirable businesses and industries, which are those that:

- Possess a high growth potential, such as food- and medicalrelated businesses, water and renewable resource technologies, regional and local-serving retail, hotel and conference facilities;
- Generate net fiscal benefits to the City through increased tax revenues;

- Provide a range of jobs that match the local workforce and provide opportunities for skill training;
- Create higher-paying and/or higher-quality jobs for local residents;
- Complement or augment existing goods and services in Fresno;
- Create less than significant impacts on the environment; and
- Don't require public investment beyond infrastructure and public safety services already available through the City of Fresno.
- **ED-3-b Marketing to Desired Businesses and Industries.** Expand the City's marketing efforts, focusing on desired industries and businesses.

Commentary: Actions may include, but are not limited to:

- Regularly contact existing City of Fresno industrial businesses and seek their input on how the City can support their expansion;
- Advertise in industry publications;
- Publicize local business success stories; and
- Prepare, update, and publish marketing materials, including an inventory of assets that Fresno offers, such as available development sites (and buildings), incentives, streamlined processing, affordable cost of living, quality of life, proximity to quality educational institutions and medical facilities, ease of access to communities throughout the Central Valley, and its multiethnic community.
- **ED-3-c Targeted Incentives Program.** Create a list of incentives as part of a package to approach targeted industries and businesses about relocating to Fresno.

Commentary: As part of this program:

- Identify quantifiable benchmarks to monitor and measure the progress of these incentives;
- Create a monitoring program to track the progress of the incentives, and
- Adjust and fine-tune the incentives as necessary to ensure they deliver the desired benefits to the city.
- **ED-3-d Strategic Catalysts.** Undertake strategic initiatives to attract new retail and commercial development in key locations:

- Promote catalyst projects at key locations to stimulate private investment and revitalize existing neighborhoods in need of such projects;
- Encourage quality retail and restaurant uses to locate near existing successes and in neighborhoods deficient in such uses; and
- Build on synergies that could occur between complementary businesses.

Commentary: Initially the catalyst projects are likely to be in the Downtown, the Fulton Corridor and the Mixed-Use Centers shown on the Land Use Diagram (Figure LU-I). This will help spur infill development and investment in Downtown, the surrounding established neighborhoods, and along future BRT corridors, which is one of the goals of the General Plan.

- **ED-3-e Competitive Utility Costs.** Strive to achieve and maintain price structures in Fresno for electricity, fuels, water, wastewater treatment and drainage that are competitive with other regions. Promote the Enhanced Economic Development Rate.
- ED-3-f

 Strategic Infrastructure. Strive to provide necessary major street infrastructure and utility capacities for properly zoned land, consistent with the General Plan, so this land can be efficiently and effectively developed in a timely manner. Ensure the City's public works, public utilities, and transit capital improvement plans are aligned to support the economic development objectives in the General Plan.

Commentary: This is particularly important for fostering reuse of infill sites in areas where infrastructure and utilities are deficient.

OBJECTIVE

ED-4 Cultivate a skilled, educated, and well-trained workforce by increasing educational attainment and the relevant job skill levels in order to appeal to local and non-local businesses.

IMPLEMENTING POLICIES

ED-4-a Industry-Education Partnerships. Facilitate partnerships between area businesses and training and education partners. Support the continuation of the Fresno Regional Workforce Investment Board's biannual employment study to provide accurate information to the training community about job trends. Support expansion of Career

Technical Education in area schools. Promote adult education for residents who require basic education and training.

- **ED-4-b Connect Residents to Jobs.** Pilot a "Jobs in Your Neighborhood" initiative to ensure residents are aware of job opportunities in their immediate neighborhood.
- **ED-4-c Job Training Program Incentives.** Strive to create a program to provide incentives for local businesses to offer internship, mentoring, and apprenticeship programs to high school and college students in partnership with California State University, Fresno and other educational institutions and major employers.
- ED-4-d

 Employment Development Conference. Participate in an employment development conference every two years to discuss employment training needs, collaboration opportunities, internship and apprenticeship opportunities, job and labor trends, and the educational performance of local schools, to come up with a list actions and strategies.
- **ED-4-e** Access to Education and Training. Improve access to education and skills training by locating housing and employment opportunities near academic and vocational training facilities and programs.
- **Private-Public Partnerships.** Support the use of private-public partnerships that bring together academic programs and employers through internships, mentoring, and outreach initiatives.

OBJECTIVE

ED-5 Achieve fiscal sustainability.

Commentary: Fiscal sustainability will occur when (1) core services are funded, (2) all fund balances are positive, and (3) emergency and maintenance reserves have attained at least minimally acceptable levels. To attain this objective, the City should periodically prepare and implement mid-term actions that achieve fiscal sustainability to support this General Plan. These will complement the normal budget process and may include specific actions needed for identified problems. Chapter 12, Implementation includes details on the strategies that the City anticipates will be established in support of fiscal sustainability.

IMPLEMENTING POLICIES

ED-5-a Standards and Service Districts. Establish levels of service and development standards for necessary public infrastructure to be built and maintained with funding through capital improvement and maintenance districts.

Commentary: These districts would be established to promote economic development in specific areas of the city, consistent with the Land Use Diagram of the General Plan (Figure LU-I).

- ED-5-b

 Fair and Proportional Payments. Require new residential and commercial development that requires annexation to the City to pay its fair and proportional share of needed community improvements through impact fees, assessment districts, and other mechanisms. Approve new residential and commercial development projects that require annexation to the City only after making findings that all of the following conditions are met:
 - No City revenue will be used to replace or provide developer funding that has or would have been committed to any mitigation project;
 - The development project will fully fund public facilities and infrastructure as necessary to mitigate any impacts arising from the new development;
 - The development project will pay for public facilities and infrastructure improvements in proportion to the development's neighborhood and citywide impacts; and
 - The development will fully fund ongoing public facility and infrastructure maintenance and public service costs.
- **ED-5-c Properly Set Fees for Fee-Based Services.** Ensure City services are being delivered as efficiently as possible. Eliminate duplicative efforts and streamline the development review process. Then, adopt fee structures that cover full City costs for fee-based services (e.g. staffing, legal services, noticing, and others). Identify services for which fees will be adopted and the percentage of such service costs that should be covered by the fee.

Commentary: The City provides a variety of services that are established on the assumption that they will be paid for in total or in part by user fees. State and local policy dictate that such fees not exceed the fully allocated costs of these services.

ED-5-d Periodic Fee Studies. Periodically conduct comprehensive fee studies to determine whether development impact fees fully account for the recovery of costs, consistent with applicable law.

Commentary: In the future, when the cost of providing services exceeds fee revenue, the City should identify such shortfalls through a comprehensive fee study. When it is not possible to reduce operating costs proportionately, the City should seek fee adjustments to avoid further subsidies. In cases where the City wishes to incentivize feebased services, such as for infill development in established neighborhoods, the City should lower infrastructure requirements or identify other options for cost recovery.

ED-5-e Fiscal Impact Analyses. Require fiscal impact analyses for development proposals requiring a General Plan amendment or annexation to assess citywide impacts and to identify any burden such projects might create for the City, any school districts, special districts, and other public agencies within the City's Sphere of Influence.

Commentary: When preparing such measures for implementation, the City should explore the feasibility of a two-tiered system, in which larger projects must provide greater fiscal analysis than smaller projects.

ED-5-f Fiscal Management. Continue to implement responsible financial management practices.

Commentary: The City has adopted legislative polices for fiscal management including: Fiscal Sustainability Policy, Debt Management Act, Labor-Management Act, and Reserve Management Act. Collectively they provide for fiscal discipline and public transparency. When coupled with other General Plan policies, they create a framework for responsible fiscal management

- **ED-5-g Budget for Maintenance.** Balance ongoing operating costs, paying off internal debt, and building reserves with the need to plan and pay for regular, basic maintenance and replacement of equipment and property.
- **ED-5-h Fund Shortage Notification.** Pursuant to the Fiscal Sustainability Policy, continue to provide decision-makers timely notification of cash insufficiency and actions needed to ensure fiscal sustainability.

Commentary: The City Manager should continue to provide the Mayor and Council prompt written notification of the Manager's determination that a major government or enterprise fund is likely to have insufficient cash to cover its legal or budgetary obligations at year end.

ED-5-i Explore the use of CFDs to Offset Costs. Explore opportunities for establishing Community Facility Districts as an ongoing revenue source for maintenance and operations of various City facilities and services.

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3 URBAN FORM, LAND USE, AND DESIGN

The Urban Form, Land Use, and Design Element focuses on establishing a structural framework for the city, enhancing the character of neighborhoods and districts, creating vibrant centers of activity and a public realm that is engaging and livable, crafting a tapestry of distinctive, connected communities, and strengthening Fresno's identity and sense of place. How land use underlies the experience of living, working, and visiting Fresno is also critical. Besides policy direction on urban form, this element provides a basis for land use decision-making. It establishes a land use classification system, intensity and height standards, and citywide and area-specific land use policies.

3.1 CONTEXT

Land use is one of the seven general plan topics or elements required by California's Planning and Zoning Law. While a city is required to address the mandatory seven topics or elements, State law allows a general plan format that best fits the unique circumstances of the city. The City of Fresno has chosen to combine the required components of a land use element within the larger context of an Urban Form, Land Use, and Design Element because of the close relationship that these topics have to one another in Fresno.

In preparing this element, the City considered the impact of new growth on military readiness activities, and future development under the Plan is not anticipated to have any discernible impact on the Fresno Air National Guard military installation. Continuing enforcement of the Airport Land Use Plan for Fresno Yosemite International Airport will avoid interference with the military readiness activities at the military installation. Finally, given the absence of timber, forest land, and timber harvesting industry within the Planning Area, no land use classifications provide for timber production, nor are objectives and policies needed to address this subject. Plan Horizon and Buildout calculations are presented in the Introduction. Commonly used terms are defined in the Glossary.

RELATIONSHIP TO GENERAL PLAN GOALS

The objectives and policies of this element support the following General Plan goals:

1. Increase opportunity, economic development, business, and job creation.

Use urban form, land use, and Development Code policies to streamline permit approval, promote local educational excellence and workforce relevance, significantly increase business development and expansion, retain and attract talented people, create jobs and sustained economic growth, strategically locate employment lands and facilities, and avoid over-saturation of a single type of housing, retail,, or employment.

2. Support a successful and competitive Downtown.

Emphasize infill development and a revitalized central core area as the primary activity center for Fresno and the region by locating substantial growth near

¹ The commentary in italics following certain goals is not part of the goal itself, but is instead advisory language intended to further discuss and clarify the goal, and to help guide the objectives of this General Plan.

the Downtown core and along the corridors leading to the Downtown. Use vision-based policies in a development code specific to the Downtown, when adopted, to ensure the creation of a unique sense of place in the central core.

- 3. Emphasize conservation, successful adaptation to climate and changing resource conditions, and performance effectiveness in the use of energy, water, land, buildings, natural resources, and fiscal resources required for the long-term sustainability of Fresno.
- 7. Provide for a diversity of districts, neighborhoods, housing types (including affordable housing), residential densities, job opportunities, recreation, open space, and educational venues that appeal to a broad range of people throughout the City.
- 8. Develop Complete Neighborhoods and districts with an efficient and diverse mix of residential densities, building types, and affordability which are designed to be healthy, attractive, and centered by schools, parks, and public and commercial services to provide a sense of place and that provide as many services as possible within walking distance.

Intentionally plan for Complete Neighborhoods as an outcome, rather than collections of subdivisions which do not result in Complete Neighborhoods.

9. Promote a city of healthy communities and improve quality of life in established neighborhoods.

Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, and health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.

10. Emphasize increased land use intensity and mixed-use development at densities supportive of greater use of transit in Fresno.

Greater densities can be achieved through encouragement, infrastructure, and incentives for infill and revitalization along major corridors and in Activity Centers.

12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.

Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing, and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure,

risks to service continuity, desired standards of service to meet quality-of-life goals, and required infrastructure to support growth, economic competitiveness and business development.

13. Emphasize the City as a role model for good growth management planning, efficient processing and permit streamlining, effective urban development policies, environmental quality, and a strong economy. Work collaboratively with other jurisdictions and institutions to further these values throughout the region.

Positively influence the same attributes in other jurisdictions of the San Joaquin Valley—and thus the potential for regional sustainability—and improve the standing and credibility of the City to pursue appropriate State, LAFCO, and other regional policies that would curb sprawl and prevent new unincorporated community development which compete with and threaten the success of sustainable policies and development practices in Fresno.

- Improve Fresno's visual image and enhance its form and function through urban design strategies and effective maintenance.
- Recognize, respect, and plan for Fresno's cultural, social, and ethnic diversity, and foster an informed and engaged citizenry.

Emphasize shared community values and genuine engagement with and across different neighborhoods, communities, institutions, businesses and sectors to solve difficult problems and achieve shared goals for the success of Fresno and all its residents.

3.2 CITYWIDE URBAN FORM

Urban form is the configuration of the combined physical components of the city; it is created by the interrelationship of those components as they form a cohesive whole. The components of urban form include: circulation (streets, sidewalks, transit, and bikeways), open space, buildings, and natural features. A healthy and vibrant Downtown as the Primary Activity Center of the City is an essential aspect of a diverse, attractive, and successful urban form for the City. How these components relate to one another determines the degree to which Fresno will be walkable, with inter-related uses forming Complete Neighborhoods. Many people see urban form as the ultimate determinate of "livability."

Visualize for a moment a favorite place to vacation or take a walk. What is it about such places that draw you to them? Do you feel safe? Are there others eating, shopping, or just people watching? Is the area shaded? How wide are the sidewalks?

How fast do cars move? How tall are the buildings? Is this a good place to call home, raise a family, and pursue a career?

Often it may be difficult to articulate exactly what brings a sense of attraction and satisfaction to an area. Yet no one would dispute that some cities and neighborhoods are more desirable than others. Ultimately, a number of components interconnect to make a place work well and thrive, though it is clear that significant contributions are made by physical components of a space that influence how people navigate, dwell, and work within a city. The future growth of Fresno offers the opportunity to create new neighborhoods that support a satisfying and productive lifestyle as well as to improve many established neighborhoods through careful planning.

Urban form is what organizes the city, focuses growth, creates the best possible relationships between uses, provides services and mobility, and supports a quality of life that is so important to Fresnans. The major urban form themes in this element are:

- Understanding the suburban style, auto-oriented development patterns that characterize much of Fresno today and the potential of improving that pattern in the future with walkable, pedestrian and transit-oriented development.
- Identifying areas for growth through self-supporting communities and efficient infrastructure and considering strategies for accepting future growth.
- Enhancing established neighborhoods that lack identity and an active core that supports a mix of uses and services interconnected to residences with a convenient network of pedestrian ways and bike paths.
- Supporting Downtown as the Primary Activity Center of Fresno.
- Defining parameters for growth within the City's Sphere of Influence (SOI) that will ultimately be annexed to the City.
- Establishing policies for Urban Form to achieve General Plan goals and objectives.

Making the Most of Existing Conditions: A New Emphasis

Fresno has generally grown out over the years from its first origins, Downtown. For decades that growth has been mostly of a low density suburban style development that relies heavily on the auto as the single means of mobility. This has created a condition of sprawl, sometimes leaving neglected neighborhoods and developed land uses adjacent to a number of major streets either vacant or underutilized. This can be seen in Downtown today, as well as other areas surrounding Downtown.

A 1957 California Department of Highways plan called for construction of State Routes 99, 41, and 180 to form a freeway loop around Downtown, redirecting traffic around

the City's core rather than through it. The construction of this freeway loop system beyond State Route 99, starting in the 1980s, had a devastating impact on Downtown Fresno and its surrounding neighborhoods. Formerly unified neighborhoods were cut in two by freeways without surface crossings. Facilitated by the freeways, the City continued to stretch onto inexpensive land to the north and east, aiding the flight of people and businesses away from the center of the city. By 2009, Fresno had reached a population just under 495,000 in an area of 113 square miles.

Infill opportunities in and around the center of Fresno, particularly in underutilized areas, hold great promise for recasting Fresno as a city of vibrant and Complete Neighborhoods. This can be done by creating a land use pattern and implementing policies that envision the revitalization of established neighborhoods and development of complete communities in growth areas, connected by multi-use corridors served by Bus Rapid Transit (BRT) and enhanced bus service.

Through the Urban Form, Land Use, and Design Element of the General Plan, there is opportunity to enhance existing infrastructure to support a more urban and moderately higher density model of growth in the future. This can inspire creative thinking about Fresno's urban form by its increasingly diverse population.

Major Strategic Directions for Future Growth

This General Plan shifts emphasis from a city dominated by suburban growth to one that also shares increased urban development in the form of infill and rehabilitation, along with new Activity Centers with mixed-uses and neighborhoods in growth areas. The basis of this Plan's concepts are formed by balancing more efficient infill, Downtown, and neighborhood revitalization; transit-oriented development along major streets; mixed-uses in new Activity Centers in growth areas; and the building of Complete Neighborhoods.

Major urban form components include Activity Centers with mixed-uses, intensification, and infill development. Some of these Activity Centers are generally located on land along the first phase of the BRT system. The first phase is composed of BRT corridors along Blackstone Avenue between Downtown and the major shopping centers from Herndon Avenue to Nees Avenue, and along Ventura Avenue-Kings Canyon Road from Downtown to Clovis Avenue. Concurrently there will be enhanced bus service along Shaw Avenue.

As demand necessitates, later phases of BRT may include:

 The California Avenue BRT corridor, which will connect southwest Fresno from the area located between Hughes and Marks Avenues to Downtown; and The Shaw Avenue corridor, which will support the opportunity for focused intensity at the West Shaw Activity Center proposed at Veterans Boulevard and Shaw Avenue west of State Route 99, extending south along Grantland Avenue to the Grantland Transit Village between Ashlan and Shields Avenues.

The Mobility and Transportation Element contains policies on developing and implementing effective, convenient, and safe public transportation and parking programs to meet the interrelated needs of Downtown and proposed BRT corridor land use development.

Employment centers in existing developed areas and in growth areas, composed of high concentrations of office, business parks and districts, and industrial clusters, are also important components of urban form. These areas have traditionally been served by freeways, freight rail, and major streets, and now will be additionally served by proposed BRT corridors with more intense land uses generating many new business and employment opportunities. New smaller scale business parks and larger scale regional business park campuses are shown on Figure LU-1: General Plan Land Use Diagram, in addition to traditional light and heavy industry locations, and will be designed to be more compatible and appropriate to co-exist next to residential neighborhoods, retail, and mixed-use districts.

The General Plan does not expand the City's SOI² beyond its extent as of December 31, 2012 for residential and commercial development.³ This strategy supports the goals of this General Plan, particularly the success of Downtown, protection of agriculture, improvement of established neighborhoods, and efficient use of existing and future public infrastructure. The Land Use section addresses annexation policy.

Concepts for Focus Areas

Infill and development in growth areas will be in accord with General Plan land use designations, goals, objectives, and policies, and updated zoning and subdivision provisions. It is anticipated that policy direction for the Downtown Planning Area will be refined by community, Specific Plans, and neighborhood plans and further implemented by a Downtown Development Code after the General Plan is approved.

² Except for a possible expansion south for industry and employment, proximate to the SOI boundary between SR41 and SR99, to accommodate a maintenance yard and facilities, and industrial parks surrounding and supporting High Speed Rail functions. See Policy LU-1-g: SOI Expansion.

³ The SOI has not been expanded since 2006.

In growth areas and large infill areas outside of the Downtown Planning Area, subsequent Specific Plans or Concept Plans are also anticipated to refine more discreet land use and transportation design integration and intensity with necessary public facilities, maintenance, and services financing. CEQA streamlining will facilitate this refinement because the City will have a Master Environmental Impact Report (MEIR) in place that may address the major issues from these "subsequent projects" for identified growth areas and certain large infill areas. These subsequent projects are described for CEQA purposes in the MEIR. It is anticipated that these subsequent Specific Plans will include preparation of design guidelines and standards, and infrastructure financing programs.

The sheer scale of existing developed land in need of reinvestment, coupled with Fresno's fiscal constraints, means that near-term actions need to focus on smaller geographic areas where there are opportunities to leverage public and private investment concurrently and build on existing assets. These areas have the best development potential and targeted investments can put in motion a positive feedback cycle, whereby a sustained level of public and private investment signals to the marketplace that something positive is happening.

Infill Incentives

This General Plan emphasizes and builds on the City's interest in supporting infill development, which includes a number of fiscal, environmental, economic, social, transportation, and resource related benefits. Land Use policies listed here establish a more cohesive city environment with vibrant neighborhoods, BRT corridors, and Activity Centers that are implemented through increased infill development. See Figure IM-1 (Chapter 12).

Infill incentives, priority areas, and project application process streamlining are the focus of the Infill Development Act (IDA) approved by the Fresno City Council on November 1, 2012 and the Fresno General Plan Implementation and Infill Finance Task Force (Task Force) Final Report prepared by the Task Force in in late 2013. Both the IDA and the recommendations in the Task Force Final Report are discussed in the Implementation Element of this General Plan which set the framework for the implementation strategies that will facilitate increased infill development in the city of Fresno. A key recommendation from the Task Force is to prioritize and incentivize rehabilitation and new construction in the Downtown Planning Area, along BRT Corridors, and within established neighborhoods generally south of Herndon Avenue.

Complete Neighborhoods

Much of Fresno has been built as discrete residential tracts bordered by strip retail centers, many of which are not accessible from the adjacent homes due to security walls or other barriers. By contrast, the Complete Neighborhoods concept will enable Fresnans to live in communities with convenient services, employment, and recreation within walking distance.

Complete Neighborhoods are not and should not be all alike. In fact, each neighborhood should express the needs, character, and values of its residents through the specific arrangement of the many possible characteristics that make up each neighborhood. All elements of a neighborhood do not need to be of the same architectural style to create a Complete Neighborhood. While it is important to use common design components to create interest and character, individuality of the various parts of the neighborhood is more important.

The defining characteristic of a Complete Neighborhood is a neighborhood that is mostly self-sufficient, walkable, and interconnected. It provides residents with most all they need on a daily basis nearby. In other words, a Complete Neighborhood anticipates and plans in advance all amenities needed in a neighborhood to ensure quality and lasting property values *before* the residential units are built instead of trying to piecemeal those amenities after the fact. This convenient and healthy lifestyle is the benefit of a Complete Neighborhood. While total self-sufficiency or even completeness is unlikely to be accomplished in each neighborhood, all or most of the following characteristics can be combined to create an enhanced quality of life and retained and increased property values:

- A range of housing choices;
- Neighborhood-serving retail;
- A range of employment opportunities;
- Public services, such as health clinics;
- Entertainment and cultural assets;
- Parks and public schools within or near the neighborhood;
- Community services, such as a library, recreation center, senior center, and/or community garden;

- Public plaza/civic space; and
- Access to public transit.

This list can be combined and arranged in each specific neighborhood in such a way as to create a true sense of place and community that improves quality of life and increases property values.

Connectivity and Walkability

In Fresno, the early street grid pattern created neighborhoods with relatively small blocks, which can still be easily walked today due to their interconnected nature. However, as Fresno developed, the street and lot patterns changed, particularly after the advent of the automobile. Rather, the norm became blocks of 200 feet wide by 600 to 1300 feet in length, which are not as easily walked. The orientation of these blocks also directly impacted the number of access points to the major roadways, with the longer block lengths running parallel to major roadway frontages, thus providing less connectivity and walkability. As subdivision design introduced the cul-de-sac and further interrupted the traditional grid patterns, neighborhoods were intentionally cut off, becoming isolated and disconnected from other adjacent uses and neighborhoods.

Wide streets and long blocks result in the need to drive for even the shortest of trips, leading to more traffic congestion and worse air quality. Smaller block sizes in a connected pattern create the opportunity to easily walk to the corner store, visit a friend, or even to work.



Complete Streets can include a substantial tree canopy and landscaping to create a sense of place, provide shade, and reduce heat build-up, as shown above.

A centerpiece of the Mobility and Transportation Element is a Complete Streets system. Complete Streets are designed and operated to enable safe, attractive, and comfortable access and travel for all users such as pedestrians, bicyclists, motorists and public transport users of all ages and abilities. Among their advantages, Complete Streets are intended to encourage health through walking and biking, create a sense of place, improve social interaction, and generally improve adjacent property values. Complete Streets can also incorporate landscaping and a substantial tree canopy as a feature to reduce heat build-up and create a tunnel effect, shown to slow down vehicle traffic.

OBJECTIVE

UF-1 Emphasize the opportunity for a diversity of districts, neighborhoods, and housing types.

IMPLEMENTING POLICIES

UF-1-a Diverse Neighborhoods. Support development projects that provide Fresno with a diversity of urban and suburban neighborhood opportunities.

Commentary: Future growth will occur in a range of higher, medium, and lower densities in existing and new mixed-use urban centers, compact neighborhoods, and suburban areas. This policy also envisions making use of underutilized land, reducing long-term farmland conversion, supporting transit and multiple transportation modes, mixing and balancing compatible residential and retail uses in new growth areas, and existing infill areas to produce economic opportunities, jobs, housing options, recreation, and other choices.

UF-1-b Revitalized Downtown Planning Area. Support adoption of community plans or Specific Plans, Downtown Development Code, programs, and streamlined regulations to support a revitalized Downtown Planning Area as the Primary Activity Center for Fresno and the surrounding region.

> Commentary: The General Plan anticipates the Downtown Planning Area will be further refined through specific and community plans, such as the proposed Downtown Neighborhoods Community Plan (DNCP) and the Fulton Corridor Specific Plan (FCSP), and further implemented through the adoption of a new Development Code for regulations specific to Downtown Planning Area.

UF-1-c Identifiable City Structure. Focus integrated and ongoing planning efforts to achieve an identifiable city structure, comprised of a concentration of buildings, people, and pedestrian-oriented activity in Downtown; along a small number of transit-oriented, mixed-use corridors and strategically located Activity Centers; and in existing and new neighborhoods augmented with parks and connected by multi-purpose trails and tree lined bike lanes and streets.

UF-1-d Range of Housing Types. Provide for diversity and variation of building types, densities, and scales of development in order to reinforce the identity of individual neighborhoods, foster a variety of market-based options for living and working to suit a large range of income levels, and further affordable housing opportunities throughout the city.

> Commentary: The Development Code will provide guidance to promote continuity in development scale and character and transitions between densities and design typologies.

UF-1-e Unique Neighborhoods. Promote and protect unique neighborhoods and mixed use areas throughout Fresno that respect and support various ethnic, cultural and historic enclaves; provide a range of housing options, including furthering affordable housing opportunities; and convey a unique character and lifestyle attractive to Fresnans. Support unique areas through more specific planning processes that directly engage community members in creative and innovative design efforts.

UF-1-f Complete Neighborhoods, Densities, and Development Standards. Use Complete Neighborhood design concepts and development standards to achieve the development of Complete Neighborhoods and the residential density targets of the General Plan.

3.3 INFILL DEVELOPMENT

An Objective of this General Plan is to plan for infill development. The terms "infill area" and "infill development" are intended to be used interchangeably, and shall be defined as consistent with the definition of "infill area" set forth in Objective UF-12.

However, the City acknowledges that various statutes articulate alternative definitions for "infill." To the extent that the City must comply with those alternative statutory definitions, the definitions of "infill" contained within Public Resources Code 21061.3 and CEQA Guidelines 15332 may apply.

The Downtown Planning Area and the Fulton Street Corridor

The centerpiece of Fresno is the Downtown Planning Area. The General Plan anticipates the Downtown Planning Area will be further refined through specific and community plans, such as the proposed DNCP and the FCSP, and further implemented through the adoption of a new Development Code for regulations specific to the Downtown Planning Area.

The General Plan, as well as these proposed plans, envisions a new focus on land use and design along major streets and in neighborhoods that support Downtown, with an emphasis on Fulton Street. This new focus includes proposals for increased density and vibrant mixed-use centers that will emanate from the Downtown area along the Blackstone Avenue, Ventura Avenue-Kings Canyon Road, and California Avenue transportation corridors (described below), extending the reach of and connections with Downtown in all directions.

OBJECTIVES

UF-2 Enhance the unique sense of character and identity of the different subareas of the Downtown neighborhoods.

Fresno and the region.

UF-4 Support and encourage arts and culture in the Downtown neighborhoods.

Commentary: As part of Plan implementation, the City will prepare and adopt regulations and programs to support and encourage arts and culture in the Downtown neighborhoods.

Revitalize the Downtown to be the economic and cultural heart of

- UF-5 Promote a greater concentration of buildings and people in the Downtown.
- **UF-6** Support new development in the Downtown through investment in public infrastructure.
- UF-7 Promote a diverse mix of uses in the Downtown in order to create a community with a 24 hour entertainment district.
- **UF-8** Develop each of Downtown's neighborhoods and districts, according to its unique character.
- **UF-9** Capitalize on the High Speed Train system to help revitalize the Downtown neighborhoods.

Commentary: As part of Plan implementation, the City intends to prepare and adopt a station area plan to capitalize on the High Speed Train system to compliment and encourage revitalization in the Downtown Planning Area.

- **UF-10** Calibrate parking according to the Downtown's parking needs and make it efficient and easy to find.
- **UF-II** Revitalize the Fulton Corridor consistent with the reconstruction project.

BRT Corridors & Centers

UF-3

Fresno's BRT corridors offer great opportunities for future growth over time in the form of mixed-use development on sites that are now underutilized or vacant. Vibrant Activity Centers with public spaces, medium-high and high-density residential, retail, and employment uses will be located on these major street corridors. The Activity Centers will also support surrounding neighborhoods, multi-modal transportation including the BRT system, and Downtown. BRT corridors proposed in the General Plan include the following:

Blackstone Avenue Corridor

Blackstone Avenue is currently the most prominent major street corridor connecting the Downtown area to the northern areas of Fresno, including the major commercial centers concentrated between Herndon and Nees Avenues. This major street is part of the first phase planned BRT route for transit supportive corridor related land use development and contains many "opportunity sites" that may be developed into Activity Centers in the future. Naturally, this development will occur over time as properties become available or landowners choose to re-develop. Initially, the BRT stops will occur every half-mile. Eventually, Blackstone Avenue is planned to have major BRT stations and surrounding mixed-use centers at one-mile intervals, located at the intersections of major east-west avenues such as Bullard, Shaw, Ashlan, Shields, and McKinley. Ultimately, the BRT stations will be the focus of mixed-use development that is pedestrian-oriented and closely ties the stations with the surrounding neighborhood.

Ventura Avenue - Kings Canyon Road Corridor

Ventura Avenue and Kings Canyon Road link the Downtown with the Southeast Development Area (SEDA) to the east. Much of the major street corridor is contained in the area anticipated to be encompassed by the DNCP, and the General Plan contains urban form and land use concepts and strategies from that proposed plan. Both north and south sides of this corridor are planned with existing and new residential neighborhoods. Like the Blackstone Avenue Corridor, the Ventura Avenue - Kings Canyon Road Corridor offers many opportunities for mixed-use development on both under-utilized properties and vacant land. This corridor is envisioned to be developed in the future with areas of multi-family housing facing directly on the street and retail centers integrated with housing at the one-mile and half-mile road intersections. At certain intersections, such as the Clovis Avenue intersection, more intense sub-regional mixed-use development is planned to occur. Much of the Ventura Avenue - Kings Canyon Road west of Chestnut Avenue is expected to evolve over time as a "Main Street" environment. Main Street Commercial designation encourages a traditional "Main Street" character with active storefronts, outdoor seating, and pedestrianoriented design. This land use and design type promotes primarily one to two story retail uses, with moderate office and minimal multi-family as supportive uses.

Clovis Avenue – State Route 180/Belmont Corridor

The Clovis Avenue – State Route 180/Belmont Corridor is essentially an extension of the Ventura Avenue - Kings Canyon Road Corridor and BRT system up Clovis Avenue to State Route 180 interchange area, including land along Belmont Avenue. The intent for this corridor is to promote mixed-use, transit-oriented development surrounding the planned Fancher Creek Town Center, which is to be located at the intersection of Clovis Avenue and Tulare Street. It is envisioned as an area of highly integrated residential uses with a variety of densities and types designed in and around a regional activity and commercial center. Development in this corridor will involve a combination

of infill, revitalization, and new construction on large, by-passed parcels. Because of its proposed density, mix of uses, and connectivity, the area could also host a Park-and-Ride lot, especially near the State Route 180/Clovis Avenue interchange.

Shaw Avenue Corridor

The Shaw Avenue Corridor will be served by enhanced bus service and is envisioned as the primary transit corridor connecting Fresno and Clovis. This enhanced service in Fresno will extend along Shaw Avenue as far east as the intersection of State Route 168 and the California State University, Fresno, campus and as far west as the West Development Area located west of State Route 99. Shaw Avenue has been an important corridor in Fresno for decades, with much of the area's retail and employment uses located there. As opportunities arise, it is envisioned that the Shaw Avenue Corridor will be developed as mixed-use infill with a variety of building types and sizes. Particular attention will be paid to urban design to make sure that the scale and form of new buildings are always coordinated with existing development. This includes improving connectivity with new development along the Shaw Avenue Corridor with the surrounding and adjoining neighborhoods.

California Avenue and West Shaw Avenue Future Transit Corridors

The West Shaw Avenue Corridor (west of State Route 99) is discussed in the "West Development Area" section below. The California Avenue Corridor is discussed in the "Southwest Development Area" section.

Non-Corridor Infill

Fresno needs to promote well-designed infill and rehabilitation throughout the city, not just along the corridors. This includes single-family lots, small multi-family lots and small subdivisions. There will also be revitalization and rehabilitation over the years of small retail centers, employment centers and some multi-family properties. These infill developments and redevelopments will focus on creating Complete Neighborhoods in existing areas. Some tools that can be used to accomplish this include: connectivity, financial incentives for investing in established neighborhoods, design compatibility, providing missing uses such as recreation, enhanced landscaping and maintenance of public right-of-way areas, and providing community-based services.

OBJECTIVE

UF-12

Locate roughly one-half of future residential development in infill areas—defined as being within the City on December 31, 2012—including the Downtown core area and surrounding neighborhoods, mixed-use centers and transit-oriented development along major BRT corridors, and other non-corridor infill areas, and vacant land.

Commentary: The Planning Director will provide an annual report describing the City's compliance with the Plan and progress toward meeting the goals and objectives to City Council, and prepare, every five years, an updated plan for achieving this goal, with recommended appropriate policy amendments and also new implementation strategies necessary to meet this goal by 2035. The rate of progress toward meeting this goal is not expected to occur in a linear or "one-to-one" pattern. Development in infill areas versus growth areas may progress in an uneven pattern, depending upon the schedule of relevant key incentive programs (such as those related to BRT) and the impact of market forces. However, the City expects to make steady progress toward all the goals and objectives and anticipates meeting them at or near the close of General Plan Horizon in 2035. See the Implementation Element for additional implementation strategies for this objective.

IMPLEMENTING POLICIES

UF-12-a

BRT Corridors. Design land uses and integrate development site plans along BRT corridors, with transit-oriented development that supports transit ridership and convenient pedestrian access to bus stops and BRT station stops.

Commentary: Developments close to major streets encourages walking and can be connected with the adjacent neighborhoods through a network of pedestrian ways. Parking will be concealed from the street, and predominant residential uses will be considered an acceptable use in all mixed-use areas.

UF-12-b

Activity Centers. Mixed-use designated areas along BRT and/or transit corridors are appropriate for more intensive concentrations of urban uses. Typical uses could include commercial areas; employment centers; schools; compact residential development; religious institutions; parks; and other gathering points where residents may interact, work, and obtain goods and services in the same place.

Commentary: Activity Centers are typified by a full range of uses, including residential, retail, employment, education, recreation, public amenities, and/or open space features. Near the mixed-use central area of the Activity Center, there are typically higher residential densities, typically 15 to 45 dwelling units per acre, but away from the center of the Activity Center, uses become predominantly residential at lower densities.

UF-12-c Local-Serving Neighborhood Centers. Design Neighborhood Centers for local services and amenities that build upon the character and identity of surrounding neighborhoods and communities.

UF-12-d Appropriate Mixed-Use. Facilitate the development of vertical and horizontal mixed-uses to blend residential, commercial, and public land uses on one or adjacent sites. Ensure land use compatibility between mixed-use districts in Activity Centers and the surrounding residential neighborhoods.

Commentary: Vertical mixed-use may be achieved within the same building with multiple compatible uses in multiple stories, and horizontal mixed use may be achieved across an integrated development site with a mix of compatible and complementary uses housed in different buildings.

UF-12-e Access to Activity Centers. Promote adoption and implementation of standards supporting pedestrian activities and bicycle linkages from surrounding land uses and neighborhoods into Activity Centers and to transit stops. Provide for priority transit routes and facilities to serve the Activity Centers.

UF-12-f Mixed-Use in Activity Centers. Adopt a new Development Code which includes use regulations and standards to allow for mixed-uses and shared parking facilities.

UF-12-g Impacts on Surrounding Uses. Establish design standards and buffering requirements for high-intensity Activity Centers to protect surrounding residential uses from increased impacts from traffic noise and vehicle emissions, visual intrusion, interruption of view and air movement, and encroachment upon solar access.

UF-12-h Parking Standards for Shared Parking. Explore opportunities to provide shared parking within mixed-use designations to reduce the need to construct large parking lots or structures needed for peak use times only.

3.4 DEVELOPMENT AREAS⁴

The pace of new development in the Development Areas needs to be balanced with the City's goals for achieving significant reinvestment within the 2012 City Limits. Development Areas are generally depicted on Figure 1-3: Residential Capacity Allocation. Figure LU-1: General Plan Land Use Diagram shows the general mix of compatible uses recommended residential designations for the Development Areas. Concept Plans will achieve the optimum benefits of designing new neighborhoods as Complete Neighborhoods.

As discussed earlier, Complete Neighborhoods are a key planning concept for development of new residential areas in designated Development Areas. Complete Neighborhoods are neighborhoods connected with a range of housing types; employment, supporting retail and service uses; parks and open space; and public/civic uses.

Concept Planning

The General Plan aims to achieve efficient, attractive, and resilient development in the Development Areas through the implementation of Complete Neighborhoods. Some key attributes of Concept Plans are described below.

- Much of the implementation will involve coordinating a harmonious integration of new growth areas and existing development.
- Subdivision and proposed commercial developments should depict how the project may impact surrounding properties, including how street connectivity will be achieved within the Concept Plan area.
- Concept Plans should envision parks, and in some cases a school, with higher
 densities located around the park and school, and predominantly residential
 development with a mix of housing types beyond the core.
- Concept Plans should capture the Complete Neighborhood potential of the area.
- Retail and employment centers should be allowed to serve the neighborhood.

⁴ Development Area descriptions, densities, illustrative diagrams, land uses, circulation network, etc., are based on the August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.

West Development Area

The West Development Area (see Figure UF-1: West Development Area Land Use Diagram below) provides many opportunities for the development of Complete Neighborhoods. New neighborhoods will be integrated with the urbanized areas of Fresno to the east through the connections afforded by roadways and future BRT corridors. As each neighborhood evolves, existing subdivisions will become an integrated part of the overall plan.

West Shaw Avenue Corridor & Transit Village

The Shaw Avenue Corridor from State Route 99 to the Grantland Avenue intersection is envisioned to be developed as a mixed-use corridor supported by enhanced transit service, which includes high density and urban neighborhood residential components, along with retail, employment and civic uses. There is a proposal for a Community Park, up to 40 acres in size, along the east side of Veterans Boulevard between Shaw Avenue and Barstow Avenue, which will anchor the West Shaw Transit Village. The park is bisected by a Class 1 bike trail along the Herndon Canal. A regional mixed-use center is designated between Veterans Boulevard and Grantland Avenue. These land uses will be mixed both vertically and horizontally, and represent the transit-oriented cores of Complete Neighborhoods connected with surrounding residential areas.

Grantland Avenue Transit Village

A mixed-use transit-oriented center is contemplated along the east side of Grantland Avenue between Ashlan and Shields Avenues, as part of the proposed Grantland-East Communities. Initial development is contemplated in the area bounded by Ashlan, Bryan, Shields, and Grantland Avenues, with multi-family, retail, park, and school uses along the east side of Grantland Avenue. The Grantland Avenue Transit Village will be an area of focus for a Complete Neighborhood, as a high density and urban neighborhood with residential development around a 15-acre Community Park and 15-acre mixed-use neighborhood shopping center, complementing a Central Unified School site on the west side of Grantland Avenue.

Grantland-East Communities

The Grantland-East Communities, generally bounded by Ashlan, Polk, Clinton, and Grantland Avenues, will be coordinated with the Grantland Avenue Transit Village developments, and support their land uses and plan configurations. Of the 12 quarter sections (160 acres per section, generally formed by the half-grid of major streets) within the Grantland-East Communities boundary, the nine sections south of Ashlan Avenue will develop via Concept Plans. This design creates access to over 600 acres of useable, but currently inaccessible land, within these quarter sections, ringed by rural residential lots. The City will work closely with property owners and developers to develop Concept Plans that capture the Complete Neighborhood potential of these

areas. The concept envisions parks, and in some cases a school, located at the center, with medium-high and urban residential density multiple-family and townhome development clustered around the park and school, and predominantly medium-density residential development with a mix of housing types beyond the core.

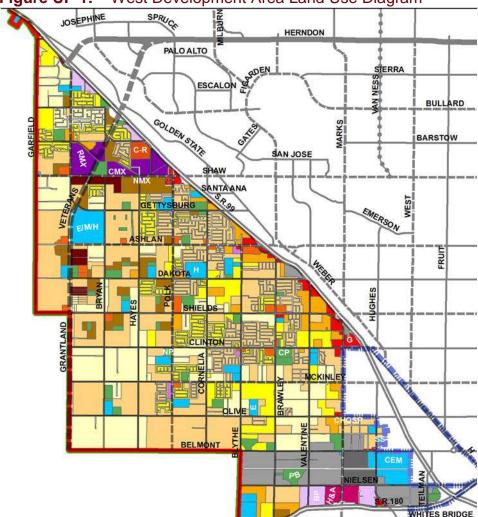


Figure UF-1: West Development Area Land Use Diagram

Southwest Development Area

The Southwest Development Area (see Figure UF-2: Southwest Development Area Land Use Diagram) contains a significant amount of the vacant residentially designated land within the City's SOI, but the area has not yet exhibited much market demand to develop typical suburban neighborhoods with desired commercial and retail services. The area is generally characterized by a patchwork of un-coordinated existing

subdivisions, industry, and farmland. However, the General Plan envisions great opportunities in southwest Fresno that can be created by focusing on the development of Complete Neighborhoods: eventually providing a BRT corridor along California Avenue, creating a Transit Village between Hughes and Marks Avenues, and building a regional shopping center and community park with surrounding neighborhood development between Church and Jensen Avenues along Martin Luther King Boulevard (MLK) west of the Rutherford B. Gaston Middle School.

California Avenue is a primary corridor connecting the Southwest Development Area to Downtown, the Blackstone Avenue Corridor north, and the Ventura Avenue-Kings Canyon Road Corridor east to SEDA. Over time, this corridor will contain substantial new development, infill and redevelopment providing market feasible opportunities for mixed-use development that furthers the goals of the General Plan. California Avenue will have a Complete Street system and transit network to connect southwest Fresno to other metro area communities.

The Veteran's Community Activity Center will be centered by a community park next to the Veteran's Home Complex located on the southeast corner of Marks and California Avenues. This area is envisioned for high density and urban neighborhood residential density around the core with Complete Neighborhoods to the north, south, and east. The Veteran's Community Activity Center will anchor the western terminus of the California Avenue Transportation Corridor system, supplying a unique and desirable destination and urban living environment in southwest Fresno.

Southwest Neighborhoods

In addition to the California Avenue Corridor and Veteran's Community Activity Center, one other focus area is the Southwest Neighborhoods, which is generally bounded by Church, Marks, North, and Elm Avenues. New medium and medium low density neighborhoods adjoining existing residential areas are designed with local streets, centered by parks, multi-family, townhomes, and in some cases, schools to form a network of Complete Neighborhoods, as is proposed in other Development Areas. Neighborhood shopping centers are located to serve these new clusters of neighborhoods.

Martin Luther King Boulevard (MLK) Activity Center

A regional shopping center on the northwest corner of Jensen Avenue and MLK Boulevard is proposed to be integrated with a higher density neighborhood district between Church and Jensen Avenues along MLK, centered by a community park across from the new Fresno Unified School District Rutherford B. Gaston Middle School complex. This regional retail use will serve the Southwest Development Area, established neighborhoods in southwest Fresno, proximate residential areas in southeast

Fresno, and rural areas to the south and west of Fresno. The MLK Village is on the southern edge of the Downtown Planning Area and will also serve residents in that area.

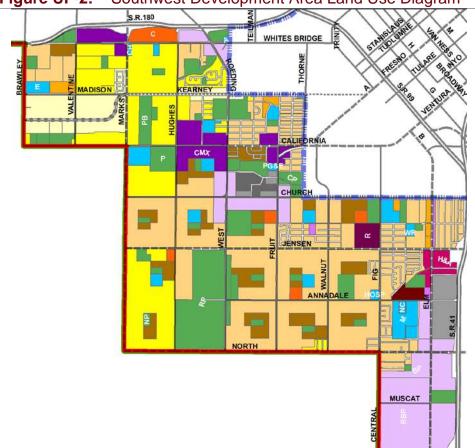


Figure UF-2: Southwest Development Area Land Use Diagram

Southeast Development Area (SEDA)

The original Southeast Growth Area Specific Plan (see Figure UF-3: Southeast Development Area Land Use Diagram), or SEGA, contains approximately 9,000 acres and was formally designated as a Growth Area in the 2025 Fresno General Plan. While originally called SEGA, this area is now referred to as the Southeast Development Area (SEDA).

SEGA was approved in 2006 by the Local Agency Formation Commission (LAFCO) for incorporation into the City with a number of provisions that included preparation of a Specific Plan and associated environmental assessment documents before any

annexations of land to the City could be approved. The City started the process of preparing a Specific Plan for SEGA, but due to delays, the planning for SEGA was rolled into the City-wide General Plan Update, as the supporting environmental analysis required by CEQA was not completed, nor the draft Specific Plan approved by the City. The planning concepts for SEGA have been used to guide the planning for the SEDA.

Planning concepts for SEGA included design and development concepts for street, block, and lot patterns; bike and pedestrian access and circulation; open spaces; mixed-use centers; neighborhoods; building orientations; energy and water saving approaches; employment areas; subdivisions; site planning; and more. These items are illustrative of configuration types suitable for the Southeast Development Area to the extent they are not inconsistent with this General Plan.

Planning now for ultimate urban land uses, circulation, intensities, and urban design for SEDA is imperative for preserving land and protecting the surrounding agriculture and rural areas. Absent new technology, treated water sources, additional recharge or offsets, or significant reduction in consumption achieved through conservation or other methods, metropolitan surface water treatment and wastewater infrastructure systems are also needed to support Fresno, Clovis, and eventual SEDA development. This Development Area also has the unique feature of an eastern border designated as a permanent buffer, which is designed to separate and preserve long-term agriculture to the east and outside SOI boundary from urban uses further to the west inside the SOI boundary.

In SEGA, each subarea was proposed to be developed with a master plan, and potentially, property owner agreements to achieve the scale and intensity required to support independent district type financing structures for necessary public infrastructure, and ongoing maintenance and public service costs. General Plan Development Areas generally follow SEGA subarea descriptions. These areas will require additional planning, such as a Specific Plan and/or concept planning in conformance with the City-County MOU for development of this area.

North SEDA (North of McKinley Avenue)

The North SEDA subarea is planned with two community centers that are surrounded by Residential-Urban Neighborhood and Residential-Medium Density land uses. A K-12 educational complex planned by Clovis Unified School District is anticipated to be located adjacent to the community center at Clinton and Highland Avenues. It is anticipated that there will also be two neighborhood centers located amidst the residential areas that are designated Public Facilities – Neighborhood Center.

Central SEDA (between McKinley & Jensen Avenues)

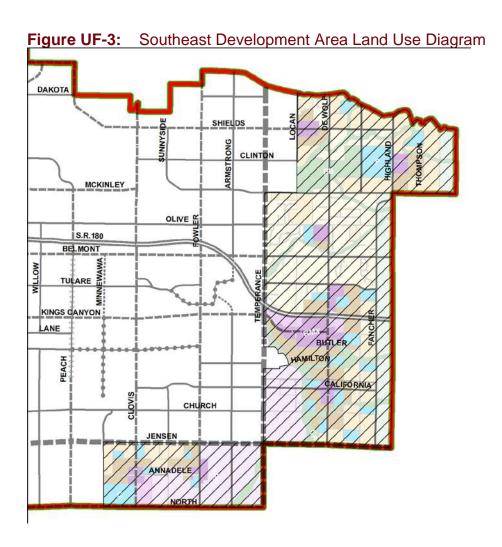
Central SEDA is bounded by McKinley, Highland, Jensen and Temperance Avenues. This subarea would be characterized by a regional center designated as Regional Mixed Use, three community centers designated as Corridor/Center Mixed Use, and fourteen neighborhood centers designated as Public Facilities — Neighborhood Center. It is anticipated that the regional center also will contain three employment centers. It would be desirable to integrate the regional center and community centers with mixed residential, while locating the neighborhood centers in either neighborhood residential or existing rural residential areas designated as low density residential.

Peach - Jensen Avenues Neighborhood

The Peach-Jensen Avenues Neighborhood subarea, generally bounded by Peach, Jensen, Minnewawa, and North Avenues, is deemed appropriate for long-term residential uses. It represents an additional growth subarea opportunity in southeast Fresno for development of Complete Neighborhoods. It is just outside the SEDA boundary to the west and complements SEDA development planned around the regional education and vocational training complex proposed by the State Center Community College District (SCCCD) at Clovis and North Avenues. It is anticipated that this new neighborhood will adjoin and support a proposed Activity Center with a future community college at Clovis Avenue to the east and a business park and light industrial employment center to the west. Primarily a residential area, the area would be served with local streets, park and recreational trails, and multi-family townhomes, and it will be filled-out by medium density residential to conform with adjacent centers.

South SEDA (South of Jensen Avenue)

South SEDA is generally bounded by Temperance Avenue to North Avenue, North Avenue to Minnewawa Avenue, Minnewawa to Jensen Avenue, and Jensen back to Temperance Avenue. This subarea is also planned with two community centers and four neighborhood centers, with surrounding mixed residential and neighborhood residential beyond the centers. This area is also intended to feature a major education and vocational training complex proposed by the SCCCD and significant land designated for employment in regional business parks with light industry and a range of businesses and enterprises. Land use in South SEDA is proposed with Complete Neighborhoods anchored by mixed-use centers to be integrated and compatible with these larger institutional and employment users.



OBJECTIVE

UF-13

Locate roughly one-half of future residential development in the Growth Areas—defined as unincorporated land as of December 31, 2012 SOI—which are to be developed with Complete Neighborhoods that include housing, services, and recreation; mixed-use centers; or along future BRT corridors.

Commentary: The Planning Director will provide an annual report describing the City's compliance with the Plan and progress toward meeting the goals and objectives to City Council and every five years prepare an updated plan for achieving this goal, with recommended appropriate policy amendments and also new implementation strategies necessary to meet this goal by 2035. The rate of progress

toward meeting this goal is not expected to occur in a linear or "one-to-one" pattern. Development in infill areas versus growth areas may progress in an uneven pattern, depending upon the schedule of relevant key incentive programs (such as those related to BRT) and the impact of market forces. However, the City expects to make steady progress toward all the goals and objectives and anticipates meeting them at or near the close of General Plan Horizon in 2035. See the Implementation Element for additional implementation strategies for this objective.

IMPLEMENTING POLICIES

UF-13-a Fut

Future Planning to Require Design Principles. Require future planning, such as Specific Plans, neighborhood plans or Concept Plans, for Development Areas and BRT Corridors designated by the General Plan to include urban design principles and standards consistent with the Urban Form, Land Use, and Design Element.

Commentary: The General Plan requirements and regulations will be further defined through Specific Plans, neighborhood plans and Concept Plans to coordinate more discreet land use and transportation design integration and intensity with necessary public facilities, maintenance, and services financing for Development Areas following General Plan adoption and the subsequent adoption of a new Development Code.

OBJECTIVE

UF-14 Create an urban form that facilitates multi-modal connectivity.

Commentary. Multi-modal connectivity creates the opportunity for people to travel through a variety of modes of transportation, including biking, walking, driving, and using public transit.

IMPLEMENTING POLICIES

UF-14-a

Design Guidelines for Walkability. Develop and use design guidelines and standards for a walkable and pedestrian-scaled environment with a network of streets and connections for pedestrians and bicyclists, as well as transit and autos.

Commentary. These guidelines will highlight how to achieve these design ideas and avoid barriers to access, such as:

- Walls and fences that separate related uses or isolate neighborhoods;
- Over reliance on cul-de-sacs and dead end streets that cut off access within neighborhoods;
- Disconnected bike and pedestrian paths;
- Wide streets that lack pedestrian support, such as sidewalks, median strips, and a landscaped strip that separates pedestrians from the street;
- Street front parking lots that separate pedestrian from commercial operations;
- Retail centers that are exclusively auto-oriented;
- Transit stops that are not easily accessible from an individual's starting point and destination; and
- Long blocks that discourage walking.

UF-14-b Local Street Connectivity. Design local roadways to connect throughout neighborhoods and large private developments with adjacent major roadways and pathways of existing adjacent development. Create access for pedestrians and bicycles where a local street must dead end or be designed as a cul-de-sac to adjoining uses that provide services, shopping, and connecting pathways for access to the greater community area.

UF-14-c Block Length. Create development standards that provide desired and maximum block lengths in residential, retail, and mixed-use districts in order to enhance walkability.

Commentary: When preparing such standards the City should assess the desirability of varying maximum block length requirements between single family residential, multi-family residential, mixed use, and commercial districts.

3.5 LAND USE

The following sections provide the General Plan's required land use information with use classifications, maximum densities and intensities on Figure LU-1: Fresno General Plan Land Use Diagram.

The City has reviewed those areas covered by the General Plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA), which can be found at Figure NS-7: Floodplains. The City

will annually review those areas covered by the Plan as set out in the Implementation Element.

Land Use Diagram

The Land Use Diagram is the City's master designation of land uses for Fresno including the City's SOI. The Land Use Diagram includes the Downtown Planning Area, shown in an inset, and its designations are anticipated to be further refined and implemented through specific and community plans, such as the proposed FCSP and the DNCP. Land use designations for the Downtown Planning Area are generalized to facilitate implementation by providing some flexibility for the detailed plans.

Dual Designations

All new parks, open space, and public facilities (such as school sites) carry dual land use designations, so that if that facility is not needed, private and public development consistent with zoning and development standards may be approved. These dual land use designations are shown in Figure LU-2: Dual Designation.

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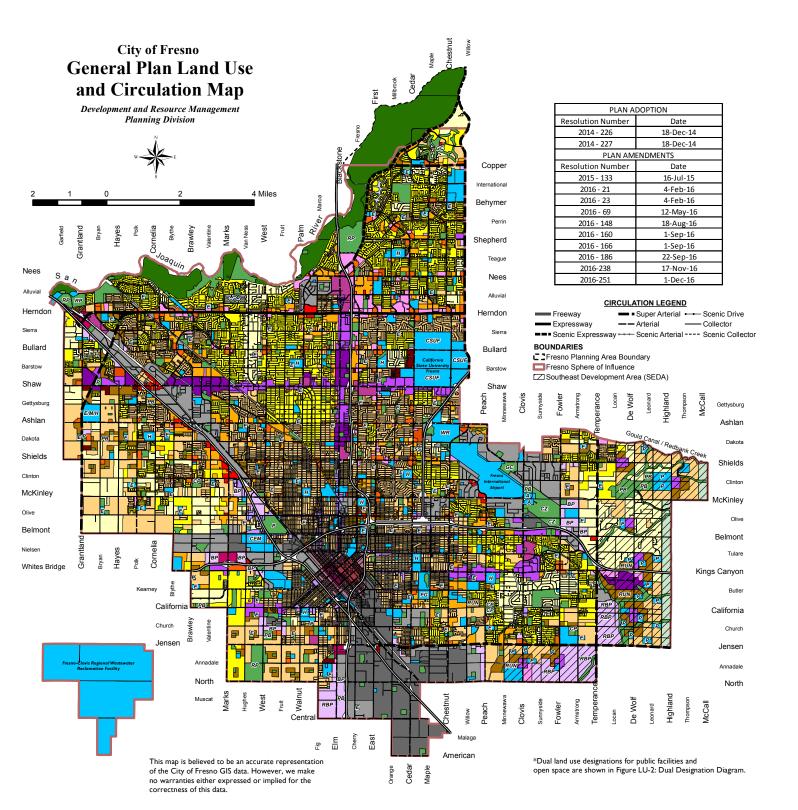


Figure LU-1:

Fresno General Plan Land Use Diagram

RESIDENTIAL

- Low Density (1-3.5 D.U./acre)
- Medium Low Density (3.5-6 D.U./acre)
- Medium Density (5.0-12 D.U./acre)
- Medium High Density (12-16 D.U./acre) Urban Neighborhood (16-30 D.U./acre)
- High Density (30-45 D.U./acre)

COMMERCIAL

- Main Street
- Community
- Recreation
- General
- Highway & Auto Regional

EMPLOYMENT

- Office
- Business Park
- Regional Business Park
- Light Industrial
- Heavy Industrial

MIXED USE

- Neighborhood Mixed Use
- Corridor/Center Mixed Use
- Regional Mixed Use

DOWNTOWN

- Downtown Core
- Downtown General
- Downtown Neighborhood
- OPEN SPACE Clear Zone
- Commercial-Recreational
- Community Park
- Flood Control Project
- Golf Course Lake, Pond
- Multi-Use
- Neighborhood Park
- Outdoor Environmental Education Area
- Open Space
- Park
- Ponding Basin Ponding Basin (Park use)
- Regional Park

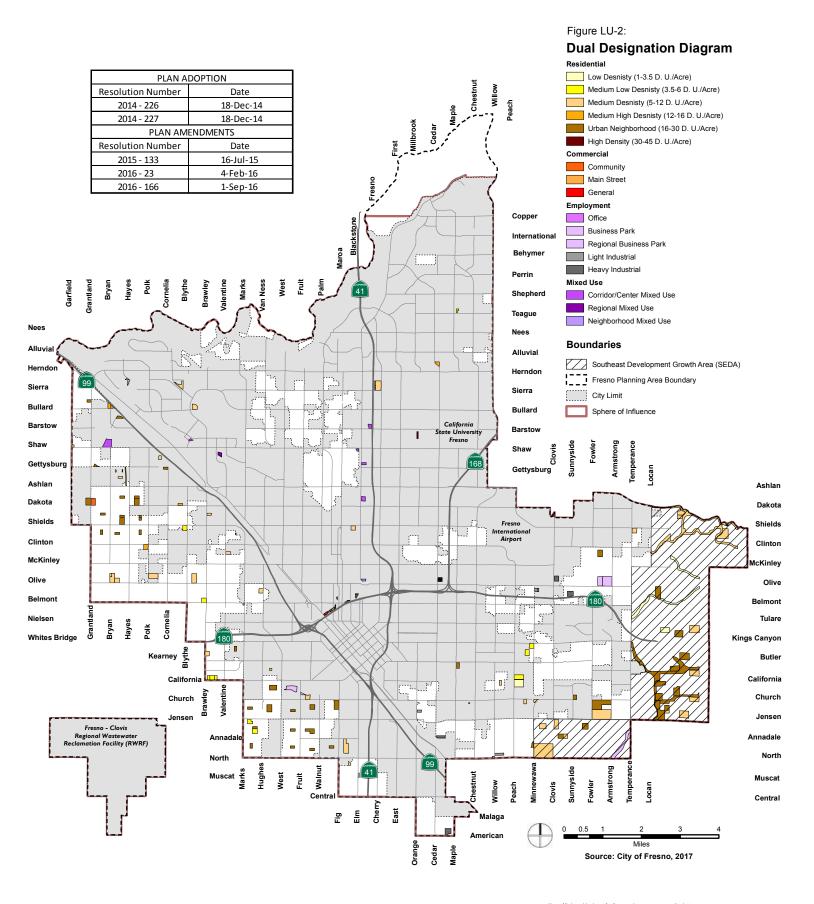
PUBLIC FACILITIES

- Public/Quasi-public Facility Special School
- Elementary School
- Elementary & Middle School
- Elementary, Middle & High School
- Middle School
- High School
- College
- School with Park Airport
- Cemetery
- Church
- Community Activity Center
- Convalescent Hospital
- Fairgrounds
- Fire Station
- Government Offices
- Base Hospital
- Medical Center
- Meighborhood Center
- PG & E Substation
- Police Dressing Station
- Water Recharge Basin
- Www Waste Water Treatment Facility

BUFFER

■ Buffer

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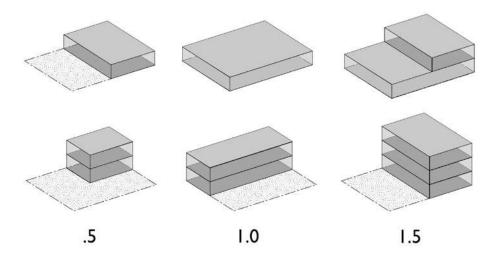


Note: All planned land uses for future parks, open space, ponding basins, schools (e.g. special, elementary, middle, high, and colleges) and schools with parks carry dual planned land use designations so that if that facility not needed private and public development consistent with zoning and development standards may be approved. This map shows the additional land use designations.

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Density and Intensity

The General Plan calculates density on net acreage, defined as the land area of a lot remaining after dedication of all areas for major streets, schools, regional trails, certified wetlands or floodplains, and land underneath electric transmission lines. For residential uses, the density and intensity standards are expressed as the number of housing units per net acre. For non-residential uses, a measure known as Floor Area Ratio (FAR) is specified. FAR is defined as the permitted ratio of gross floor area to site area. It is a measure of building bulk that controls both visual prominence and traffic generation, as shown in the diagram below.



The citywide density and intensity standards, established in Table 3-1, are intended to establish minimum and maximum densities per net acre allowed in each General Plan land use category, exclusive of the Downtown Planning Area. Minimum and maximum densities, intensities, and required land use mixes will be more precisely defined within the Development Code for purposes of determining the consistency of a proposed zone district and a property development entitlement with an applicable land use designation.

Minimum lot/parcel sizes (and corresponding lot frontage minimums and other lot design requirements) will be defined in the Development Code for each zone district. The Development Code will also provide procedures and criteria for preparing and implementing "planned development" for a given area to allow for limited reconfiguration of the planned land uses for that area and variations from base zoning district development standard, while maintaining the equivalent densities, intensities and mix of uses. Finally, the General Plan land use designation may provide overlap in the defined densities, intensities and land uses described for various land uses.

TABLE 3-1: CITYWIDE STANDARDS FOR DENSITY AND			
DEVELOPMENT INTENSITY			
	Minimum to Maximum		
	Residential Density	Maximum Floor	
Land Use	(du/net acre) ^{1,2,3}	Area Ratio	
		Alea Nalio	
Buffer	Max = 0.05 (1 unit per 20 net acres)	-	
Residential	,		
Low Density	Min = 1 unit per 5 acres	-	
	Max = 3.5 units per acre		
Medium Low Density	Min = 3.5 units per acre	-	
	Max = 6 units per acre		
Medium Density	Min = 5 units per acre	-	
	Max = 12 units per acre		
Medium High Density	Min = 12 units per acre	-	
	Max = 16 units per acre		
Urban Neighborhood	Min = 16 units per acre	-	
Density	Max = 30 units per acre		
High Density	Min = 30 units per acre	-	
	Max = 45 units per acre		
Commercial		4.0	
Main Street		1.0	
Community		1.0	
Recreation		0.5	
General		2.0	
Highway & Auto		0.75	
Regional		1.0	
Mixed-Use	Min 40 units non sons	4.Γ	
Neighborhood Mixed-Use	Min = 12 units per acre Max = 16 units per acre	1.5	
Corridor/Center Mixed-	Min = 16 units per acre	1.5	
Use	Max = 30 units per acre		
Regional Mixed-Use	Min = 30 units per acre	2.0	
	Max = 45 units per acre		
Downtown			
Downtown Neighborhood	Min = No limit	No limit	
	Max = No limit		
Downtown General	Min = No limit	No limit	
	Max = No limit		
Downtown Core	Min = No limit	No limit	
Fundament.	Max = No limit		
Employment		2.0	
Office Business Park	-	2.0	
	-		
Regional Business Park	-	1.0	
Light Industrial	-	1.5	
Heavy Industrial	-	1.5	

- 1. Based on Net Acreage.
- 1. Based off Net Acreage.
 2. Residential density refers to the ratio of residential dwelling units per acre (43,560 square feet) of land which is calculated by dividing the number of existing or proposed residential dwelling units by the land area of the property designated for, or proposed for development with, a residential use. The residential land area includes property upon which the residential and ancillary structures are located, together with yards and other private or common open spaces, and includes vehicle access drives and parking areas together with public and private roadways. The residential land area does not include major streets or State Routes designated by Figure MT-1: General Plan Circulation Diagram, and does not include schools or regional trails.
- Additional density may be allowed for affordable housing or provision of community benefits (pursuant to California Government Code Sections 65915 – 65918, as may be amended).

Land Use Classifications

These land use classifications cover the entire Planning Area, with the exception of the Downtown Planning Area. The land use classifications for the Downtown Planning Area are described later in this element.

Residential

Residential land uses provide for a wide range of neighborhoods and housing types.

LOW DENSITY

This designation is intended to provide for large lot residential development. Low Density residential allows one to 3.5 housing units per acre. The resulting land use pattern is large lot residential in nature, such as rural residential, ranchettes, or estate homes.

MEDIUM LOW DENSITY

The Medium Low Density designation is intended to provide for single family detached housing with densities of 3.5 to 6 units per acre.

MEDIUM DENSITY

Medium Density residential covers developments of 5 to 12 units per acre and is intended for areas with predominantly single-family residential development, but can also accommodate a mix of housing types, including small-lot starter homes, zero-lot-line developments, duplexes, and townhouses. Much of the City's established neighborhoods fall within this designation.

MEDIUM HIGH

Medium High Density residential is intended for neighborhoods with a mix of single-family residences, townhomes, garden apartments, and multi-family units intended to support a fine-grain, pedestrian scale. This land use accommodates densities from 12 to 16 units per acre overall.

URBAN NEIGHBORHOOD

Urban Neighborhood residential covers densities from 16 to 30 units per acre, which will require multi-family dwellings but still allows for a mix of housing types including single-family houses. This land use is intended to provide for a compact community that includes community facilities and walkable access to parkland and commercial services; it also supports efficient, frequent transit service. Urban Neighborhood is designated for targeted areas with complementary land uses adjacently located.



An example of Fresno's established residential neighborhoods, with wide streets, sidewalks, and large trees.

HIGH DENSITY

High Density residential is intended to accommodate attached homes, two- to four-plexes, and apartment buildings, and it will be supported by walkable access to frequent transit, retail and services, and community facilities such as parks and schools. High Density allows for 30 to 45 units per acre.

Commercial

Commercial land use designations allow a wide range of retail and service establishments intended to serve local and regional needs.

MAIN STREET

Main Street Commercial encourages a traditional Main Street character with active storefronts, outdoor seating and pedestrian-oriented design. This designation promotes primarily one to two story retail uses. It also preserves small-scale, fine-grain character in neighborhoods where single-family residential and townhomes are predominant. The maximum FAR is 1.0.

COMMUNITY

Community Commercial is intended for commercial development that primarily serves local needs such as convenience shopping and small offices. Many of the city's current commercial districts fall into this designation. Specific uses allowed include medium-scale retail, office, civic and entertainment uses, supermarkets, drug stores and supporting uses. The maximum FAR is 1.0.

RECREATION

The Recreation designation is intended for areas of private commercial recreation uses, such as bowling alleys and golf driving ranges. The maximum FAR is 0.5.

GENERAL

The General Commercial designation is intended for a range of retail and service uses that are not appropriate in other areas because of higher volumes of vehicle traffic and potential adverse impacts on other uses. Development such as strip malls fall into this designation. Examples of allowable uses include: building materials, storage facilities with active storefronts, equipment rental, wholesale businesses, and specialized retail not normally found in shopping centers. The maximum FAR is 2.0.

HIGHWAY & AUTO

The Highway & Auto designation is intended for limited areas near State Route 99 to accommodate uses that depend on or are supported by freeway access but do not generate a large volume of traffic. Hotels, restaurants, and auto malls are typical land uses. The maximum FAR is 0.75.

REGIONAL

The Regional Commercial designation is intended to meet local and regional retail demand, such as large-scale retail, office, civic and entertainment uses; shopping malls, with large format or "big-box" retail allowed; and supporting uses such as gas stations, and hotels. Buildings typically have relatively large footprints. Development and design standards will create a pedestrian orientation within centers and along major corridors. The maximum FAR is 1.0.

Employment

OFFICE

The Office designation is intended for administrative, financial, business, professional, medical, and public offices. This designation is mainly intended to apply to existing office uses on smaller lots, generally located on arterial roadways. This designation is also considered compatible with existing residential neighborhoods given the smaller

level of noise and traffic generated compared to commercial uses. Retail uses would be limited to business services, food services, and convenience goods for those who work in the area. The maximum FAR is 2.0.

BUSINESS PARK

The Business Park designation provides for office/business parks in campus-like settings that are well suited for large offices or multi-tenant buildings. This designation is intended to accommodate and allow for the expansion of small businesses. Given its proximity to residential uses, only limited outdoor storage will be permitted, while adequate landscaping is imperative to minimize the visual impacts. Typical land uses include research and development, laboratories, administrative and general offices, medical offices and clinics, professional offices, prototype manufacturing, testing, repairing, packaging, and printing. No free-standing retail is permitted, except for small uses serving businesses and employees. The maximum FAR is 1.0.

REGIONAL BUSINESS PARK

The Regional Business Park designation is intended for large or campus-like office and technology development that includes office, research and development, manufacturing, and other large-scale, professional uses, with limited and properly screened outdoor storage. Permitted uses include incubator-research facilities, prototype manufacturing, testing, repairing, packaging, and printing, as well as offices and research facilities. Small-scale retail and service uses serving local employees and visitors are permitted as secondary uses. The maximum FAR is 1.0.

LIGHT INDUSTRIAL

The Light Industrial designation accommodates a diverse range of light industrial uses, including limited manufacturing and processing, research and development, fabrication, utility equipment and service yards, wholesaling, warehousing, and distribution activities. Small-scale retail and ancillary office uses are also permitted. Light Industrial areas may serve as buffers between Heavy Industrial and other land uses and otherwise are generally located in areas with good transportation access, such as along railroads and State Routes. The maximum FAR is 1.5.

HEAVY INDUSTRIAL

The Heavy Industrial designation accommodates the broadest range of industrial uses including manufacturing, assembly, wholesaling, distribution, and storage activities that are essential to the development of a balanced economic base. Small-scale commercial services and ancillary office uses are also permitted. The maximum FAR is 1.5.

Mixed-Use⁵

Mixed-use designations are based on commercial uses and also require a residential or upper-floor office component.

NEIGHBORHOOD MIXED-USE

This designation allows a minimum of 50 percent residential uses and provides for mixed-use districts of local-serving, pedestrian-oriented commercial development, such as convenience shopping and professional offices in two- to three-story buildings. Development is expected to include ground-floor neighborhood retails uses and upper-level housing or offices, with a mix of small lot single family houses, townhomes, and multi-family dwelling units on side streets, in a horizontal or vertical mixed-use orientation. The built form will have a scale and character that is consistent with pedestrian-orientation, to attract and promote a walk-in clientele, with small lots and frequent roadway and pedestrian connections permitting convenient access from residences to commercial space. Automobile-oriented uses are not permitted. Residential densities range between 12 and 16 units per acre and the maximum FAR is 1.5.

CORRIDOR/CENTER MIXED-USE

The Corridor/Center Mixed-Use designation is higher intensity than Neighborhood Mixed-Use, and is intended to allow for horizontal and vertical mixed-use development in multiple story buildings along key circulation corridors where height and density can be easily accommodated. Ground-floor retail and upper-floor residential or offices are the primary uses, with personal and business services and public and institutional space as supportive uses. Development will facilitate the transformation of existing transportation corridors into vibrant, highly walkable areas with broad, pedestrian-friendly sidewalks, trees, landscaping, and local-serving uses with new buildings that step down in relationship to the scale and character of adjacent neighborhoods. This designation will largely apply along major roadways, at targeted locations between regional Activity Centers. Residential densities range between 16 and 30 units per acre with a minimum 40 percent residential uses, and the maximum FAR is 1.5.

⁵ The General Plan is long-term in nature, and recognizes the importance of providing for an orderly evolution of existing, legal non-conforming uses during the planning period in a manner that acknowledges their current economic contributions while providing for a transition into conforming uses consistent with applicable land use designations.

REGIONAL MIXED-USE

The Regional Mixed-Use land use designation is intended to accommodate mixed-use development in urban-scale buildings and retail establishments that serve residents and businesses of the region at large. Medium-scale retail, residential, office, civic and entertainment uses, and shopping malls (with large format or "big-box" retail) are allowed, as are supporting uses such as gas stations and hotels in mixed-use or single use buildings. Design standards will support a pedestrian orientation within centers and along major corridors, with parking on the side or rear in general, but automobile-oriented uses also will be accommodated on identified streets and frontages. Residential densities range between 30 and 45 units per acre with a minimum 30 percent residential uses, and the maximum FAR is 2.0.

Open Space

The Open Space designations (Parks and Recreational Facilities; Other Public Open Space) apply to open space areas that are not parks or trails, such as riparian corridors, the clear zone around Fresno-Yosemite International Airport, and the San Joaquin River bottom, which is primarily designated as open space even though it includes a limited number of existing homes.

Public Facilities

This designation applies to public facilities, such as City Hall, county buildings, schools, colleges, the municipal airports, and hospitals. It also includes public facilities, such as fire and police stations, City-operated recycling centers, sewage treatment plants, neighborhood, community and regional parks, recreational centers, and golf courses. Finally, it applies to multi-purpose trails that serve both regional and neighborhood needs.

Buffer

This designation is intended to separate urban uses from long-term agricultural uses in order to preserve long-term viable agricultural areas and intensive farming operations adjoining but outside the Planning Area. The Buffer designation will serve to prevent urban residential and related uses from developing near agricultural operations and infringing on full operation of important farmland. A variety of uses are compatible with the purpose of the Buffer, which will be defined in detail in the Development Code. General categories include environmental habitats; water conveyance, retention and recharge; preservation and preparation of gravel resources for beneficial uses related to permanent water resource facilities; limited agriculture and necessary supportive uses, such as agricultural processing, excluding animal processing or uses that have the potential to create nuisances; and residential uses with 20 acres of land required per residence.

Downtown

Downtown designations allow a wide range of uses and the most intense development patterns in the region while creating pedestrian-oriented urban environments.

Downtown Core

The Downtown Core (DTC) is the cultural, civic, shopping, and transit center of Fresno and the region. This designation is applied to the traditional central business district of the city near the proposed High Speed Rail station and oriented around the restored section of Fulton Street. New buildings will be up to 15 stories in height and will be located at or near the sidewalk. Ground floor spaces will have active frontages with commercial, retail, multi-family housing, and office activity to support active streetscapes and walking. Upper floors and the floor area behind storefronts will accommodate a wide variety of office, civic, lodgings, housing, or additional commercial uses.

Downtown General

The Downtown General (DTG) designation will support a high concentration of regional activity generators such as governmental buildings and convention centers within a pedestrian-oriented, mixed-use urban setting. New buildings will be up to 10 stories in height and will be located at or near the sidewalk. Ground floor spaces will have active frontages with commercial, retail, multi-family housing, and office activity to support active streetscapes and walking. Upper floors and the floor area behind storefronts will accommodate a wide variety of office, civic, lodging, housing, or additional commercial uses.

Downtown Neighborhood

The Downtown Neighborhood (DTN) designation will create lively, walkable, mixed-use urban neighborhoods surrounding the Downtown Core and Downtown General areas. New buildings will be up to 6 stories in height and will be located at or near the sidewalk. Ground floor spaces will have active frontages with commercial, retail, multifamily housing, and office activity to support active streetscapes and walking. Upper floors and the floor area behind storefronts will accommodate a wide variety of office, civic, lodging, housing, or additional commercial uses.



Downtown Neighborhood areas feature a mix of uses, including retail, office, civic, housing, and entertainment.

General Plan and Zoning Consistency

Table 3-2 summarizes the proposed zoning districts that will contain detailed development guidelines and regulations for the land uses in the General Plan.

TABLE 3-2: GENERAL PI DISTRICTS CONSISTEN		DESIGNATIONS AND ZONING	
General Plan Land Use Designation	Development Code Zoning District		
Buffer	В	Buffer	
Residential			
Low Density	RE	Residential Estate	
	RS-1	Residential Single Family, Extremely Low Density	
	RS-2	Residential Single Family, Very Low Density	
	RS-3	Residential Single Family, Low Density	
Medium Low Density	RS-4	Residential Single Family, Medium Low Density	
Medium Density	RS-5	Residential Single Family, Medium Density	
Medium High Density	RM-MH	Mobile Home Park	
	RM-1	Residential Multi-Family, Medium High Density	
Urban Neighborhood	RM-2	Residential Multi-Family, Urban Neighborhood	
High Density	RM-3	Residential Multi-Family, High Density	
Mixed-Use			
Neighborhood	NMX	Neighborhood Mixed Use	
Corridor/Center	CMX	Corridor/Center Mixed Use	
Regional	RMX	Regional Mixed Use	
Commercial			
Main Street	CMS	Commercial - Main Street	
Community	CC	Commercial - Community	
Regional	CR	Commercial - Regional	
General	CG	Commercial - General	
Highway and Auto	CH	Commercial - Highway and Auto	
Recreation	CRC	Commercial - Recreation	
Downtown			
Downtown Neighborhood	DTN	Downtown Neighborhood	
Downtown General	DTG	Downtown General	
Downtown Core	DTC	Downtown Core	
Employment			
Office	0	Office	
Business Park	BP	Business Park	
Regional Business Park	RBP	Regional Business Park	
Light Industrial	IL	Light Industrial	
Heavy Industrial	IH	Heavy Industrial	
Other			
Open Space	OS	Open Space	
	PR	Parks and Recreation	
Public Facilities	PI	Public and Institutional	

Local Plans

The City has adopted a number of plans that apply to defined areas throughout Fresno. Under the City's Local Planning and Procedures Ordinance (LPPO), Specific and Community Plans prevail when inconsistent with the General Plan. As a practical matter, this means full implementation of the General Plan may require certain Specific or Community plans to be either repealed or amended to allow consistency. As part of this process, policies and portions from certain plans have been considered in developing the General Plan, essentially resulting in a consolidation and update of planning documents through this repeal and amendment of plans. See Implementing Policy D-7-a for the list of plans being amended or repealed.

Annexation

As specified by Policy LU-1-g, this General Plan promotes the principle that the SOI not be expanded. The one exception to SOI expansion is to allow for the siting of a maintenance yard proximate to and south of the SOI boundary associated with the California High Speed Train project.

Regional Cooperation

Fresno is part of an eight-county region, each with its own Metropolitan Planning Organization. Collectively, they have approved the San Joaquin Valley Blueprint along with the Smart Growth principles listed below, which have been integrated into the General Plan. The adopted San Joaquin Valley Blueprint 12 Smart Growth principles:

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

The City of Fresno is also partnering with 13 of the other 15 federally defined Urbanized Areas in the San Joaquin Valley as part of the Smart Valley Places network, to plan and implement smart growth, livability, and sustainability through revised land use and transportation systems in the respective cities within all the Urbanized Areas in the eight-county Valley region. The City of Fresno also seeks to develop a regional cooperative planning and development strategy with all the city, county, and special district jurisdictions in Fresno, Madera, Tulare, and Kings counties in order to better achieve increased air quality, lower greenhouse gas emissions, farmland preservation, water and energy conservation, increased regional transportation infrastructure and economic development, and sustainable fiscal resource and mutual quality-of-life goals in the region.

OBJECTIVE

LU-1

Establish a comprehensive citywide land use planning strategy to meet economic development objectives, achieve efficient and equitable use of resources and infrastructure, and create an attractive living environment.

IMPLEMENTING POLICIES

LU-1-a Promote Development within the Existing City Limits as of December 31, 2012. Promote new development, infill, and rehabilitation of existing building stock in the Downtown Planning Area, along BRT corridors, in established neighborhoods generally south of Herndon Avenue, and on other infill sites and vacant land within the City.

LU-1-bLand Use Definition and Compatibility. Include zoning districts and standards in the Development Code that provide for the General Plan land use designations and create appropriate transitions or buffers between new development with existing uses, taking into consideration the health and safety of the community.

LU-1-c Provision of Public Facilities and Services. Promote orderly land use development in pace with public facilities and services needed to serve development.

Commentary: Proposed school sites, parks, and storm water retention basin sites are shown in their most probable location, but the General Plan Land Use Diagram only represents probable placement for many of these prospective future public uses, and these various future public facility sites may be relocated or purchased in alternate locations.

LU-1-d Orderly Transition of Existing Uses. Implement updates to the Fresno Municipal Code to provide for the orderly transition of existing, legal non-conforming uses on the BRT Corridors.

Commentary: The goals, objectives and policies of this General Plan are long-term in nature. The General Plan recognizes the importance of providing for an orderly evolution of existing, legal non-conforming uses in a manner that acknowledges their current economic contributions while providing for a full transition into conforming uses consistent with applicable land use designations.

LU-1-e Annexation Requirements. Adopt implementing policies and requirements that achieve annexations to the City that conform to the General Plan Land Use Designations and open space and park system, and are revenue neutral and cover all costs for public infrastructure, public facilities, and public services on an ongoing basis consistent with the requirements of ED-5-b.

Commentary: If initiated directly with LAFCO without application by the City, the City is likely to oppose the proposed annexation unless it is consistent with the General Plan and the sequence of development discussed in the Implementation Element.

Regarding Disadvantaged Unincorporated Communities, the City will partner with the community, if there is wide support for annexation, to coordinate terms to initiate and support the annexation process.

LU-1-f Coordination with Fresno County Land Use Planning. Seek a Memorandum of Understanding (MOU) with the County of Fresno to prohibit development inconsistent with this General Plan on unincorporated land within the City's SOI.

Commentary: The MOU should also require all new development within the SOI to comply with all City development standards and policies.

LU-1-g SOI Expansion. Maintain the City's current SOI boundaries without additional expansion, except to allow for the siting of a maintenance yard for the California High Speed Train project and related industrial and employment priority areas proximate to and south of the SOI boundary between State Route 41 and State Route 99. Prohibit residential uses in the expansion area.

OBJECTIVE

LU-2 Plan for infill development that includes a range of housing types, building forms, and land uses to meet the needs of both current and future residents.

LUI-2-a Infill Development and Redevelopment. Promote development of vacant, underdeveloped, and re-developable land within the City Limits where urban services are available by considering the establishment and implementation of supportive regulations and programs.

LU-2-b Infill Development for Affordable Housing. Establish a priority infill incentive program for residential infill development of existing vacant lots and underutilized sites within the City as a strategy to help to meet the affordable housing needs of the community.

LU-2-c Infill Design Toolkit. Develop and distribute an infill design toolkit, consistent with the City's Infill Development Act to support and encourage infill development.

Commentary: The toolkit will use photos and diagrams to:

- Explain design and permit requirements and priority infill development incentives;
- Illustrate context-responsive best practices for prototype development; and
- Address detailed issues such as parking, scale, privacy, outdoor spaces, housing types, transitions, building design, siting and street orientation, setbacks, windows, and general material guidelines and buffering for adjacent uses.

LU-2-d Infrastructure Upgrades. Facilitate urban infill by building and upgrading community and neighborhood public infrastructure and services to enhance public health and convenience, and improve the overall experience and quality of city living.

LU-2-e Neighborhood Preservation. Incorporate standards in the Development Code to preserve the existing residential quality of established neighborhoods.

LU-2-FLot Consolidation. Include incentives in the Development Code for streamlining the consolidation of very small, oddly shaped, and difficult to develop lots to create more efficient and developable parcels.

OBJECTIVE

LU-3 Support the successful fulfillment of plans when adopted for the Downtown Planning Area.

LU-3-a Downtown Planning Area Plans. Prepare and adopt community plans and Specific Plans for the revitalization and continued development of the Downtown Planning Area neighborhoods, including the Fulton Street corridor, accompanied by implementing regulations that will govern future development in the area.

LU-3-b Mixed-Use Urban Corridors that Connect the Downtown Planning Area. Support the development of mixed-use urban corridors that connect the Downtown Planning Area with the greater Fresno-Clovis Metropolitan Area with functional, enduring, and desirable urban qualities along the Blackstone Avenue, Shaw Avenue, California Avenue, and Ventura Avenue/Kings Canyon Road corridors, as shown on Figure LU-1: General Plan Land Use Diagram.

LU-3-c Zoning for High Density on Major BRT Corridors. Encourage adoption of supportive zoning regulations for compact development along BRT corridors leading to the Downtown Core that will not diminish the long-term growth and development potential for Downtown.

OBJECTIVE

LU-4 Enhance existing residential neighborhoods through regulations, code enforcement, and compatible infill development.

IMPLEMENTING POLICIES

LU-4-a Neighborhood Nuisance Abatement. Continue proactive and responsive code enforcement and nuisance abatement programs to improve the attractiveness of residential neighborhoods.

LU-4-b Neighborhood Reinvestment. Promote and consider partnerships with lending institutions that provide a variety of financing alternatives and adhere to the provisions of the federal Community Reinvestment Act.

LU-4-c Housing Task Force. Establish an interagency housing task force to coordinate the housing programs of the City with similar programs of other local jurisdictions and the Fresno Housing Authority to develop a coordinated affordable housing implementation plan.

OBJECTIVE

Plan for a diverse housing stock that will support balanced urban growth, and make efficient use of resources and public facilities.

- LU-5-a Low Density Residential Uses. Promote low density residential uses only where there are established neighborhoods with semi-rural or estate characteristics.
- LU-5-b Medium-Low Density Residential Uses. Promote medium-low density residential uses to preserve existing uses of that nature or provide a transition between low and medium density residential areas.
- LU-5-c Medium Density Residential Uses. Promote medium density residential uses to maximize efficient use of residential property through a wide range of densities.
- **LU-5-d Medium-High Density Residential Uses.** Promote medium-high density residential uses to optimize use of available or planned public facilities and services and to provide housing opportunities with convenient access to employment, shopping, services, and transportation.
- **LU-5-e Urban Neighborhood Residential Uses.** Promote urban neighborhood residential uses to support compact communities and Complete Neighborhoods that include community facilities, walkable access to parkland and commercial services, and transit stops.
- **LU-5-fHigh Density Residential Uses.** Promote high-density residential uses to support Activity Centers and BRT Corridors, and walkable access to transit stops.
- **LU-5-g Scale and Character of New Development.** Allow new development in or adjacent to established neighborhoods that is compatible in scale and character with the surrounding area by promoting a transition in scale and architectural character between new buildings and established neighborhoods, as well as integrating pedestrian circulation and vehicular routes.
- LU-5-h Housing Offering Amenities. Support housing that offers residents a range of amenities, including public and private open space, landscaping, and recreation facilities with direct access to commercial services, public transit, and community gathering spaces.
- **LU-5-i Housing for Seniors.** Facilitate the development of senior housing projects that are accessible to public transportation and services.
- **LU-5-j Campus-Centered Communities.** Encourage development of campus-centered communities by focusing growth around existing and planned academic facilities and by directing infrastructure to those areas.

OBJECTIVE

LU-6

Retain and enhance existing commercial areas to strengthen Fresno's economic base and site new office, retail, and lodging use districts to serve neighborhoods and regional visitors.

IMPLEMENTING POLICIES

LU-6-a Design of Commercial Development. Foster high quality design, diversity, and a mix of amenities in new development with uses through the consideration of guidelines, regulations and design review procedures.

LU-6-b Commercial Development Guidelines. Consider adopting commercial development guidelines to assure high quality design and site planning for large commercial developments, consistent with the Urban Form policies of this Plan.

Commentary: The guidelines should address:

- Architectural finishes, coordinated color palette, massing, and hierarchy in scale;
- Pedestrian-scaled amenities, signage, and lighting;
- Site improvements, including parking lot landscaping, perimeter landscaping, foundation landscaping, walkways, and passageways;
- Ground floor transparency requirements along shopping streets and limitations on blank walls in these areas;
- Anti-theft glass on windows, rather than bars or roll-down metal screens, that are architecturally compatible with building design;
- Screening of truck loading, parking, mechanical equipment, transformers, ventilation systems, storage containers, and refuse collection areas from the street;
- Shading and its relationship and effects on surrounding buildings;
- Building entries; and
- Design standards for perimeter walls and fencing.

LU-6-c Appropriate Office Development. Promote the establishment of development standards for new offices, addressing location, size, and intensity necessary to meet the City's needs. Integrate and support employment in adjacent and proximate neighborhoods.

 Locate office projects to provide a transition between more intensive commercial uses and residential areas;

- Facilitate office uses in conjunction with, and adjacent to, institutions and employment centers; and
- Avoid over concentrating office uses in any one part of Fresno when new office developments would create excessive vacancy rates in other established office areas.

LU-6-d Neighborhood and Community Commercial Center Design. Plan for neighborhood mixed use and community commercial uses to implement the Urban Form concepts of this Plan, promote the stability and identity of neighborhoods and community shopping areas, and allow efficient access without compromising the operational effectiveness of the street system.

- Neighborhoods will be anchored by community commercial centers with a mix of uses that meet the area's needs and create a sense of place; and
- Community commercial centers will be located within Activity Centers.

LU-6-e Regional Center Planning and Design. Promote economic growth with regional commercial centers.

- New regional commercial centers will be located with access to State Routes and/or other major transportation facilities to ensure access from throughout the region; and
- Regional shopping centers will have internally-unified building design, landscaping, and signage standards.

LU-6-fAuto-Oriented Commercial Uses. Direct highway-oriented and auto-serving commercial uses to locations that are compatible with the Urban Form policies of the General Plan. Ensure adequate buffering measures for adjacent residential uses, noise, glare, odors, and dust.

LU-6-g Lodging Facilities Location. Site lodging facilities and related accommodations near major transportation facilities.

OBJECTIVE

LU-7 Plan and support industrial development to promote job growth.

IMPLEMENTING POLICIES

LU-7-a Incentives for a Diversity of Industries, Increased Food Processing and Manufacturing, and Related Employment Opportunities in Fresno. Use the City's Capital Improvement Program to set priorities for locations and timing of water,

sewer, and transportation infrastructure investments by the City and initiate implementation programs to encourage development of targeted industries as identified under Policy ED-3-c, in employment land use areas designated on Figure LU-1: Land Use Diagram.

Commentary: The South Industrial Area, located generally south of Jensen Avenue within the City's SOI, intersected by State Routes 41 and 99, and containing over 1,100 vacant acres designated for industry, is one such priority industrial development area for major infrastructure improvements (See Figure 1-3).

LU-7-b Business and Industrial Parks. Promote business and industrial park sites that are of sufficient size, unified in design, and diversified in activity to attract a full range of business types needed for economic growth.

LU-7-c Efficiency of Industrial Uses. Promote industrial land use clusters to maximize the operational efficiency of similar activities.

- Provide access to a range of transportation modes through plans and incentives, ensuring that local, regional, and national connections are available to industrial uses;
- Develop a strategy to promote rail-accessible sites for industries that need such capability; and
- Ensure timely access to the full range of urban services for industrial development by coordinating proposed plans with the annual and long-range City infrastructure planning.

LU-7-d Industrial Waste. Establish appropriate development standards and review procedures in the Development Code for industrial waste recycling operations and waste transfer stations.

LU-7-e Shared Parking for Industrial Uses. Promote use of shared surface parking and other arrangements necessary to meet industrial needs with updated parking regulations.

OBJECTIVE

LU-8 Provide for the development of civic and institutional land uses to meet the educational, medical, social, economic, cultural, and religious needs of the community.

- LU-8-a Civic and Institutional Use Compatibility. Protect civic and institutional areas from incompatible uses that could affect their vitality and contributions to the city.
- LU-8-b Access to Public Facilities. Ensure that major public facilities and institutions have adequate multi-modal access and can be easily reached by public transit.
- **LU-8-c Zoning for Public Facilities.** Allow public facility uses in zoning districts where appropriate.
- **LU-8-d Public Facilities and Institutions Meeting City Standards.** Request that federal, State, and local agencies locating public facilities and institutions in the City or designated growth area, meet City standards for public streets and sidewalks, access, parking, water supply, wastewater disposal, landscaping, and amenities.

OBJECTIVE

Plan land uses, design, and development intensities to supplement and support, and not compete with, the Downtown.

IMPLEMENTING POLICIES

- **LU-9-a Residential Locations.** Plan for new residential uses and types in a manner that help make the Downtown Planning Area a convenient destination for employment and regional retail shopping.
- **LU-9-b Activity Centers.** Plan for future Activity Centers at appropriate locations that avoid competition with Downtown businesses.
- LU-9-c Primacy of Downtown. Maintain the Downtown mixed-use areas as the Primary Activity Center within the city with the tallest buildings to enhance its profile and visibility.

Commentary: Activity Centers outside of Downtown may include, but not be limited to, the vicinity of Woodward Park and the Blackstone Avenue, Kings Canyon Avenue, and Shaw Avenue corridors.

- **LU-9-d Directional Signage.** Direct travelers to the Downtown with directional signage throughout the city and along regional routes.
- **LU-9-e Downtown Sightline.** Require new development to preserve existing sightlines to Downtown to the extent feasible.

LU-9-fView Corridors. Promote new view corridors that highlight the Downtown skyline.

LU-9-g Improve Access. Provide opportunities to enhance the existing physical accessibility of Downtown in order to encourage the inclusion of individuals with disabilities.

OBJECTIVE

LU-10 Promote regional cooperation and coordination on land use and planning issues among local jurisdictions.

IMPLEMENTING POLICIES

LU-10-a Regional Land Use and Transportation Planning Program. Continue participation efforts in a coordinated Regional Land Use and Transportation Planning Program with the City of Clovis, Fresno and Madera counties, and other cities in the region.

Commentary: This program can undertake mutually-agreeable development strategy to:

- Identify areas suitable for development;
- Direct urban development to incorporated cities;
- Propose programs to meet federal, State, and local air quality requirements;
- Identify future regional facilities and services, including transportation corridors, water, and sewerage;
- Conserve agricultural land and prevent its premature conversion including requirements for an economic assessment, phasing plan, and criteria to prevent leapfrog development; and
- Discourage the creation of new rural residential lots and subdivisions.

LU-10-b Integrity of the General Plan. Urge neighboring jurisdictions to support the integrity and implementation of the General Plan.

LU-10-c Memorandum of Understanding (MOU). Comply with the most recent Master Settlement Agreement and Amended and Restated MOU between the City of Fresno and County of Fresno. Update the existing MOU and Agreement as necessary to implement the goals of this Plan.

OBJECTIVE

LU-11

Encourage coordination with adjacent jurisdictions in providing public services, infrastructure and cooperative economic development.

IMPLEMENTING POLICIES

LU-II-a Regional Programs. Coordinate with the County of Fresno, County of Madera, the City of Clovis and other cities or special districts to:

- Promote resource management programs to avoid overlap and duplication of effort;
- Promote the development of a regional justice system program to meet future needs of the justice system, both adult and juvenile, including the judicial system and law enforcement;
- Promote the development of a regional public health program to meet future needs including community, environmental and mental health services; and
- Promote the development of a regional program to meet future library, recreational and social service needs of the region.

LU-II-b Regional Economic Development. Promote cooperative efforts with the County of Fresno, the County of Madera, the City of Clovis, other cities, or special districts to develop a regional approach to economic development that:

- Identifies regional economic development programs to create jobs and provide cost-effective incentives to assist business development of regional significance; and
- Promotes an agricultural-industrial synergy that will enable a significant portion of agricultural products to be fully prepared and processed locally.

LU-II-c General Plan Consistency. Pursue coordinated planning and development project reviews with relevant federal, State, and local public agencies to ensure consistency with this General Plan.

3.6 BUILDINGS AND DESIGN

Many well-known areas in Fresno are easily identified by their urban design and architecture. Both new and old, these areas can also serve as a basis for community dialogue when discussing design in general or specific proposed design guidelines and standards. Areas such as the Tower District, Huntington Boulevard, Wilson Island, Van

Ness Boulevard in the Fresno High area, and Old Fig Garden possess architectural and urban design characteristics that are highly valued by local residents and businesses. There are other areas in Fresno that are not so well known, but are highly regarded by their neighborhood because of urban design features.

For the most part, higher density and high-rise buildings are focused in Downtown. The State Route 41/Blackstone Avenue corridor is designated in the 2025 General Plan as a high-rise/mid-rise district, originally proposed in 1984, but has not yet developed as such. Once outside Downtown, the intensity and overall mass of buildings with a few exceptions in the River Park area are relatively low and homogenous. Generally, one-and two-story buildings predominate, although in distinct areas some structures rise up to four and six stories. Going forward and in support of Downtown, LU-9 policies provide desirable guidance.

Many buildings in Fresno are conservative in design, with some exceptions, such as the City Hall and the Robert E. Coyle Federal Building. Pre-World War II homes are highly valued and exhibit considerable variety and texture. The California ranch home movement produced notable homes in Old Fig Garden. Also, some garden office buildings are notable for the quality of their landscape and low-lying design.

OBJECTIVE

D-I Provide and maintain an urban image that creates a "sense of place" throughout Fresno.

IMPLEMENTING POLICIES

- D-1-a Direct Access to Units. Require all new multi-family residential development along BRT and other transit or pedestrian-oriented streets (Collector and Local), including high-rise, townhomes or other units, to provide direct pedestrian street access and to promote walkable connectivity, individualization, family-friendly development, identity, and street safety to the maximum extent reasonably feasible.
- D-1-b Active Ground Floor Frontage. Encourage all new development located within Activity Centers and/or along BRT corridors to incorporate active ground floor frontages that engage pedestrians to the maximum extent feasible. Establish pedestrian-oriented design standards in the Development Code for building frontages, transparency, fenestration, and entries to create active streetscapes.
- D-1-c Privately Owned Public Spaces. Consider creating and adopting design standards and incentives for providing privately owned public open

spaces and plazas for gathering to enhance the pedestrian realm and provide opportunities for social interaction.

- **D-1-d Public Art.** Continue to promote a citywide public art program that contributes to an awareness of the City's history and culture.
- D-1-e Graphic Identity. Continue the preservation, promotion, procurement and strategic location of landmarks, monuments and artwork that provide orientation and represent Fresno's cultural heritage and artistic values.
- **D-1-f Update Street Signs.** Consider updating street sign regulations to create a way-finding system and graphic identity without dominating city and district appearance.
- **D-1-g Reducing Surface Parking.** Consider adopting and implementing incentives to replace existing large surface parking lots in centers with parking structures, and to incorporate them into high-density mixeduse developments.
- D-1-h Screening of Parking. Consider requiring all new development with parking in Activity Centers and along corridors to be screened or concealed. Locate principal pedestrian entrances to new non-residential buildings on the sidewalk; any entrances from parking areas should be incidental or emergency use only.
- **D-1-i Wrapping Parking Structures.** Consider requiring new development of above-grade parking structures to be wrapped with and provide direct access to active uses, such as dwelling units, offices, and shopping spaces.

Commentary: If active uses are not feasible on the ground floor of parking garages, frontages should be architecturally attractive. This may be accomplished by including unique designs and materials, such as glass, articulated masonry, murals or landscaping setbacks.

D-1-j Lighting Standards. Update lighting standards to reflect best practices and protect adjoining uses from glare and spillover light.

Commentary: Security and interior lighting should not be visible from the exterior of parking garages.

OBJECTIVE

D-2 Enhance the visual image of all "gateway" routes entering the Fresno Planning Area.

IMPLEMENTING POLICIES

D-2-a Design Requirements for Gateways. Create unified design requirements for gateways to welcome travelers to the City's Activity Centers.

Commentary: Gateway route designation will be considered for application to key access routes such as State Routes 99, 41, 168, and 180; passenger rail rights-of-way; Peach Avenue, McKinley Avenue, and Clinton Way where air travelers enter Fresno; Van Ness Avenue; Fulton, Divisadero, Tulare, and Fresno Streets; Belmont and Olive; and Blackstone, Abby, Shaw and Herndon Avenues.

- **D-2-b Funding for Gateway Enhancements.** Pursue funding to implement gateway enhancement plans and programs.
- D-2-c Highway Beautification. Work with Caltrans, the Fresno Council of Governments, Tree Fresno, neighboring jurisdictions, and other organizations to obtain funding for highway beautification programs.

OBJECTIVE

D-3 Create unified plans for Green Streets, using distinctive features reflecting Fresno's landscape heritage.

IMPLEMENTING POLICIES

- D-3-a Green Street Tree Planting. Create a Green Street Tree Planting Program, with a well-balanced variety and spacing of trees to establish continuous shading and visual continuity for each streetscape. Strive to achieve coherent linkages between public and private spaces, prioritizing tree planting along tree-deficient Arterial Roadways in neighborhoods characterized by lower per capita rates of vehicle ownership.
- D-3-b Funding for Green Street Tree Planting Program. Pursue funding for the Green Street Tree Planting Program, including landscaping of median islands.

- **D-3-c Local Streets as Urban Parkways.** Develop local streets as "urban parkways," where appropriate, with landscaping and pedestrian spaces.
- D-3-d Undergrounding Utilities. Partner with utility companies to continue to pursue the undergrounding of overhead utilities as feasible.

OBJECTIVE

D-4 Preserve and strengthen Fresno's overall image through design review and create a safe, walkable and attractive urban environment for the current and future generations of residents.

IMPLEMENTING POLICIES

D-4-a Design Review for Large Buildings. Consider adopting and implementing a streamlined design review process for new construction and visible exterior alterations of large and significant multi-family, mixed-use and non-residential developments.

Commentary: Thresholds of size and significance will need to be defined and review processes designed not to impede investment and development time frames.

D-4-b Incentives for Pedestrian-Oriented Anchor Retail. Consider adopting and implementing incentives for new pedestrian-friendly anchor retail at intersections within Activity Centers and along corridors to attract retail clientele and maximize foot traffic.

Commentary: Examples of incentives include increased floor area ratios, deferred impact fees, and priority processing.

- D-4-c Appropriate Day and Night Activity. Promote new residential, commercial and related forms of development that foster both day and appropriate night time activity; visual presence on the street level; appropriate lighting; and minimally obstructed view areas.
- D-4-d Design for Safety. Continue to involve the City's Police Department in the development review process to ensure new buildings are designed with security and safety in mind.
- D-4-e Flexibility through Overlay Districts. Allow innovative lot designs and patterns to enhance community livability in residential neighborhoods through new zoning provisions, with flexible development standards.

- D-4-f

 Design Compatibility with Residential Uses. Strive to ensure that all new non-residential land uses are developed and maintained in a manner complementary to and compatible with adjacent residential land uses, to minimize interface problems with the surrounding environment and to be compatible with public facilities and services.
- D-4-g Development Code Update for Design Concepts. Ensure that standards in the Development Code implement General Plan design concepts for each land use type.

Commentary: The following will be considered in the new Development Code:

- Appropriate space is provided for activities proposed (e.g., indoor area for display of merchandise, as opposed to sidewalk/parking lot display);
- Sufficient space and access is provided for support functions, (e.g., storage, loading, parking, waste disposal/recycling);
- Location of customer parking areas does not discourage pedestrian and bicycle access;
- Access for the disabled is incorporated into project designs as required;
- Buildings in shopping centers are linked by pedestrian walkways;
- Business and industrial parks have campus-like settings, with uniformity of improvements and shared facilities for parking, loading, mass transit, and with internal and external bicycle and pedestrian access; and
- Structural conversions and changes of occupancy demonstrate compliance with building and zoning codes.
- **D-4-h Metal Buildings.** Promote the establishment of standards and guidelines for metal buildings to be acceptable and economical forms of structures.
 - New buildings with metal walls or metal roofs shall be painted or have other appropriate finishes, as approved by the City; and
 - Mechanical equipment shall be screened with parapet walls, mechanical wells, or other means. Roof vent color must match that of the roof. The distinctive pattern of ribs and joints in standing seam and other metal roofing materials should coordinate dimensionally with similar elements in exterior walls.

OBJECTIVE

D-5 Maintain and improve community appearance through programs that prevent and abate blighting influences.

IMPLEMENTING POLICIES

- **D-5-a Code Enforcement.** Continue enforcement of the Fresno Municipal Code to remove or abate public nuisances in a timely manner.
- D-5-b Clean Streets. Promote community partnerships and continued City efforts toward litter clean-up and abatement of trash stockpiles on public and private streets.
- **D-5-c Façade Improvements.** Pursue funding for, and support of, building facade improvement programs.
- **D-5-d Graffiti Prevention and Abatement.** Seek ways to end graffiti, continue and expand the City's effective Graffiti Abatement Program.
- **D-5-e Community Sanitation.** Continue efforts in Operation Clean-Up to address rubbish/debris associated with homelessness.

OBJECTIVE

D-6 Encourage design that celebrates and supports the cultural and ethnic diversity of Fresno.

IMPLEMENTING POLICIES

D-6-aConsult with neighboring populations, including non-English speaking groups, to inform the architecture, landscape, programming, and interior design of City-owned facilities such as parks, offices, street lighting, and other visible features.

Commentary: The intent of this policy is to incorporate local needs and desires into the design and function of local-serving public facilities, as appropriate.

D-6-bConsider adopting and implementing incentives for, and support efforts by, private development to incorporate culturally-specific architectural elements in areas with a predominant ethnic population.

OBJECTIVE

D-7 Continue applying local urban form, land use, and design policies to specific neighborhoods and locations.

IMPLEMENTING POLICIES

D-7-a Amend or repeal the Community and Specific Plans as listed below. As appropriate, relocate specific street setback requirements found in the various plans to the Development Code. Repeal the Local Planning and Procedures Ordinance (LPPO) after adoption of the General Plan.

To Be Amended:

Bullard Community Plan (becomes Pinedale Neighborhood Plan)

Sierra Sky Park Land Use Policy Plan (for consistency with the Airport Land Use Commission's Sierra Sky Park Plan)

Tower District Specific Plan

Butler-Willow Specific Plan

North Avenue Industrial Plan

Sun Garden Acres Specific Plan

Hoover Community Plan (becomes El Dorado Park Neighborhood Plan)

To Be Repealed:

West Area Community Plan

Roosevelt Community Plan

Fulton/Lowell Specific Plan

Woodward Park Community Plan

Central Area Community Plan

McLane Community Plan

Fresno-High Roeding Plan

Yosemite School Area Specific Plan

Dakota-First Street Specific Plan

Edison Community Plan

Civic Center Master Plan

Highway City Specific Plan

D-7-b Consider preparing new community, neighborhood, and/or Specific Plans for neighborhoods and locations that were covered by repealed plans.

Commentary: The City will work with community members in the preparation of new community, neighborhood, and/or Specific Plans after the adoption of the General Plan.

D-7-c Forestiere Underground Gardens. In the event that the Highway City Specific Plan is repealed, those goals and implementation policies in the Highway City Specific Plan that are pertinent to the Forestiere Underground Gardens shall be incorporated in their entirety into this General Plan and will remain in effect.

3.7 DISADVANTAGED UNINCORPORATED COMMUNITIES

California Senate Bill 244 (Wolk, 2011; SB 244) requires local municipalities to identify Disadvantaged Unincorporated Communities (DUCs) within or adjacent to their Sphere of Influence (SOI), analyze the infrastructure needs of the DUCs (including water, wastewater, stormwater drainage, and structural fire protection), and evaluate potential funding mechanisms to make service extension feasible.

Disadvantaged Unincorporated Communities are defined as settled places not within city limits where the median household income is 80 percent or less than the statewide median household income.^{6, 7} Under the policy set forth by the Fresno Local Agency Formation Commission (LAFCO), a DUC must also have at least 15 residences with a density of one unit per acre or greater. ⁸

In 2015, Fresno LAFCO identified a total of 20 DUCs that are located within or adjacent to the City of Fresno SOI and which meet the full definition of a DUC (See Figure LU-3).

Infrastructure Conditions Summary of Fresno Area DUCs Water

Water access for DUCs is served through either the City of Fresno Public Utilities Department or through private wells. Adequate water infrastructure is defined as having existing infrastructure connecting a parcel that contains one or more residences to the City's water system. The analysis does not include parcels that do not contain residences (i.e. vacant land or businesses) nor does it consider whether or not a residence has active service.

Wastewater

Similar to water, wastewater service is provided either through the City of Fresno Public Utilities Department or through private septic tanks. Adequate wastewater

⁶ State of California Office of Planning and Research. Technical Advisory to SB 244.

⁷ Flegal, C., Rice, S., Mann, J., & Tran, J. California Unincorporated: Mapping Disadvantaged Communities. PolicyLink, 2013

⁸ Fresno Local Agency Formation Commission. City of Fresno Municipal Service Review Public Review Draft, prepared by Policy Consulting Associates, LLC. October 20, 2015.

infrastructure is likewise defined as having existing infrastructure connecting a parcel that contains one or more residences to the City's system. The analysis does not include parcels that do not contain residences nor does it make a distinction of active versus inactive service.

Stormwater Drainage

The stormwater drainage analysis includes review of the existing curb and gutter facilities in the DUC areas. Adequate stormwater drainage is defined as having curb and gutter located between a parcel containing one or more residences and the adjacent street(s) throughout the entire DUC area. FEMA Flood Zones are also given to indicate the likelihood that an area would face a significant flood threat.⁹

Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

Zone XS: Zone X (shaded). Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone A: No Base Flood Elevations determined.

Zone AE: Floodway Areas. The floodway is the channel of a stream [or canal] plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

Structural Fire Protection

Fire protection service is provided through the City of Fresno Fire Department and through response agreements with the City of Clovis Fire Department and the Fresno County Fire Protection District. Adequate structural fire protection is defined as having all parcels located within a four minute-response area. Only two DUC areas are not completely within this area.

Accessibility to fire hydrants is also important to the structural fire protection of DUCs, yet it was not possible to give an accurate analysis for fire hydrant coverage due to the

⁹ Flood Insurance Rate Map for Fresno County. Federal Emergency Management Agency, 2009.

constraints in mapping the (conservative) 500 foot range of coverage from a hydrant to a parcel via travel path. However, maps showing the 500 foot circular radius around fire hydrants is given in Appendix A to denote a general awareness of where fire hydrant coverage is sparse and where it is abundant. It should be noted that in areas without fire hydrant protection, the fire department will deploy a water tender and draft from seasonal irrigation canals as available to supplement the 500-700 gallons of fire suppression water carried on each apparatus. However, this alternate means of fire suppression results in significant delays or inability to mount an interior fire attack in a house, which affects rescue of the inhabitants and the deployment of adequate hose streams to protect adjacent structures.

In the following table, information is given for each DUC that exhibits the extent to which adequate infrastructure (as defined for each category) exists in those areas.

TABLE 3-3: DUC INFRASTRUCTURE CONDITIONS SUMMARY					
#	Water ¹	Wastewater ¹	Stormwater Drainage		Structural Fire Protection
#	Connected Line	Connected Line	Curb & Gutter	FEMA Flood Zone	Within 4 Minute Zone
1	4 of 18 22%	7 of 18 39%	No	Zone X	100%
2	8 of 39 21%	1 of 39 3%	No	Zone X	100%
3	0 of 249 0%	0 of 249 0%	No	Zone X & Zone XS	100%
4	131 of 221 59%	53 of 221 24%	No	Zone X & Zone XS	100%
5	0 of 14 0%	0 of 14 0%	No	Zone X & Zone XS	3.6%
6	0 of 39 0%	0 of 39 0%	No	Zone X & Zone A	100%
7	0 of 12 0%	0 of 12 0%	No	Zone X	100%
8	0 of 25 0%	0 of 25 0%	No	Zone X	100%
9	1 N/A ²	1 N/A ²	N/A	Zone X	60%
10	0 of 4 0% 12 N/A ²	0 of 4 0% 12 N/A ²	No	Zone X	100%
11	0 of 15 0%	0 of 15 0%	No	Zone X	100%
12	327 of 330 99%	324 of 330 98%	Yes	Zone X & Zone XS	100%
13	13 of 14 93%	0 of 14 0%	No	Zone XS	100%
14	104 N/A ³	83 of 104 80%	No	Zone X, Zone XS, & Zone AE	100%
15a	462 N/A ³	416 of 462 90%	No	Zone X & Zone XS	100%
15b	122 of 131 93% 5 N/A ³	125 of 136 92%	No	Zone X & Zone XS	100%
16	159 of 159 100% 441 N/A ³	587 of 600 98%	No	Zone XS	100%
17	976 of 976 100%	976 of 976 100%	No	Zone X & Zone XS	100%
18	1195 of 1195 100%	1195 of 1195 100%	Yes	Zone X, Zone XS, & Zone AE	100%
19	56 of 60 93%	60 of 60 100%	No	Zone XS	100%
20	272 of 272 100%	264 of 272 97%	No (missing 3 parcels)	Zone X	100%

¹ Counts of parcels with one or more residences are considered as a close approximation.

The number of parcels with residences within each DUC was determined through visual interpretation of aerial maps and Google Maps Street View. Maps and additional data are included in Chapter 3, Appendix A.

² These parcels are located within the boundaries of the Malaga Water District.

³ These parcels are located within the boundaries of the Bakman Water District.

Water Districts

As noted in Table 3-4, some DUCs or portions of DUCs are served by the Malaga and Bakman Water Districts. While the active service in these areas may be more limited than the actual district boundaries, they are nevertheless excluded from the analysis because an activation or system upgrade in these areas would be managed by the respective water district, not the City.

Potential Funding Mechanisms to Address Deficiencies

SB 244 does not require cities to provide infrastructure directly to DUC areas, however, it does require cities to evaluate potential funding mechanisms that would make such service extensions feasible. The following alternatives are provided as potential funding mechanisms that could be utilized by entities within the governmental, private, and non-profit realms.

New Development

One way to address existing deficiencies is through new private development where the installation, upgrade, or expansion of infrastructure would be required to serve the new development. This type of development typically occurs on a limited, site-specific basis and is thus unlikely to address area-wide infrastructure needs within large areas that are nonadjacent to the city limits. However, for small areas like DUC Area 1 or in areas like DUC Area 15b, where infrastructure is missing from only a small number of parcels, private development could be effective in completing the community's total infrastructure needs.

Service Districts

Another mechanism to provide infrastructure is to establish an assessment district to bond for infrastructure construction and pay for it over time. A district would fund the cost of the infrastructure within a designated area through the fairly proportioned financial contributions of each benefiting landowner. To form a district, property owners vote to affirm the establishment of the district and assessment through a special election. This method would be most effective in areas that are missing significant portions of infrastructure such as water and sewer mains along major corridors.

Grants and Loans

There are numerous state, federal, and regional grants and loans that can provide funding for infrastructure projects within DUCs. Some examples include:

STATE WATER RESOURCES CONTROL BOARD DRINKING WATER STATE REVOLVING FUND 10

The DWRSF is a State-managed fund that can supply low-interest to no-interest loans to provide drinking water infrastructure to disadvantaged communities. Eligible applicants include cities, counties, districts, for-profit and non-profit community water systems, public school districts and other non-community water systems, and systems that are created by the project. The repayment terms are 20 years or longer and the principal balance may be forgiven for publicly owned water systems or non-profit mutual water companies that serve disadvantaged communities.

STATE WATER RESOURCES CONTROL BOARD CLEAN WATER STATE REVOLVING FUND¹⁰

The CWSRF provides low interest financing agreements (dependent on General Obligation Bond Rate) for wastewater and stormwater treatment projects. Eligible applicants include cities, counties, districts, state agencies, tribal governments/organizations, agencies approved under Section 208 of the Clean Water Act, 501(c)(3)s, and National Estuary Programs. The repayment terms are up to 30 years or the useful life of the project. A percentage of the total project cost up to the full amount may be waived for projects benefiting DACs."

STATE WATER RESOURCES CONTROL BOARD DIVISION OF FINANCIAL ASSISTANCE

The Division of Financial Assistance is in charge of implementing the State Water Resources Control Board's financial assistance programs and contains a link to current funding sources on its website at www.waterboards.ca.gov/water_issues/programs/grants_loans

GROUNDWATER QUALITY FUNDING ASSISTANCE 12

The Groundwater Grant Program holds approximately \$744 million dollars for the prevention and cleanup of contamination of groundwater-sourced drinking water. Up to \$160 million has been specifically set aside for project serving disadvantaged communities (DACs) and economically distressed areas (EDAs). Eligible applicants include public agencies, non-profits, tribal organizations, public utilities, and mutual water companies. Grants range from \$100,000 - \$1 million for planning and \$500,000 -

^{10 &}quot;Below-Market Financing for Wastewater & Water Quality." State of California Clean Water State Revolving Fund.

[&]quot;Proposition 1 - Small Community Wastewater." State Water Resources Control Board, 15 Sept. 2015.

¹² Water Board Groundwater Funding Programs." California Water Boards.

unrestricted for implementation. Funds are available from 2018 to 2021. Minimum local matching is 50%, however this may be reduced or waived for projects that benefit a DAC or EDA.

INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) GRANT PROGRAM¹³

The IRWM Grant is administered by the Department of Water Resources and contains approximately \$474.3 million in funding to be applied to projects that will adapt water systems to climate change, improve collaboration in regional water management, and increase regional water self-reliance (reducing reliance on the Sacramento-San Joaquin Delta). Of this \$102 million is set aside for assistance to disadvantaged communities (DACs). Eligible applicants include public agencies, non-profits, tribal organizations, public utilities, and mutual water companies. Minimum local matching is 50%, however this may be reduced or waived for projects that benefit a DAC or EDA.

INFRASTRUCTURE STATE REVOLVING FUND (ISRF) LOAN PROGRAM¹⁴

The California Infrastructure and Economic Development Bank manages the ISRF program to provide low-cost financing for infrastructure projects in amounts ranging from \$50,000 to \$25 million with terms of up to 30 years. Municipal agencies and non-profit entities with municipal sponsors are eligible for funding.

USDA RURAL DEVELOPMENT WATER & WASTE DISPOSAL LOAN & GRANT PROGRAM¹⁵

The United States Department of Agriculture manages a Water & Waste Disposal Loan & Grant Program that offers long-term (up to 40 years), low-interest loans (sometimes combined with grants) for the construction or improvement of drinking water, sewer, solid waste, and storm water facilities in rural communities. The program may be pursued by state and local government entities, non-profits, and federally recognized tribes.

COMMUNITY DEVELOPMENT BLOCK GRANT FUND 16

^{13 &}quot;Proposition 1 IRWM Grant Program." California Department of Water Resources. 22 Feb. 2016.

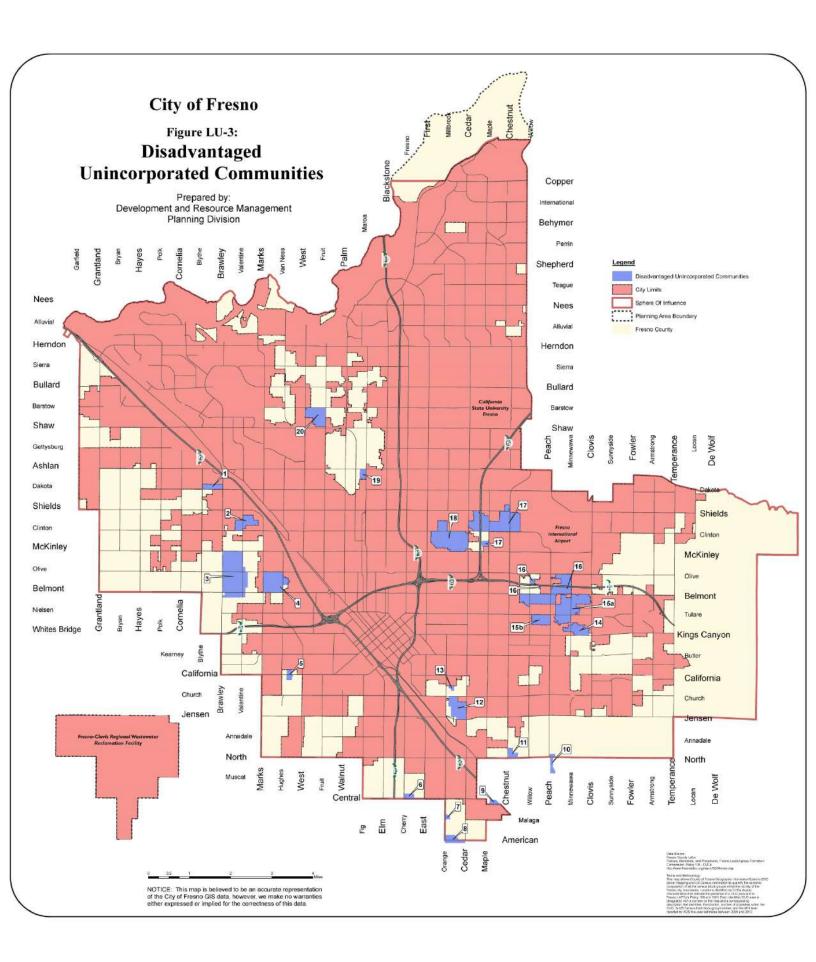
¹⁴ California Infrastructure and Economic Development Bank. Criteria, Priorities and Guidelines for the Selection of Projects for Financing Under the Infrastructure State Revolving Fund (ISRF) Program. Adopted August 25, 2015.

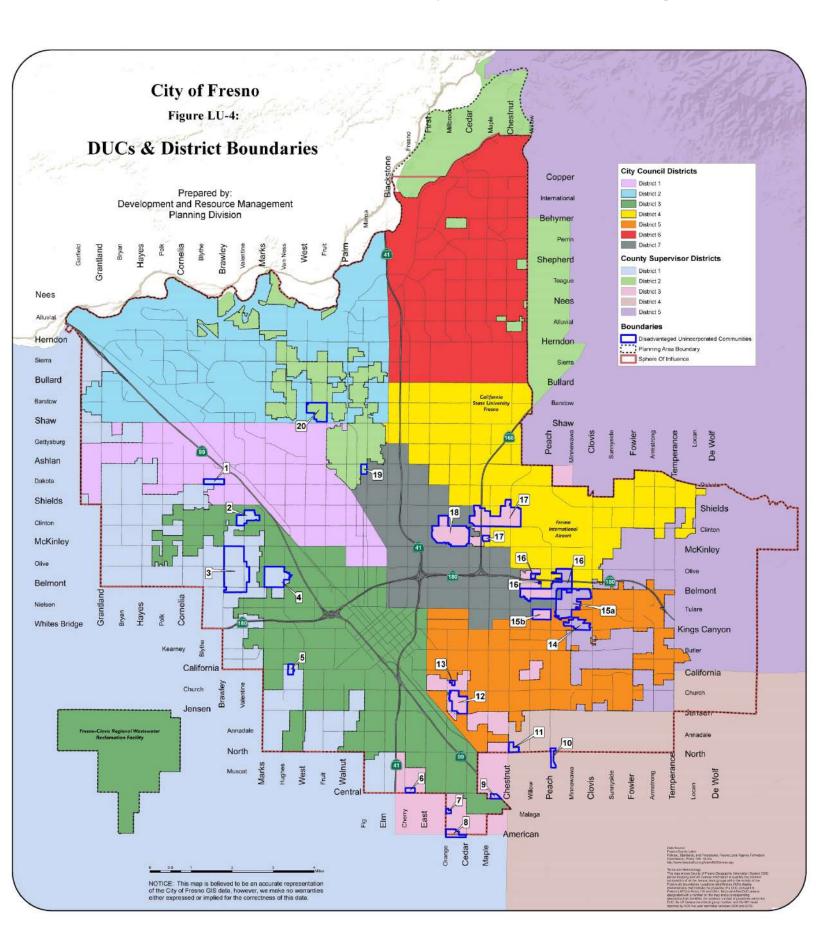
^{15 &}quot;Water & Waste Disposal Loan & Grants Program.." United States Department of Agriculture, Rural Development.

^{16 &}quot;CDBG Entitlement Program Eligibility Requirements." US Department of Housing & Urban Development, 2014.

Administered by the United States Department of Housing and Urban Development, CDBG Funds are used to benefit low- and moderate-income communities, blighted communities, and communities that face issues of health and welfare. The fund may be used by the state and by cities and counties and can be applied toward infrastructure improvements.¹⁷

^{17 &}quot;Expenditure Report: Use of CDBG Funds by Fresno County, CA." US Department of Housing & Urban Development, Office of Community Planning and Development. 12 Jan. 2015





4 MOBILITY AND TRANSPORTATION

The purpose of the Mobility and Transportation Element is to provide an efficient, multi-modal transportation system that will meet the needs of all residents throughout the planning period. The Element is based on a fundamental philosophy that travel needs can be met through a comprehensive program of transportation planning, land use planning, growth management strategies, and a new Complete Streets concept. This Element includes objectives and policies for all modes and all users of streets and highways, transit, sidewalks and trails, and bicycle transportation modes, as well as parking, goods movement strategies, and the City's airports.

4.1 CONTEXT

This element has a strong connection to the Urban Form, Land Use, and Design Element, as the intensity, type, and location of land uses directly affects demand for transportation, and the idea of Complete Neighborhoods and pedestrian-oriented shopping districts must be supported by a well-connected system of Complete Streets, transit, and pedestrian and bicycle networks. A good transportation system also is critical to achieving the economic goals of this General Plan. Issues of transportation and connectivity also influence issues in other elements, such as supporting healthy communities; a resilient city; fiscal sustainability; improving air quality; access to police, fire, and medical services; and the ability to go for a walk. The appearance and function of public roadways is also one of the major components of a city's character and functionality, and one of the City government's main investments in the public realm and sense of place of its community.

Relationship to General Plan Goals

The Mobility and Transportation Element supports a number of General Plan goals, in particular the following:

- 1. Increase opportunity, economic development, business and job creation.
 - Use urban form, land use, and Development Code policies to streamline permit approval, promote local educational excellence and workforce relevance, significantly increase business development and expansion, attract and retain talented people, create jobs and sustained economic growth, strategically locate employment lands and facilities, and avoid over-saturation of a single type of housing, retail or employment.
- Emphasize conservation, successful adaptation to climate and changing resource conditions, and performance effectiveness in the use of energy, water, land, buildings, natural resources, and fiscal resources required for the longterm sustainability of Fresno.
- 9. Promote a city of healthy communities and improve quality of life in established neighborhoods.
 - Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, and health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.

4-2 FRESNO GENERAL PLAN

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¹ The commentary in italics following certain goals is not part of the goal itself, but is instead advisory language intended to further discuss and clarify the goal to help guide the objectives of this General Plan

- 11. Emphasize and plan for all modes of travel on local and Major Streets in Fresno.
 - Facilitate travel by walking, biking, transit, and motor vehicle with interconnected and linked neighborhoods, districts, major campuses and public facilities, shopping centers and other service centers, and regional transportation such as air, rail, bus and highways.
- 13. Emphasize the City as a role model for good growth management planning, efficient processing and permit streamlining, effective urban development policies, environmental quality, and a strong economy. Work collaboratively with other jurisdictions and institutions to further these values throughout the region.
 - Positively influence the same attributes in other jurisdictions of the San Joaquin Valley —and thus the potential for regional sustainability and improve the standing and credibility of the City to pursue appropriate State, LAFCO, and other regional policies that would curb sprawl and prevent new unincorporated community development which compete with and threaten the success of sustainable policies and development practices in Fresno.
- 14. Provide a network of well-maintained parks, open spaces, athletic facilities, and walking and biking trails connecting the city's districts and neighborhoods to attract and retain a broad range of individuals, benefit the health of residents, and provide the level of public amenities required to encourage and support development of higher density urban living and transit use.
- Protect and improve public health and safety.

4.2 STRATEGIC INITIATIVES

Fresno has an effective and well-planned transportation system that is one of the strengths of the city. Looking ahead, however, the City has unmet transportation needs. A "re-think" is needed to consider how to meet them, given emerging concerns about urban form and economic development, performance measures for multi-modal planning, fiscal realities, and environmental considerations, as well as the State mandate that the concept of Complete Streets be integrated into the local general plan. How all of these ideas can be brought together is the focus of this section.

Complete Streets

The California Complete Streets Act (Act) requires general plans updated after January 30, 2011 to develop a plan for a multi-modal transportation system. The goal of the Act is to encourage cities to rethink policies that emphasize automobile circulation and prioritize motor vehicle improvements, and come up with creative solutions that

emphasize all modes of transportation. Complete Streets design has many advantages. When people have more transportation options, there are fewer traffic jams and the overall capacity of the transportation network increases. Additionally, increased transit ridership, walking, and biking can reduce air pollution, energy consumption, and greenhouse gas emissions, while improving the overall travel experience for road users. Providing more transportation options will allow the City to meet its future travel demands without solely relying on motorized vehicles.

Specifically, the legislation requires roadways to be designed to accommodate all users and provide a balance of multiple uses. Users could include motorists, pedestrians, bicyclists, children, older adults, persons with disabilities, and users of public transportation. Each street segment is not required to be Complete Street on its own; rather, all streets within the system as a whole must be considered. However, major thoroughfares such as Fresno's Arterials are among those roadways that should be Complete Streets along their entire length. The only exception would be if an immediately proximate roadway offered a faster, safer, and more convenient route, such as a bike boulevard running parallel to a heavy traffic corridor.

While there is no standard design template for a Complete Street, it generally includes one or more of the following features: bicycle lanes, wide shoulders, well-designed and well placed crosswalks, crossing islands in appropriate midblock locations, bus pullouts or special bus lanes, audible and accessible pedestrian signals, sidewalk bulb-outs, center medians, street trees, planter strips and ground cover. Complete Streets create a sense of place and improve public safety due to their emphasis on comprehensively encouraging pedestrian activity.

Using Performance Standards for Multi-Modal Systems

The City's current method of evaluating roadway performance needs to be updated to bring it in line with best practices for transportation planning and the Complete Streets legislation and align with General Plan goals for a multi-modal system. The current performance criteria dictate the number of street lanes constructed in order to prevent traffic congestion from exceeding a certain level, without consideration of other transportation modes that also should be accommodated. Issues with the City's traditional approach to roadway performance include:

- The current "one size fits all" approach that treats all areas of the city the same;
- The absence of other modes of travel—walking, bikes, transit—from the criteria;
- The City's past practice of giving relatively high priority to vehicle travel level of service. This emphasizes keeping traffic congestion low but requires a roadway

system that is expensive to construct and maintain to serve the city's peak 15-minute travel time (rush hour). This also distorts the land development market and does not support the General Plan's urban form concepts.

System Capacity Design

Related to the City's high performance standards, Fresno's roadway system is built to handle a very short peak period of usage. The city does not have a full rush "hour," but rather a peak 15-minute period at most major intersections. Similar to a giant parking lot built to accommodate shoppers on the busiest day of the year only, but which is relatively empty most of the time, the street system is designed for a very small portion of overall demand.

This approach does create minimal traffic congestion at peak times, but results in an over-supply of capacity the majority of the time. It also requires a large amount of land to be devoted to streets, using up land that could be used for residential and commercial development, parks, schools and civic facilities. It creates environmental impacts and discourages travel by other modes—which paradoxically increases the amount of traffic on Fresno's streets. It is also expensive for the City to maintain this robust roadway system.

Making Use of Excess Capacity

Fresno's existing street system has excess capacity in several key areas due to the recent construction of the freeway system. The City can take advantage of this situation by promoting denser development on these streets, which will make the most efficient use of an existing public resource, increase opportunities for economic development and property values, and encourage a diversity of development types.

Comprehensive Connectivity

Fresno has transportation facilities that meet most modes of circulation, but the systems for pedestrians and bicycles are largely incomplete. In certain areas of Fresno, there is also difficulty in getting from one neighborhood to another, and to local stores, services, and public facilities such as schools and parks, by any means other than private automobile. Completing these citywide networks will encourage faster and simpler travel routes for work, errands, and recreation.

A well-connected street system offers a choice of routes and enables more direct connections. At the neighborhood scale a street grid facilitates walking, as convenience and direct routes are very important to pedestrians. What is good for walking is also good for transit: in a well-connected street system, buses can travel along routes easily reached on foot from the neighborhood interior. At a district or city scale, a grid

provides ideal conditions for a robust bicycle network. Cyclists prefer direct routes with moderate or low auto traffic; streets meeting both these descriptions can only be found in a system where streets connect across and not only within neighborhoods. Critically, a connective pattern is good for automobile traffic. With many routes to choose from, cars are able to distribute across the system rather than relying on a few major roads. This is also a valuable component of safe and efficient emergency vehicle response.

Air Transportation

Regional, national and global connectivity is provided by the City's two public airports, Fresno Yosemite International (FYI) and Fresno Chandler Executive Airport (FCH), and one private airport open to public use, Sierra Sky Park. FYI has excellent connectivity throughout the United States and world with ten airlines serving 12 non-stop destinations (five of which are major gateways). This also fosters healthy competition between the air carriers and stabilizes airfares. As of February 2014, FYI has connectivity to 242 domestic destinations and 74 international destinations across all seven continents - through just one connecting flight. FCH serves as a critical reliever airport to FYI and is the busiest general aviation airport in the Central Valley. It plays a significant role in accommodating business and corporate connectivity to the region and throughout California. The airport-related Objectives and Implementation Policies identified in this element address the continued viability of both FYI and FCH.

Parking and Goods Movement

Fresno does not have any particular issue with parking and goods movement, but faces similar concerns of many other cities, which is ensuring adequate infrastructure and logistics to keep the costs of economic development low, while simultaneously aiming to improve visual appearance, enhance the safety of walking and biking, and reduce the costs of road maintenance. The reliance of both inter-regional and local goods movement on State Route 99 is an important issue for both Fresno and the San Joaquin Valley, and plans for future development will need to avoid loading unnecessary personal traffic onto this crucial corridor when possible.



A well-connected, multi-modal transportation system serves all Fresnans.

4.3 ROADWAYS AND AUTOMOBILES

The City and County public roadway network, together with State highway routes, comprise the predominant transportation infrastructure in and around Fresno. Although this network primarily serves travel by private automobiles, it also accommodates persons travelling by most modes, as well as the distribution of goods and services. Streets and highways are also the most widespread element of the public realm, constitute a prominent urban form defining feature, and establish a common environment and image of the city.

Automobile travel has been the main emphasis of transportation planning and is the dominant mode in Fresno. According to Fresno Council of Governments' (FCOG) Travel Demand Model (2012), about 91.2 percent of the total average daily trips beginning or ending in the County are made by private vehicles. About 7.4 percent of the daily average trips are made by walking and bicycling, and less than one percent (0.86 percent) use transit, based on the most recent U.S Census journey to work data.

In Fresno, the roadway system configuration has been primarily based on a traditional grid pattern. The oldest part of the city (the traditional Downtown area) is an urban grid oriented to the Union Pacific (originally Southern Pacific) railroad alignment that traverses the San Joaquin Valley in a northwest to southeast direction. Outside of this area the grid shifts to a north-south orientation based on Township, Range and Section lines. Almost all of the Arterial and Collector Streets (roadways) within the

Metropolitan Area are regularly spaced at half-mile intervals. This roadway pattern has been modified in the past several decades to include several curvilinear and diagonal alignments, and neighborhood street patterns have sometimes deviated from the grid pattern.

Over time, Fresno's street circulation system and developed urban form have also been framed by limited access State highways that traverse the city. State Route 99 traverses the city from northwest to southeast, connecting Fresno to other communities throughout the central and southern San Joaquin Valley. State Routes 41 and 180 bisect the city north-south and east-west connecting Fresno to Yosemite and Kings Canyon National Parks, respectively. State Route 168 links Fresno to Clovis and Sierra Nevada recreational attractions at Shaver and Huntington Lakes to the northeast. The construction of the freeway system removed a substantial amount of the "through" traffic from the local roadway network (e.g.: Blackstone Avenue, Golden State Boulevard, Kings Canyon Road), freeing up capacity on the local streets except at intersections near freeway interchanges. This urban freeway system has shortened commute times from the northern areas of the city and Clovis, and to the east for bedroom communities and foothill communities, thus supporting the continued spread of urbanization onto productive agricultural land, increasing commute lengths, and vehicle miles travelled each day to and from work.

Roadway System

Figure MT-1: Circulation Diagram designates the planned roadway network of the General Plan. The planned roadway system focuses primarily upon roadways, which includes the Expressway, Superarterial, Arterial, and Collector Streets. For some roadways, especially in areas that are not yet developed with urban uses, the diagram indicates the future and not the present character of the road. The construction of planned roadways occurs during the course of a general plan's implementation through the execution of the City's capital improvements program utilizing funds from a variety of sources. In addition, portions of roadways are constructed by private property owners and developers in accordance with applicable property development standards.

Street Typologies

This General Plan establishes a refined street classification system to categorize roadways and other transportation facilities, as shown in Figure MT-1: Circulation Diagram. Each classification reflects the character of the facility as well as its function within the context of the entire transportation system. Each classification has standards considering a facility's relation to surrounding land uses, existing rights-of-way, accessibility via other roadways, and appropriate travel speeds. While roadway classification types were originally based upon a priority given to various types and lengths of motor vehicle tips, they now give substantial consideration to the

accommodation of multiple travel modes and trips (public transportation, bicycle, pedestrian). This classification system will be used for engineering design and traffic operation standards. Scenic Corridors apply the corresponding classification listed here.

Freeway: Multiple-lane divided (median island separation) roadways on adopted State route alignments servicing through and crosstown traffic, with no access to abutting property and no at-grade intersections. Freeways are under the jurisdiction of the State, outside the control of the City. They have been assessed for the purposes of this General Plan due to their location within the Planning Area for the General Plan.

Expressway: Four- to six-lane divided (median island separation) roadways primarily serving through and crosstown vehicle traffic, with at-grade major street intersections located at approximately one-half mile intervals and no driveways for direct motor vehicle access to abutting property.

Superarterial: Four- to six-lane divided (median island separation) roadways with a primary purpose of moving multiple modes of travel traffic to and from major traffic generators and among subregions. A select number of motor vehicle access points to adjacent properties or local streets between the major street intersections may be approved by the City. Access points will be limited to right-turn entrance and exit vehicular movements, as well as select left-turn partial openings in medians from the Superarterials to surrounding properties or neighborhoods, limited to one location per half-mile. No left turns are allowed out of local streets or properties.

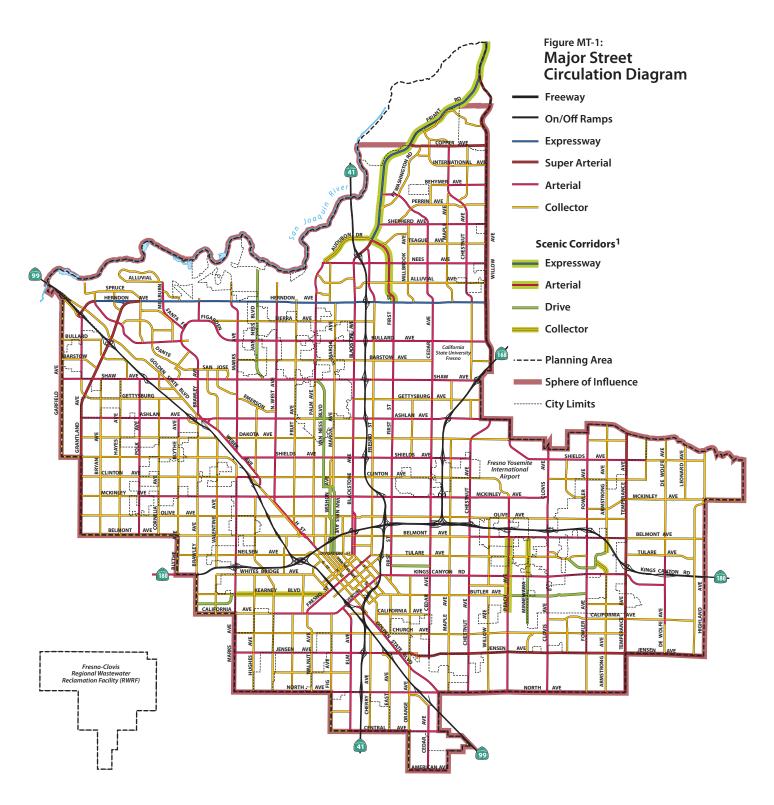
Arterial: Four- to six-lane divided (median island separation) roadways, with somewhat limited motor vehicle access to abutting properties, and with the primary purpose of moving traffic within and between neighborhoods and to and from freeways and expressways. In addition to major street intersections, appropriately designed and spaced local street intersections may allow left-turn movements to and from the arterial streets.

Collector: Two- to four-lane undivided (opposing travel lanes generally not separated by a median island) roadways, with the primary function of connecting local streets and arterials and neighborhood traffic generators and providing access to abutting properties. Local street intersections and motor vehicle access points from abutting properties are allowed consistent with the City's engineering standards and accepted traffic engineering practices. Collectors typically have a center two-way left-turn lane.

Local: Two- to three-lane roadways designed to provide direct access to properties, while discouraging excessive speeds and volumes of motor vehicle travel incompatible with neighborhoods being served through the implementation of multiple, well

connected routes and traffic calming measures. The alignments of future local streets are typically not specified by the General Plan Circulation Diagram, but existing local streets may be depicted for informational purposes. In specific circumstances local streets are designated where necessary to assure adequate access and implementation of Complete Neighborhoods with well-connected routes for motor vehicle, bicycle and pedestrian travel.

Drive: A street that in addition to its transportation function provides opportunities for the enjoyment of natural and man-made scenic resources. The aesthetic values of scenic drives may be protected.



1. See Policies MT-3-a and MT-3-b for Scenic Corridors.

Note: The Fresno Air National Guard Base, a military airport, and the Fresno Yosemite International Airport are located in the area represented as Fresno Yosemite International Airport.



Source: City of Fresno, 2014.

Street Design Standards

Over the past 35 years, the planned roadway hierarchy has shifted from being singularly focused on moving automobiles to a more complete multi-modal network. However, the relationship of street function to land use characteristics has continued to focus upon ameliorating adverse impacts of traffic nuisances with landscaped setbacks, walls and parking areas separating buildings from the street and sidewalk public realm. This system does not adequately account for land uses along streets that may be more focused on pedestrians, cyclists, and transit riders, as seen in Downtown, Activity Centers, and BRT Corridors. A new approach to street classification must now be considered to account for the specific characteristics sought in these areas.

The General Plan expands the roadway classification descriptions to include specific characteristics, such as pedestrian realm, on-street parking, number of vehicle lanes, bike lanes, and landscaped median, as shown in Table 4-1.

TABLE 4-1: ROADWAY CHARACTERISTIC MATRIX						
Roadway Type	Number of Vehicle Lanes	Bike Lanes	Pedestrian Facilities	On- Street Parking	Median	
Expressway	4 to 6	No	Trail	No	Yes	
Superarterial	4 to 6	Yes	Sidewalks ¹	No	Yes	
Arterial	4 to 6	Yes	Sidewalks ¹	Possible	Yes	
Collector	2 to 4	Yes	Sidewalks	Yes	Possible	
Local	2 to 3	Possible (or Trail)	Sidewalks	Yes	Possible	

Source: Fehr & Peers, 2011.

Standards for Multi-Modal Level of Service

This General Plan calls for the City to use a more flexible system of multi-modal measures or indicators of "Level of Service" (LOS) provided by public roadways to evaluate current and projected conditions for each mode of travel and identify congestion points or deficiencies which need to be addressed in planning for future improvements. Historically, LOS analysis has been auto-oriented and relied upon a conventional perspective of the primary use of public streets by motor vehicles rather than considering all modes of travel, including public transportation, bicycling and walking. This system provides a ranking of the efficiency of a street segment or intersection with six categories ranging from A (free traffic flow with individual vehicles virtually unaffected by the presence of other vehicles) to F (forced, stop-and-go travel with the volume of vehicles substantially exceeding the capacity of the street and often

^{1.} Where called for by the General Plan, a trail may be required instead of a sidewalk.

referred to as "gridlock"). A multi-modal LOS system would address the frequency of bus service or the width of sidewalk clear zones for pedestrians and how many people are served by a facility, whatever their mode of travel, rather than just how many cars get through an intersection.

Level of service is typically evaluated using a peak hour travel condition rather than a 24-hour average daily travel condition - when is traffic at its worst. LOS A, therefore, would appear to be a good grade to achieve. But it is actually a result of overbuilding the system, resulting in wasted money, resources, land, and increased impacts from the facility, such as encroaching closer than necessary to existing houses or removing of houses unnecessarily. However, LOS F is not always good either, resulting in increased commute times, more idling cars resulting in increased emissions, and driver frustration.

In analyzing current and future projected conditions there needs to be exceptions to standards where it would not be reasonably feasible to provide the sufficient street width to make improvements necessary to accommodate projected peak hour traffic volumes to attain the set LOS for that roadway or intersection. Congestion, especially if only for short periods of time, can be more fiscally prudent compared to the costs and impacts of facility improvements and maintenance that at the same time may contribute to an overbuilt system. Additionally, congestion can incentivize the use of transit or other modes of transportation that more efficiently move people, save tax dollars, and are better for local air quality.

Context-Sensitive LOS

A more dense urban development pattern will focus traffic increases within the urban core of the city when compared to a less dense pattern where development is located on the urban fringe. However, a denser development pattern brings with it more travel mode choices and can result in shorter trips and more trips made by bus, by bicycle or on foot, compared to a more dispersed pattern. Thus, more compact infill development tends to have a smaller impact per dwelling unit on roadway level of service and the demand for street widening and extension as compared with more dispersed development at the urban edge. An example of this is the congestion that currently occurs on Friant Road during the AM and PM peak periods in northeast Fresno due to low-density development on the urban fringe, as compared to the low level of congestion that occurs in the area around the Tower District. The General Plan envisions that a context-sensitive LOS system can be developed which will be more responsive to the City's needs and support achieving the urban form concepts of the Plan.

All-Day vs. Peak Period Use

LOS is measured based on traffic conditions during the morning and evening peak periods. Good or satisfactory conditions ("free flow" at LOS A to "tolerable delays" at LOS D) are ascribed to roadways where congestion does not become acute even during rush hour. Meeting this standard requires the construction of roadways that provide far more capacity than is needed for most hours of the day. Accommodating a LOS of D or better for vehicular traffic may necessitate six- and eight-lane roadways with dual left turn lanes. These roadways then become extremely wide and unfriendly for pedestrian and bicycle use. Responding to this problem, the General Plan sets a direction for a Complete Streets system that will be more efficiently used. This may mean a greater emphasis on distributing traffic across a more connective network, and a greater tolerance for peak-hour congestion.

Multi-Modal LOS

As mentioned above, the General Plan proposes a balanced transportation system that serves public transit, bicyclists and pedestrians as well as motor vehicles. This multimodal system will support more compact development patterns, which in turn will support other goals, including farmland preservation and neighborhood walkability. Less reliance on the automobile is critical for Fresno if the city is to improve air quality and reduce greenhouse gas emissions. A multi-modal system will ensure mobility for all community members. Ultimately, a truly multi-modal system is more resilient from a transportation perspective, giving Fresno attributes it needs to manage congestion over the long-term.

Fresno can create a transportation system that performs well for all modes, in part by measuring performance with qualitative indicators for each mode based on inputs covering facility design, facility controls, and volumes. This multi-modal LOS concept is illustrated in Table 4-2. Implementing a multi-modal LOS standard would require the consideration of all travel modes when evaluating traffic congestion and needed mitigation such that widening roads at the expense of walking and bicycling—a result that ironically is much more expensive for private development to build, the public sector to maintain, and adds more traffic to streets since other travel modes are no longer possible - would not explicitly be considered reasonable or acceptable mitigation. A multi-modal LOS system will also help support the development of more intense land uses where desired by permitting localized automobile congestion if walking, biking, and transit systems operate at high levels. A multi-modal LOS standard does not define an overall grade for a roadway section, but provides information for each travel mode to properly assess, for that facility, the best approach to improve its travel capacity with the financing available. Based on a project's location, the proposed improvements will be different. A more suburban intersection may add capacity with a double left turn lane where at a Downtown intersection it may be determined infeasible due to the lack of available right-of-way, or pedestrian islands are required to improve pedestrian flow and intersection wait times.

TABI	LE 4-2: MULTI-MODAL	LEVEL OF SERVICE II	NDICATORS
LOS	Transit	Bicycle	Pedestrian
Α	(Good walk access to bus stops, frequent service, good bus stop amenities.)	(Few driveway and cross street conflicts, good pavement condition, ample width of outside lane, including parking and bike lanes.)	(Low traffic volumes, wide buffer separating sidewalk from traffic, numerous street trees, and high parking occupancy.)
В			occupacy./
С			
D			
E			
	(Poor walk access to bus stops, infrequent service,	(Poor pavement condition, narrow width of outside	(High traffic volumes, limited buffer separating sidewalk from traffic, few
F	poor schedule adherence, no bus stop amenities.)	lane, frequent driveways and cross streets.)	street trees, low parking occupancy.)

Source: Dowling Associates, 2010.

Designing for Sustainable Transportation

Four approaches have guided policy development for transportation:

- 1. Reduce Vehicle Miles Traveled (VMT). Reducing VMT frequently involves providing more and better transportation options and improving land use so that frequent origins and destinations are closer. The main benefit of reducing VMTs is the benefit to Fresno's air quality since vehicle emissions are one of the main sources of air pollution in our air basin. Reducing VMT frees up discretionary income for Fresno families by reducing money spent on fuel and vehicle wear and tear. Reducing VMT supports economic development by shifting trips that don't need to drive, preserving scarce roadway capacity for goods movement and trips that do need to drive. Finally, reducing VMT helps people by (usually) increasing walking, bicycle and transit use, all of which increase physical activity and therefore health.
- 2. Prioritize Funding for Improvements in Areas That Have Reported Fatalities and Injuries. Reducing unanticipated congestion due to accidents adds benefits through trip reliability for freight and other high value trips. Reducing unanticipated congestion also reduces braking, acceleration and idling, all of which reduce fuel consumption and, therefore, greenhouse gas emissions.

- 3. Improve Travel Time Reliability. For high value trips (e.g., freight and commute), predictable/reliable travel times are often more valuable to users than improvements to average travel time. Improving travel time reliability supports the economy by creating more reliable freight trips. Improving travel time reliability helps people by allowing them to avoid wasting time by leaving early in order to deal with unpredictable trip times. It also helps reliability and performance of emergency response vehicles.
- 4. Improve Speed Consistency. Improving speed consistency can help reduce fuel consumption. It is a measure based on speed, braking and acceleration. Pursuing traffic synchronization on major roadways will result in reduced travel time, smoother vehicle and transit flows, as well as reduced vehicle emissions and improved air quality.

4.4 BIKES AND PEDESTRIANS

Fresno has made a strong commitment to improving non-motorized travel. The City established a Bicycle-Pedestrian Advisory Committee in 2002 and subsequently completed the Bicycle, Pedestrian and Trails Master Plan (BMP), which was adopted by the City Council in 2010. In 2017, the City adopted the Active Transportation Plan (ATP) which is replaces the BMP. Although the ATP is a separate document and not part of this Plan, the General Plan supports the ATP's aspirations for a comprehensive bicycle and pedestrian facilities network consisting of sidewalks, lanes, paths and trails while recognizing that the ATP identifies more facilities and programs than discussed in the General Plan. The ATP also identifies more detailed implementation strategies with cost estimates and prospective funding sources, evaluates priorities of prospective improvements, and identifies a complete inventory of both short-and long-range bicycle improvements.

Pedestrian Facilities and the Pedestrian Realm

Sidewalks

The presence of sidewalks and the quality of the pedestrian realm is a critical factor in the ability to walk around the city. Certain areas of Fresno lack continuous sidewalks, leaving pedestrians to share road space with cars. The City began addressing this problem with the "No Neighborhood Left Behind" program in 2005, which added new gutters, curbs, sidewalks, and streetlights to inner city neighborhoods at a budget of \$45 million over six years starting in FY 2005, and has since been completed.

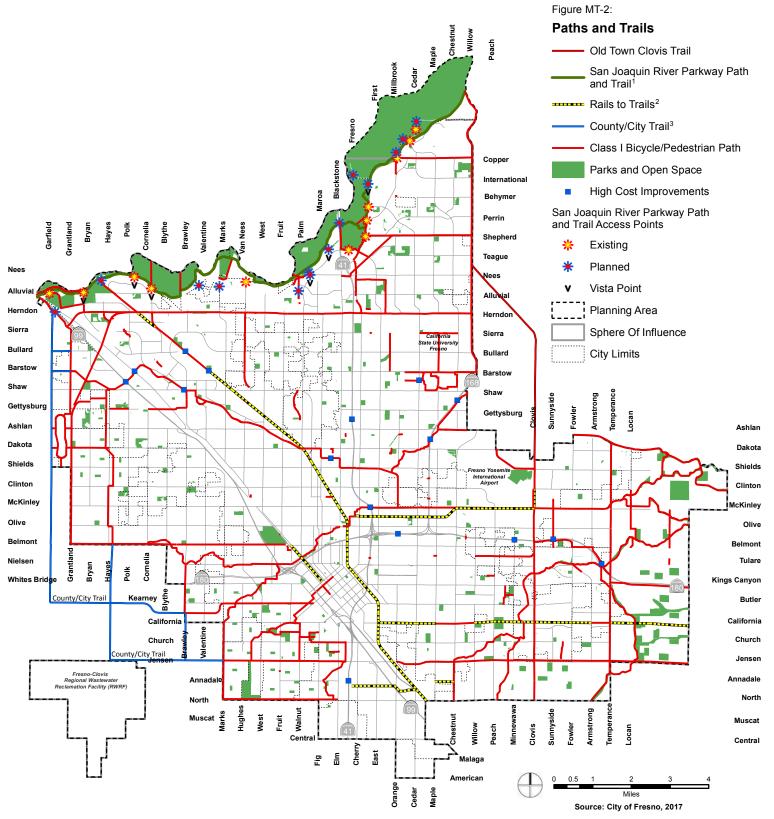
Accessible Design

Most of the city was built before the federal Americans with Disabilities Act (ADA) required streets to be accessible to persons in wheelchairs or with impaired mobility.

The City made significant progress in rebuilding sidewalks to add curb cuts or accessibility ramps and will continue striving to do so with a focus on areas with the highest pedestrian usage.



Sidewalks and trails throughout Fresno offer residents alternative methods of moving through the city, including walking and bicycling.



- Conceptual alignment of existing and proposed path and trail. All planned Parkway access and projects, their features, uses, and locations, are subject to the acquisition of lands and/ or easements from willing sellers, and project-specific, site-specific environmental review.
- Required unless there is an existing railroad. Should existing railroad lines be vacated, they shall be converted to a greenbelt.
- 3. Conceptual alignment, subject to City/County cooperative planning adoption, and implementation. City preferred location depicted.

Note: Paths and Trails adjacent to neighboring jurisdictions may be developed jointly with that jurisdiction.

Note: Complete detail of the proposed bike network can be found in the Active Transportation Plan.

Note: Trails shall be developed on side of road represented in the Active Transportation Plan, to do otherwise would require Active Transportation Plan Amendment and minimum length of 2 miles.

Comfort and Amenities

In a typical neighborhood, continuous sidewalks and ADA-compliant curb cuts may be satisfactory to provide for pedestrian movement. In areas where high pedestrian use exists or is desired, a successful pedestrian environment also requires street design that is comfortable and attractive to people on foot.

While sidewalk capacity is not generally an issue, sidewalks should be designed to comfortably accommodate people on foot, some of whom will walk in groups, use wheelchairs, or push strollers or delivery trolleys. The sidewalk should be ample enough to signal that walking is expected and encouraged. Trees should be provided at an adequate spacing, and placed to help provide a buffer between cars and pedestrians and shading in summer. On-street parking can be an important supporting component by providing an additional buffer between the sidewalk and vehicle travel lanes and an important vehicle calming mechanism encouraging lower vehicle operating speeds. Finally, benches, fountains, and other amenities help to make pedestrian use a reality and a pleasure.

Bicycle Facilities

Bicycle facilities consist of three types of classification, as follows:

- Class 1: Bicycle or multi-use (bicycle-pedestrian) path which is completely separated from vehicle traffic and typically a 10- to 12-foot wide concrete/asphalt-concrete paved surface with two-foot wide shoulders;
- Class II: Designated on-street bicycle lane which is identified with painted pavement striping and signing and is typically at least five feet in width; and
- Class III: On-street bicycle route which is designated by signs and markings and utilizes the paved surface shared with a low volume of motorized vehicles.
- Class IV: Separated on-street bicycle lane, commonly known as "cycle track," which
 is physically separated from motor vehicle traffic by a minimum three foot buffer
 and vertical element, distinct from the sidewalk, designed exclusively for bicyclists,
 and seven feet in width.

As of 2017, Fresno has approximately 38 miles of Class I trails or paths, 426 miles of Class II bike lanes, and 21 miles of Class III bicycle routes, built over an approximately 40-year period generally beginning with adoption of the 1974 Fresno General Plan.

Class I paths have been built within abandoned rail spur lines and municipal parkland, and dedications have been made adjacent to canals or Expressways as a condition of property development, and on land along the San Joaquin River. The City is working to resolve issues identified by the Fresno Irrigation District to accomplish development of

path or trail improvements along canals. Currently within the urban area, the City has only been successful where new development has provided additional space adjacent to the canal. However, in the future the City will continue efforts to resolve impediments and implement paths along canal alignments.

Planned Improvements

Pedestrian

During the past 10 years, the City Council has made constructing improvements to meet ADA accessibility requirements for public street sidewalks a City priority. As resources have become available, the City has also pursued the construction of missing segments of partially completed bicycle-pedestrian paths. The objectives and policies in this element generally present the following ideas for improving the pedestrian environment:

- Continuous sidewalks will be required along public streets on both sides, within all new development. Sidewalks or alternative pedestrian routes will also be required within developments that utilize private street access;
- New or improved pedestrian crossings and additional industry standard safety features such as pedestrian refuges, raised or lighted crossing areas, and signals will be built, as funding is available, where there is high pedestrian traffic;
- Where freeways and railroads create major barriers to pedestrian travel, identify improvements for safe, grade separated pedestrian crossings to be built as funding is available;
- Lighting that provides comfort and visibility to pedestrians will be a priority on streets where pedestrian use is high and on streets transitioning from a more autooriented to more mixed-use character:
- Develop connectivity requirements and/or maximum block size or block length standards to apply to new development to ensure support for pedestrian travel;
- Certain areas where walking is or has the potential to be most common may be
 identified for the implementation of improvements to promote a high-quality
 pedestrian experience. These areas might include arboretum corridors, Main Street
 commercial; mixed-use centers or corridors; transit corridors; and areas around
 schools, following a safe routes to school model, which is addressed in the Healthy
 Communities Element; and
- Complete Streets and Multi-Modal roadway measures and performance characteristics, discussed elsewhere in this element, will also support greater walkability.

Bicycle

The City's planned bikeway network will support significant increases in bicycle use. It strives to ensure that major destinations are well-served by Class II bike lanes, well-marked Class III bike routes are extended into nearly all neighborhoods, an attractive system of Class I bike paths is provided in new growth areas and along key corridors where right-of-way exists, and Class IV separated bikeways are located along key streets to encourage the casual rider to bike to destinations outside their neighborhood. These four bicycle transportation components are described more below.

SEPARATE MULTI-USE PATHS (CLASS I)

Bike or multi-use (bicycle-pedestrian) paths are completely separated from vehicle traffic (Class 1 bikeways) and may be considered the most desirable type in terms of comfort, particularly by the casual bicyclist. New Class 1 bikeways will be investigated for all new growth areas, and will be developed in existing parts of the city where opportunities to obtain right-of-way may exist which would provide meaningful pathway connections.

IMPROVED BIKE LANES (CLASS II)

Providing Class 1 facilities may not be practical or cost effective in many parts of the developed urban area, and not necessarily preferable in terms of convenience and travel utility. Bike lanes (Class II facilities) are the heart of the bicycle network and will be accommodated along all roadways in new growth areas. They can often also be accommodated within already developed areas with the reconfiguration of travel lanes and on-street motor vehicle parking. Bike lanes will have a minimum width of at least five feet whenever possible. While this is adequate, bike lanes should be wider where space is available. They must be well striped and marked.

IMPROVED SHARED BIKE ROUTES (CLASS III)

Bike routes or bikeways (Class III facilities), which are identified with signage and lane markings indicating a shared roadway, have been identified as especially appropriate for bicycle use. As "the capillaries of the bikeway system," Class III segments allow the bike system to provide critical links even where roadways are constrained and to extend into all neighborhoods. Class III facilities (routes and bikeways) will be expanded citywide and included in new development.

IMPROVED SEPARATED BIKEWAYS/CYCLE TRACKS (CLASS IV)

Separated Bikeways or cycle tracks (Class IV facilities) are on-street bicycle facilities that include a vertical physical barrier between the bikeway and moving traffic. These facilities have been identified as appropriate in areas with high motor traffic volume where Class II or Class III facilities would cause many bicycles to feel high levels of

stress. Cycle tracks necessitate wider right-of-way than Class II and III facilities and are best placed in areas with fewer driveways.

Table 4-3 summarizes Fresno's existing bikeway system compared to the planned bikeway system in terms of mileage by facility type.

TABLE 4-3: BIO	CYCLE NETWORK		
Facility Type	Existing System - 2017 (miles)	Planned System (miles)	Change
Class I	38	165	203
Class II	426	703	1129
Class III	21	67	88
Class IV	0	2	2

Source: City of Fresno, 2017,

4.5 TRANSIT SERVICE

Transit is a term used to cover all forms of public transportation, such as buses and various forms of rail (light rail, subways, heavy rail).

Existing Transit Service

The City operates Fresno Area Express (FAX), the city's major provider of urban public transportation services. The FAX fixed route conventional bus transportation system integrates with the City of Clovis' fixed route system; together these systems potentially serve a population of 650,000. The FAX fixed route system is comprised of routes that typically follow many of the city's Arterial roadways, which are generally spaced with a one-mile separation. The system currently includes 15 standard fixed routes of bus service and one express bus connection between the Riverpark regional commercial center, located at North Blackstone and East Nees Avenues, and Children's Hospital of Central California, located on Avenue 9 in Madera County. Many routes converge on Downtown and meet at the main transit center located on "M" and Fresno Streets (County of Fresno's Courthouse Park). Most of the FAX routes operate at 30-minute frequencies, with four routes providing 20-minute frequencies during peak commute periods.

A demand-response service, Handy Ride, provides transportation for older adults and persons with disabilities. The Fresno County Rural Transit Agency provides transit services to communities located outside of the Fresno Clovis Metropolitan Area. In addition, the Fresno County Economic Opportunities Commission provides transportation for access to specific social services.

The FAX bus system provides connections to the Amtrak passenger rail station and the Greyhound bus station, both of which are located in Downtown. Amtrak's San Joaquin line provides seven trains daily traveling both northbound to the San Francisco Bay Area and southbound to Los Angeles. Greyhound has eleven daily buses to Los Angeles and five to San Francisco. Intercity bus service is also provided by Orange Belt Stages and Transportation Inter-Californias.



The FAX bus system has a fixed route system, primarily on major Arterial streets in the city, which offers residents another convenient method of moving around the city without their vehicles.

Access to Transit

Fresno's bus lines travel along many of the city's heavily traveled major Arterial roads that serve the most densely populated neighborhoods and most intense office and commercial employment centers. With the expansive urban growth that occurred during the past decade, there are notable exceptions to transit accessibility, primarily in the west, northwest, northeast, and southeastern edges of the urban area. The bus system has not been expanded commensurate with peripheral urban development over the past decade, leaving predominantly lower density developed areas on the city's outer edges without public transit services. This appears generally due to a combination of insufficient resources and decreasing performance (excessive cost per passenger and low farebox recovery) of routes serving lower density urban edge development.

Bus Rapid Transit (BRT)

A first phase Bus Rapid Transit (BRT) system is planned and funded to run along the Ventura Street/Kings Canyon Road and the Blackstone Avenue corridors, meeting in Downtown. This system is presently in the design stage with a planned implementation anticipated over the next few years.

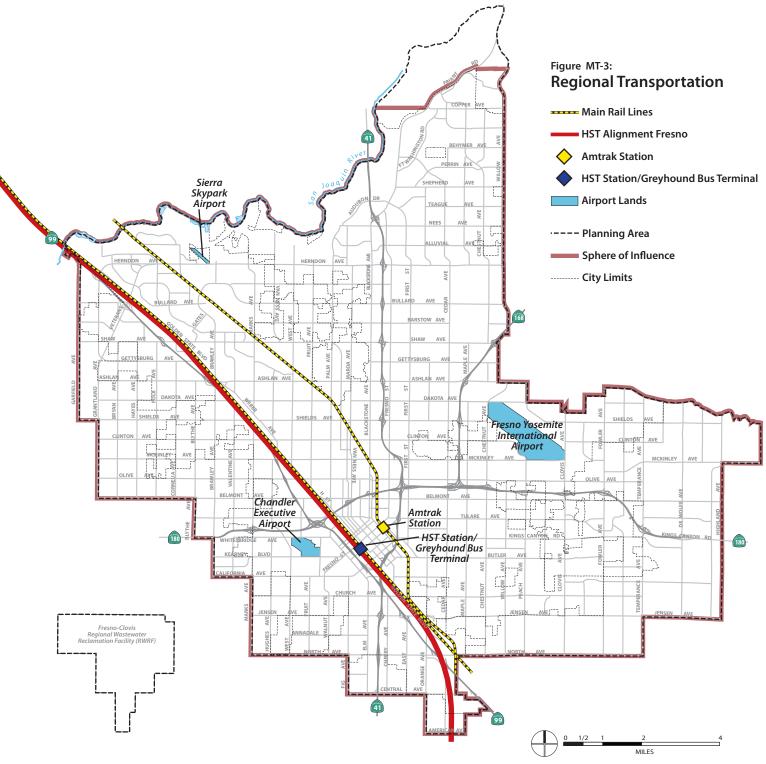
The General Plan supports the proposed BRT system through its designation of complementary land uses along and near its routes, such as higher-density development and land uses that may gravitate toward use of BRT. The Fresno General Plan Land Use Diagram (Figure LU-1) designates mixed-use, multi-family residential uses, and Activity Centers along the BRT routes. In addition, Shaw Ave. will be served by enhanced bus service while BRT is envisioned on California Ave. as part of the second phase.

High Speed Train (HST)

In addition to airport, train, and bus travel mentioned above, the California High Speed Train (HST) will also serve as a regional transportation system (see MT-3: Regional Transportation) for Fresno and surrounding communities. The proposed HST line, if approved and funded, would ultimately extend through the San Joaquin Valley, linking San Francisco with Los Angeles. The Initial Construction Section is planned to start in Madera County to just north of Bakersfield, with a station located in Fresno's Downtown, aligned with Mariposa Street. The HST tracks through Fresno's Metropolitan Area would run generally parallel to the Union Pacific Railroad tracks and primarily at-grade, with some shorter sections being depressed (below surface grade) to clear existing structures, such as the interchange of State Routes 99 and 180. However, any road proposed to cross the HST alignment will be grade-separated from the HST (go over or under).

Implementation of a HST system would significantly increase the accessibility of Fresno to the major population and economic hubs of California. It also provides an opportunity for the redevelopment of the area around the station with a walkable district that includes offices, retail, and multi-family housing that takes advantage of the proximity of the HST station and captures value from disembarking passengers. Although this General Plan anticipates the building of the HST, it is not necessary to carry out the purposes or to implement the intent of the General Plan.

While detailed planning has not yet occurred for the HST station, the City is examining and proposing to accommodate the access and space requirements and the potential effects upon surrounding properties and land uses through community and Specific Plans in the Downtown Planning Area and a HST Station Area Master Plan. When HST is built, the City ultimately plans to link the FAX and BRT systems with the HST station.



Source: City of Fresno DARM, 2014

4.6 OBJECTIVES AND POLICIES

OBJECTIVE

MT-1 Create and maintain a transportation system that is safe, efficient, provides access in an equitable manner, and optimizes travel by all modes.

IMPLEMENTING POLICIES

- MT-1-a Transportation Planning Consistent with the General Plan. Continue to review local, regional and inter-regional transportation plans and capital improvement plans, and advocate for the approval and funding of State highway and rail projects, consistent with the General Plan and discourage projects inconsistent with the General Plan.
- MT-1-b Circulation Plan Diagram Implementation. Design and construct planned streets and highways that complement and enhance the existing network, as well as future improvements to the network consistent with the goals, objectives and policies of the General Plan, as shown on the Circulation Diagram (Figure MT-1), to ensure that each new and existing roadway continues to function as intended.
- MT-1-c Plan Line Adoption. Prepare and adopt Official Plan Lines, or other appropriate documentation such as Director Determinations, for transportation corridors, roadways, and bicycle/pedestrian paths/trails, as necessary to preserve and/or obtain right-of-way needed for planned circulation improvements.
- MT-1-d Integrate Land Use and Transportation Planning. Plan for and maintain a coordinated and well integrated land use pattern, local circulation network and transportation system that accommodates planned growth, reduces impacts on adjacent land uses, and preserves the integrity of established neighborhoods.
- MT-1-e Ensure Interconnectivity Across Land Uses. Update development standards and design guidelines applicable to public and private property to achieve Activity Centers, neighborhoods and communities which are well connected by pedestrian, bicycle, appropriate public transportation and automobile travel facilities.
- MT-1-f Match Travel Demand with Transportation Facilities. Designate the types and intensities of land uses at locations such that related travel

demands can be accommodated by a variety of viable transportation modes and support Complete Neighborhoods while avoiding the routing of excessive or incompatible traffic through local residential streets.

MT-1-g

Complete Streets Concept Implementation. Provide transportation facilities based upon a Complete Streets concept that facilitates the balanced use of all viable travel modes (pedestrians, bicyclists, motor vehicle and transit users), meeting the transportation needs of all ages, income groups, and abilities and providing mobility for a variety of trip purposes, while also supporting other City goals.

Implementation actions will include:

- Meeting the needs of all users within the street system as a
 whole; each individual street does not need to provide all modes
 of travel, but travel by all modes must be accommodated
 throughout the Planning Area;
- Continuing to adopt refined street cross-section standards as appropriate in response to needs identified;
- Encouraging conversion of one-way streets to two-way streets to improve location circulation, access, and safety;
- Considering the impact of streets on public health by addressing storm water runoff quality, air quality, and water conservation among other factors; and
- Adhering to the water efficient landscape standards adopted by the City for median and streetscape plantings and irrigation methods.

MT-1-h

Update Standards for Complete Streets. Update the City's Engineering and Street Design Standards to ensure that roadway and streetscape design specifications reflect the Complete Streets concept, while also addressing the needs of through traffic, transit stops, bus turnouts, passenger loading needs, bike lanes, pedestrian accommodation, and short- and long-term parking.

Commentary: For instance, transit stops and bus turnouts may have higher priority than through traffic on important transit corridors; through traffic may have higher priority than parking on Arterials; and pedestrian and bicycle movement may have high priority in areas with high pedestrian interest and activity such as the Downtown Planning Area.

MT-1-i

Local Street Standards. Establish and implement local roadway standards addressing characteristics such as alignment, width, continuity and traffic calming, to provide efficient neighborhood circulation; to allow convenient access by residents, visitors, and public service and safety providers; and to promote neighborhood integrity and desired quality of life by limiting intrusive pass-through traffic.

MT-1-j Transportation Improvements Consistent with Community Character. Prioritize transportation improvements that are consistent with the character of surrounding neighborhoods and supportive of safe, functional and Complete Neighborhoods; minimize negative impacts upon sensitive land uses such as residences, hospitals, schools, natural habitats, open space areas, and historic and cultural resources.

In implementing this policy, the City will design improvements to:

- Facilitate provision of multi-modal transportation opportunities;
- Provide added safety, including appropriate traffic calming measures;
- Promote achievement of air quality standards;
- Provide capacity in a cost effective manner; and
- Create improved and equitable access with increased efficiency and connectivity.
- MT-1-k

 Multi-Modal Level of Service Standards. Develop and use a tiered system of flexible, multi-modal Level of Service standards for streets designated by the Circulation Diagram (Figure MT-1). Strive to accommodate a peak hour vehicle LOS of D or better on street segments and at intersections, except where Policies MT-1-m through MT-1-p provide greater specificity. Establish minimum acceptable service levels for other modes and use them in the development and environmental review process.
- MT-1-l Level of Service in the Downtown Area. Within the Downtown Planning Area accept vehicle LOS F conditions during peak hours for street segments and intersections specified in community and Specific Plans as may be adopted by the City. Where there is an overlap in policies regarding LOS in the Downtown Planning Area, this policy shall supersede.
- MT-1-m Standards for Planned Bus Rapid Transit Corridors and Activity Centers. Independent of the Traffic Impact Zones identified in MT-2-i

and Figure MT-4, strive to maintain the following vehicle LOS standards on major roadway segments and intersections along Bus Rapid Transit Corridors and in Activity Centers:

- LOS E or better at all times, including peak travel times, unless the City Traffic Engineer determines that mitigation to maintain this LOS would be infeasible and/or conflict with the achievement of other General Plan policies.
- Accept LOS F conditions in Activity Centers and Bus Rapid
 Transit Corridors only if provisions are made to improve the
 overall system and/or promote non-vehicular transportation and
 transit as part of a development project or a City-initiated
 project. In accepting LOS F conditions, the City Traffic Engineer
 may request limited analyses of operational issues at locations
 near Activity Centers and along Bus Rapid Transit Corridors,
 such as queuing or left-turn movements.
- Give priority to maintaining pedestrian service first, followed by transit service and then by vehicle LOS, where conflicts between objectives for service capacity between different transportation modes occur.
- Identify pedestrian-priority and transit-priority streets where these modes would have priority in order to apply a multi-modal priority system, as part of the General Plan implementation.
- MT-1-n

 Peak Hour Vehicle LOS. Maintain a peak-hour vehicle LOS standard of D or better for all roadway areas outside of identified Activity Center and Bus Rapid Transit Corridor districts, unless the City Traffic Engineer determines that mitigation to maintain this LOS would be infeasible and/or conflict with the achievement of other General Plan policies.
- MT-1-0

 LOS Deviations Outside of Activity Centers and Areas Designated for Mixed-Use. Accept vehicle LOS E or F conditions outside of identified multi-modal districts only if provisions commensurate with the level of impact and approved by the City Traffic Engineer are made to sufficiently improve the overall transportation system and/or promote non-vehicular transportation as part of a development project or City-initiated project.
- MT-1-p Participate in Sustainable Communities Strategy/ Regional Transportation Plan. Continue to work with the Fresno Council of Governments in developing and updating the Sustainable

Communities Strategy and Regional Transportation Plan, consistent with the goals, objectives and policies of the General Plan.

OBJECTIVE

MT-2

Make efficient use of the City's existing and proposed transportation system and strive to ensure the planning and provision of adequate resources to operate and maintain it.

IMPLEMENTING POLICIES

MT-2-a

Intensification of Bus Rapid Transit Corridors. Where traffic has previously been diverted to freeways, encourage incentives for more intense development along transportation corridors, such as the Blackstone Corridor, where there is now additional capacity.

Commentary: The General Plan Land Use Diagram (Figure LU-1) shows corridors where increases in allowable densities are permitted.

MT-2-b

Reduce Vehicle Miles Traveled and Trips. Partner with major employers and other responsible agencies, such the San Joaquin Valley Air Pollution Control District and the Fresno Council of Governments, to implement trip reduction strategies, such as eTRIP, to reduce total vehicle miles traveled and the total number of daily and peak hour vehicle trips, thereby making better use of the existing transportation system.

MT-2-c

Reduce VMT through Infill Development. Provide incentives for infill development that would provide jobs and services closer to housing and multi-modal transportations corridors in order to reduce citywide vehicle miles travelled (VMT).

Commentary: This policy is intended to reduce regional trips and citywide congestion. Even if local congestion increases due to an increase in population from infill, this will eventually improve air quality by reducing per capita vehicle emissions and VMT through shorter commutes and increase in transit and non-motorized modes of travel. This will also reduce the need for regional travel demand transportation improvements.

MT-2-d

Street Redesign where Excess Capacity Exists. Evaluate opportunities to reduce right of way and/or redesign streets to support non-automobile travel modes along streets with excess roadway capacity where adjacent land use is not expected to change over the planning period.

Commentary: Such strategies could include narrowing roads (road diets), adding landscape medians, adding street parking, and adding bike lanes.

- MT-2-e Driveway and Access Consolidation. Take advantage of opportunities to consolidate driveways, access points, and curb cuts along designated major roadways when a change in development or a change in intensity occurs or when traffic operation or safety warrants.
- MT-2-f

 Optimization of Roadway Operations. Optimize roadway operations by continuing to expand the use of techniques such as the City's intelligent transportation system (ITS) to manage traffic signal timing coordination in order to improve traffic operations and increase traffic-carrying capacity, while reducing unnecessary congestion and decreasing air pollution emissions. In order to facilitate roadway optimization and as a potential revenue source for the optimization, the following strategies need to be implemented:
 - **Dig Once Policy**. Install conduit for telecommunications use when trenching or construction occurs.
 - Telecommunications Strategy. Develop a costing mechanism for allowing the use of excess conduit within the City for use by communication carriers. The Policy shall follow regulations of the California Public Utilities Commission.
 - Grant Funding. Pursue grant funding to assist in construction and/or implementation of fiber-optic or other telecommunication infrastructure for additional public services such as education, economic development, reaching underserved populations, and public safety communications.
- MT-2-g Transportation Demand Management and Transportation System Management. Pursue implementation of Transportation Demand Management and Transportation System Management strategies to reduce peak hour vehicle traffic and supplement the capacity of the transportation system.

Commentary: The City anticipates these strategies will reduce demand on the regional transportation system, limiting the need for major capital investments in those systems.

MT-2-h Update TIS. Update the City's Traffic Impact Study guidelines to address all modes of transportation and Complete Streets concepts consistent with the General Plan. The name should be expanded to

encompass its assessment of various modes of transportation and connectivity in addition to traffic impacts. Once a regional fee plan or program is in place, the TIS may be used to carry out that plan or program.

MT-2-i Transportation Impact Studies. Require a Transportation Impact Study (currently named *Traffic Impact Study*) to assess the impacts of new development projects on existing and planned streets for projects meeting one or more of the following criteria, unless it is determined by the City Traffic Engineer that the project site and surrounding area already has appropriate multi-modal infrastructure

improvements.

- When a project includes a General Plan amendment that changes the General Plan Land Use Designation.
- When the project will substantially change the off-site transportation system (auto, transit, bike or pedestrian) or connection to the system, as determined by the City Traffic Engineer.
- Transportation impact criteria are tiered based on a project's location within the City's Sphere of Influence. This is to assist with areas being incentivized for development. The four zones, as defined on Figure MT-4, are listed below. The following criteria apply:
 - O Traffic Impact Zone 1 (TIZ-1): TIZ-1 represents the Downtown Planning Area. Maintain a peak hour LOS standard of F or better for all intersections and roadway segments. A TIS will be required for all development projected to generate 200 or more peak hour new vehicle trips.
 - O Traffic Impact Zone II (TIZ-II): TIZ-II generally represents areas of the City currently built up and wanting to encourage infill development. Maintain a peak hour LOS standard of E or better for all intersections and roadway segments. A TIS will be required for all development projected to generate 200 or more peak hour new vehicle trips.
 - Traffic Impact Zone III (TIZ-III): TIZ-III generally represents areas near or outside the City Limits but within the SOI as of December 31, 2012. Maintain a peak hour LOS standard of D or better for all intersections and roadway segments. A TIS

will be required for all development projected to generate 100 or more peak hour new vehicle trips.

O Traffic Impact Zone IV (TIZ-IV): TIZ-IV represents the southern employment areas within and planned by the City. Maintain a peak hour LOS standard of E or better for all intersections and roadway segments. A TIS will be required for all development projected to generate 200 or more peak hour new vehicle trips.

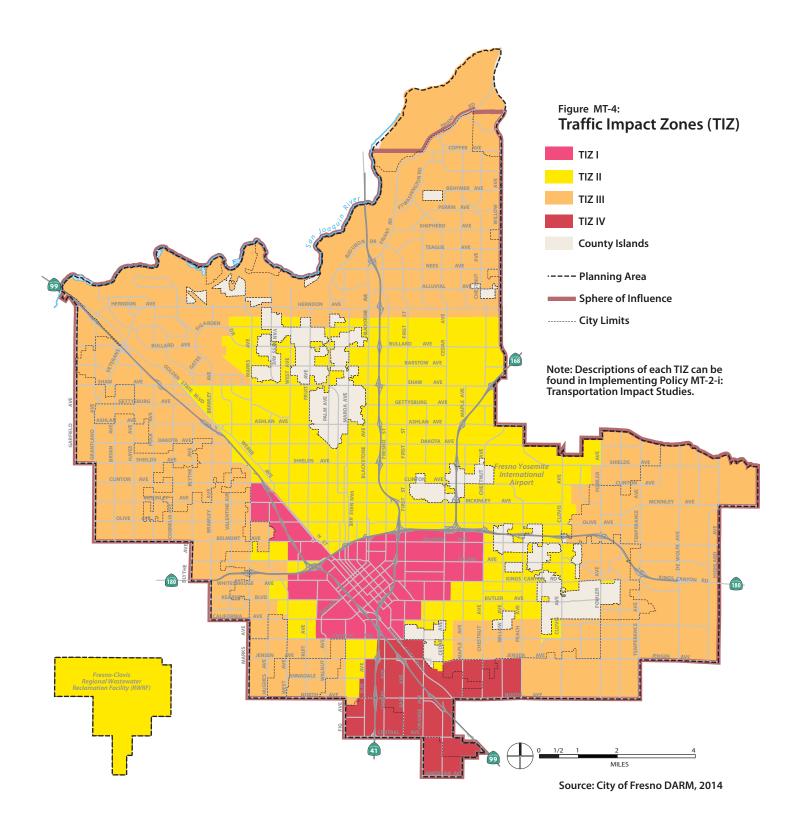
MT-2-j Funding for Multi-Modal Transportation System. Continue to seek and secure adequate financing to construct and maintain a complete multi-modal system through such measures as development impact fees, local sales tax measures, special tax measures, assessment/improvement districts, and regional, state and federal transportation funds and grants.

Commentary: This policy will be coordinated with policies and objectives for fiscal sustainability in the Economic Development and Fiscal Sustainability Element.

MT-2-k

Funding for Complete Streets Retrofits. Continue to participate in a comprehensive analysis of transportation needs and the funding of transportation improvements, including State and federal grant funding to support Complete Street retrofit improvements, within the Fresno-Clovis Metropolitan Area.

Commentary: This will be done cooperatively with the Fresno Council of Governments, other government agencies, and public interest groups.



MT-2-l

Region-Wide Transportation Impact Fees. Continue to support the implementation of metropolitan-wide and region-wide transportation impact fees sufficient to cover the proportional share of a development's impacts and need for a comprehensive multi-modal transportation system that is not funded by other sources. Work with the Council of Fresno County Governments, transportation agencies (e.g. Caltrans, Federal Transportation Agency) and other jurisdictions in the region to develop a method for determining:

- Regional transportation impacts of new development;
- Regional highways, streets, rail, trails, public transportation, and goods movement system components, consistent with the General Plan, necessary to mitigate those impacts and serve projected demands;
- Projected full lifetime costs of the regional transportation system components, including construction, operation, and maintenance; and
- Costs covered by established funding sources.

Commentary: This policy is consistent with and supports policies and objectives for fiscal sustainability in the Economic Development and Fiscal Sustainability Element.

OBJECTIVE

MT-3

Identify, promote and preserve scenic or aesthetically unique corridors by application of appropriate policies and regulations.

IMPLEMENTING POLICIES

MT-3-a **Scenic Corridors.** Implement measures to preserve and enhance scenic qualities along scenic corridors or boulevards, including:

- Van Ness Boulevard Weldon to Shaw Avenues
- Van Ness Extension Shaw Avenue to the San Joaquin River Bluff
- Kearney Boulevard Fresno Street to Polk Avenue
- Van Ness/Fulton couplet Weldon Avenue to Divisadero
- Butler Avenue Peach to Fowler Avenues
- Minnewawa Avenue Belmont Avenue to Central Canal
- Huntington Boulevard First Street to Cedar Avenue

- Shepherd Avenue Friant Road to Willow Avenue
- Audubon Drive Blackstone to Herndon Avenues
- Friant Road Audubon to Millerton Roads
- Tulare Avenue Sunnyside to Armstrong Avenues
- Ashlan Avenue- Palm to Maroa Avenues
- MT-3-b Preserve street trees lining designated scenic corridors or boulevards.

 Replace trees of the predominant type and in a comparable pattern to existing plantings if there is no detriment to public safety.

OBJECTIVE

MT-4 Establish and maintain a continuous, safe, and easily accessible bikeways system throughout the metropolitan area to reduce vehicle use, improve air quality and the quality of life, and provide public health benefits.

IMPLEMENTING POLICIES

- MT-4-a Active Transportation Plan. To the extent consistent with this General Plan, continue to implement and periodically update the Active Transportation Plan to meet State standards and requirements for recommended improvements and funding proposals as determined appropriate and feasible.
- MT-4-b

 Bikeway Improvements. Establish and implement property development standards to assure that projects adjacent to designated bikeways provide adequate right-of-way and that necessary improvements are constructed to implement the planned bikeway system shown on Figure MT-2 to provide for bikeways, to the extent feasible, when existing roadways are reconstructed; and alternative bikeway alignments or routes where inadequate right-of-way is available.
- MT-4-c

 Bikeway Linkages. Provide linkages between bikeways, trails and paths, and other regional networks such as the San Joaquin River Trail and adjacent jurisdiction bicycle systems wherever possible.
- MT-4-d Prioritization of Bikeway Improvements. Prioritize bikeway components that link existing separated sections of the system, or that are likely to serve the highest concentration of existing or potential cyclists, particularly in those neighborhoods with low vehicle ownership rates, or that are likely to serve destination areas with the

highest demand such as schools, shopping areas, recreational and park areas, and employment centers.

- MT-4-e

 Minimum Bike Lane Widths. Provide not less than 10 feet of street width (five feet for each travel direction) to implement bike lanes for designated Class II bikeways along roadways. Strive for 14 feet of street width (seven feet for each travel direction) for curbside bike lanes where right-of-way is available.
- MT-4-f

 Bike Detection Devices. Include bicycle detection devices when new intersection traffic control signals are installed and strive to retrofit existing traffic control signals to provide bicycle detection and retiming of signal phases to make them more bicycle friendly.
- MT-4-g Advocacy for Bike Accommodation. Advocate for the accommodation of bike facilities in new or upgraded State Route interchanges and railroad construction projects, and construction of bicycle crossings of freeways and railroads.
- MT-4-h

 Bicycle Parking Facilities. Promote the installation of bicycle locking racks and bicycle parking facilities at public buildings, transit facilities, public and private parking lots, and recreational facilities. Establish standards for bicycle parking in the Development Code.
- MT-4-i

 Bicycling and Public Transportation. Promote the integration of bicycling with other forms of transportation, including public transit.

 Continue to provide bike racks or space for bicycles on FAX buses.
- MT-4-j Street Maintenance for Bicycle Safety. Provide regular sweeping and other necessary maintenance to clear bikeways of dirt, glass, gravel, and other debris and maintain the integrity of the bicycling network.
- MT-4-k

 Bicycle Safety, Awareness, and Education. Promote bicycle ridership
 by providing secure bicycle facilities, promoting traffic safety
 awareness for both bicyclists and motorists, promoting the air quality
 benefits, promoting non-renewable energy savings, and promoting the
 public health benefits of physical activity.

OBJECTIVE

MT-5 Establish a well-integrated network of pedestrian facilities to accommodate safe, convenient, practical, and inviting travel by walking, including for those with physical mobility and vision impairments.

IMPLEMENTING POLICIES

MT-5-a Sidewalk Development. Pursue funding and implement standards for development of sidewalks on public streets, with priority given to meeting the needs of persons with physical and vision limitations; providing safe routes to school; completing pedestrian improvements in established neighborhoods with lower vehicle ownership rates; or

providing pedestrian access to public transportation routes.

MT-5-b Sidewalk Requirements. Assure adequate access for pedestrians and people with disabilities in new residential developments per adopted City policies, consistent with the California Building Code and the Americans with Disabilities Act.

MT-5-c

New Subdivision Design. Do not approve new single-family residential subdivisions with lots that front and access onto a major roadway, unless the City Traffic Engineer determines that no other feasible alternative means of vehicle access can be provided and that sufficient design measures can be implemented, such as an on-site driveway turnaround, landscaped buffering, or an on-street parking lane to assure a desirable and enduring residential environment.

Commentary: To make this determination, the City Traffic Engineer may require an evaluation of alternative means of access, including frontage roads, backup treatment, and substantial redesign of the subdivision proposal.

MT-5-d

Pedestrian Safety. Minimize vehicular and pedestrian conflicts on both major and non-roadways through implementation of traffic access design and control standards addressing street intersections, median island openings and access driveways to facilitate accessibility while reducing congestion and increasing safety. Increase safety and accessibility for pedestrians with vision disabilities through the installation of Accessible Pedestrian Signals at signalized intersections.

MT-5-e

Traffic Management in Established Neighborhoods. Establish acceptable design and improvement standards and provide traffic planning assistance to established neighborhoods to identify practical traffic management and calming methods to enhance the pedestrian environment with costs equitably assigned to properties receiving the benefits or generating excessive vehicle traffic.

MT-5-f Modifications to Street Standards. Continue to evaluate and adopt modifications to City street standards to achieve overall objectives of

providing good access and travel opportunities while calming traffic, promoting pedestrian and other transportation options, and reducing the amount of land devoted to streets.

OBJECTIVE

MT-6

Establish a network of multi-purpose pedestrian and bicycle paths, as well as limited access trails, to link residential areas to local and regional open spaces and recreation areas and urban Activity Centers in order to enhance Fresno's recreational amenities and alternative transportation options.

IMPLEMENTING POLICIES

MT-6-a

Link Residences to Destinations. Design a pedestrian and bicycle path network that links residential areas with Activity Centers, such as parks and recreational facilities, educational institutions, employment centers, cultural sites, and other focal points of the city environment.

MT-6-b

Multi-Agency Planning for Paths and Trail System. Continue to participate in multi-agency planning and implementation partnerships for the coordinated development of the Fresno-Clovis Metropolitan Area planned path and trail system and with Madera County for the San Joaquin River Parkway trail system.

MT-6-c

Link Paths and Trails and Recreational Facilities. Strive to provide path or trail connections to recreational facilities, including parks and community centers where appropriate, and give priority to pathway improvements within neighborhoods characterized by lower vehicle ownership rates and lower per capita rates of parks and public open space.

MT-6-d

Link Paths and Trails and Cultural Resources. Strive to designate and implement paths and trails to pass by environmental amenities, historic sites, and other cultural resources, where appropriate, and provide informational signage or other interpretation of those resources to the public.

MT-6-e

Utilize Public Rights of Way. Pursue the attainment of path and trail corridors within abandoned railroad rights-of-way, canal alignments, PG&E transmission tower easements, limited access streets (Expressways, freeways), riverbottom/bluff areas, or other such rights-of-ways. Offer existing easements and rights-of-way to local agencies before selling them to private parties.

MT-6-f

Path and Trail Designation Process. Develop a network of multipurpose path and trail corridors by using the Official Plan Line process or other processes as provided by the Development Code to obtain appropriate linear rights-of-way along riparian corridors, drainage and irrigation easements, utility easements, abandoned railroad rights-of-way, and major street corridors.

MT-6-g

Path and Trail Development. Require all projects to incorporate planned multi-purpose path and trail development standards and corridor linkages consistent with the General Plan, applicable law and case-by-case determinations as a condition of project approval.

Commentary: This should be done pursuant to Figure MT-2: Paths and Trails, and the adopted ATP, as may amended.

MT-6-h

Preference for Public Ownership. Avoid path and trail alignments that involve private ownership of sections of public path or trail right-of-way. Use the Director Determination process, if necessary, to adjust planned path or trail rights-of-way to avoid these situations by realigning along more visible, publicly owned routes.

MT-6-i

Path and Trail Design Standards. Designate and design paths and trails in accordance with design standards established by the City that give consideration to all path and trail users (consistent with design, terrain and habitat limitations) and provide for appropriate widths, surfacing, drainage, design speed, barriers, fences, signage, visibility, intersections, bridges, and street cleaning.

Commentary: Trail improvements and characteristics (e.g. accessibility, continuity, width and location, and surface treatment) within the Fancher Creek water conveyance and riparian corridor, and other alignments immediately adjacent to existing or planned residential land, will be determined by the City Council after providing for appropriate public participation.

MT-6-j

Variety in Path and Trail Design. Provide for different levels and types of usable pedestrian and bicycle corridors, including broad, shaded sidewalks; jogging paths; paved and all terrain bicycle paths; throughblock passageways; and hiking trails. Where a designated multipurpose path route is adjacent to a public right-of-way which accommodates bike lane, allow for flexibility in path design, so that bike lanes may be substituted for the bicycle component of the multipurpose path where it is safe and appropriate to do so.

Commentary: This should be done pursuant to Figure MT-2: Paths and Trails, and the adopted ATP, as may amended.

MT-6-k

Path and Trail Buffers. Use landscaping with appropriate and adequate physical and visual barriers (e.g., masonry walls, wroughtiron, or square-tube fencing) to screen path and trail rights-of ways and separate paths and trails from mining operations, drainage

facilities, and similar locations as warranted.

actions:

MT-6-l Environmentally Sensitive Path and Trail Design. Develop paths and trails with minimum environmental impact by taking the following

- Surface paths and trails with materials that are conducive to maintenance and safe travel, choosing materials that blend in with the surrounding area;
- Design paths and trails to follow contour lines where the least amount of grading (fewest cuts and fills) and least disturbance of the surrounding habitat will occur;
- Beautify path and trail rights-of-way in a manner consistent with intended use, safety, and maintenance;
- Use landscaping to stabilize slopes, create physical or visual barriers, and provide shaded areas; and
- Preserve and incorporate native plant species into the landscaping.

MT-6-m Path and Trail Crossings. Limit vehicle access, to the extent feasible, where paths or trails are designated parallel and adjacent to roadways, with consideration given to other transportation, land use, and site design priorities and constraints.

MT-6-n Emergency Vehicle Access along Paths and Trails. Provide points of emergency vehicle access within the path and trail corridors, via parking areas, service roads, emergency access gates in fencing, and firebreaks.

Commentary: Service roads will be interconnected, where possible, to permit through travel by emergency vehicles.

OBJECTIVE

MT-7 Pursue a variety of funding sources to maximize implementation and development of the City's path and trail system.

IMPLEMENTING POLICIES

MT-7-a **Urban Path and Trail Development Funds.** Continue to seek grants and other funding sources for trail construction and maintenance, and support the enactment of State and federal legislation that will expand urban path and trail development funds.

MT-7-b Supporting Nonprofit Organizations. Support and assist nonprofit organizations whose purpose or charter is to promote and support public path and trail construction and maintenance. Establish an "Adopt a Path/Trail" program that allows private entities to maintain segments.

MT-7-c Citywide Funding Program for Path and Trail Network. Strive to establish an equitable citywide funding program for construction and maintenance of the path and trail network, in order to:

- Acquire right-of-way needed for paths and trails in alreadydeveloped neighborhoods and other areas, as identified in community plans, Specific Plans, and neighborhood plans;
- Reimburse developers for public path and trail development costs that they may incur in excess of the trail cost attributable to the impact of their development project (this may require a citywide nexus study); and
- Seek funding sources to add to and adequately maintain the citywide path and trail network.

Commentary: This program could be folded into a comprehensive parks and trails funding program, supported by voter-approved sales tax revenues.

OBJECTIVE

MT-8 Provide public transit options that serve existing and future concentrations of residences, employment, recreation and civic uses and are feasible, efficient, safe, and minimize environmental impacts.

Commentary: Public transit services must meet accessibility standards for individuals with disabilities as required by applicable state and federal regulations.

IMPLEMENTING POLICIES

MT-8-a Street Design Coordinated with Transit. Coordinate the planning, design, and construction of the major roadway network with transit operators to facilitate efficient direct transit routing throughout the Planning Area.

Commentary: Neighborhoods with circuitous and discontinuous streets are more difficult for public transit to serve efficiently than those with consistently spaced linear or semi-grid patterns.

- MT-8-b Transit Serving Residential and Employment Nodes. Identify the location of current and future residential and employment concentrations and Activity Centers throughout the transit service area in order to facilitate planning and implementation of optimal transit services for these uses. Work with California State University, Fresno to determine locations within the campus core for bus stops.
- MT-8-c New Development Facilitating Transit. Continue to review development proposals in transportation corridors to ensure they are designed to facilitate transit. Coordinate all projects that have residential or employment densities suitable for transit services, so they are located along existing or planned transit corridors or that otherwise have the potential for transit orientation to FAX, and consider FAX's comments in decision-making.
- MT-8-d Coordination of Transportation Modes. Plan, design, and implement transportation system improvements promoting coordination and continuity of transportation modes and facilities, such as shared parking or park and ride facilities at Activity Centers.
- MT-8-e Regional Coordination. Continue to work with local and regional governmental institutions to promote efficient transportation policies and coordinated programs.
- MT-8-f Multi-modal Downtown Transportation Facility. Support the development of a multi-modal transportation facility in Downtown.

Commentary: Additional details for the facility are anticipated to be addressed in a future community or Specific Plan, such as the proposed DNCP or FCSP.

MT-8-g High Speed Train. If the State moves forward with HST, ensure it is constructed through Fresno in a manner that minimizes impacts to

surrounding property owners and creates the most opportunity for redevelopment around the HST station.

MT-8-h Move Forward with High Speed Train Station Area Planning. Work with local residents, property and business owners, and other stakeholders to develop a station area plan to provide the most opportunity for growth and prosperity in concert with development of the Fresno HST station.

MT-8-i Legislative Support. Monitor State and federal legislation that creates incentives to reduce auto dependency and support the use of alternatives to the single occupant vehicle and support legislation that is consistent with the General Plan.

MT-8-j Transit Services. Emphasize expansion of transit service in low income neighborhoods that lack appropriate service levels.

OBJECTIVE

MT-9 Provide public transit opportunities to the maximum number and diversity of people practicable in balance with providing service that is high in quality, convenient, frequent, reliable, cost- effective, and financially feasible.

IMPLEMENTING POLICIES

MT-9-a Equitable Transit Provision. Provide transit that can serve all residents, including older residents and persons with disabilities.

MT-9-b Transit Service Productivity Evaluation. Continue to evaluate transit service productivity and cost efficiency indicators in the City's Short-Range Transit Plan, and make necessary and appropriate service adjustments when operationally and financially feasible.

Commentary: Short-range transportation planning is a federal requirement for continued funding.

MT-9-c Addressing Unmet Transit Needs. Continue to participate in the Council of Fresno County Governments' annual unmet transit needs evaluation process, particularly with respect to identifying need for access to medical and educational services; perform market analysis to identify potential transit choice riders; and pursue public education and information programs to identify changes in demand characteristics and opportunities to increase ridership.

MT-9-d Long-Range Transit Options. Advocate and participate in regional transportation analyses and identify appropriate long-range measures to support incorporation of light rail transit and other advanced transit service within major transportation corridors, freeway and

railroad alignments.

MT-9-e Area Specific Transit Improvements. Continue to evaluate and pursue the planning and implementation of area specific transit

improvements, such as street car facilities.

MT-9-f Encourage Telecommuting. Support measures that will facilitate expanded use of telecommunications technologies to reduce congestion, expansion of regional transportation facilities consistent with this General Plan, energy use, and air emissions (i.e., work at home, dispersed telecommute work centers, teleconferencing).

OBJECTIVE

MT-10 Establish parking standards that are strategically tuned to support neighborhoods, shopping districts and employment centers that have a complete range of transportation choices.

IMPLEMENTING POLICIES

MT-10-a **Updating Parking Standards.** Update off-street parking standards to reflect the context and location within activity areas of multiple uses and reductions appropriate for mixed residential and non-residential uses and proximity to existing or planned transit service.

MT-10-b Shared Parking. Establish a strategy to promote the sharing of excess parking between uses within Activity Centers and BRT corridors, including specific provisions for this in the Development Code.

MT-10-c Transportation Demand Management Guidelines. Establish transportation demand management guidelines to allow for reduced off-street parking requirements.

MT-10-d Parking Maximums. Explore maximum off-street parking limits within Activity Centers proximate to BRT corridors, if such an Activity Center is determined compatible with promotion of a healthy and vigorous business environment.

MT-10-e Parking Cash-Out. Educate employers of 50 or more persons on their obligation to provide a "parking cash-out program" under State law and enforce compliance.

Commentary: Under such a program, an employer offers a cash allowance to an employee equivalent to the cost of parking the employer would otherwise provide, as an incentive to using alternative modes of transportation for commuting. These programs must be offered in any non-attainment area for air quality.

A 2009 amendment to State law on parking cash-out provides authority for cities to enforce these requirements, including penalties to be imposed on employers who do not provide the "parking cash-out" allowance to employees.²

MT-10-f

Parking Benefit Districts. Establish parking benefit districts to fund consolidated public parking where supported by local businesses.

Commentary: Net revenues collected from on-street parking pricing and permit revenues can be dedicated to funding public improvements within designated Parking Benefit Districts, ensuring that revenue is used to benefit the blocks where the money is collected. State laws provide for public parking facility construction, operation and maintenance.³

OBJECTIVE

MT-11

Achieve necessary capacity increasing and inter-modal connectivity enhancing improvements to the goods movement transportation system to support the growth in critical farm product and value added industries.

Commentary: Connectivity enhancing improvements and strategies will be used to address necessary capacity and inter-modal connectivity.

 $^{^{\}rm 2}$ California Health & Safety Code §43845.

³ Vehicle Parking District of 1943, Parking District Law of 1951, and Parking and Business Improvement Area Law of 1989. Substantive requirements for assessment districts were changed with passage of Proposition 218 in 1996, and the law is evolving, so the City will determine the appropriate statutory authority to use for creation of parking benefit assessment districts and note statutory restrictions on the potential use of such funds.

IMPLEMENTING POLICIES

MT-II-a Improve Goods Movement for Product Export. Advocate for and pursue all appropriate and available local, regional, state and national planning and implementation opportunities to achieve necessary improvements to regional, interregional and international export opportunities beneficial to the Fresno area.

MT-II-b Railroad Improvements. Continue to participate in and advocate for collaborative efforts to improve railroad transportation facilities and reduce conflicts with the street system, including relocation and/or consolidation of the BNSF and UP mainline railroad track facilities.

MT-II-c Truck Route Designations. Continue to plan and designate truck routes within the Metropolitan Area to facilitate access to and from goods production and processing areas while minimizing conflicts with other transportation priorities.

MT-II-d Appropriate Truck Route Roadway Design. Incorporate provisions for trucks in design of routes designated for truck movement. Ensure that truck routes meet federal standards for intersections, pavement, and turning movements.

MT-II-e Railroad Crossing Improvements. Continue to improve and maintain the condition and safety of existing railroad crossings by upgrading surface conditions and installing signs and signals where warranted.

MT-II-f State Route 99 / Goods Movement. Partner with Caltrans to prioritize goods movements along State Route 99.

OBJECTIVE

MT-12 Operate the City's municipal airport facilities to meet present and anticipated demands in a manner that maintains compliance with federal regulations, enhances safety to the public, minimizes the adverse effects of aircraft operations on people, and promotes the economic health of the community.

IMPLEMENTING POLICIES

MT-12-a Funding for Airport Capital Improvements. Pursue appropriate funding sources and capital improvement budget enhancements that will:

- Provide a modern, safe, and efficient municipal airport terminal facility including the Federal Inspection Station and airfield;
- Maintain airfield compliance with FAA Part 139 operating requirements;
- Maintain financial self-sufficiency and long-term sustainability;
- Continue to implement the master plans for FYI Airport and Fresno Chandler Executive Airport to meet projected air passenger travel, air cargo transportation and general aviation demands.
- MT-12-b Airport Ground Movement Improvements. Obtain and install a FAA-approved Surface Movement Guidance and Control System to allow for ground movement on the airfield in lower visibility conditions.
- MT-12-c Airport Management and Viability. Pursue management policies to keep Fresno Yosemite International Airport and Fresno Chandler Executive Airport self-sustaining and financially viable in compliance with FAA grant assurances.
 - Implement aircraft rescue and firefighting transition plan;
 - Implement the police transition plan;
 - Seek alternate ways to improve the financial viability of the airports; and
 - Seek non-reimbursable Port of Entry status with the U.S.
 Department of Homeland Security.

OBJECTIVE

MT-13 Improve the competitiveness of domestic and international air carrier service, and air cargo operations to and from Fresno Yosemite International Airport (FYI).

IMPLEMENTING POLICIES

- MT-13-a Increase Competitiveness. Work with incumbent air carriers and new air carriers to increase the competitiveness of commercial air service to and from Fresno.
- MT-13-b Marketing Air Travel. Create a marketing plan to attract the traveling public to the FYI and encourage tourists to use FYI Airport as a gateway to Yosemite and Sequoia/Kings Canyon National Parks.

- MT-13-c Expanding Service. Continually solicit new airlines and seek expanded service from incumbent air carriers for both domestic and international flights. Provide incentives as market conditions dictate.
- MT-13-d Airport Property Development. Develop airport properties as outlined in the applicable airport and environs master plans to support economic growth.
- MT-13-e Aviation Support Services. Ensure necessary aviation support services are provided while promoting a business friendly, but competitive environment through appropriate land use policies.
- MT-13-f Environmental Remediation of Hammer Field. Ensure that environmental remediation activities are conducted with the active participation of previous landowners and tenants.

Commentary: This will be done in accordance with the Settlement Agreement reached among the City, the Boeing Corporation, and the United States government regarding Hammer Field (Portions now site of FYI Airport).

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5 PARKS, OPEN SPACE, AND SCHOOLS

The Parks, Open Space, and Schools Element sets forth policy guidance for a broad spectrum of open spaces and community facilities in Fresno. These spaces will provide areas appropriate for agricultural or resource production and conservation; parks and open spaces for recreation; areas for protection of natural resources; and school sites which support neighborhood identity and cohesion. A key need addressed in the element is the shortage of parks and recreation space, particularly in established areas of the city, and a lack of access to these facilities for all Fresnans. This element aims to provide those special places that support a sense of community and are vital to creating a livable and sustainable Fresno.

5.1 CONTEXT

Open space is one of the seven general plan elements required by California's Planning and Zoning Law, Government Code section 65302(e). While a city is required to address the mandatory seven topics or elements, State law allows a general plan format that best fits the unique circumstances of the city. The City of Fresno has chosen to combine the required components of a local open space plan within the larger context of a Parks, Open Space, and Schools Element because of the close relation that these topics have to one another in Fresno.

Relationship to General Plan Goals

The objectives and policies in the Parks, Open Space, and Schools Element support the following General Plan goals:

- 6. Protect, preserve, and enhance natural, historic, and cultural resources.
 - Emphasize the continued protection of important natural, historic and cultural resources in the future development of Fresno. This includes both designated historic structures and neighborhoods, but also "urban artifacts" and neighborhoods that create the character of Fresno.
- 7. Provide for a diversity of districts, neighborhoods, housing types (including affordable housing), residential densities, job opportunities, recreation, open space, and educational venues that appeal to a broad range of people throughout the city.
- 8. Develop Complete Neighborhoods and districts with an efficient and diverse mix of residential densities, building types, and affordability which are designed to be healthy, attractive, and centered by schools, parks, and public and commercial services to provide a sense of place and that provide as many services as possible within walking distance.
 - Intentionally plan for Complete Neighborhoods as an outcome, and not a collection of subdivisions which do not result in Complete Neighborhoods.
- 9. Promote a city of healthy communities and improve quality of life in established neighborhoods.
 - Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, healthy food, health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.

- 12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.
 - Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure, risks to service continuity, desired standards of service to meet quality-of-life goals, and required infrastructure to support growth, economic competitiveness and business development.
- 13. Emphasize the City as a role model for good growth management planning, efficient processing and permit streamlining, effective urban development policies, environmental quality, and a strong economy. Work collaboratively with other jurisdictions and institutions to further these values throughout the region.
 - Positively influence the same attributes in other jurisdictions of the San Joaquin Valley —and thus the potential for regional sustainability and improve the standing and credibility of the City to pursue appropriate State, LAFCO, and other regional policies that would curb sprawl and prevent new unincorporated community development which compete with and threaten the success of sustainable policies and development practices in Fresno.
- 14. Provide a network of safe well-maintained parks, open spaces, athletic facilities, and walking and biking trails connecting the city's districts and neighborhoods to attract and retain a broad range of individuals, benefit the health of residents, and provide the level of public amenities required to encourage and support development of higher density urban living and transit use.

Sufficient parks and recreation spaces are also needed in support of the higher residential densities associated with the Bus Rapid Transit (BRT) corridors and Activity Centers and in the new Complete Neighborhoods planned for Fresno and addressed in the Urban Form, Land Use and Design Element. Parks, open spaces, and schools also critical to residents' physical activity levels are central to the public health strategy, as discussed in the Healthy Communities element.

Of Special Note, Parks Master Plan Update on December 14, 2017

On December 14, 2017, the City of Fresno adopted the Fresno Parks Master Plan (PMP) which was an update to the previously adopted 1989 Parks Master Plan. In comparison to this chapter of the General Plan, the Fresno Parks Master provides updated data and system overview, revised park classifications, additional goals, recommendations and

strategies, and new design guidelines that support and enhance the objectives and policies found in this chapter. As a result, policy POSS-1-a has been revised and the PMP park classifications are to take precedence over the park classifications in this chapter which means that the goal of 2 acres/1,000 residences is to be achieved through Regional Parks, Open Space/Natural Areas, and Special Use Parks/Facilities.

5.2 PARKS AND RECREATION

Parks, natural open spaces, and greenways are an important component to urban form, and they provide both recreational and aesthetic assets that contribute to the creation of a desirable visual character. The City has devoted substantial resources over the past several decades to provide parks and greenways, including the adoption of an Urban Growth Management (UGM) policy that helped establish a park impact development fee in 1976. In 2008, the City Council approved the UGM Impact Fee and Reimbursement policy. Additionally, other agencies and entities, such as school districts, the Fresno Metropolitan Flood Control District (FMFCD), the San Joaquin River and Parkway Conservation Trust, and the San Joaquin River Conservancy, have made significant contributions to the provision of recreational and natural areas. Despite these efforts, Fresno, in 2012 and 2013 was ranked last out of the 40 and then 50 largest U.S. cities, respectively, for ParkScore, a measure that takes into account public open space acreage, services, investment, and access. City Staff, through diligent efforts, increased the City's ParkScore by 6.5 points from 2012 to 2013, and additional programs such as the City's Residential Guidelines for Open Space have increased the amount of recreational open space within the Planning Area without adding costs to the General Fund.

This General Plan affirms Fresno's commitment to creating and maintaining a park system that meets residents' recreational needs, maximizes landscapes endowed by the natural environment, contributes to Fresno's quality of life, and supports urban living. Adoption of this element will guide the subsequent planning and implementation of the City's parks and open space program.

¹ "ParkScore Index." Trust for Public Land. http://parkscore.tpl.org/city.php?city=Fresno.



Parks provide a variety of important social, environmental, and health benefits for the Fresno community, and the City has devoted substantial resources over the past several decades to provide and improve parks and greenways.

Park Classifications

The City provides Fresno residents with several types of parks and facilities.² Parks are defined as land owned, leased, or provided to the City and used for public recreational purposes. In addition, several FMFCD storm water detention basins also serve as passive and active parks (from April to November); and, there are joint use planning and operation of school district playgrounds and athletic facilities for public recreation. In addition to the public parks discussed here, there are many private parks and public lands that provide similar services such as along the San Joaquin River.³ Park types in the General Plan are classified as follows and summarized in Table 5-1:

Pocket Park. A park up to 0.5 to 2.0 acres in size, which is intended to serve the needs of a smaller, specific neighborhood located within a half-mile radius of the pocket park. Pocket Parks should include amenities to draw neighbors to the park such as a tot lot, picnic bench, or shade structure. New Pocket Parks developed

² General Plan park standards and types may differ from PARCS Department operational classifications for existing facilities with various passive and active recreational facilities and features.

³ The banks of the San Joaquin River are under the jurisdiction of the State Lands Commission and open to the public for recreational use.

within new subdivisions are maintained as part of a Home Owners Association (HOA) or Community Facilities District (CFD). Fresno currently is served by 93 pocket parks.

- Neighborhood Park. A park of more than 2 and up to 10 acres in size, which provides basic recreational activities for neighborhoods located generally within a one-mile radius. There are two types of Neighborhood Parks, active and passive. These parks contribute to neighborhood identity and accommodate a range of facilities, such as play fields and courts, children's play structures, picnic tables, restrooms, and may include a small center with a multi-purpose room, but also passive recreational features such as walking trails, community gardens, or nature areas. Fresno has 62 neighborhood parks.
- Community Park. A park of more than 10 and up to 40 acres in size (typically at least 20 acres), which helps define a community or district and is intended to serve the more active recreational needs of persons who live or work up to a two to four-mile radius. These parks typically include facilities such as lighted sport fields and a community center building with a gym, meeting rooms, and restrooms. Other features may include swimming pools, tennis courts, concession stands, community defining public art, courtyard or plaza. Fresno has 13 community parks.
- Regional Park. A large park of more than 40 acres in size, which is meant to serve a large number of residents across a broad area of the city, or around 100,000 residents. Regional parks typically include community park features that allow for a variety of sports and active recreation. Some are large enough to enable Fresno to host local and regional tournaments or events that bring revenue to the City and local businesses in the form of additional patrons and tax revenue generated. Regional parks also provide unique public facilities, such as the Shinzen Japanese Garden, the Chaffee Zoological Gardens, or natural areas with hiking trails, fishing opportunities, and access to the San Joaquin River. Parks that provide unique opportunities, such as river access, have been categorized as a regional park, even though they are less than 40 acres in size. Fresno presently has three City owned regional parks: Woodward, Roeding, and the Regional Sports Complex; and two regional parks owned by other public entities, Camp Pashayan (San Joaquin River Conservancy), and Clovis North High School play fields and facilities (Clovis Unified School District).
- Trail/Greenway/Parkway. A network of linear open spaces of varying size, typically intended to accommodate walking and bicycling opportunities for leisure, exercise and commuting purposes. These parkways typically include paved surfaces for bicyclists and walkers, and in appropriate locations may include equestrian trails. Fresno has 19 paths and trails, which are planned to be expanded and eventually form a substantial portion of the Valley Arboretum. Fresno's trail network is described in the Transportation and Mobility Element.

TABLE 5-1: DESIRABLE PARK FACILITY STANDARDS						
Park Type	Typical Size	Service Area				
Pocket	0.5 to 2 acres	Up to ½ mile				
Neighborhood	2.01 to 10 acres	Up to 1 mile radius				
Community	10.01 to 40 acres	Up to 4 mile radius				
Regional	More than 40 acres ¹	100K residents				
Trail/Greenway/Parkway	Varies	Entire city				

¹ Some parks with less than 40 acres may be classified as Regional if they provide a unique opportunity such as river access.

Source: City of Fresno.

The function and desirability of smaller open spaces, such as pocket parks, has been an ongoing issue for the City. These smaller spaces are often popular with residential developers because of their appeal to homeowners, and they may be the most realistic option to correct deficiencies within already-developed areas. However, the smaller size and scattered location of these sites had tended to increase maintenance costs, pose potential supervision and attractive nuisance challenges, and limit the range of recreational amenities and services that can be offered. In the past, the City has even occasionally decommissioned a pocket park for these or similar reasons. Requiring new pocket parks to have secure maintenance funds through an HOA or CFD provides three benefits: set maintenance funding for each pocket park; local control of the park; and does not add additional burden to the City's PARCS Department maintenance program, allowing them to focus on the City's neighborhood, community, and regional parks. This change in how pocket parks are managed, and including amenities that attract local residents, has made them an attractive option to increase recreational space in the city with minimal to no impact on PARCS resources.

Existing Parks and Recreation Facilities

The City maintains approximately 1,617 acres of open space, nearly 230,000 square feet of building space dedicated to recreational/educational purposes distributed among 104 sites. Other facilities include 9 community pools, 4 splash parks, 518 picnic tables, 153 barbeque grills, 3 amphitheaters, 54 baseball/softball fields, 53 football/soccer fields, 40 basketball courts, 11 volleyball courts, 40 tennis courts, 7 skate parks, and 5 dog parks. The park system also provides and maintains 115 acres of paths and trails for pedestrians and bicyclists.

The FMFCD and the City partner in the use of portions of storm water detention basins as park and open space features. These include trees and turf for passive recreation and play equipment or sports fields where flood control design parameters allow. There are currently 16 basins, totaling over 143 acres, which are open to the public from April to November, when they are not in use for stormwater detention. These basins are often designed with two floor levels. The upper floor is available for recreational uses during the dry weather seasons, while the lower level may be used for ground water recharge purposes and to accommodate rainwater runoff from smaller

storm events. The adaptation of stormwater detention basins for park use must be carefully balanced with the critical need to use these facilities to perform groundwater recharge.

Park Demand and Proposed Park Land

The City's 2025 General Plan standard called for at least 3.0 acres of parkland to be provided per 1,000 residents (comprised of 0.75 acres neighborhood parks, 0.25 acres community parks, 2.0 acres regional parks). This standard is among the lowest in the Central Valley, where many cities have a standard of 4.0 or 5.0 acres per 1,000 residents. Under the Quimby Act, California State law sets a generally applicable standard of 3.0 acres of parkland per 1,000 residents as the maximum that can typically be required by a city or county as a condition of approval of a residential subdivision. However, a city or county can exceed this limitation and require dedication and improvement of parkland up to a ratio of 5.0 acres per 1,000 residents if it can be demonstrated that the developed portion of the community meets or exceeds the higher standard. The Quimby Act limits do not preclude a city from establishing a higher parkland standard, just the amount that can be charged to a new residential development.

The current citywide park fee is based upon a ratio of 3.0 acres per 1,000 residents; this was established under the City's previous Urban Growth Management Program and 1989 Master Plan for Parks and Recreation. This 3.0 acre parkland standard was maintained through the adoption of the 2025 Fresno General Plan, the subsequent Park Facilities Impact Fee & Parkland Dedication Study, and the adoption of the citywide Park Facilities Fee ordinance. In addition to public parks, the Park Facilities Impact Fee study also identified and examined additional open spaces that are publicly owned but have limited access, recreation, or leisure uses, such as golf courses, school playgrounds, or sports fields.

Citywide, Fresno has a current supply of 3.28 acres of City Park Space per 1,000 residents, which exceeds the City's minimum standard by 0.28 acre. Including All Park Space in the City's SOI increases that ratio to 4.65 acres per 1,000 residents.⁴ The

⁴ For this General Plan, Park categories include All Park Space within the City's SOI: parks owned and maintained by an HOA that are publicly accessible (no gate), public golf courses, SJRC parkland open to the public and directly accessible from the City; pocket parks maintained through Community Facility Districts (CFD); ponding basins with park improvements (excludes fenced-off flood areas); Clovis and Central Unified School District playgrounds, Fresno Unified's Burroughs Elementary and Yosemite Middle School (grass fields and courts, Kindergarten play areas, and parking areas only). City Park Space excludes golf courses and school lands because of their use limitations and where the City lacks jurisdiction over the park.

breakdown of these figures is shown in Table 5-2. The difference is due to the inclusion of the City's two golf courses and school playgrounds and play fields. Since school district policies are not within the City's control, those lands have been excluded from the City's inventory. Nevertheless, Clovis and Central Unified's policies for open playgrounds provide a very significant amount of recreational area for residents in those school districts. Including Fresno Unified's Burroughs Elementary and Yosemite Middle School open space, city schools provide over 450 acres of recreational land. This could be greatly increased with the inclusion of additional Fresno Unified School facilities located in the central areas of the city, areas severely lacking in available park space.

Although overall the City exceeds the minimum standard of 3.0 acres per 1,000 residents, the provision of parkland is uneven across the city. The inclusion of open campus schools as parkland increases the disparity of park space in the established neighborhoods north and south of Shaw Avenue. Newer neighborhoods with larger amounts of parkland increase the citywide average and obscure the parkland deficiencies of many Fresno neighborhoods. In particular, many of the central neighborhoods in Fresno lack convenient access to parkland and fall well below the 3.0 acre standard, as shown in Table 5-3 and Figure POSS-1. The discrepancy between developments north and south of Shaw Avenue also demonstrates the effectiveness of park and open space fees and other policies in providing park space to the residents of newer residential developments as compared to past policies, although the city as a whole still remains well below other similar-sized cities.

TABLE 5-2: CITY PARK SPACE AND RATIO PER 1,000 RESIDENTS BY PARK CATEGORY									
Park Category	City Park Space ¹			All Park Space in SOI ²					
	Acres	Number of Parks	Acres per 1,000 Residents ³	Acres	Number of Parks	Acres per 1,000 Residents ³			
Community	198.32 ⁴	13	0.40	557.69	33	1.13			
Neighborhood	372.45 ⁵	62	0.75	401.57	66	0.81			
Pocket	61.57 ⁴	93	0.12	61.57	93	0.12			
Trail- Greenway- Parkway	115.19 ⁴	19	0.23	115.19	19	0.23			
Regional	877.05	5	1.77	940.11	6	1.90			
Golf				223.62	2	0.45			
Total	1,624.58	192	3.28	2,299.75	219	4.65			

- 1. City Park Space includes parks owned and/or maintained by the City or parks where there is little likelihood that the use or access will change. City Park Space does not include lands controlled by other jurisdictions where policy changes could limit or eliminate those lands from use as parkland, such as school district properties. Parks under the jurisdiction of the San Joaquin River Conservancy currently open directly to city residents (Camp Pashayan, Jensen River Ranch) and Fresno Metropolitan Flood Control Basins improved for park use are included. Golf courses are not included because their use is limited to golf.
- In addition, mutual-use agreements with schools provide 451.54 acres of Regional, Neighborhood, and Community Park space for Fresnans, which is not included in the total acres of City Park Space. Golf courses provide an additional 223.62 acres of open space.
- 3. Based on 2010 city population of 495,000.
- 4. Homeowners Associations account for 9.17 acres of the Pocket parks, 4.10 acres of Trail-Greenway-Parkway, and 7.74 acres of the Neighborhood parks under the City Park Space.
- Ponding basins comprise 74.46 acres of the Neighborhood parks and 57.76 acres of the Community Parks under the City Park Space.

Source: City of Fresno.

TABLE 5-3: PARK ACREAGE IN DEVELOPMENT AREAS							
Area	Population ²	City Park Space ¹		Pocket/Neighborhood/ Community Parks			
		Total Acres	Acres per 1,000 Residents ²	Total Acres	Acres per 1,000 Residents ²		
Downtown	CE 500	005.04	2.00	70.04	4 44		
Planning Area Established	65,509	235.84	3.60	72.91	1.11		
Neighborhoods							
South of Shaw	238,116	242.73	1.02	231.78	0.97		
Established Neighborhoods North of Shaw	165,534	764.43	4.62	194.96	1.18		
Combined Development Areas NW ³	47,122	43.56	0.92	42.30	0.90		
DA-1 South	15,056	296.55	19.70	48.92	3.25		
Combined Development Areas East ⁴	15,385	21.25	1.38	21.25	1.38		
South Industrial	15,365	21.23	1.30	21.23	1.30		
Area	11,316	20.23	1.79	20.23	1.79		
Total	558,038	1,625	2.91	632	1.13		
Using 2010 City Population	495,000	1,625	3.28	632	1.28		

- 1. City Park Space includes parks owned and/or maintained by the City or parks where there is little likelihood that the use or access will change. City Park Space does not include lands controlled by other jurisdictions where policy changes could limit or eliminate those lands from use as parkland, such as school district properties. Parks under the jurisdiction of the San Joaquin River Conservancy currently open directly to city residents (Camp Pashayan, Jensen River Ranch) and Fresno Metropolitan Flood Control Basins improved for park use are included. Golf courses are not included because their use is limited to golf.
- 2. Based on Census Tract population totals that include population outside the 2010 City SOI and Planning Area.
- 3. Includes West Development areas north of SR 180 (DA-1 North, DA-4 West).
- 4. Includes East Development areas (DA-2 North & South, DA-3, DA-4 East).

Source: City of Fresno.

In Fresno, the neighborhood and community, and pocket parks are the backbone of the urban park system. They are large enough for play fields and programmed activities and may include sport courts and community centers. They provide open and accessible active and passive open space to neighborhoods, typically within walking or biking distance of many residences. Given the important role these facilities play in Fresno's communities, it is appropriate for the City to achieve 3.0 acres of neighborhood, community, and pocket parks per 1,000 residents.

In Fresno, regional park facilities include trails, paths, and greenways that provide linear connections through and between communities. In addition, regional park facilities include an amphitheater, zoo, a regional sports park, and river access. These facilities provide walking and biking connectivity for the larger community, as well as spaces for leisurely enjoyment of the surrounding neighborhoods. Regional parks provide active and passive recreation and leisure activities at a larger scale, and it is appropriate for the City to continue to provide them at a ratio of 2 acres per 1,000 residents, the standard from the City's 2025 General Plan.

To meet the standard of 3.0 acres of neighborhood, community, and pocket parks per 1,000 residents, a total of 2,313 acres of new parks will be needed to serve the estimated 771,000 residents in the city at General Plan Horizon. To achieve parity with other Valley cities, the City would need to increase the parkland ratio standard to 5.0 acres per 1,000 residents, and the City would need an additional 3,855 acres of parks from all categories. The overall ratio for parkland under this General Plan is 5 acres per 1,000 residents of which 3 acres per 1,000 residents is for Community, Neighborhood, and Pocket Parks.

As shown in Table 5-4, the established neighborhoods south of Shaw and the south industrial area have a deficit of 984 acres in City park space. Using provisions in the Quimby Act, which apply to new residential subdivisions, the City could provide an additional 1,275 acres of parkland and accomplish the overall City goal of providing parkland at a similar rate as other Valley cities. However, State laws concerning parkland dedication and fee limitations require that the open space facilities be proximate to the developments generating these fee revenues. The existing deficit of pocket, neighborhood, and community parks within the established neighborhoods south of Shaw, including the South Industrial Area, may not be considered proximate to developing areas. Thus, additional funding is needed to provide parks in these areas with deficits to equitably distribute the City's parks and open space among all Fresnans. Recent revisions to the Quimby Act through AB 1359 (2013) allows fees, paid pursuant to the act, to be used in a neighborhood other than the neighborhood being developed if specific conditions can be met. This may allow some flexibility but will not resolve the ongoing issue of limited park space in established neighborhoods.

A number of approaches will be pursued to meet both future and existing needs for parks:

- Focus funding efforts on increasing the number of Neighborhood and Community Parks, especially within the areas south of Shaw Avenue;
- Increasing the City's standard to 3.0 acres of usable parkland per 1,000 residents for combined Pocket, Neighborhood, and Community parks while striving for 5.0 acres or more of usable parkland per 1,000 residents for total City Park Space for the SOI;
- Seek dedicated funding sources for parkland acquisition, improvement, and ongoing maintenance costs, in both growth areas and established neighborhoods;
- Strategically locate neighborhood and community parks along BRT corridors, in Activity Centers, and in established neighborhoods to support urban densities;
- Allow flexibility in siting and sizing neighborhood parks;
- Identify the sites of future regional parks, 40 to 100 acres in size, in the City's Development Areas;
- Continue to evaluate and update the City's Citywide Park Fee as applied to new residential development to assure priority park areas are acquired in existing and new residential neighborhoods;
- Identify underutilized and vacant land within the city that can be acquired and developed as parks to meet the needs of existing residents and cure deficiencies in established neighborhoods;
- Secure more joint use facilities, particularly with public schools;
- Pursue joint use facilities with Police and Fire when siting new parks or police/fire stations. These joint facilities will provide added security for the parks and provide greater opportunity for police and fire personnel to interact with the public and neighborhood children;
- Add security measures to parks to protect facilities and patrons;
- Identify opportunities to provide cultural parks consistent with the neighborhood;
- Develop parks that meet specialized needs, such as certain sports activities or recreational facilities not provided elsewhere in the city;
- Encourage development of recreation facilities that are open to the public and free
 of charge such as trails, greenways, and drainage basins developed with the intent
 of being predominantly used as a park; and
- Use low-impact design and landscaping strategies, including use of climatized and drought-resistant plants, for new and existing parks to minimize water demand

and increase capacity for passive water storage and conservation that also provides scenic and recreational opportunities for users.



The General Plan aims to provide more neighborhood, community, and pocket parks, such as the skate park pictured above, throughout the city to improve access to parks, open spaces, and recreational areas for all Fresnans.

Planned Parks, Trails and Open Space

The General Plan proposes over 1,100 acres of land for new City parks by the General Plan 2035 build-out stage for development in the Fresno SOI. All new development will include neighborhood, community, trails, and regional scale parks, where feasible, meeting a minimum combined standard of three acres per 1,000 new residents for Pocket, Neighborhood, and Community Parks. Other funding sources will be sought for the additional two acres per 1,000 residents for Regional Parks, trails, and greenways. These parks are not all mapped on the Figure LU-1: Land Use Diagram, but will be identified through subsequent implementation planning after adoption of this General Plan. Implementation and ongoing maintenance of all park facilities will require new sources of dedicated ongoing revenue.

 $^{^{\}rm 5}$ See Figure MT-2: Paths and Trails in Chapter 4, Mobility and Transportation.

Park maintenance in Development Areas can be funded with CFDs or landscaping and lighting districts. A new funding source for citywide parks maintenance may be needed, as discussed in the Economic Development and Fiscal Sustainability Element. Figure POSS-1: Parks and Open Space, shows the location of the major new parks that are proposed. These include regional parks with some neighborhood and community parks sited in key locations such as in Activity Centers or infill locations. San Joaquin River Parkway paths and trail access points are shown in Figure POSS-2.

Inspiration Park. Set on eight acres near Polk and Gettysburg Avenues, Inspiration Park (formerly referred to as Universally Accessible Park) will provide a Miracle League special-needs baseball field with special-needs designed children play areas, along with a sensory garden and wall, wheelchair accessible dog park, and rubberized basketball court in addition to other features.



TABLE 5-4: EXISTING CITY PARK SPACE AND POCKET/NEIGHBORHOOD/COMMUNITY PARK SPACE NEEDS BASED ON 5 ACRES AND 3 ACRES PER 1,000 RESIDENTS RATIOS

Area	City Park Space			Pocket, Neighborhood, and Community Park		
	Existing Park Acres	Target Park Acres to Reach Ratio of 5 acres per 1,000 Residents	Acres Needed to Reach 5 Acres per 1,000 Residents Ratio	Existing Park Acres	Target Park Acres to Reach Ratio of 3 acres per 1,000 Residents	Acres Needed to Reach Ratio of 3 acres per 1,000 Residents
Downtown (DNCP)	235.84	327.55	91.70	72.91	196.53	123.62
Established Neighborhoods South of Shaw Established Neighborhoods North of Shaw	242.73 764.43	1190.58 827.67	947.85	231.78 194.96	714.35 496.60	482.57 301.65
Combined DA Northwest	43.56	235.61	192.05	42.30	141.37	99.06
Combined DA Southwest	296.55	75.28	-221.27	48.92	45.17	-3.76
Combined DA East	21.25	76.93	55.68	21.25	46.16	24.91
South Industrial Area	20.23	56.58	36.35	20.23	33.95	13.72
Total	1,625	2,725	1,100	632	1,635	1,003

^{1.} Total based on 2010 SOI population of 545,000, Area ratios based on Census Tract populations within each area. City Park Space includes Regional, Trails, Neighborhood, Pocket, and Community Parks not including school properties.

Source: City of Fresno.

As summarized in Table 5-5, the amount of new parkland expected under the General Plan Horizon (2035) is around 1,100 acres of new parkland. It is both mapped and assumed to be provided by new development and added on infill sites in established neighborhoods.

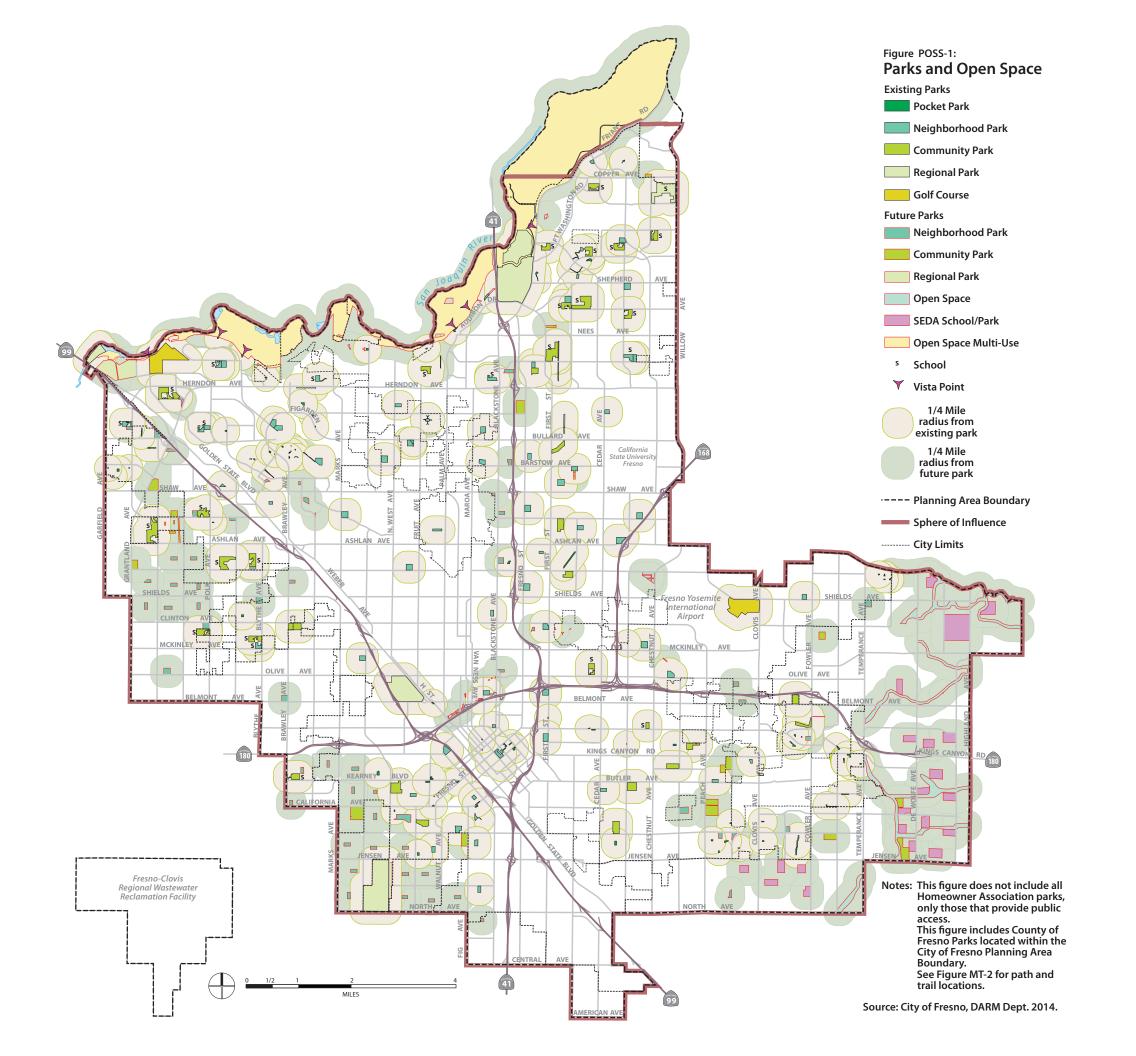
TABLE 5-5: TOTAL EXISTING AND FUTURE PARK NEEDS SCENARIOS								
Park Space Categories	Based on 2010 Population ¹	Based on Additional Future Population at General Plan Horizon	Total					
All City Park Spaces at Ratio of 5 Acres per 1,000								
Residents	2,725	1,130	3,855					
Pocket, Neighborhood, and Community Parks at Ratio of								
3 Acres per 1,000 Residents	1,635	678	2,313					
1. Based on Table 5-4 SOI Population and Acreage Need at 3 and 5 acres per 1,000 residents.								

Source: City of Fresno.

Subsequent implementation planning for parks following the General Plan adoption will be designed as a guiding blueprint for the City Council, City administration, and the public. It will strive to ensure the cohesive development of a parks and open space system that upholds the standards and goals set forth in the General Plan, and include a range of programs for all ages, interests, and neighborhoods. It will also help determine which parks and recreation facilities will be shared with school programs.

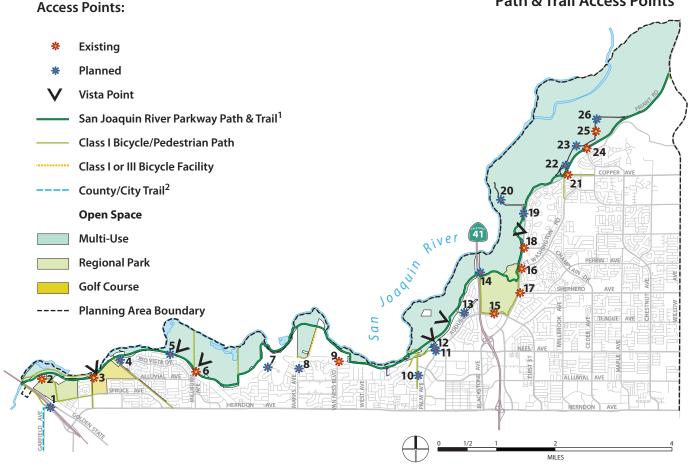
5.3 OPEN SPACE ACTION PLAN

Fresno's Open Space Action Plan consists of the objectives, and policies presented in this element. These include policy direction for specific actions and programs which the City Council intends to pursue to implement the ideas for open space systems contained in this element. Additional detail on how the action plan will be implemented is in the Implementation Element, in the Table 12-1, "Summary of Implementation Actions for Plan Policies". Taken together, these initiatives specifically respond to and are consistent with the Government Code's requirements for an Open Space Action Plan that is to include "specific programs which the legislative body intends to pursue in implementing its open space plan" (Government Code Section 65564).



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Figure POSS-2:
San Joaquin River Parkway
Path & Trail Access Points



- 1. Pedestrian Access
- 2. Multi-Modal Access with Parking
- 3. Multi-Modal Access with Parking
- 4. Multi-Modal Access with Parking
- 5. Pedestrian, Bicycle, Managment, and Emergency Access
- 6. Existing Golf Course Access, Future Multi-Modal Access with Parking
- 7. Pedestrian and Bicycle Access
- 8. Pedestrian and Bicycle Access
- 9. Existing Scout Island Access, Future Pedestrian and Bicycle Access
- 10. Pedestrian and Bicycle Access
- 11. Existing Parking, Planned Pedestrian Access
- 12. Multi-Modal Access with Parking
- 13. Pedestrian, Bicycle, Managment, and Emergency Access
- 1.Conceptual alignment of proposed path and trail. All planned Parkway access and projects, their features, uses, and locations, are subject to the acquisition of lands and/or easements from willing sellers, and project-specific, site-specific environmental review.
- Conceptual alignment, subject to City/County cooperative planning adoption, and implementation. City preferred location depicted.

- 14. Multi-Modal Access with Parking
- 15. Multi-Modal Access with Parking
- 16. Multi-Modal Access with Parking
- 17. Pedestrian and Bicycle Access
- 18. Pedestrian and Bicycle Access
- 19. Multi-Modal Access with Parking
- 20. Multi-Modal Access with Parking
- 21. Multi-Modal Access with Parking
- 22. Multi-Modal Access with Parking
- 23. Multi-Modal Access with Parking
- 24. Pedestrian and Bicycle Access
- 25. Multi-Modal Access with Parking
- 26. Multi-Modal Access with Parking

Source: City of Fresno, DARM Dept 2013 Base Map San Joaquin River Conservancy, 2013 Access Points.

OBJECTIVE

POSS-1

Provide an expanded, high quality and diversified park system, allowing for varied recreational opportunities for the entire Fresno community.

Commentary: The park system will be comprehensive; include greenways, trails and open space; allow for athletic, leisure and mobility opportunities; support planned land use intensities and patterns and buffers along transportation corridors; and accommodate groundwater and other resource management objectives.

IMPLEMENTING POLICIES

POSS-1-a

Parkland standard. Implement a standard of at least three acres of public parkland per 1,000 residents for Pocket, Neighborhood, and Community parks throughout the city, while striving for five acres per 1,000 residents for all parks throughout the city, subject to identifying additional funding for Regional Parks, Open Space/Natural Areas, and Special Use Parks/Facilities.

POSS-1-b

Parks Implementation Planning. Conduct ongoing planning to implement park policies established in this General Plan and continue to strive for well-maintained and fully accessible playgrounds, with accessible amenities, throughout the city.

- Keep an up-to-date inventory of existing and planned parks, including locations mapped on the Parks and Open Space Diagram;
- Plan for acquiring new parkland designated in the General Plan, as shown in Figure POSS-1;
- Establish a standard protocol for working with new development to arrange for parkland acquisition and dedication;
- Establish a protocol for working with established neighborhoods to provide needed parks, including the fostering of neighborhood and district associations to help plan, acquire, improve and care for public parks, and coordinating new City service facilities to provide new open space;
- Establish detailed design, construction, and maintenance standards;
- Prepare an assessment of the recreation needs of existing and future residents;

- Create an action plan defining priorities, timeframes, and responsibilities;
- Adopt and implement a comprehensive financing strategy for land acquisition, park development, operations, and maintenance;
- Identify opportunities for using existing or planned park space as passive stormwater storage, treatment, and conservation areas that also provide scenic and/or recreational opportunities;
- Identify opportunities for siting and using existing or planned park space as passive "purple pipe" waste water storage, treatment, and conservation areas that also provide scenic and/or recreational opportunities; and
- Update the Parks Master Plan.
- POSS-1-c Public Input in Park Planning. Continue to provide opportunities for public participation in the planning and development of park facilities and in creation of social, cultural, and recreational activities in the community.
- POSS-1-d Additional parkland in certain areas. Strive to obtain additional parkland of sufficient size to adequately serve underserved neighborhood areas and along BRT corridors in support of new and intense residential and mixed use infill development.
 - Identify, where appropriate, joint use opportunities in siting parks with other City service facility needs.
- POSS-1-e Criteria for Parks in Development Areas. Continue to use park size and service area criteria for siting new parks and planning for parks in Development Areas:

Park Type	Size Range (Acreage)	Population Served	Service Area Radius
Neighborhood	2.01 to 10	10,000 - 15,000	Up to 1 mile
Community	10.01 to 40	50,000 - 80,000	Up to 4 miles
Regional	More than 401	100,000	100,000 residents
10 1 11			residents

¹ Or when amenities provide regional service.

POSS-1-f

Parks and Open Space Diagram. Require parks to be sited and sized as shown on the Parks and Open Space Diagram (Figure POSS-1) of the General Plan, subject to the following:

 All new park designations carry dual land use designations, so that if a park is not needed, private development consistent with

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zoning and development standards may be approved. (See Figure LU-2: Dual Designation Diagram in the Urban Form, Land Use, and Design Element);

- Revised and/or additional park sites will be identified through subsequent implementation and planning in established neighborhoods and Development Areas;
- Locations for future park sites as shown on Figure POSS-1 are schematic to the extent that park sites may be relocated as necessity and opportunity dictate, and a General Plan amendment is not required if the park continues to serve the target areas as determined by the Planning Director; and
- A park may be located on any suitable land in the general vicinity
 of the sites depicted. However, the zoning of potential park sites
 must be made consistent with the General Plan.

POSS-1-g Regional Urban Forest. Maintain and implement incrementally, through new development projects, additions to Fresno's urban forest to delineate corridors and the boundaries of urban areas, and to provide tree canopy for bike lanes, sidewalks, parking lots, and trails.

OBJECTIVE

POSS-2 Ensure that adequate land, in appropriate locations, is designated and acquired for park and recreation uses in infill and growth areas.

IMPLEMENTING POLICIES

- POSS-2-a Identify opportunities to site, develop and co-locate Fire and Police stations with needed parks and open space as joint-use facilities.
 - Capital Improvement Plans should be updated to reflect this policy.

Commentary: Co-location of public safety with parks provides added security for the park and creates an opportunity for public safety personnel to interact with the neighborhood.

- POSS-2-b Park and Recreation Priorities. Use the following priorities and guidelines in acquiring and developing parks and recreation facilities:
 - Acquire and develop neighborhood park space in existing developed neighborhoods that are deficient of such space and in

areas along BRT corridors that are designated as priorities for encouraging new mixed-use transit-oriented development;

 Provide accessible recreation facilities in established neighborhoods with emphasis on those neighborhoods currently underserved by recreation facilities;

Commentary: As funding permits, the City will strive to make all recreation facilities universally accessible for all residents. Guidelines should also consider the provision for universally accessible facilities in established neighborhoods.

- Improve established neighborhood parks with emphasis on those neighborhoods with the greatest need;
- Acquire and develop neighborhood and community parks in new Development Areas;
- Recognize community parks as a special need in areas that lack these facilities or are planned for transit supportive urban densities, and explore all potential sources of revenue to secure and develop appropriate sites including joint use facilities;
- Develop new special purpose parks, such as outdoor gym equipment, natural resource based trail parks, equestrian centers, dog parks, and amphitheaters, as well as alternative recreation facilities, such as community recreation centers, passive wildlife observation park, cultural heritage and diversity park, military veterans memorial park, and universal access open space park; and
- Acquire and develop park and open space in established neighborhoods and Development Areas, prioritizing existing neighborhoods with the greatest deficiencies, so that all residents have access to park or open space within one-half mile of their residence. Develop these facilities to be fully accessible to individuals with disabilities as required by law.
- POSS-2-c Review of Development Applications. Coordinate review of all development applications (i.e., site plans, conditional use permits, and subdivision maps) in order to implement the parks and open space standards of this Plan.
 - Assure the provision of adequate active and passive open spaces and facilities as appropriate within residential subdivisions through Development Code requirements for mandatory dedication and improvement of land and/or development fees.

Commentary: Revisions to the Quimby Act by AB 1359, allows fees paid pursuant to the act to be used in a neighborhood other than the neighborhood being developed if specific conditions can be met.

- Require the provision of appropriate outdoor living areas or private open space in multi-family residential developments not subject to the Subdivision Map Act.
- Request open space easements where feasible and warranted to secure appropriate public use of sensitive areas with scenic or recreation values, and for buffering space for sensitive areas.
- Require provision of appropriate open space areas in private projects, in the form of trails, enhanced landscaped setbacks, parks, and water features.
- Evaluate the merits of establishing a development bonus entitlement program in which development incentives (i.e., bonus densities, bonus floor area square footage) are provided for contributions to public recreational facilities on-site or in the vicinity of the development project.
- POSS-2-d Recreation Opportunities near Freeway Corridors. Negotiate with Caltrans, other public agencies, and private property owners to develop remnant parcels along freeway corridors for appropriate recreational uses.
- POSS-2-e Open Space Dedication for Residential Development. Ensure new residential developments provide adequate land for parks, open space, landscaping, and trails through the dedication of land or otherwise providing for Pocket Parks, planned trails, and other recreational space, maintained by an HOA, CFD, or other such entity.

Commentary: Thresholds for this requirement will be established when the Development Code is adopted.

POSS-2-f Freeway Landscaping. Support the expansion of the State Route 99
Beautification Association to the Fresno County Highway
Beautification Association with related updates and implementation of
the master landscape plans for each freeway.

OBJECTIVE

POSS-3 Ensure that park and recreational facilities make the most efficient use of land; that they are designed and managed to provide for the entire Fresno community; and that they represent positive examples of design and energy conservation.

IMPLEMENTING POLICIES

- POSS-3-a Centralized Park Locations. Site parks central and accessible to the population served, while preserving the integrity of the surrounding neighborhood.
- POSS-3-b Park Location and Walking Distance. Site Pocket and Neighborhood Parks within a half-mile walking distance of new residential development.
- POSS-3-c Link Parks with Walkways. Link public open space to adjacent, schools, and residential uses and Activity Centers through a series of landscaped linear walkways and bikeways that enhance and encourage pedestrian use.
- POSS-3-d Sidewalks to Connect Neighborhoods. Sidewalks should be designed for internal neighborhood circulation, and to connect neighborhoods to other residential areas, parks, community trails, shopping, and major streets.
- POSS-3-e Minimum Park Size for Active Recreation. Minimize City acquisition or acceptance of dedication of park sites less than two acres in size for active recreational uses, except where maintenance costs are secured through a CFD, HOA, or other such mechanism.
- POSS-3-f Park Design Guidelines. Create, maintain, and apply park design guidelines, with provisions for appropriate amenities for each park type, which may include:
 - Minimum and maximum shade.
 - Protections from shading by adjacent buildings.
 - Accessibility to persons with disabilities.
 - Street trees and landscaped median strips in adjacent arterial roads.
 - Art and points of attraction.

- Landscape and hardscape features.
- Street furniture, signage, and lighting.
- Food sales and entertainment.
- Restroom facilities, play structures, and picnic shelters.
- Landscape design synthesis with input from civil engineers and hydrologists, educators and daycare providers, fitness trainers and coaches, police officers and experts in crime prevention through environmental design, as appropriate.
- Solar panels, new LED lighting, and water efficiency improvements. Sports field areas designed to allow periodic changes in field locations to minimize wear areas and provide sufficient fields to host regional, state, or national tournaments.
- Using topography to create interesting and visually appealing spaces and forms.
- Use of waterways as a key design influence, a focus of restoration, and an opportunity to provide for public enjoyment of views.
- Reflecting the agricultural and horticultural heritage of the site or area.
- Connecting with surrounding areas in a way that encourages expanded pedestrian activity.
- Creating individual places within a park that respond to the needs of a broad range of park users, from youth to the elderly.
- Creating places of delight that engage the senses.
- Creating places that engage the mind, by treating park features as opportunities for interpretation and questioning.
- Using sustainable design practices, and highlighting these as opportunities for learning.
- POSS-3-g Park Security and Design. Promote safety, attractiveness, and compatibility between parks and adjacent residential areas through design, maintenance, and enforcement of park regulations
 - Require the installation of security lighting for parking, points of access, and building areas at all public recreation and park sites.
 - Keep neighborhood eyes on parks to increase security.
- POSS-3-h Coordination with School Districts. Continue to coordinate with school districts to explore opportunities for joint use of both outdoor

and indoor recreation facilities, such as playgrounds, play fields, and gymnasiums, for City recreation programs.

POSS-3-i Joint Use with Drainage Facilities. Continue to seek joint use agreements for use of FMFCD stormwater drainage facilities.

Commentary: Proposals to use ponding basins (or parts of ponding basins) for recreation will need to be approved by the Department of Public Utilities to ensure minimal loss of capacity for groundwater recharge.

OBJECTIVE

POSS-4 Pursue sufficient and dedicated funding for parks acquisition, operations, and maintenance.

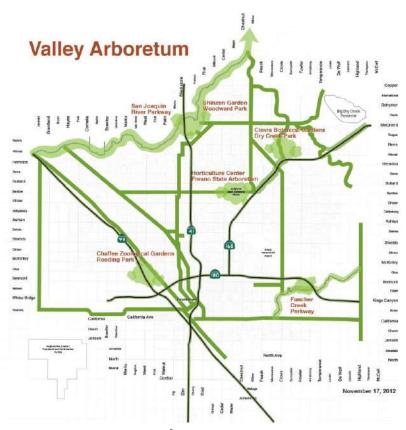
IMPLEMENTING POLICIES

- POSS-4-a Supplemental Revenue. Seek revenue sources to supplement General Fund support for basic park maintenance and basic recreational services.
- POSS-4-b Operation and Maintenance Financing. Continue to require new residential development to form lighting and landscaping maintenance districts or community facility districts or ensure other means of financing to pay for park operations and maintenance.
- POSS-4-c Improvements in Established Neighborhoods. Seek agreements with formal neighborhood associations and institutions for improvements and ongoing maintenance of parks in established neighborhoods.
- POSS-4-d Maintain Adopt-A-Park Program. Continue promoting the City's Adopt-A-Park program that utilizes partnerships with local organizations to preserve, beautify and maintain Fresno's neighborhood parks.

5.4 VALLEY ARBORETUM

The concept of a Valley Arboretum was introduced by the Tree Fresno organization in 2012. An arboretum is defined as a place where trees, shrubs, and plants are grown in order to be observed scientifically and/or seen by the public for educational and ornamental purposes. The Tree Fresno organization presented the City with a description of 14 arboretum segments and a preliminary diagram, shown below, connecting these segments through Fresno and into adjoining parts of Fresno County

and Clovis. Their vision is to establish a signature amenity for the region: a system of linear parks, like the Sugar Pine Trail, with different development standards, to improve Fresno's quality-of-life and ParkScore and help make the region more investment-worthy to families and businesses.



The vision of the Valley Arboretum⁶ is to establish a link between the "botanical brothers" in the region: the Fresno State campus arboretum and horticulture center, the Clovis Botanical Gardens at Dry Creek Park, the Shinzen Garden at Woodward Park, and the Chaffee Zoological Gardens at Roeding Park with a potential expansion to include Kearney Park, Avocado Park, Lost Lake Park, and other trails in the four county region.

In concept, a Valley Arboretum complements and enhances a number of goals, objectives and policies in this General Plan: expanding Fresno's urban forest; reducing

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⁶ Diagram as presented to the City by Tree Fresno.

heat island effect; establishing green streets, Complete Streets, and Complete Neighborhoods; beautifying trails; connecting a network of paths with parks, greenways and parkways as well as neighborhoods and Activity Centers for recreation and transportation purposes; and increasing the attractiveness of the city to existing and potential residents, visitors, employers and employees.

Some of the items that need analysis prior to City consideration include the following:

- Segment locations and possible alternatives may be reviewed by City Departments, neighboring jurisdictions, local agencies and organizations, universities, school districts, and the public.
- The proposed Greenbelt Trails located along the periphery of Fresno's SOI may not
 be as functional as alternative routes located in closer proximity to more populated
 areas of the city. The Valley Arboretum could provide much needed open space to
 communities that are underserved by parks and open space.
- Additional routes may be needed in the older parts of the city that have a fair amount of pedestrian activity and would benefit from an improved street experience. Some of the Valley Arboretum could be located in such a way as to provide a sense of place in smaller segments to enhance potential main streets in Fresno.
- Some segments of the concept Arboretum may need to be adjusted to accommodate other community needs.
- Substituting some or all major street segments for local street segments may be
 advantageous. Relocating segments of the Valley Arboretum along local streets
 could provide a more enjoyable experience for recreational walkers and cyclists,
 while reserving major streets for transportation and commuter oriented cyclists.
- The Valley Arboretum design needs to be further clarified to guarantee that there
 are neither conflicts with nor opportunities taken away from cyclists that have
 been represented in the General Plan.
- Representation of the Valley Arboretum design diversity and street cross sections
 for the various conditions found throughout the many segments identified and for
 those that may be proposed through a vetting process need to be shown. Street
 crossing design, safety features and the interface with abutting residential and
 commercial properties will also vary. The range in overall widths; the type and
 location of trees and other landscaping; landscaping buffer widths; trail width,
 location and type; and educational amenities and gateway locations need to be
 determined.

5.5 OPEN SPACE AND BIOLOGICAL RESOURCES

Overall, there are more than 4,000 acres of existing open space in the Planning Area. Open space is distinguished here from parkland as discussed above. More than half of the existing open space, including private golf courses and parks in gated communities, is not accessible to the general public. Ponding/recharge basins, owned by the FMFCD, account for 1,273 acres; all serve as ponding basins for storm drainage while some also act as year-round groundwater recharge basins.

Six types of open space land are defined by the Government Code for General Plan purposes:

- Open space for public health and safety, including but not limited to, areas which
 require special management or regulation because of hazardous or special
 conditions such as earthquake fault zones, unstable soil areas, flood plains,
 watersheds, areas presenting high fire risks, areas required for the protection of
 water quality and water reservoirs and areas required for the protection and
 enhancement of air quality.
- Open space for the preservation of natural resources, including but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.
- Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
- Open space for outdoor recreation, including but not limited to, areas of
 outstanding scenic, historic and cultural value; areas particularly suited for park
 and recreation purposes, including access to lakeshores, beaches, and rivers and
 streams; and areas which serve as links between major recreation and open space
 reservations, including utility easements, banks of rivers and streams, trails, and
 scenic highway corridors.
- Open space in support of the mission of military installations that comprises of areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.
- Open space for the protection of places, features, and objects for the preservation
 of Native American artifacts, sites and remains.

Central California is a unique biological enclave, with a rich diversity of flora and fauna. This region's climate, soils, hydrology, and geographic isolation fostered resident species found nowhere else on earth. Through agriculture, rural residential and urban development, these species and their habitats are being diminished and marginalized. In collaboration with federal, State, and local flood control and natural resource agencies, the City is striving to protect native plants by providing greater setbacks near sensitive environments; however, continued urbanization may reduce these species' opportunities.

Special Status Species

The Planning Area includes a variety of rare plants and wildlife species, particularly along the San Joaquin River, which provides a concentrated riparian plant and animal sanctuary. This area of natural habitat is recognized as unique and scenic given its topographic variation in the characteristically flat San Joaquin Valley. It is a sensitive environment hosting a diversity of wildlife, fish, and plant species, and it contains the last remnants of a true riparian environment, due to the year—round presence of flowing water, which supports aquatic life. This riparian community provides nesting and roosting sites for raptors, herons, egrets, and other bird species (resident and migratory). It also contains special status species, such as the Valley Elderberry Long Horn Beetle (potential to be de-listed), as well as non-special status vegetation, such as cottonwood and willow trees. In short, this segment of the river provides habitat diversity of great value to wildlife.

Aside from the San Joaquin River, there are several canals that traverse the Planning Area that provide opportunities for both vegetation and wildlife; however, such opportunities are limited.

OBJECTIVE

POSS-5 Provide for long-term preservation, enhancement, and enjoyment of plant, wildlife, and aquatic habitat.

IMPLEMENTING POLICIES

- POSS-5-a Habitat Area Acquisition. Support federal, State, and local programs to acquire significant habitat areas for permanent protection and/or conjunctive educational and recreational use.
- POSS-5-b Habitat Conservation Plans. Participate in cooperative, multijurisdictional approaches for area-wide habitat conservation plans to preserve and protect rare, threatened, and endangered species.

- POSS-5-c Buffers for Natural Areas. Require development projects, where appropriate and warranted, to incorporate natural features (such as ponds, hedgerows, and wooded strips) to serve as buffers for adjacent natural areas with high ecological value.
- POSS-5-d Guidelines for Habitat Conservation. Establish guidelines for habitat conservation and mitigation programs, including:
 - Protocols for the evaluation of a site's environmental setting and proposed design and operating parameters of proposed mitigation measures.
 - Methodology for the analysis depiction of land to be acquired or set aside for mitigation activities.
 - Parameters for specification of the types and sources of plant material used for any re-vegetation, irrigation requirements, and post-planting maintenance and other operational measures to ensure successful mitigation.
 - Monitoring at an appropriate frequency by qualified personnel and reporting of data collected to permitting agencies.
- POSS-5-e Pursue development of conjunctive habitat and recreational trail uses in flood control and drainage projects.

Commentary: Establishment of wildlife and aquatic habitat is unsuitable along primary conveyance systems to existing and future water treatment facilities. Certain waterways may be excluded from habitat development for this reason.

- POSS-5-f Regional Mitigation and Habitat Restoration. Coordinate habitat restoration programs with responsible agencies to take advantage of opportunities for a coordinated regional mitigation program.
- POSS-5-g

 Assistance in Valley Arboretum Master Planning. Assist community organizations that have raised grant funds to pursue the preparation of a Valley Arboretum Master Plan and Implementation Program, including funding, to be coordinated with community groups, as well as related plans and policies for established neighborhoods and other areas with park deficiencies.

Commentary: It is anticipated that when completed, the Valley Arboretum Master Plan will be presented to the City Council for consideration as an amendment to the General Plan. See discussion at the end of this Element, Section 5.4 Valley Arboretum.

OBJECTIVE

POSS-6 Maintain and restore, where feasible, the ecological values of the San Joaquin River corridor.

IMPLEMENTING POLICIES

- POSS-6-a San Joaquin River Parkway Master Plan. Support the San Joaquin River Conservancy in its efforts to update the San Joaquin River Parkway Master Plan by working with the other jurisdictions and the River Conservancy to create a comprehensive and feasible plan for preservation, conservation, and Parkway development.
- POSS-6-b Effects of Stormwater Discharge. Support efforts to identify and mitigate cumulative adverse effects on aquatic life from stormwater discharge to the San Joaquin River.
 - Avoid discharge of runoff from urban uses to the San Joaquin River or other riparian corridors.
 - Approve development on sites having drainage (directly or indirectly) to the San Joaquin River or other riparian areas only upon a finding that adequate measures for preventing pollution of natural bodies of water from their runoff will be implemented.
 - Periodically monitor water quality and sediments near drainage outfalls to riparian areas. Institute remedial measures promptly if unacceptable levels of contaminant(s) occur.

OBJECTIVE

POSS-7 Support the San Joaquin River Conservancy in its collaborative, multiagency efforts to develop the San Joaquin River Parkway.

IMPLEMENTING POLICIES

- POSS-7-a Preserve Wildlife Corridors. Acquire and expand natural reserves and wildlife corridors through purchase, easements, mitigation for proposed activities, or other mutually satisfactory transactions.
- POSS-7-b Wildlife Corridor along San Joaquin River. Create a wildlife corridor to provide continuous open space land and water areas parallel to the San Joaquin River within the jurisdiction of the City.
 - Preserve a minimum width of 200 feet of riparian vegetation on both sides of the river.

- Require the corridor to be wider when possible and/or necessary to protect additional areas of native plants and critical habitat (such as wildlife breeding areas). Re-establishment of a 200-foot or wider band of native plants is recommended in areas where 200 feet of riparian vegetation no longer exists along the river bank, to the maximum extent feasible from topologic and hydrologic standpoints.
- Allow exceptions where the minimum-width corridor is infeasible due to topography, hydrology, or other constraints. An offsetting expansion may be approved in those instances on the opposite side of the river. Incorporate the bluff face into the wildlife corridor where steep bluffs drop directly into or close to the river.
- POSS-7-c Monitoring River Corridor Conditions. Undertake periodic monitoring to determine the status of conditions and mitigation measures required for projects within, and in the vicinity of, the river corridor.
 - Pursue a Memorandum of Understanding (MOU) or other agreement so that the San Joaquin River Conservancy can perform, or participate in, this monitoring program in order to furnish additional expertise, provide for cost efficiency, and to ensure consistency throughout the river corridor.
 - Based on information obtained from monitoring, modifications in special permits, reclamation plans, and other documents, operating parameters for uses may be necessary to insure human health and safety and the well-being of riparian plants and wildlife.
- POSS-7-d Buffer Zones near Intensive Uses. Protect natural reserve areas and wildlife corridor areas in the San Joaquin River corridor whenever more intensive human uses exist or are proposed on adjacent lands. Use buffer zones to allow multiple uses on parts of the parkway while still protecting wildlife and native plants.
 - Require studies of appropriate buffer widths to be approved by State and federal wildlife agencies before variances from standard buffer zone widths are granted.
 - Maintain natural riparian buffer zones with appropriate native plants (seed material and cuttings locally derived).
 - Incorporate open space uses such as pasture, low-intensity agricultural activities, and the "rough" or marginal areas of golf

courses, into buffer zones when they constitute an improvement in habitat over a previous use or degraded area. Evaluate and address the potential impacts of construction, cultural, and operational practices (such as grading, number of livestock per acre, lighting, and use of pesticides, herbicides, and fertilizers) before these uses are be approved for buffering.

 For nearby areas of the San Joaquin River corridor outside of the exclusive jurisdiction of the City, support efforts to work with other jurisdictions to achieve this policy.

POSS-7-e

Natural Habitats and Historic Resources. Continue to protect and enhance the San Joaquin River Parkway environs' unique and irreplaceable natural habitats and historic resources (including archaeological sites). Continue to maintain standards to protect public health, and provide for development of substantial recreational opportunities for all segments of the community by preserving open space on the bluffs and riverbottom while allowing appropriate recreational development respectful of private property rights.

- In conjunction with other land use jurisdictions along the river corridor, determine whether to create a new or modified open space zone district applicable to the San Joaquin riverbottom environs, with provisions that would allow and support the multiple open space uses consistent with the multi-use open space plan designation in this area, and to minimize or prohibit new residential construction.
- Require existing undeveloped areas of the riverbottom to remain non-urbanized and establish controls to preserve and enhance the remaining riparian areas and minimize or prohibit new residential uses.

POSS-7-f

River Bluffs. Preserve the river bluffs as a unique geological feature in the San Joaquin Valley by maintaining and enforcing the requirements of the "BP" Bluff Preservation Overlay Zone District, maintaining the bluff area setback for buildings, structures, decks, pools and spas (which may be above or below grade), fencing, and steps, and maintaining designated vista points.

 Strive to assure that development of the parkway and other uses within the San Joaquin riverbottom environs are consistent with the mineral resources conservation zones; honor flood, environmental, recreational and aesthetic issues; protect natural habitats and historic resources; and consider adjacent property owners.

- Take an active role in establishing park entrances. Provide all gates, trails and roads adequate access by emergency vehicles such as fire trucks, police cars, and ambulances.
- For safety reasons, access may be limited to points that have controlled access gates. Cooperation of private parties having legal control of riverbottom access shall be sought in this effort.
- Continue to work toward the adoption of official plan lines for new segments of the San Joaquin River Trails and actively pursue completion of these segments to ensure that adequate and appropriate public access to the San Joaquin River and the Parkway is provided.
- Refer to Policy NS-2-d (Chapter 9, Noise and Safety) for additional information for sites within the BP Overlay District.

San Joaquin River Parkway - River West Fresno Project Area. Support POSS-7-g the extension of the Lewis Eaton Trail into the River West Fresno Project Area consistent with the San Joaquin River Parkway Master Plan and the following criteria:

Public access into the River View Drive Area/Neighborhoods should be limited to cyclists and pedestrians with the exception of public safety, circulation, and/or other governmental/support service provider vehicles.

Commentary: Limitations on vehicular access through the River View Drive Area/Neighborhoods are not intended to restrict vehicular access to the neighborhoods themselves. Public right-ofway held by the City for public street purposes will remain accessible to the public consistent with the requirements of the California Vehicle Code.

- Proposed public parking facilities should be designed in order to accommodate as many vehicles as possible.
- Additional public parking should be located under and/or adjacent to the old San Joaquin Bridge and State Route 41 corridor.
- The feasibility of additional public parking and equestrian trailer parking near Spano Park should be considered and fully evaluated.

- The location of public parking should not conflict with other recommendations in this policy.
- The trail alignment should, at the greatest extent possible, be located along and/or near the river for maximum public enjoyment, view and access to the river by all users, and to allow for the best possible fire and public safety buffer for adjacent property owners while also taking into consideration environmental impacts, design and maintenance costs, historical and required water flows and flooding, and/or other events that result in increases to water levels.
- Full development or public access should be avoided until adequate and sustainable funding needed to support annual operations and maintenance has been identified.
- The San Joaquin River Bluff and Protection Ordinance should be implemented prior to the completion of the project.
- POSS-7-h

 Interlink City and San Joaquin River Parkway Trail Networks. Strive to connect the parkway trail network to other trails in the vicinity, in order to create a community and regional trail system that offers a variety of different route combinations and enhances public access to the parkway.
- POSS-7-i Public Access to San Joaquin River Parkway Trail Networks. Strive to provide public access to the parkway from public streets, roads, and rights-of-way immediately adjacent to parkway properties, facilities, and trails such as those proposed in Figure POSS-2: San Joaquin River Parkway Path and Trail Access Points, Figure MT-2: Paths and Trails, as well as several public right-of-way alignments identified in Figure MT-1: Major Street Circulation Diagram, which could serve as public access points for vehicles, bicycles, equestrians and/or pedestrians:
 - 1. Herndon and Parkway Avenues: pedestrian access
 - 2. Weber Avenue: multi-modal access with parking
 - 3. Riverside Avenue: multi-modal access with parking
 - 4. Santa Fe and Bluff Avenues: multi-modal access with parking
 - Polk Avenue: pedestrian, bicycle, management, and emergency access
 - 6. Milburn Avenue: existing golf course access and future multimodal access with parking
 - 7. Valentine Avenue: pedestrian and bicycle access

- 8. Marks Avenue: pedestrian and bicycle access
- 9. Van Ness Boulevard: existing Scout Island access, future pedestrian and bicycle access
- 10. Harrison Avenue: pedestrian and bicycle access
- 11. Palm and Nees Avenues: multi-modal access with parking
- 2. Palm Avenue: existing parking and planned pedestrian access
- 13. Riverview and Bluff Avenue: pedestrian, bicycle, management, and emergency access
- 14. Perrin Alignment at State Route 41: multi-modal access with parking
- Woodward Park Audubon Avenue Entrance: multi-modal access with parking
- 16. Woodward Park Friant Road Entrance: multi-modal access with parking
- 17. Shepherd Avenue and Friant Road: pedestrian and bicycle access
- 18. Champlain Avenue and Friant Road: pedestrian and bicycle access
- 19. Rice Road: multi-modal access with parking
- 20. Lanes Road: multi-modal access with parking
- 21. Copper Avenue and Friant Road: multi-modal access with parking
- 22. Old Friant Road: multi-modal access with parking
- 23. Old Friant Road: multi-modal access with parking
- 24. Old Friant Road and Copper River Drive: pedestrian and bicycle access
- 25. Old Friant Road at River Center: multi-modal access with parking
- 26. Old Friant Road: multi-modal access with parking

5.6 SCHOOLS

Schools often act as focal points for neighborhoods and can serve as gathering places and provide open space and recreation opportunities. The City does not operate any of the public schools in Fresno, but it does maintain a collaborative relationship with the school districts, reviewing and approving sites through the subdivision process to ensure that they are consistent with and supportive of the General Plan. The City can also make land use and urban form choices that enhance the role of school facilities in the community.

Existing Public Schools

Fresno is served by several school districts, and the school boundaries do not mirror the city limits. The City coordinates land use plans and subdivision approvals with local districts and cooperates with them to ensure that school fees are collected prior to the issuance of building permits. However, substantial population growth, changing demographic characteristics, and funding constraints have made it difficult for school districts to meet growing student capacity demands.

Most of the city is served by the Fresno Unified School District (FUSD), the fourth largest school district in the state, operating 95 schools with an enrollment of 70,704 students. FUSD adopted a District Facilities Master Plan in 2009 to revise and improve feeder patterns, adjust school boundaries to balance enrollment, improve building and site conditions, reduce the use of portable classrooms, and build new classrooms and facilities where needed. In accordance with the Master Plan, the District constructed a new middle school in southwest Fresno (Rutherford B. Gaston Sr.), which opened in 2014. The District Facilities Master Plan also calls for a new high school in the southeast area of the District, which would help accommodate new growth and help lessen overcrowding at existing high schools.



While the City does not operate any of the schools in Fresno, it works closely with the local school districts to coordinate land use plans and subdivision approvals. Photo Courtesy of Karana Hattersley-Drayton.

Clovis Unified School District (CUSD) currently serves areas in Fresno north of Herndon Avenue and east of FYI Airport, and it will serve areas in the Southeast Development Area generally north of the Tulare Avenue alignment. It is the second largest school district in the city serving 40,677 students in 43 schools with

approximately 40 percent of students in CUSD being Fresno residents. CUSD has one educational complex in Fresno that houses a middle and a high school. CUSD is in the early planning stages of its newest educational complex in the northern portion of SEDA.

Central Unified School District (Central USD) serves the northwestern and west portions of the city serving 14,547 students in 19 schools, and it will serve most of the new development in the Development Areas west of State Route 99. Fueled by residential construction in these areas since 2000, Central USD has experienced an influx of students and as a consequence they have constructed new schools. Fortunately, the Central area contains large parcels of undeveloped land that provide the district flexibility when identifying new school sites.

Sanger Unified School District (Sanger USD) serves the southeast portion of the city serving 10,917 students in 20 schools, and at a 7.8 percent increase in enrollment over 5 years has experienced comparable growth to Central USD and slightly lower than Clovis USD at 8.4 percent. As Fresno experiences new development in the eastern fringe, student populations will undoubtedly increase. High school students living in Fresno and within the Sanger USD currently attend Sanger High School located several miles to the east of Fresno. A new Sanger Unified High School and Middle School are planned in the vicinity of a new Sanger Elementary School north of Jensen and west of Temperance Avenue.

The southwest portion of the city was served by the West Fresno School District, which contains an elementary school and a middle school. In July 2011, West Fresno USD merged into and became a part of the Washington Unified School District that serves 2,560 students in 4 schools. A large portion of the area south of Church Avenue in southwest Fresno is now within the Washington Unified School District.

Combined, the public school districts have the capacity to serve 144,000 school aged children between the grades of K-12, and private schools can serve another 4,200 students. With 136,000 students currently in the public school districts, there remains space for up to 8,000 additional students. Clovis, Fresno, Central and Sanger USDs are planning new schools to increase student capacities as they plan for future growth in the Fresno Planning Area.

Future Schools

Development under the General Plan by 2035 is expected to result in around 35,000 new school-aged students who would require another 28 elementary schools, 6 middle schools, and 4 high schools. The actual school need will depend on the location and phasing of new development, the capacity of existing schools, other growth within

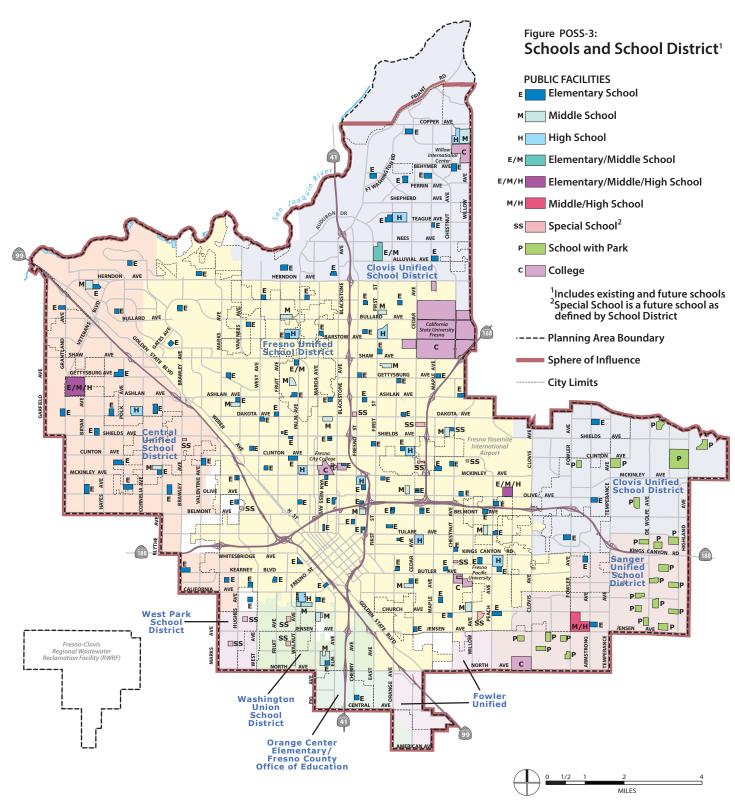
school districts outside of Fresno, and demographic shifts within existing residential neighborhoods.

The City is aware of several planned or proposed school sites and has designated these on Figure LU-1: Land Use Diagram, and Figure POSS-3: Schools and School Districts Diagram. Otherwise, future school facilities are permitted in a variety of land use and zoning districts. The State's school facility size and service area characteristics will aid preparing master plans for Development Areas, supporting districts' needs.

Higher Education

Fresno is home to a major four-year public university, California State University, Fresno, commonly known as Fresno State. It is located in the northeastern area of the city. Fresno State is one of the largest and best known of the 23 CSU campuses. It has one of the five public agricultural colleges in the state and maintains research farms within the city limits. Fresno State is largely a commuter campus, with relatively few students living on campus. The university is surrounded by urbanized land, generally low density residential neighborhoods; there are concentrations of apartment complexes west and south of the campus, as well as in the new Campus Pointe development on campus. The residential uses surrounding the university limit its potential for expansion and for the adjacent development of complementary uses, such as research and development, retail, and student housing.

Fresno is also home to Fresno Pacific University (FPU), the Central Valley's only accredited Christian university; San Joaquin Valley College; Heald College; UCSF Fresno Center for Medical Education and Research; UEI College; and other professional and technical training centers. Another key institution for higher education and training is the State Center Community College District (SCCCD), which operates Fresno City College in the center of the city and offers associates degrees and vocational training, as well as the Willow International College Center, a satellite campus on the northeastern edge of the city. The District is planning to add a satellite campus focused on vocational training in the southeastern corner of the city in SEDA.



Source: City of Fresno, 2014

OBJECTIVE

POSS-8 Work cooperatively with school districts to find appropriate locations for schools to meet the needs of students and neighborhoods.

IMPLEMENTING POLICIES

- POSS-8-a Support School Districts' Programs. Support strategies and programs of school districts and the Fresno County Office of Education to provide access to and use of the highest quality educational programs and support services.
- POSS-8-b Appropriate School Locations. Support school locations that facilitate safe and convenient access by pedestrian and bicycle routes, are compatible with surrounding land uses, and contribute to a positive neighborhood identity and Complete Neighborhoods. Commit to the following:
 - Work with representatives of public and private schools during the preparation and amendment of plans and the processing of development proposals to ensure that General Plan policies are implemented.
 - Require school districts to provide necessary street improvements, pedestrian facilities, public facilities, and public services at each new school site as authorized by law.
 - Continue to designate known school sites on the Land Use Diagram (Figure LU-I), and in community plans, Specific Plans, and other plans compatible with the locational criteria of each school district, and to facilitate safe and convenient walking and biking to schools in neighborhoods.
 - Meet regularly with school district staff and trustees to provide ongoing communication and coordination of plans, projects, and priorities.
 - Collaborate with school districts to plan and implement new school sites in a manner that supports and reinforces objectives to develop walkable Complete Neighborhoods.
- POSS-8-c Park and School Site Coordination. Pursue the cooperative development and use of school sites with adjacent neighborhood parks for both school activities and non-school related recreational activities.

OBJECTIVE

POSS-9

Work with California State University, Fresno, and other institutions of higher learning in Fresno, to enhance the City's workforce, job creation, and economic development, as well as its image and desirability as a place to live.

IMPLEMENTING POLICIES

POSS-9-a

Economic Potential of Institutions of Higher Education in Fresno. Seek to leverage the human capital, research pursuits, and economic potential of California State University, Fresno (Fresno State), and all of Fresno's institutions of higher education, whenever possible in economic development and land use decisions.

POSS-9-b

Regular Coordination with Institutions of Higher Education in Fresno. Encourage regular meetings with Fresno State, FPU and SCCCD leadership, including the Facilities Planning and Housing divisions.

POSS-9-c

University Neighborhood Planning. Partner with Fresno State, FPU and SCCCD leadership to find funding for, develop, and implement a Specific Plan for the neighborhoods around the primary campuses of these and other higher education institutions in Fresno.

Commentary: Using Fresno State as an example, the Specific Plans will focus on updating land use designations, zoning, and infrastructure investments along Cedar Avenue, Shaw Avenue, and other city/school interface zones. The plan also will provide a framework for coordinating jointly beneficial actions, such as development of a research park near the campus and enhanced bus service connections.

6 PUBLIC UTILITIES AND SERVICES

The purpose of the Public Utilities and Services Element is to provide a policy framework for the City to manage infrastructure and services, identify areas for improvement, and ensure that public utilities and services meet the needs of the community as the city grows. More specifically, the Public Utilities and Services Element addresses the planning, provision, and maintenance of water, wastewater, solid waste systems, and other facilities operated by the City, as well as police and fire services. Details on fiscal management policies and strategies, which also have a bearing on public utilities and services, are in the Economic Development and Fiscal Sustainability Element.

One of the fundamental responsibilities of the City is to provide adequate public facilities and services that will support existing development as well as projected growth. As part of this mandate, the City provides police, fire protection, potable water, sewage collection and treatment, and solid waste pickup, while the Fresno Metropolitan Flood Control District (FMFCD) provides storm drainage and flood control. Continued urban development under the General Plan, within the city limits and the City's Sphere of Influence (SOI) may require new or expanded facilities and increased service capacities. The capital costs of these facilities and services will be borne by the development community, consistent with the policies of the Economic Development and Fiscal Sustainability Element.

This Public Utilities and Services Element focuses on substantive issues related to public facilities and services, including service standards, design, and operational measures. Related issues are covered in other elements. Water conservation, for example, is addressed in the Resource Conservation and Resilience Element. Emergency response, flood hazards, and fire hazards are addressed in the Noise and Safety Element. Policies regarding the extension of utilities outside the city limits are in the Urban Form, Land Use, and Design Element.

Relationship to General Plan Goals

This Element provides objectives and policies that support a wide range of General Plan goals, in particular the following:

- 9. Promote a city of healthy communities and improve quality of life in established neighborhoods.
 - Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.
- 12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.
 - Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure, risks to service continuity, desired standards of service to meet quality-of-life goals, and required infrastructure to support growth, economic competitiveness and business development.
- 16. Protect and improve public health and safety.

6.1 POLICE

The Fresno Police Department (Police Department) Patrol Division provides a full range of police services, including uniformed patrol response to both emergency and non-emergency calls for service, crime prevention, pro-active tactical crime enforcement (including gang and violent crime suppression through the use of Impact Teams), and investigation of crimes utilizing District Detectives.

The Police Department currently operates out of four policing district stations in the Southwest, Southeast, Northwest, and Northeast geographic areas within the city. In 2011, the Central Policing District located at Broadway and Elizabeth Streets was closed due to budget reductions. From the four remaining policing districts, the Police Department responds to approximately 1,100 law enforcement calls per day utilizing a priority system to immediately respond to life threatening calls for service and crimes in progress. Other calls for service have a lesser priority and are handled as patrol officers become available.

These services are supplemented by the Police Department - Investigative Services Division, which is responsible for follow-up investigation on cases involving crimes against persons and property crimes, evaluation of crime and public safety intelligence information utilizing the Intelligence Unit, and pro-active investigation of vice/narcotics related crimes.

The Police Department - Support Division encompasses Traffic Enforcement and Accident Prevention, Communications, and Records Bureaus, as well as a Volunteer Services and Reserve Officers Unit. In addition to enforcement-related services, the Police Department provides extensive crime prevention assistance through residence and business security inspections; neighborhood and business watch group formation programs; and public presentations.

The Police Department - Professional Standards Division oversees the Commission of Accreditation for Law Enforcement Act (CALEA) compliance, as well as the Internal Affairs, Fiscal Affairs, Grant, and Policy and Procedure Units and the Accountability and Compliance, Training, and Personnel Bureaus.

Key Issues

Safety is a fundamental concern for the citizens of Fresno and of upmost importance to the City of Fresno. Fresno experiences violent crime at a rate similar to and at times better than other large populace cities in California and on par with cities in the San Joaquin Valley. In comparison, Fresno's violent crime rate in 2012 was 5.4 per 1,000 persons while San Jose was 3.6, Anaheim 3.7, Sacramento 7.4, and Oakland 19.9, while

in the San Joaquin Valley, Clovis was 2.2, Bakersfield 5.4, Stockton 15.5, Visalia 4.3, Hanford 5.6, Tulare 6.2, Madera 7.4, Merced 10, and Sanger 10.8. The city's property crime rate of 50.9 per 1,000 persons in 2012 was higher than San Jose 29.2, Anaheim 29.2, Sacramento 41.9, and less than Oakland 65.9. In the San Joaquin Valley, it was more than Merced 50.8, Madera 25.8, Hanford 32.2, Clovis 41.1, Visalia 43.4, Tulare 39.4, Sanger 41.9, Bakersfield 49.9, and less than Stockton 51.

With much ingenuity, hard work and dedication the Police Department has had much success in countering crime in Fresno. For the third straight year, violent crime has decreased in Fresno with a seven percent reduction for 2013. This includes a 22 percent decline in homicides. Property crimes also fell in 2013 by 12 percent. For the first time in over a decade, every single crime category decreased in our city. This occurred despite the loss of experienced personnel and the strained criminal justice system in Fresno County.

From 2010 to 2013, the Police Department has concentrated resources and efforts to address the violent crime that is a hallmark of the Bulldog gang. This includes the focused efforts of the Multi-Agency Gang Enforcement Consortium (MAGEC), Street Violence Unit, and patrol resources and tactical teams. Continuing efforts have resulted in 135 search warrants authored, 261 Bulldog probation and compliance checks conducted, 112 shootings solved, and 98 illegal firearms taken off the streets.

The Police Department also formed the Gun Crimes Unit in 2011 as part of their overall violent crime reduction strategy. Since inception, the Gun Crimes Unit has reviewed 853 cases involving weapons in Fresno, authored 107 search warrants, recovered 54 illegal guns as a result of the investigations and sought Federal Prosecution of 6 cases by the United States Attorney's Office.



SKYWATCH helicopter on patrol over Fresno



Fresno Police Department Honor Guard at Fresno County Peace Officer's Memorial



Fresno Police Department Chief of Police Jerry Dyer at community event



Police K-9 training

In addition to enforcement efforts, the Police Department in collaboration with the Office of the Mayor set out in 2006 to create an environment where gang members and their associates can obtain educational services, job skills, and social skills to obtain success. The Mayor's Gang Prevention Initiative (MGPI) provides a number of efforts designed to provide alternatives to the gang lifestyle through public/private collaborations such as Night Walks (community outreach in specified parts of the city with high concentration of gang incidents), Ceasefire (prevention, intervention and community-mobilization strategies to reduce violence), Street Outreach (former gang members trained as street outreach workers), and a tattoo removal program (removal of visible gang related tattoos which may inhibit their ability to seek employment).

In 2013, the Police Department formed the Homeless Task Force (HTF) to assist both the community and people experiencing homelessness by providing a safer environment, free from illegal and dangerous encampments. In that year, the HTF completed four major encampment cleanups and removed over 168 smaller settlements. In addition, they made 73 felony arrests, 147 misdemeanor arrests, issued 180 citations and removed over 770 shopping carts from the street. The HTF is the first unit in the Department to wear personal video cameras that are used to record all property storage and release, as well as citizen contacts.

The Police Department Regional Training Center (RTC) opened in September of 2010 and is a unique training center among California's law enforcement agencies. Since opening, personnel representing over 150 different agencies have trained at the RTC. The RTC has become the host for an annual regional SWAT training day that is overseen by the FBI which draws about 300 participants. The RTC also provides facilities for the California Department of Corrections and Rehabilitation as they conduct monthly physical fitness testing of its entry level applicants for their position of correctional officer. In addition, the RTC hosts a portion of the annual fire symposium that is held in Fresno and the City allows fire agencies to use the RTC throughout the year. Many agencies now use the RTC as a venue where they provide their own training to their employees including the FBI, DEA, U.S. Probation, Veterans Affairs Police, California Department of Consumer Affairs to name a few.

The Police Department maintains national accreditation through the Commission on Accreditation for Law Enforcement Agencies (CALEA) which requires the agency to prove that the City meet national best practice standards for law enforcement. Having received initial accreditation in 2003, CALEA ensures continual compliance to their standards through rigorous on-site inspections, audits, public hearings and extensive reporting mechanisms every three years. By continually adhering to these strict standards, the agency will be seeking a "Gold" certification standard for excellence in law enforcement through the 2014 CALEA accreditation process.

For the purposes of planning for the future it is important to point out some of the needs the Police Department have which affect their ability to provide optimum service. Over the past five years, staff reductions were necessary to meet budget constraints. These reductions resulted in reduced service delivery for services such as handling lower priority field calls and prisoner processing, and increased call-delay time in the agency's 9-1-1 Dispatch Center. The Police Department is diligently working toward restoring these services.

Other resource issues facing the Police Department include ongoing equipment needs such as patrol vehicles, radios, and computers. As an example, patrol vehicles have historically had a useful service life of five years and 100,000 miles. Due to budget constraints, these same vehicles now remain in the patrol fleet for more than seven years with many having over 170,000 miles. Extending the service time for other law enforcement equipment has also occurred including expanded years of service life for traffic enforcement motorcycles, plain cars, and other safety equipment used by police officers. Policies in the Economic Development and Fiscal Sustainability Element address these long-term resource needs.

A strained criminal justice system also creates critical issues for the Police Department. The realignment of convicted prisoners from State incarceration to County of Fresno

supervision under AB109 has increased the workload of patrol officers and investigators. As inmates, released from State prison, continue their criminal enterprises out of custody, calls for police services, as well as additional investigative follow up are imposing significant impacts on the Police Departments already strained resources.

Liquor Stores

The location and prevalence of liquor stores can have a negative effect on neighborhood health. In recent public meetings, three interrelated concerns have arisen:

- Market saturation. Some neighborhoods feel they have an overabundance of
 establishments with off-sale or on-sale licenses to sell liquor. The Downtown and
 the area immediately east have a larger number of venues for the sale and
 consumption of alcoholic beverages within a small area than other areas of the city.
 Blackstone and Shaw Avenues also feature a high concentration of these stores.
- Fear of crime. Community members often see a strong relationship between establishments with off-sale or on-sale licenses to sell liquor and rates of nuisances and crime.
- Danger to schools. Related to the above point, residents are concerned when
 alcohol sales are allowed too close to schools because of the impact on teenage
 drinking.

The State Department of Alcoholic Beverage Control (ABC) manages the issuance of licenses for the sale of alcoholic beverages. ABC is allowed to deny licenses located in the immediate vicinity of churches and hospitals, within 600 feet of schools and public playgrounds, or within 100 feet of a residence. ABC can also restrict hours of sales. State law limits the number of off-sale beer and wine licenses to no more than one per 2,500 city residents, although there is no restriction on the concentration of licensed establishments within the city.

Currently, the ability to use land within the city for alcoholic beverage sales is subject to Conditional Use Permit approval. While this requirement applies citywide, some neighborhoods feel saturated with liquor stores. The City has not developed an independent mechanism for assessing appropriate concentrations of alcohol sales establishments, however, and relies on information from the Police Department and the ABC in their consideration of permit applications. The Development Code update provides an opportunity for a more nuanced approach to controlling and abating nuisances associated with liquor stores and restaurants through Conditional Use Permit and other land use approvals that consider neighborhood needs and potential impacts.

OBJECTIVE

PU-1

Provide the level of law enforcement and crime prevention services necessary to maintain a safe, secure, and stable urban living environment through a Police Department that is dedicated to providing professional, ethical, efficient and innovative service with integrity, consistency and pride.

IMPLEMENTING POLICIES

PU-1-a

Integration of Crime Data. Develop a mechanism to share pertinent crime data from multiple sources with other law enforcement agencies as a means of improving service delivery, officer safety, and providing a safer community for the citizens of Fresno.

- Strive to develop and implement data sharing agreements externally throughout County of Fresno Law Enforcement Agencies with the intent of participating in region-wide data sharing agreements throughout the State of California.
- Utilize developing technologies internally to ensure that crime specific data is made available for first responders and criminal investigators.
- Develop advanced predictive policing capabilities to ensure that limited law enforcement resources are properly placed to reduce criminal activity in locations of the city that are identified as having a high probability of criminal activity.
- Fully implement a Real Time Crime Center which provides responding officers integrated computer data, video data from the Video Policing Unit, and up-to-date emergency dispatch information as a means of improving officer safety to critical incidents and service delivery to the community.

PU-1-b

Involvement in General Plan. Facilitate Police Department participation in the implementation of General Plan policies, including citizen participation efforts and the application of crime prevention design measures to reduce the exposure of neighborhoods to crime and to promote community security.

- Facilitate Police Department communication with citizen advisory committees.
- Refer appropriate development entitlements to the Police Department for review and comment.

PU-1-c Safety Considerations in Development Approval. Continue to identify and apply appropriate safety, design and operational measures as conditions of development approval, including, but not limited to, street access control measures, lighting and visibility of access points and common areas, functional and secure on-site recreational and open space improvements within residential developments, and use of State licensed, uniformed security.

PU-1-d

New Police Station Locations. Consideration will be given to colocating new police station facilities with other public property including, but not limited to, schools, parks, playgrounds, and community centers to create a synergy of participation in the neighborhood with the potential result of less vandalism and promotion of a better sense of security for the citizens using these facilities.

PU-1-e Communication with Public. Maximize communication and cooperative efforts with residents and businesses in order to identify crime problems and optimize the effectiveness of crime prevention measures and law enforcement programs.

PU-1-f Law Enforcement Collaboration. Collaborate with community-based public, non-profit and private agencies to:

- Develop comprehensive narcotics and violence prevention programs designed to discourage delinquent behavior and narcotics abuse and to encourage viable alternative behaviors.
- Develop a more concentrated understanding of how to assist and support citizens with a variety of disabilities, especially those with cognitive and developmental auditory disabilities.
- Maintain active involvement in youth development and delinquency prevention activities.

PU-1-g Plan for Optimum Service. Create and adopt a program to provide targeted police services and establish long-term steps for attaining and maintaining the optimum levels of service - 1.5 unrestricted officers per 1,000 residents.

Commentary: The City's fiscal management strategies will affect planning for optimum service. The Economic Development and Fiscal Sustainability Element provides additional details.

- PU-1-h Retail Conversion. Assist community groups seeking information on conversion of establishments with off-site or on-site liquor sales licenses to other retail products that better meet community needs.
- PU-1-i Crime and Nuisances. Assist community and neighborhood groups seeking to reduce crime and nuisances they associate with high concentrations of establishments with off-sale or on-sale liquor licenses through Police Department consultations, other available services, and programs such as Neighborhood Watch.
- PU-1-j Lighting and Safety. Ensure adequate lighting at off-sale liquor stores to help deter crime and to promote a more inviting and safe atmosphere around them.

6.2 FIRE

The City of Fresno Fire Department (Fire Department) offers a full range of services including fire prevention, suppression, emergency medical care, hazardous materials, urban search and rescue response, as well as emergency preparedness planning and public education coordination. This plan addresses the on-going need for the effectiveness and efficiency of the Fire Department's fire suppression operations, emergency medical service, and special operations delivery in protecting the citizens of the jurisdiction and the occupational safety and health of its employees. The Fire Department in 2005, 2006, and 2007 contracted for services with the Airports Department and two adjacent fire protection districts and now operates 24 fires stations that serve a 336-square mile area. The contracting of services has provided an enhanced level of service through consolidation of communication center, and boundaryless fire station response districts. The City also has an automatic aid agreement with the City of Clovis whereby the nearest fire station responds to an emergency regardless of the jurisdiction within which it is located. The Fire Department also participates in a statewide mutual aid system, providing resources throughout the State of California upon request.

Historically, 60 to 65 percent of all calls for Fire Department services have been for medical emergencies, while seven percent have been for structure fires. Other fire-related calls include vegetation fires, vehicle fires, and debris fires. Fresno averages two working multiple alarm fires every day, which must be addressed despite the challenge of substantially reduced staffing levels. In addition to responding to calls, the Fire Department is involved in reviewing all building permits and subdivision maps to ensure access and fire suppression equipment (i.e., fire hydrants) are properly located. Staff also conducts new construction inspections of fire protection systems and routine fire and life safety inspections of existing buildings.

The Fire Department provides comprehensive fire prevention services to all commercial, industrial, and residential establishments by routine fire and life safety inspections and public education. Fire risk factors have been substantially reduced through more restrictive statewide residential housing unit fire sprinkler mandates and adoption of a local fire sprinkler ordinance, in effect since 1979, requiring fire sprinklers in most buildings over 5,000 square feet; as a result, the frequency and severity of extended fire attacks has been reduced. In order to combat the threat of structure fires in new growth areas, the City developed urban growth management standards requiring new development to be within a four minute response service area of a fire station. While this standard may be increased by applying additional conditions of approval (i.e., building separation distances, traffic preemption, enhanced onsite fire protection systems), it is uncommon for residential development to be located outside of a fire station's four minute response area.



1877 Fresno Fire Fighters



Recent photo of Fresno Fire Engines



Rescue at car roll over with pin in



Ladder Truck in action at a working fire

Key Issues

Ability to Meet Response Time Standards

The City of Fresno Fire Departments target response time for its service area is 5 minutes and 20 seconds for 90 percent of emergency incident response. This time standard measures unit response from the time the unit was alerted to the emergency

incident to the time the first unit arrived at the emergency incident. This response time standard is critical to saving lives before flashover occurs at fire incidents and arriving in time to provide basic life support in situations such as sudden cardiac arrest, trauma, impaired breathing and other severe medical emergencies. In 2013, the Fire Department response time was 6 minutes 26 seconds to 90 percent of fire and medical emergencies.

The Fire Department has been unable to meet target response times due to cuts in the number of units available to respond. In 2009, the Fire Department had 25 operational units available to respond to, however, due to the economic downturn in 2010, the Fire Department had to reduce the number of responding units to 19 (a 24 percent reduction in available work force) though the service level demands remained the same or higher. Industry standard defines an effective firefighting force as having 15 firefighters on a residential fire ground within 8 minutes 90 percent of the time. Today the department continues to provide service with 19 responding units providing an effective firefighting force on-scene only 64 percent of the time in 8 minutes. Note the FY2015 budget anticipates one additional engine company added to the service level.

Although there are currently 19 fire stations in the Metropolitan Area, staffing levels are a key issue that must be addressed. The national standard for firefighter staffing is 1 to 1.5 per 1,000 residents and the state average is 0.81 firefighters per 1,000 residents. The National Fire Protection Association Standard (NFPA) 1710 provides recommendations of minimum workforce standards to accomplish provisions of fire suppression and emergency medical services. Fresno Fire Department uses NFPA 1710 as a guidance document to establish its own minimum staffing standards to ensure sufficient workforce is present in the event of emergency situations.

In 2009, the Fire Department had 89 firefighters on duty each day (a minimum daily staffing) or 0.52 firefighters per 1,000 residents. In 2011, the daily minimum staffing dropped to 66 firefighters on duty each day or 0.39 firefighters per 1,000 residents, which is equivalent to the staffing levels held in 1958. Today, the current daily minimum staffing level is a total of 70 firefighters on duty each day which equates to 0.41 firefighters per 1,000 residents. This increase was realized through funding by the Staffing for Adequate Fire and Emergency Response Grants (SAFER).

This significant reduction in resources caused the Fire Department to change its operating model in an effort to keep apparatus available to respond within the desired response criteria for emergencies. More specifically, the Fire Department:

 Stopped responding to approximately 10,000 annual serious medical emergency calls;

- Moved all fire and life safety inspections to the Fire Department Prevention Division; and
- Reduced availability for all public education outreach.

The Fire Department's long-term planning target is to match daily staffing levels to service level demands.

The City is currently rated by the Insurance Services Office (ISO) as a Public Protection Class 3 (scale 1 to 10, with 1 being the best). An updated City of Fresno Fire Department Strategic Plan should include objectives that will identify strategies to improve and/or enhance emergency operations, community risk reduction (to include education, engineering and enforcement), training requirements, and support service functions that improve service delivery and potentially move the Fire Department into a Class 2 rating.

Ability to Provide Annual Fire Inspections and Fire Safety Education

Fire prevention is not simply preventing fire. It is the systematic application of codes, standard, engineering principles, and an understanding of human behavior to achieve the objective of limiting the loss of life and property. The Fire Department is responsible for providing annual fire and life safety inspections of all commercial, industrial, institutional, and multi-family buildings and proactive fire safety public education programs. Due to current budget constraints, many low and moderate fire and life safety hazard buildings are not being inspected, and public education outreach has ceased. The eventual effect of these reductions in fire prevention services has yet to be determined, but it is anticipated that frequency of preventable fires will increase and the reliability of building fire protection systems will decrease, due to lack of inspection and maintenance of those systems. Furthermore in the Fire Department's recent ISO review, full points were not received in the area of fire inspections due to deferral of consistent inspections by a reduced staff. Policies are currently being evaluated to address options for implementing a long-term plan to restore the Fire Department's ability to conduct fire and life safety inspections on all appropriate occupancies, and when possible provide a self-certification option and appropriate fire and life safety education outreach programs to the community.

Facilities to Serve New Development

Existing facilities may not be adequate to maintain a sufficient level of services for future growth in Fresno. Increased population densities in the Downtown and mixeduse corridors and centers, at the locations shown on the Land Use Diagram (Figure LU-1), may require commensurate increases in firefighter staffing, facilities, and equipment to maintain current levels of service. The location of fire stations may become more dependent on density and availability than running distances between fire stations.

Infill development may require reopening of the former Broadway/Elizabeth fire station, construction of a new station in the Downtown Planning Area, and/or restoring the number of fire apparatus and firefighters at the existing stations. Where infill development substantially increases density or building height, the existing public water main infrastructure may require upgrading due to increased domestic water demand reducing available water volume and pressure for firefighting and potential damage to aging water pipes when fire apparatus must pump large volumes of water for fire suppression purposes.

New development in Development Areas identified in Figure 1-3 will need new and relocated fire stations. In DA-1 North, the City owns land near Shaw and Bryan Avenues and is currently in the process of finalizing details for the construction of permanent Fire Station 18. One site for a future fire station is needed to serve the southeast corner of Established Neighborhoods south of Shaw Avenue and the South Industrial Area. Five future sites have been identified to build three future fire stations in Established Neighborhoods north of Shaw Avenue, one in DA-2 South, and one in DA-2 North. Also needed over the planning period are a new Training & Learning Center, Repair and Maintenance Facility, Joint Police/Fire Public Safety Complexes and Communications Center, possibly located in the Downtown.

In planning for new facility locations, consideration will be given to co-locating such facilities with other public property such as schools, parks, playgrounds, community centers, etc. to create a synergy of participation in the neighborhood with the potential result of less vandalism and promotion of a better sense of security for the citizens using these facilities.

OBJECTIVE

PU-2 Ensure that the Fire Department's staffing and equipment resources are sufficient to meet all fire and emergency service level objectives and are provided in an efficient and cost effective manner.

IMPLEMENTING POLICIES

- PU-2-a Unify Fire Protection. Pursue long-range transfer of fire protection service agreements with adjacent fire districts that, in concert with existing automatic aid agreements, will lead to the eventual unification of fire protection services in the greater Fresno area.
- PU-2-b Maintain Ability. Strive to continually maintain the Fire Department's ability to provide staffing and equipment resources to effectively prevent and mitigate emergencies in existing and new high-rise

buildings and in other high-density residential and commercial development throughout the city.

- PU-2-c Rescue Standards. Develop appropriate standards, as necessary, for rescue operations, including, but not limited to, confined space, high angle, swift water rescues, and the unique challenges of a high speed train corridor.
- PU-2-d Station Siting. Use the General Plan, community plans, Specific Plans, neighborhood plans, and Concept Plans, the City's Geographic Information Systems (GIS) database, and a fire station location program to achieve optimum siting of future fire stations.
- PU-2-e Service Standards. Strive to achieve a community wide risk management plan that include the following service level objectives 90 percent of the time:
 - First Unit on Scene First fire unit arriving with minimum of three firefighters within 5 minutes and 20 seconds from the time the unit was alerted to the emergency incident.
 - Effective Response Force Provide sufficient number of firefighters on the scene of an emergency within 9 minutes and 20 seconds from the time of unit alert to arrival. The effective response force is measured as 15 firefighters for low risk fire incidents and 21 firefighters for high risk fire incidents and is the number of personnel necessary to complete specific tasks required to contain and control fire minimizing loss of life and property.
- PU-2-f

 Plan for Optimum Service. Create and adopt a program to provide appropriate number of employees to effectively respond to call volume and type; and establish a long-term plan to attain a level of service of 0.81 firefighters per 1,000 residents.

Commentary: The City's fiscal management strategies will affect planning for optimum service. The Economic Development and Fiscal Sustainability Element has additional details.

PU-2-g Community Facilities District for Emergency Services. Develop strategies on the formation of Community Facilities Districts in new Development Areas to fund emergency services.

OBJECTIVE

PU-3 Enhance the level of fire protection to meet the increasing demand for services from an increasing population.

Commentary: In addressing enhanced fire protection provide a community wide risk management model.

IMPLEMENTING POLICIES

- PU-3-a Fire Prevention Inspections. Develop strategies to enable the performance of annual fire and life safety inspection of all industrial, commercial, institutional, and multi-family residential buildings, in accordance with nationally recognized standards for the level of service necessary for a large Metropolitan Area, including a self-certification program.
- PU-3-b Reduction Strategies. Develop community risk reduction strategies that target high service demand areas, vulnerable populations (e.g. young children, older adults, non-English speaking residents, persons with disabilities, etc.), and high life hazard occupancies.
- PU-3-c Public Education Strategies. Develop strategies to re-establish and enhance routine public education outreach to all sectors of the community.
- PU-3-d Review Development Applications. Continue Fire Department review of development applications, provide comments and recommend conditions of approval that will ensure adequate on-site and off-site fire protection systems and features are provided.
- **PU-3-e Building Codes.** Adopt and enforce amendments to construction and fire codes, as determined appropriate, to systematically reduce the level of risk to life and property from fire, commensurate with the City's fire suppression capabilities.
- PU-3-f Adequate Infrastructure. Continue to pursue the provision of adequate water supplies, hydrants, and appropriate property access to allow for adequate fire suppression throughout the City.
- PU-3-g Cost Recovery. Continue to evaluate appropriate codes, policies, and methods to generate fees or other sources of revenue to offset the ongoing personnel and maintenance costs of providing fire prevention and response services.

- PU-3-h Annexations. Develop annexation strategies to include the appropriate rights-of-way and easements necessary to provide cost effective emergency services.
- PU-3-i

 New Fire Station Locations. Consideration will be given to co-locating new Fire Station facilities with other public property including, but not limited to, police substations, schools, parks, playgrounds, and community centers to create a synergy of participation in the neighborhood with the potential result of less vandalism and promotion of a better sense of security for the citizens using these facilities.

6.3 WASTEWATER COLLECTION AND TREATMENT

The City is the Regional Sewer Agency for the Fresno-Clovis Metropolitan Area. The City owns and maintains the wastewater collection system that serves the City and the other participating agencies: County of Fresno, City of Clovis (Clovis), Pinedale Public Utility District, and Pinedale County Water District. The City also owns and operates the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF), located southwest of the city, and the North Fresno Water Reclamation Facility, located in northeast Fresno. The wastewater treatment and reclamation system includes: (1) collection and conveyance of wastewater; (2) treatment of raw wastewater; and (3) management of reclaimed water and bio solids. Aging infrastructure (collection and treatment), together with the need to pursue more advanced levels of reclamation and reuse are a concern over the long term, not only in the new growth areas but also in established neighborhoods and Downtown where increased density is planned.

The City's existing wastewater system, shown in Figure PU-1: Wastewater System is comprised of an extensive system of main lines, connection points, manholes, and lift stations. The collections pipelines consist of smaller diameter pipes (4 to 12 inches) serving individual properties, larger collection pipelines (13 to 33 inches) typically referred to as "oversized sewers," and sewer trunk interceptors (34 inches and larger) that convey sewage to the RWRF. The age and condition of the collection system varies considerably over the service area, with some pipelines dating back to the 1890s.

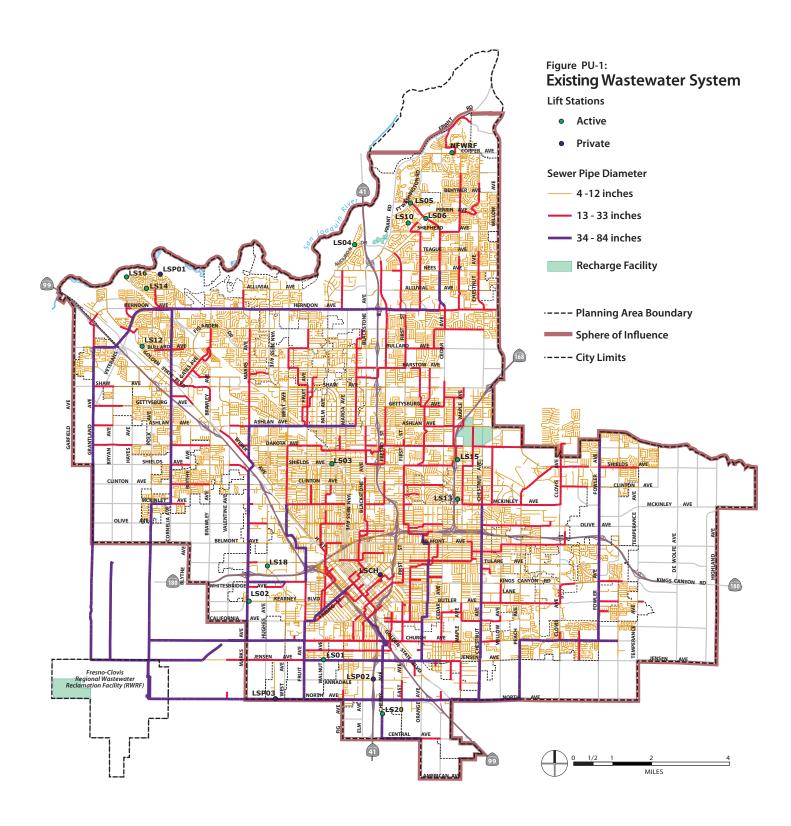
The City of Fresno Department of Public Utilities (DPU) manages a comprehensive sewer maintenance program in accordance with its Sewer System Management Plan. The DPU is also responsible for preparing the Fresno Wastewater Collection System Master Plan, last updated in 2006. The 2006 Fresno Wastewater Collection System Master Plan (2006 Master Plan) concluded that the collection system receives "no appreciable groundwater infiltration" and relatively small amounts of rainfall-dependent infiltration or inflow, except for older areas of the Downtown. The 2006 Master Plan

identified over 130 projects as necessary to accommodate the projected development anticipated by the 2025 Fresno General Plan; a greater number will be needed to serve development under this Plan.

The 2006 Master Plan anticipated that the RWRF would be operating at its full capacity, treating 80 million gallons of wastewater per day by 2010; however, the volume of wastewater has declined in recent years. Consequently, it is possible that the plant has sufficient capacity to accommodate growth for several years beyond what was previously anticipated. Nonetheless, the City is required by State statutes to begin planning for increased capacity when flows reach 75 percent of the current design capacity.

Wastewater presently receives primary (removal of materials that will float or settle) and secondary treatment (biological process to remove suspended and dissolved solids). Upon treatment, the wastewater is distributed to a series of infiltration ponds where it is allowed to percolate through the soil (which serves as another level of treatment). The City also conducts programs, such as a federally mandated Industrial Pretreatment Program, to prevent the introduction of pollutants into a publicly owned treatment works (collection system and treatment facilities) that could impact its infrastructure and pass through into receiving waters. Under the Industrial Pretreatment Program, industrial users are regulated through a Wastewater Discharge Permit that specifies discharge prohibitions and limitations. Failure to comply could result in penalties.

In addition, industries are billed for sewer depending on the amount of water used or effluent discharged and the strength of their wastewater measured as pounds of biochemical oxygen demand and pounds of total suspended solids. Reducing the strength of their wastewater to reduce sewer utility costs becomes an incentive for industrial users to improve their water quality and the amount of water used and/or discharged.



Source: City of Fresno, 2014

OBJECTIVE

PU-4 Ensure provision of adequate trunk sewer and collector main capacities to serve existing and planned urban development, consistent with the Wastewater Master Plan.

IMPLEMENTING POLICIES

- PU-4-a Plan for Regional Needs. Coordinate and consult with the City of Clovis, pursuant to the Fresno-Clovis Sewerage System Joint Powers Agreement, so that planning and construction of sewer collection facilities will continue to meet the regional needs of the Metropolitan Area.
- PU-4-b

 New Trunk Facilities. Pursue construction of new or replacement sewer trunk facilities or other alternatives consistent with the Wastewater Master Plan to accommodate the uses as envisioned in this General Plan.
- PU-4-c System Extension and Cost Recovery. Pursue enlargement or extension of the sewage collection system where necessary to serve planned urban development, with the capital costs and benefits allocated equitably and fairly between the existing users and new users.

Commentary: Consistent with fiscal management policies and strategies in the Economic Development and Fiscal Sustainability Element, new users will be obligated to pay for the cost of being attached to the collection system through connection fees, including the cost of any incremental burden that they may place on the entire system, and pay for their share of operational and maintenance costs in addition to any costs for extraordinary facilities, such as lift stations or capacity enhancement measures, as authorized by law.

PU-4-d Capacity Modeling. Continue development and utilization of citywide sewer flow monitoring and computerized flow modeling to determine availability of sewer collection system capacity to serve planned urban development.

Commentary: Information about the availability of sewer collection system capacity will be a factor in evaluating proposed General Plan amendments, community plans, Specific Plans, neighborhood plans, and Concept Plans.

- PU-4-e Evaluate and Maintain Infrastructure. Promote the health and safety of the community, and preserve the longevity and sound condition of the sewer collection system through evaluation and maintenance of the sewer infrastructure.
 - Continue assessments of existing infrastructure and facilitate necessary repair to damaged and worn-out pipelines.
 - Continue routine sewer line maintenance and cleaning programs to prevent line blockages caused by root intrusion, grease buildup, and pipe failure.
 - Continue a sewer line replacement program and funding to repair or replace sewer lines damaged or worn beyond useful life.

OBJECTIVE

PU-5 Preserve groundwater quality and ensure that the health and safety of the entire Fresno community is not impaired by use of private, on-site disposal systems.

IMPLEMENTING POLICIES

- PU-5-a Mandatory Septic Conversion. Continue to evaluate and pursue where determined appropriate the mandatory abatement of existing private wastewater disposal (septic) systems and mandatory connection to the public sewage collection and disposal system.
- PU-5-b

 Non-Regional Treatment. Discourage, and when determined appropriate, oppose the use of private wastewater (septic) disposal systems, community wastewater disposal systems, or other non-regional sewage treatment and disposal systems within or adjacent to the Metropolitan Area if these types of wastewater treatment facilities would cause discharges that could result in groundwater degradation.
- PU-5-c Satellite Facilities. Work with the Regional Water Quality Control Board to ensure that approval of any satellite treatment and reclamation facility proposal is consistent with governing statutes and regulations.

OBJECTIVE

PU-6 Ensure the provision of adequate sewage treatment and disposal by utilizing the Fresno-Clovis Regional Wastewater Reclamation Facility as the primary facility, when economically feasible, for all existing and new development within the Metropolitan Area.

Commentary: Supplemental subregional facilities, such as the North Fresno Water Reclamation Facility, may also provide sewage treatment and disposal for new and existing development in the Metropolitan Area

IMPLEMENTING POLICIES

PU-6-a Treatment Capacity and Cost Recovery. Prepare for and consider the implementation of increased wastewater treatment and reclamation facility capacity in a timely manner to facilitate planned urban development within the Metropolitan Area consistent with this General Plan. Accommodate increase in flows and loadings from the existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users, as authorized by law.

Commentary: Consistent with the fiscal management policies and strategies in the Economic Development and Fiscal Sustainability Element, new users will be obligated to pay for the cost of being attached to the treatment facility through connection fees, including the cost of any incremental burden that they may place on the entire system, and pay for their share of operational costs of extraordinary facilities such as satellite or "package" treatment plants, as authorized by law.

PU-6-b

Consider Capacity in Plan Amendments. Monitor wastewater treatment plant flows and loadings to the extent feasible. Consider the effects on wastewater treatment capacity and availability of potable water when evaluating proposed General Plan amendment proposals, community plans, Specific Plans, neighborhood plans, and Concept Plans.

OBJECTIVE

PU-7 Promote reduction in wastewater flows and develop facilities for beneficial reuse of reclaimed water and biosolids for management and distribution of treated wastewater.

IMPLEMENTING POLICIES

PU-7-a Reduce Wastewater. Identify and consider implementing water conservation standards and other programs and policies, as determined appropriate, to reduce wastewater flows.

- PU-7-b

 Reduce Stormwater Leakage. Reduce storm water infiltration into the sewer collection system, where feasible, through a program of replacing old and deteriorated sewer collection pipeline; eliminating existing stormwater sewer cut-ins to the sanitary sewer system; and avoiding any new sewer cut-ins except when required to protect health and safety.
- PU-7-c

 Biosolid Disposal. Investigate and consider implementing economically effective and environmentally beneficial methods of biosolids handling and disposal.
- PU-7-d Wastewater Recycling. Pursue the development of a recycled water system and the expansion of beneficial wastewater recycling opportunities, including a timely technical, practicable, and institutional evaluation of treatment, facility siting, and water exchange elements.

Commentary: This policy corresponds with Policy RC-6-d in the Resource Conservation and Resilience Element.

- PU-7-e Infiltration Basins. Continue to rehabilitate existing infiltration basins, and if determined appropriate, pursue acquiring additional sites for infiltration basins, as needed.
- PU-7-f

 Food and Drink Industry. Ensure adequate provision of facilities for the appropriate management of wastewater from wineries and food processing and beverage facilities, including conformance with Waste Discharge Requirements issued by the Regional Water Quality Control Board.

6.4 WATER

The quality, treatment, and conveyance of potable water in Fresno are a critical responsibility of the DPU – Water Division, and objectives and policies in this section support this obligation. The Resource Conservation and Resilience Element addresses the long-term supply of water resources, and the Urban Form, Land Use, and Design Element includes policies restricting the extension of water supply only to planned development in Development Areas that are consistent with this Plan.

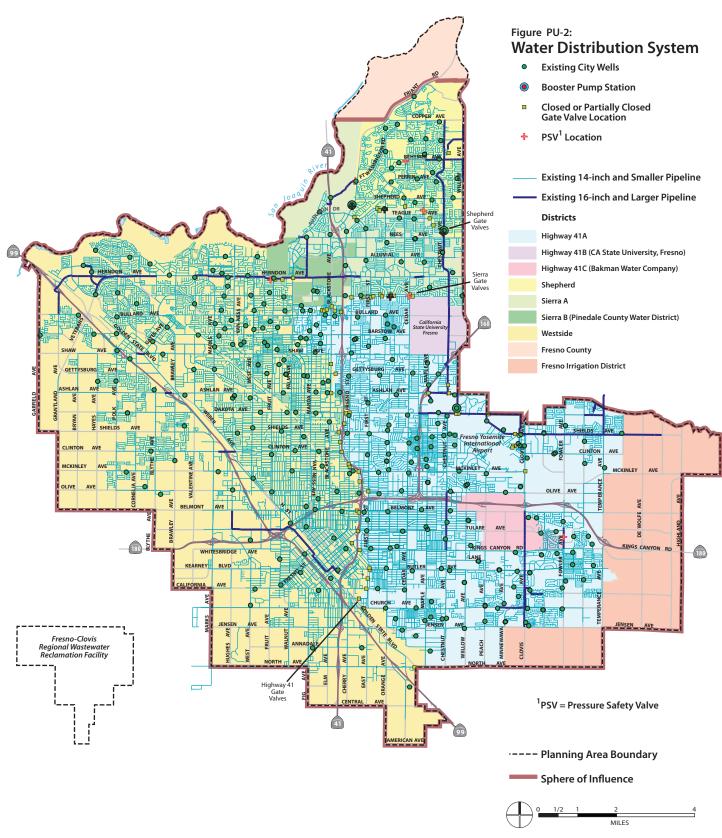
The Water Division provides potable water to the majority of the city and some users within the City's SOI with the exception of the Bakman Water Company, Pinedale County Water District, Park Van Ness Mutual Water Company, and California State University, Fresno. Fresno's primary source of potable water is groundwater stored in

an aquifer. However, in 2004 the City's first Surface Water Treatment Facility (SWTF) came on line and began delivering on average 27,000 acre feet/year to residents in northeast Fresno.

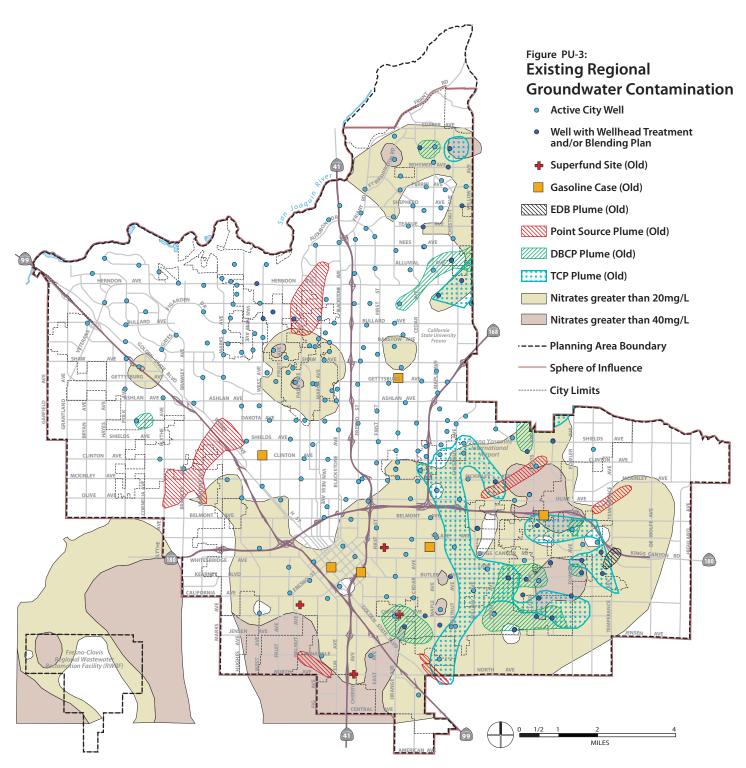
The City's existing water distribution system is quite old and is shown in Figure PU-2: Water Distribution System. Nearly 35 percent of the 1,780-mile distribution system is over 50 years old, with another 34 percent ranging between 25 and 50 years old. There is a marginal pipeline replacement plan and a limited budget to replace this aged infrastructure. Most of the aged infrastructure is in the older parts of the community, including the Downtown. When the pipes fail, there is usually extensive damage to adjacent roadway and wet and dry utilities. This can cause disruption of service and costly cleanup. Based on historic City cost data, catastrophic failure costs 3 to 5 times more than planned replacement.

Groundwater within the Kings Subbasin generally meets primary and secondary drinking water standards for municipal water use. However, the groundwater basin is threatened by chemical contaminants that affect the City's ability to fully use the groundwater basin resources without some type of wellhead treatment in certain areas. Many different types of chemical pollutants have contaminated portions of the Upper Kings Subbasin underlying the city's water service area, as shown in Figure PU-3: Existing Regional Groundwater Contamination. Some of the major contaminant plumes include 1,2-Dibromo-3-Chloropropane (DBCP); ethylene dibromide (EDB); 1-2-3 trichloropropane (TCP); and other volatile organic compounds (VOCs) including trichlorethylene (TCE), tetrachloroethylene (PCE), nitrate, manganese, radon, chloride, and iron.

There are also several major contaminate point sources. In fact, about half of the city's water service area has some form of groundwater contamination; only areas in the northwest appear to be relatively unaffected by regional groundwater contamination. Of the City's 272 currently active wells, 96 wells are impacted by a single contaminant plume, 33 wells are impacted by a pair of contaminant plumes, and 5 wells are impacted by 3 contaminant plumes. Currently, 34 of the City's wells have wellhead treatment systems. With this in mind, the General Plan includes specific policies to address groundwater contamination.



Source: City of Fresno, DPU Dept., 2014



Source: City of Fresno, DPU Dept., 2006, Metropolitan Water Resources Management Plan - Phase 1 Baseline System Characterization, December, 2007, West Yost

Note: This map does not include all of the known plumes in the Planning Area Boundary, but represents the City of Fresno's efforts during 2006 to document the location of most of the known plumes as part of an update to the City's Water Resource Management Plan.

OBJECTIVE

PU-8

Manage and develop the City's water facilities on a strategic timeline basis that recognizes the long life cycle of the assets and the duration of the resources, to ensure a safe, economical, and reliable water supply for existing customers and planned urban development and economic diversification.

IMPLEMENTING POLICIES

PU-8-a

Forecast Need. Use available and innovative tools, such as computerized flow modeling to determine system capacity, as necessary to forecast demand on water production and distribution systems by urban development, and to determine appropriate facility needs.

PU-8-b

Potable Water Supply and Cost Recovery. Prepare for provision of increased potable water capacity (including surface water treatment capacity) in a timely manner to facilitate planned urban development consistent with the General Plan. Accommodate increase in water demand from the existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users, as authorized by law, and recognizing the differences in terms of quantity, quality and reliability of the various types of water in the City's portfolio.

Commentary: Consistent with fiscal management policies and strategies in the Economic Development and Fiscal Sustainability Element, new users will be obligated to pay for the cost of being attached to the potable water supply and distribution system and surface water treatment through connection fees, including the cost of any incremental burden that they may place on the entire system in terms of both infrastructure and water resources, and pay for the full operational costs of extraordinary facilities, as authorized by law.

PU-8-c

Conditions of Approval. Set appropriate conditions of approval for each new development proposal to ensure that the necessary potable water production and supply facilities and water resources are in place prior to occupancy.

PU-8-d

CIP Update. Continue to evaluate Capital Improvement Programs and update them, as appropriate, to meet the demands of both existing and planned development consistent with the General Plan.

- PU-8-e Repairs. Continue to evaluate existing water production and distribution systems and plan for necessary repair or enhancement of damaged or antiquated facilities.
- PU-8-f
 Water Quality. Continue to evaluate and implement measures determined to be appropriate and consistent with water system policies, including prioritizing the use of groundwater, installing wellhead treatment facilities, constructing above-ground storage and surface water treatment facilities, and enhancing transmission grid mains to promote adequate water quality and quantity.
- PU-8-g Review Project Impact on Supply. Mitigate the effects of development and capital improvement projects on the long-range water budget to ensure an adequate water supply for current and future uses.

6.5 SOLID WASTE

This section addresses land use compatibility, public sanitation, and aesthetic impacts associated with the City's solid waste management and community sanitation practices. The following objectives and policies will ensure a consistent, citywide level of service for refuse collection, neighborhood cleanup, sanitation enforcement, and recycling programs.

Existing waste disposal facilities are adequate to maintain a sufficient level of service for future population growth in the city over the planning period for this Plan. The DPU - Solid Waste & Recycling Division develops performance measures yearly to determine the pounds of waste, recycling and composting generated by each household, business, and multi-family unit and updates estimates of future waste generation with the latest growth projections.

The City is currently excelling at solid waste diversion, which is the system of moving solid waste away from landfills and into recycling and composting programs. Diversion conserves limited landfill space, keeps toxic chemicals and materials from contaminating landfills, and enhances the re-use of materials. In 2009, Fresno was ranked highest in the State among larger cities by the California Integrated Waste Management Board for diverting 71 percent of its solid waste. A Fresno City Council resolution committed the City to the goal of a 75 percent Waste Diversion Rate by 2012 and a Zero Waste goal by 2025. The City is still on track for the 2025 Zero Waste goal while the Waste Diversion Rate by 2012 has been delayed. The City was on track to meet the 75 percent goal by 2012, but budget constraints in 2011 prevented the goal from being met in that year.





Annual Neighborhood Cleanup

Cleaning of the Fulton Mall







The "Claw" is used in property cleanup and maintenance

In 2005, the City adopted a Construction and Demolition Diversion ordinance to encourage and provide for the diversion of commercial materials and construction and demolition material from landfill disposal. Recycling of construction and demolition is required for any City-issued building, relocation or demolition permitted project that generates at least eight cubic yards of material by volume. All waste must be hauled to a City-approved facility.

The DPU - Solid Waste & Recycling Division provides residential waste collection service to the city of Fresno. In December 2011, exclusive franchises for commercial solid waste were approved (the system was privatized) and this service is no longer provided by the DPU - Solid Waste & Recycling Division.

OBJECTIVE

PU-9 Provide adequate solid waste facilities and services for the collection, transfer, recycling, and disposal of refuse.

IMPLEMENTING POLICIES

PU-9-a New Techniques. Continue to collaborate with affected stakeholders and partners to identify and support programs and new techniques of

solid waste disposal, such as recycling, composting, waste to energy technology, and waste separation, to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.

- PU-9-b Compliance with State Law. Continue to pursue programs to maintain conformance with the Solid Waste Management Act of 1989 or as otherwise required by law and mandated diversion goals.
- PU-9-c Cleanup and Nuisance Abatement. Continue and enhance, where feasible, community sanitation programs that provide services to neighborhoods for cleanup, illegal dumping, and nuisance abatement services.
- PU-9-d Facility Siting. Locate private or public waste facilities and recycling facilities in conformance with City zoning and State and federal regulations, so that the transportation, processing, and disposal of these materials are not detrimental to the public health, safety, welfare, and aesthetic well-being of the surrounding community.

Commentary: Following Council direction, facility siting provisions in Development Code will take into account proximity to residential development, access to transportation, density and separation requirements.

- **PU-9-e Tire Dumping**. Adopt and implement, as determined appropriate, measures to eliminate illegal tire dumping.
- PU-9-f

 Household-Generated Hazardous Waste and Hazardous Waste
 Facilities. Allow for household-generated hazardous waste and
 hazardous waste facilities, which are planned and zoned for Heavy
 Industrial uses, only after CEQA review, environmental assessments,
 and approval of a Conditional Use Permit.

6.6 DISADVANTAGED UNINCORPORATED COMMUNITIES

California State law requires that local municipalities identify any Disadvantaged Unincorporated Communities (DUCs) within their SOI, analyze the infrastructure needs (including water, wastewater, stormwater drainage, and structural fire protection) of the DUC, and evaluate potential funding mechanisms to make service extension feasible. Disadvantaged Unincorporated Communities are defined as settled places not within

city limits where the median household income is 80 percent or less than the statewide median household income. $^{\!\! 1,\,2}$

In compliance with State law, the City will identify all DUCs within the SOI and perform the required infrastructure analysis to coincide with its next Housing Element Update.

¹ State of California Office of Planning and Research. *Technical Advisory to SB 244.*

² Flegal, C., Rice, S., Mann, J., & Tran, J. California Unincorporated: Mapping Disadvantaged Communities. PolicyLink, 2012

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RESOURCE CONSERVATION AND RESILIENCE

The Resource Conservation and Resilience Element establishes objectives and policies for the conservation of natural resources in Fresno. The Element addresses air resources, including air quality and greenhouse gas emissions; water resources, including groundwater and waterways; energy resources; and land resources, including farmland and mineral resources. The overarching theme is "resiliency," meaning the ability to withstand temporary and permanent disruptions in resources that will affect everyday ways of life.

7.1 CONTEXT

A conservation element for the conservation, development, and utilization of natural resources including water, forests, soils, rivers, wildlife, minerals, and other natural resources is required to be included in a general plan by State law (California Government Code Section 65302). The conservation element must consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands.

Assembly Bill (AB) 32—the Global Warming Solutions Act of 2006 requires California to reduce statewide greenhouse gas emissions to 1990 levels by the year 2020 and Executive Order S-03-05 calls for a reduction of 80 percent below 1990 levels by 2050. In support of these State goals the City has committed through the General Plan and Greenhouse Gas (GHG) Reduction Plan to reduce community-related and City operations-related greenhouse gas emissions to a degree that would not hinder or delay implementation of AB 32 and would lay the framework to help meet future goals.

The primary benefit to the City, and to the development community, of having a citywide GHG Reduction Plan is that it will assist development by streamlining the approval process. The CEQA streamlining provisions of the CEQA Guidelines (SB 97 updates) require local governments to define the extent of GHG production and identify ways to substantially reduce GHGs in the future in order to minimize a potentially significant environmental impact. If a GHG Reduction Plan reduces community-wide emissions to a level that is less than significant, then a later project that complies with the requirements in such a GHG Reduction Plan may be found to have a less than significant impact. This will allow the applicant to complete a GHG Reduction Plan consistency analysis for their project instead of a project specific analysis for greenhouse gases.

Potential improvements in air quality and water supply security are additional benefits to pursuing GHG reductions for Fresno. The factors that contribute to GHG increases also impact air quality and water supply in the San Joaquin Valley. As discussed in later sections of this element, the accelerating climate change could have adverse impacts in the Fresno region such as: increased temperature and extreme weather events, increased risk of large wildfires, exacerbation of air quality problems, reduction in the quality and supply of water from the Sierra snowpack, decreased electricity supply, reductions in the quality and quantity of certain agricultural products, decreased health and productivity of California's forests, and increased flood risk.

Resiliency in City Planning

Resiliency, in terms of city planning, refers to creating infrastructure and implementing policies and programs to ensure that the residents, businesses, and government of a city can withstand temporary and permanent disruptions in resources that affect daily activities. A resilient city is not dependent on certain sources of energy, is able to adapt to shifts in weather patterns, has a plan to respond to emergencies such as earthquakes and floods, and has secured a long-term source of food and water. These ideas are presented in this element in relation to resource conservation concepts; details on infrastructure planning are in the Public Utilities and Services Element and the Transportation and Mobility Element, while emergency preparedness is addressed in the Noise and Safety Element. Protection of biological resources such as native plant communities and wildlife habitats is addressed in the Parks, Open Space, and Schools Element.

Relationship to General Plan Goals

This Element provides objectives and policies that support a wide range of General Plan goals, in particular the following:

- Emphasize conservation, successful adaptation to climate and changing resource conditions, and performance effectiveness in the use of energy, water, land, buildings, natural resources, and fiscal resources required for the longterm sustainability of Fresno.
- 4. Emphasize achieving healthy air quality and reduced greenhouse gas emissions.
- 5. Support agriculture and food production as an integral industry.
 - Emphasize the economic and cultural role of Fresno as a center of agriculture and food production systems by conserving farmland through a focus on developing vacant and underutilized land within the established Sphere of Influence of the City, limiting any further urban boundary expansion, and developing urban agriculture within the city and designated growth areas.
- 12. Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.
 - Emphasize the fair and necessary costs of maintaining sustainable water, sewer, streets, and other public infrastructure and service systems in rates, fees, financing and public investments to implement the General Plan. Adequately address accumulated deferred maintenance, aging infrastructure, risks to service continuity, desired standards of service to meet quality-of-life

goals, and required infrastructure to support growth, economic competitiveness and business development.

13. Emphasize the City as a role model for good growth management planning, efficient processing and permit streamlining, effective urban development policies, environmental quality, and a strong economy. Work collaboratively with other jurisdictions and institutions to further these values throughout the region.

Positively influence the same attributes in other jurisdictions of the San Joaquin Valley —and thus the potential for regional sustainability - and improve the standing and credibility of the City to pursue appropriate State, LAFCo, and other regional policies that would curb sprawl and prevent new unincorporated community development which compete with and threaten the success of sustainable policies and development practices in Fresno.

- 16. Protect and improve public health and safety.
- 17. Recognize, respect, and plan for Fresno's cultural, social, and ethnic diversity, and foster an informed and engaged citizenry.

Emphasize shared community values and genuine engagement with and across different neighborhoods, communities, institutions, businesses and sectors to solve difficult problems and achieve shared goals for the success of Fresno and all its residents.

Fresno Green - The City's Strategy for Achieving Sustainability

In 2008, the Fresno Green Strategies were presented to a previous mayor and City Council. They were accepted as the City's first attempt to articulate a direction for achieving a sustainable future through green conservation efforts, including those that could be made by the City. These strategies addressed a wide range of issues organized around five "visions" for Fresno and its future growth areas: New City Beautiful, Sierra View 2025, Solar Valley, Green Enterprise and Economic Development, and City as Good Steward. The City won an award from the U.S. Environmental Protection Agency (EPA) for these strategies.

Most of the objectives and programs that support these strategies and ideas have been or are in the process of being implemented. The majority are incorporated into policies in this General Plan. Those that are not should not be considered objectives or policies of this Plan. Key ideas from the Fresno Green Strategies are described below.

New City Beautiful

The New City Beautiful vision showcases good urban design, with priority given to public health, open spaces, public art, historic preservation, urban forests, and the protection of natural habitats. The main initiatives are:

- Develop and implement compact, transit- and pedestrian-oriented development principles and green building standards.
- Build municipal buildings to a green building rating system and adopt green technology for the retrofit of existing City buildings.
- Plan new residential areas and retrofit established neighborhoods to be within one half mile of public parks, school playgrounds and/or recreational open space.
- Plant and maintain trees in order to achieve shading of at least 50 percent of all hardscaped parking and pedestrian surfaces.
- Protect critical habitat corridors and key habitat characteristics from unsuitable development.
- Reduce the use of disposable toxic or non-renewable products through environmentally preferred purchasing policies.

Sierra View 2025

The Sierra View 2025 initiatives focus on making the Sierra Nevada mountain range clearly visible to all Valley residents by 2025. The aim of the initiatives is to improve public health with cleaner air, enhance public transportation, and increase opportunities for walking and cycling:

- Implement enhanced public transit and traffic light synchronization programs to reduce commute time.
- Reduce City fleets' air pollutant emissions and City greenhouse gas emissions.
- Reduce the number of commute trips by single occupancy vehicles.
- Meet federal clean air standards.

Solar Valley

This initiative envisions Fresno as becoming a leader in renewable energy use by maximizing new renewable sources. With its abundant sunshine, the opportunity exists to improve air quality, reduce dependence on foreign energy, and provide attractive new jobs by harnessing solar power. Three initiatives work toward this vision:

• Increase use of renewable energy to meet 50 percent of annual electrical consumption for City operations.

- Reduce the city's peak electrical load by 10 percent through energy efficiency and conservation measures and shifting the timing of energy demands.
- Reduce citywide greenhouse gas emissions to meet requirements of State AB 32.

Green Enterprises and Economic Development

These initatives set the stage for Fresno to become the Valley center for innovative business enterprises with a focus on the "triple bottom line" of providing environmental, economic and social benefits:

- Position Fresno as a regional center for green enterprises.
- Create environmentally beneficial jobs in low-income neighborhoods.
- Promote and support locally grown and organic foods.

City as Good Steward

The City as Good Steward vision puts forth Fresno as a city that leads by example in greening up its facilities and practices, embracing a zero waste initiative, providing appropriate staff resources, and collaborating with other municipalities and agencies to develop regionally-based green programs. Seven initiatives comprise the program for this vision:

- Achieve 75 percent diversion of solid waste that otherwise would go to landfills by 2012 and zero waste to landfills by 2025.
- Develop and implement an Integrated Pest Management program.
- Protect integrity of Fresno's primary drinking water sources through an update of the General Plan.
- Develop and implement environmentally responsible policies and practices.
- Market the Fresno Green Strategies (New City Beautiful, Sierra View 2025, Solar Valley, Green Enterprises and Economic Development, and City as a Good Steward) throughout the community.
- Incorporate sustainable policies into the General Plan.
- Measure successes of Fresno Green Strategies and present a periodic report to the Council, which could be integrated into the General Plan annual report.

Relation between Urban Form and Resource Conservation

Making efficient use of public infrastructure and reducing the financial resources devoted to energy use will save money for residents, businesses, and the City government. By strategically regulating urban form elements through this Plan, such as development types, intensity, building massing and orientation, landscaping size and type, and the mix of land uses, the city can produce significant energy and water savings.

The Plan also seeks to prevent an overextension of its developable area and manage land use impacts on municipal revenues more effectively. Low-density residential developments on the urban fringe in county areas that require annexation are expensive for the City to serve with both physical infrastructure (roads, water, and sewer) and public services (fire and police). In addition, because of tax sharing arrangements with the County of Fresno, these annexed areas contribute significantly less revenue to the City's general fund than land developed within the city limits. Meanwhile, Fresno has vacant and undervalued parcels located in its urban core, particularly along key transit corridors. In established neighborhoods, infrastructure and services are already provided, and tax benefits are much greater for the City than those generated by newly annexed land. Ultimately, the amount of land available to the City for future growth is finite, as further expansion of the City's SOI is blocked in certain directions by the Madera/Fresno county line and the city of Clovis, is contingent on County of Fresno plans, and may consume valuable farmland. Infill development is also important to other aims of the Plan, including ensuring that the cost of doing business goes down, revenues are maximized, and scarce financial resources are used efficiently.

7.2 USE OF INFRASTRUCTURE AND RESOURCES

Continued growth outwards creates transportation and air quality issues, as well. The continued siting of major retail and commercial uses, as well as jobs, at Fresno's urban fringe is lengthening travel times and increasing traffic levels (and air pollution) disproportionately faster than the rate of population growth, due to inefficient location selection. Given the restrictions on and impacts of increasing Fresno's land area, the Plan promotes the highest and best use of land within Fresno's current city limits, phases growth into unincorporated areas of the SOI, and avoids de-investment in Downtown and established neighborhoods. Furthermore, certain patterns of land development can increase costs to the City in excess of related revenues and essentially reduce fiscal resources. The Plan seeks to discourage this type of development and, at the least, ensure that all development covers its fair share of public costs.

Communication and Broadband

Making efficient use of public infrastructure and reducing the financial resources devoted to energy use will save money for residents, businesses, and the City. This section addresses broadband and telecommunications infrastructure opportunities as they relate to the progression, redevelopment of the inner city and development of additional services to constituents. Broadband has become an important part of the lives of every citizen as it is used for social interaction, education, business, and

healthcare, and has been a key factor in economic development for many cities. As technology evolves and content becomes more readily available, the need for higher communication speeds and access to the technology has also increased.

The City of Fresno Information Services Department (ISD) has used excess fiber of the Intelligent Transportation System, as well as its own implemented fiber, for data transport and connectivity. The City's Intelligent Traffic System is designed and implemented by the Public Works Department with ISD as a partner from a technology aspect. Most of the fiber implemented was funded through grants in order to install conduit and fiber to synchronize traffic signals. To date, most of the construction has been in major thoroughfares where there is a need to control traffic for ease of congestion and improve air quality.

Utilizing the excess fiber, the City has been able to realize a cooperative effort between the region's biggest agencies - the City of Fresno, the County of Fresno and the City of Clovis, as they share data services. In 2003, these three agencies entered into the Fresno Regional E-Government System agreement. Since the initiation of this agreement, ISD has been able to connect multiple agencies (including educational institutions) together to provide shared services such as GIS sharing, public safety data sharing, educational services, data services, as well as video broadcast services. Through this process, the City has been a good steward of taxpayer funds in that they have been able to connect other agencies via this same fiber allowing higher connection speeds without monthly communication fees while realizing additional savings in construction costs. The fiber is also used for other regional services such as video policing and radio services for public safety. In essence, the concept of using excess and additional fiber is a cost savings to the City and its constituents because fiber was installed in trenches while streets were open, thereby only digging once.

Construction costs for installing a fiber network to allow high speed broadband for City operations, as well as to reach the City's constituents is costly. While there are costs in purchasing and installing fiber, the most costly portion of installing a fiber optic network is the trenching and installation of conduit. For this reason, many agencies have considered or have adopted a "dig once" policy. While a trench is open for any reason, one or more conduits are placed in the trench either with fiber installed or it is left empty for future fiber installation. The fiber is then used for a multitude of purposes including connecting locations, video surveillance (video policing), wireless services, or it is opened up to the communication carriers who may lease the conduit space for their build outs, thereby offsetting construction costs. Not only will this cut costs of fiber implementation, it will pave the way to ensure that there is a pathway for higher speed broadband as the needs increase.

In areas of development, where there is a need, fiber can be installed to connect facilities and agencies. This can include many City Fire Department and Police Department stations as many of these have been built near neighborhoods or in locations where City fiber does not exist. Additionally, as the Video Policing program evolves and the need arises for high-tech strategies for the City Fire and Police Departments, the foundation will be in place for a cost effective means of providing connections. If the City ever decides to provide Internet or other services to the public or expand services at City parks, the connectivity can either be installed while construction is commencing or the means will be there for a cost effective implementation at a later date.

In the case where the City will allow private communication companies to lease the conduit, the conduit will remain a City asset with the potential to receive lease revenues consistent with the requirements of the California Public Utilities Commission's regulations and State laws. If other agencies or institutions would like to connect, they may do so under the current Fresno Regional E-Government System Agreement, which covers data sharing and not Internet transport where the City provides Internet connectivity in competition with other carriers.

OBJECTIVE

RC-1 Make efficient use of existing and future public infrastructure.

IMPLEMENTING POLICIES

RC-1-a Setting Service Standards. Set service delivery standards at existing levels or formulate and commit the City to an investment program that will meet an improved standard of service.

Commentary: Implementation of this policy will be coordinated with the policies and strategies for fiscal sustainability presented in the Economic Development and Fiscal Sustainability Element.

RC-1-b Capital Improvement Program. Prepare and adopt a long-term Capital Improvement Program (CIP) that describes City-sponsored capital projects related to General Plan implementation.

Commentary: The CIP will define what areas or projects it would enable and include funding sources covering the complete cost of the projects, as well as intended phasing. It will be updated annually and comprehensively reviewed every five years so that it accurately reflects the City's priorities, community needs, fiscal realities, and State mandates. It also will include an analysis of how improvements implement the General Plan and how they reflect the City's commitment to environmental justice and fair share issues relative to individual neighborhood needs. Implementation of this policy will be coordinated with the policies and strategies for fiscal sustainability presented in the Economic Development and Fiscal Sustainability Element and with technical work on service standards and infrastructure improvements mandated by policies in the Public Utilities and Services Element.

RC-1-c Prioritize Revenues. Prioritize revenues by supporting, streamlining, and providing incentives to projects that create the largest positive impacts on property values, the city's retail base, and, to the extent feasible, Downtown and established neighborhoods.

Commentary: These incentives could include giving priority to supporting redevelopment of vacant and underutilized land, particularly in mixed use and higher density corridors and Downtown, over the conversion of active farmland to urban uses.

- RC-1-d Coordinate Public Construction. Coordinate public construction with other public and private agencies, particularly with respect to streets, sewerage, water, gas, electric, irrigation improvements, flood control facilities, and communication to seek the greatest public benefit and efficiencies at the least public cost.
- RC-1-e Dig Once. Whenever a suitable trench is dug, one or more telecommunication conduits shall be placed in the trench, either with fiber installed or with space available for future fiber installation, to expand or upgrade the fiber optic network as appropriate.

Commentary: Implementation of this policy will require identification of funding sources.

- RC-1-f

 Telecommunications Strategy. Develop a process for communication carriers to use excess fiber optic conduit with the City in a manner that will allow for appropriate cost recovery and that is consistent with State and federal law.
- RC-1-g Grant Funding. Seek grant funds for the construction or implementation of the fiber optic system to provide expanded public services (such as services for educational, economic, public safety, or underserved communities).

RC-1-h Public-Private Partnerships. Foster opportunities for public-private partnerships that leverage infrastructure, encourage pooling of resources, and promote shared-use activities.

OBJECTIVE

RC-2 Promote land uses that conserve resources.

IMPLEMENTING POLICIES

- RC-2-a Link Land Use to Transportation. Promote mixed-use, higher density infill development in multi-modal corridors. Support land use patterns that make more efficient use of the transportation system and plan future transportation investments in areas of higher-intensity development. Discourage investment in infrastructure that would not meet these criteria.
- RC-2-b Provide Infrastructure for Mixed-Use and Infill. Promote investment in the public infrastructure needed to allow mixed-use and denser infill development to occur in targeted locations, such as expanded water and wastewater conveyance systems, complete streetscapes, parks and open space amenities, and trails. Discourage investment in infrastructure that would not meet these criteria.

OBJECTIVE

RC-3 Actively engage, listen to, educate, and enlist the support of the Fresno community on the need and strategies for resource conservation.

IMPLEMENTING POLICIES

RC-3-a Track Trends in Resource Consumption. Provide and periodically update written materials and information on the City's website that tracks public and private rates of resource consumption in Fresno and related fiscal and environmental costs.

Commentary: The City of Fresno Department of Public Utilities will work with the San Joaquin Valley Air Pollution Control District and other resource agencies to determine and publish such information, with the frequency of updates dependent on budgetary resources.

- RC-3-b Community Outreach and Joint Solution Making. Host an ongoing education and listening session series with the public to inform them of public and private rates of resource consumption, costs, impacts, and projected future constraints.
- RC-3-c Multi-Jurisdictional Efforts. Work actively with the public to develop and champion realistic, effective solutions to conserve resources at the local, regional, and state levels.

Commentary: The City will forge partnerships with other resource agencies, time and resources permitting, to provide information, answer questions, and suggest solutions.

7.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Fresno is located in the center of the San Joaquin Valley Air (SJVA) Basin. The air quality in the SJVA Basin is among the worst in the nation, and routinely exceeds federal and State air quality health standards for ozone and particulates. The poor air quality contributes to high levels of asthma, sinus infections, and cardiovascular disease. The SJVA Basin's poor air quality is caused by natural geographic and climatic conditions, as well as local and regional development, transportation, and land use practices.

The federal Clean Air Act required the U.S. EPA to set standards, which state that certain pollutants should not exceed specified levels. California has adopted its own set of stricter standards under the California Clean Air Act. Transportation conformity is required under the federal Clean Air Act to ensure that federally supported highway and transportation project activities are consistent with State implementation programs. Conformity means that transportation activities should not cause new air quality violations, worsen existing violations, or delay timely attainment of federal air quality standards. Conformity requires demonstration that State and regional transportation control measures in ozone nonattainment areas are implemented in a timely fashion. These measures are expected to be given funding priority and to be implemented on schedule.

The California Clean Air Act requires nonattainment areas to achieve and maintain the State ambient air quality standards by the earliest practicable date and local air districts to develop plans for attaining the State ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. In 2003, the Legislature enacted a bill to reduce public exposure to particulates and established a process for achieving near-term reductions in particulates throughout California ahead of federally required deadlines.

Under the California Health and Safety Code, the Air Resources Board is authorized to adopt regulations to protect public health and the environment through the mobile and stationary source airborne toxic control measures. These measures focus on reducing public exposure to diesel particulates and other toxic air contaminants, particularly for children riding in and playing near school buses and other commercial motor vehicles, who are disproportionately exposed to pollutants from these sources.

Emissions from cars and trucks are being reduced by State and federal standards, which are based not only on air quality considerations but also on energy use. In California, the Pavley Clean Car Standard and the Low Carbon Fuel standard will have dramatic impacts on vehicle emissions in coming years, as will implementation of the newest national fuel standards for current and future model years.

Fresno's air quality management programs are administered by the San Joaquin Valley Air Pollution Control District (SJVAPCD), which covers eight counties, from the San Joaquin County in the north to Kern County in the south. Within this region, the SJVAPCD is responsible for ensuring compliance with federal air quality standards, but it cannot regulate all the pollution sources. The SJVAPCD only has authority to regulate stationary sources for air pollution; its incentive programs to help reduce mobile source emissions are purely voluntary. This lack of authority to regulate mobile source emissions has restricted the SJVAPCD's ability to reduce emissions in the Valley and to achieve compliance timelines for federal air quality standards. Its regulations include dust reduction during construction and stationary source requirements. Incentives, which are paid for by collected fees, include programs to replace or retrofit certain vehicle and engine types (trucks, lawn mowers, and school buses) and the Burn Cleaner Program (wood stove change out).

The City's Role in Improving Air Quality

Given the SJVAPCD's limited authority, any local efforts to directly and indirectly reduce mobile source emissions and thereby improve air quality fall to the City and its transportation and land use policies. Over 81 percent of the region's summer ozone pollution comes from mobile vehicle sources. Reducing ozone pollution is therefore highly contingent on reducing the number of vehicles miles traveled in the city. Fresno residents, like the residents of other neighboring cities, are highly dependent on automobiles and trucks for day-to-day operations due to low-density development patterns. The City can reduce the vehicle miles traveled by planning for and providing feasible and convenient alternative travel facilities and modes that emit fewer pollutants per person. The City can also reduce vehicle miles traveled by striving to ensure that trip generators (such as homes) and destinations (shops and businesses) are located near one another to allow for shorter trips. The reduction in vehicle miles traveled can be realized through transit-oriented development (TOD) and higher density, mixed-use development.

The land use objectives and policies of this Plan are designed to decrease the generation of air pollution and greenhouse gases through the reduction of vehicle miles traveled by supporting infill development, encouraging Complete Neighborhoods, requiring more compact development in infill areas and growth areas, and tying mixed-land uses and high-density development to existing and probable high-capacity urban corridor transit routes. This pattern of development will allow for a more resilient and sustainable community, preserving valued agricultural land.

Infill development relies on the pre-existing public road and utility infrastructure, but may require site cleanup and may burden the existing utility infrastructure to the point that it may need to be upgraded. Mixed-use development allows for a diversity of land uses and activities to be located on the same site or in the same building, including residential uses, retail, professional offices, and commercial uses. Ultimately, higher-density infill and mixed-use development encourages people to drive less because destinations are closer together and easier to reach.

Another type of development that can improve the air quality is TOD, which locates residential and commercial districts around a public transit station or transit corridor. It attempts to encourage walking through a compact pattern of development, mixed land uses, and a location near good transit options such as train lines or bus rapid transit (BRT) corridors. TOD is often characterized by frequent and high-quality transit service, good walkability, parking management, and other design features that facilitate transit use and maximize overall accessibility. It can reduce vehicle miles traveled by offering reliable access to other forms of transportation and mobility.

The availability and reliability of transit service to users is another critical method by which local infrastructure can affect regional air quality. Public transit can play an important role in reducing air pollution by offering an alternative mode of transportation around the city beyond the private vehicle. When individuals opt to use public transportation instead of private vehicles, fewer cars are on the road, which decreases congestion, results in less pollution, and improves air quality.

Street networks can also affect air quality based on the length of trips that they require, as more distance travelled and more time on the road is likely to coincide with more air pollution. With shorter trips needed around the city, the vehicle miles traveled are reduced and fewer pollutants are released into the air, thus improving the air quality.

The term Complete Streets means that streets are designed so all users—pedestrians, bicyclists, motorists and transit riders—of all ages and abilities may safely move along and across them. Since 2011, the Complete Streets Act has required California cities to

account for the needs of all roadway users when updating their General Plans. There is no single design for a Complete Street, but components include sidewalks, curb extensions, accessible pedestrian signals, roundabouts, bike lanes, accessible public transportation stops, and pedestrian-scaled lighting. Complete Street policies often have the effect of encouraging walking and use of public transit, thereby reducing automobile traffic congestion and improving air quality. The Mobility and Transportation Element further discusses street patterns and Complete Street systems.

The Plan also supports modes of travel beyond the private automobile through its circulation policies designed to expand and connect the city's existing sidewalk and bike route network, consider multiple modes of transportation to reduce reliance on single-driver automobile transportation and level of service measurement, and consider context in roadway design. Other transportation measures that are part of the City's effort, and that have been determined to reduce air pollution include:

- Investing in BRT, express bus, limited stop bus and high frequency bus routes on principal transit corridors, transit corridors, and transit routes as determined feasible by appropriate transportation infrastructure studies.
- Support and promote employer implementation of staggered work hours and employee incentives to use carpools, public transit, and other measures to reduce vehicular use and traffic congestion.

Lastly, the use of hybrid, electric and alternative fuel vehicles can improve the air quality, as these vehicles emit fewer pollutants into the air. The Plan supports low emission vehicles through policies and infrastructure, such as providing electric and CNG (compressed natural gas) fueling stations, preferential parking spots for these vehicles, and using these vehicles for the City fleet.

Greenhouse Gas Emissions

Gases that trap heat in the earth's atmosphere are called greenhouse gases (GHGs). These gases play a critical role in determining the earth's surface temperature. Part of the solar radiation that enters earth's atmosphere from space is absorbed by the earth's surface. The other part of it is reflected off the earth and radiated back toward space, but GHGs absorb some of this radiation. As a result, radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere. Without natural GHGs, the earth's surface would be about 61°F cooler. This phenomenon is known as the greenhouse effect. However, many scientists have determined that emissions from human activities—such as electricity generation, vehicle emissions, and even farming and forestry practices—have elevated the concentration of GHGs in the atmosphere beyond naturally-occurring concentrations, contributing to the larger process of global climate change.

Global Climate Change

Global climate change (GCC) refers to a change in the average weather of the earth that may be measured by wind patterns, storms, precipitation, and temperature. Historically, the rate of temperature change has typically been incremental, with warming and cooling occurring over the course of thousands of years. In the past 10,000 years the earth has experienced incremental warming as glaciers retreated across the globe. However, scientists have observed an unprecedented increase in the rate of warming over the past 150 years, roughly coinciding with the global industrial revolution.

Although GCC is now widely accepted as a concept, the extent and speed of change to be expected, and the exact contribution from human sources, remains in debate. In its 2013 report, the Intergovernmental Panel on Climate Change (IPCC) predicted that the increase in global mean temperature in 2100 relative to 1850 to 1900 is likely to exceed 2.7 degrees Fahrenheit. The same report projects a sea level rise of 10.3 to 21.7 inches by 2100, relative to 1986-2005, with greater rise possible depending on the rate of polar ice sheet melting. A 2012 report done by the National Research Council (NRC) assessed historic and projected sea level rise for specific locations along the open Pacific coasts of California, Oregon, and Washington. Along the California coast south of Cape Mendocino, the committee projected that sea level will rise 1.57 to 11.8 inches by 2030, 4.72 to 24 inches by 2050, and 16.5 to 65.7 inches by 2100.

Accelerating GCC has the potential to cause a number of adverse impacts in California, including but not limited to:

- A reduction in the quality and supply of water from the Sierra snowpack. If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- Increased risk of large wildfires. If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the twenty-first century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Reductions in the quality and quantity of certain agricultural products. The crops
 and products likely to be adversely affected include wine grapes, fruit, nuts, and
 milk.

- Decreased electricity supply. Decreased water availability for hydropower generation (due to less Sierra snowpack and consequently lower reservoir levels) and decreased transmission efficiencies will increase the risk of brown-outs and black-outs and will affect agricultural and industrial productivity.
- Increased flood risk. Climate change is anticipated to cause a 20 to 30 percent increase in precipitation in the spring and fall in California. More frequent and heavier precipitation events cause flooding and mudslides, which would incur considerable costs in damages to property, agricultural productivity, infrastructure and even human life.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- An increase in temperature and extreme weather events. Climate change is
 expected to lead to increases in the frequency, intensity, and duration of extreme
 heat events and heat waves in California. More heat waves can exacerbate chronic
 disease or heat-related illness.
- A decrease in the health and productivity of California's forests. Climate change
 can cause an increase in wildfires, an enhanced insect population, and
 establishment of non-native species.

By identifying and addressing underlying vulnerabilities due to climate change in this Plan, the City of Fresno will increase the resilience of the community and the resources it depends on.

Responding to Climate Change Legislation

The City will continue to comply with applicable State climate change legislation. It will also take into consideration settlements by the Governor's Office of Planning and Research (OPR) Technical Advisories and Attorney General with other jurisdictions related to the California Environmental Quality Act (CEQA), GHG emissions, and General Plan updates. By proactively addressing climate change issues and requirements through the Plan, the City has the opportunity to create streamlined application processes for conforming local development.

The issue of climate change is closely related to other resource issues and opportunities, particularly air quality and water supply. The State's GHG legislation (AB 32 – California Global Warming Solutions Act of 2006 and SB 375 – Sustainable Communities and Climate Protection Act of 2008) and the amended CEQA and CEQA

Guidelines require local governments to define the extent of GHG production and identify ways to substantially reduce GHGs in the future in order to minimize a potentially significant environmental impact.

Of particular importance to the Plan is SB 375's requirement that all regional transportation planning organizations (locally, the Fresno Council of Governments) develop a Sustainable Community Strategy (SCS) designed to coordinate regional transportation plans with land use intensities and densities in order to reduce future GHG emissions. Local adherence to SB 375 and the regional SCS is not mandatory; however, the aim is to motivate local governments to align their land use planning with the adopted SCS to capitalize on the new CEQA streamlining opportunities discussed below. For instance, the County of Fresno has a State-mandated target of reducing its GHG emissions from automobile and light trucks (primarily NO_x – nitrogen oxides) by 5 percent by 2020 and 10 percent by 2035. SB 375 provides financial and regulatory incentives to achieve the target GHG reductions, including streamlined environmental review for projects that conform to an adopted SCS.

The Plan includes policies to reduce vehicle miles traveled by increasing land development densities so that more trips (such as to jobs, schools, and personal services) can be accommodated by shorter drives, transit, walking, or biking, and it is likely that such policies would be consistent with an adopted SCS. The Fresno Council of Governments adopted its SCS in 2014. This General Plan complies with the adopted SCS.

Senate Bill 97 (Chapter 185, Statutes of 2007) amended the California Environmental Quality Act statute to establish how GHG emissions and the effects of GHG emissions are appropriately analyzed under CEQA. The amendments stipulate that environmental documents for certain residential and mixed-use projects that are consistent with a General Plan designation, density, SCS, or alternative planning strategy need not analyze global warming impacts resulting from cars and light duty trucks. SB 97 also allows streamlined environmental review for projects in transit corridors that are consistent with an SCS and a City or County's General Plan.

CEQA Tiering and Streamlining Analysis of Greenhouse Gas Emissions

A Climate Action Plan (CAP) to reduce GHG emissions is being prepared concurrently with this Plan. The CAP will allow the City to streamline environmental review for later projects. This is because CEQA and CEQA Guidelines will allow the City to determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted CAP or mitigation program under specified circumstances. An environmental document that

relies on a GHG reduction plan for a cumulative impacts analysis must identify those requirements specified in the CAP that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the CAP for the reduction of GHG emissions, an EIR must be prepared for the project.

OBJECTIVE

RC-4

In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take necessary actions to achieve and maintain compliance with State and federal air quality standards for criteria pollutants.

Commentary: This includes compliance with California Government Code Section 65302.1 for the San Joaquin Valley.

IMPLEMENTING POLICIES

RC-4-a

Support Regional Efforts. Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan.

Commentary: A list of Reasonably Available Control Measures was submitted by the SJVAPCD to the U.S. Environmental Protection Agency as part of the Ozone Attainment Plan designed to reduce ozone-forming emissions. The City is responsible for implementing measures related to operations and/or services that the City controls.

- RC-4-b Conditions of Approval. Develop and incorporate air quality maintenance requirements, compatible with Air Quality Attainment and Maintenance Plans, as conditions of approval for General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals.
- RC-4-c Evaluate Impacts with Models. Continue to require the use of computer models used by SJVAPCD to evaluate the air quality impacts of plans and projects that require such environmental review by the City.

- **RC-4-d Forward Information.** Forward information regarding proposed General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals that require air quality evaluation, and amendments to development regulations to the SJVAPCD for their review of potential air quality and health impacts.
- RC-4-e Support Employer-Based Efforts. Support and promote employer implementation of staggered work hours and employee incentives to use carpools, public transit, and other measures to reduce vehicular use and traffic congestion.
- RC-4-f

 Municipal Operations and Fleet Actions. Continue to control and reduce air pollution emissions from vehicles owned by the City and municipal operations and facilities by undertaking the following:
 - Expand the use of alternative fuel, electric, and hybrid vehicles in City fleets.
 - Create preventive maintenance schedules that will ensure efficient engine operation.
 - Include air conditioning recycling and charging stations in the City vehicle maintenance facilities, to reduce Freon gases being released into the atmosphere and electrostatic filtering systems in City maintenance shops, when feasible or when required by health regulations.
 - Use satellite corporation yards for decentralized storage and vehicle maintenance.
 - Convert City-owned emergency backup generators to natural gas fuels whenever possible, and create an advanced energy storage system.
- **FAX Actions.** Continue to improve Fresno Area Express (FAX) bus transit system technical performance, reduce emission levels, streamline system operations, and implement BRT where supportive land uses are proposed by Figure LU-1: Land Use Diagram.
- RC-4-h Airport Actions. Support Airport efforts to develop and maintain programs and policies to support City, State and federal efforts to achieve and maintain air quality standards.
- **RC-4-i Methane Capture.** Continue to pursue opportunities to reduce air pollution by using methane gas from the old City landfill and the City's wastewater treatment process.

- RC-4-j All Departments. Continue to develop and implement in all City departments, operational policies to reduce air pollution.
- RC-4-k Electric Vehicle Charging. Develop standards to facilitate electric vehicle charging infrastructure in both new and existing public and private buildings, in order to accommodate these vehicles as the technology becomes more widespread.

OBJECTIVE

RC-5 In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take timely, necessary, and the most cost-effective actions to achieve and maintain reductions in greenhouse gas emissions and all strategies that reduce the causes of climate change in order to limit and prevent the related potential detrimental effects upon public health and welfare of present and future residents of the Fresno community.

IMPLEMENTING POLICIES

- RC-5-a Support State Goal to Reduce Statewide GHG Emissions. As is consistent with State law, strive to meet AB 32 goal to reduce greenhouse gas emissions to 1990 levels by 2020 and strive to meet a reduction of 80 percent below 1990 levels by 2050 as stated in Executive Order S-03-05. As new statewide GHG reduction targets and dates are set by the State update the City's Greenhouse Gas Reduction Plan to include a comprehensive strategy to achieve consistency with those targets by the dates established.
- RC-5-b Greenhouse Gas Reduction Plan. As is consistent with State law, prepare and adopt a Greenhouse Gas Reduction Plan as part of the Master Environmental Impact Report to be concurrently approved with the Fresno General Plan in order to achieve compliance with State mandates, assist development by streamlining the approval process, and focus on feasible actions the City can take to minimize the adverse impacts of growth and development on global climate change. The Greenhouse Gas Reduction Plan shall include, but not be limited to:
 - A baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in the city and sources that existed in 1990.
 - A projected inventory of the GHGs that can reasonably be expected to be emitted from those sources in the year 2035 with

implementation of this General Plan and foreseeable communitywide and municipal operations.

- A target for the reduction of emissions from those identified sources.
- A list of feasible GHG reduction measures to meet the reduction target, including energy conservation and "green building" requirements in municipal buildings and private development.
- Periodically update municipal and community-wide GHG emissions inventories to determine the efficacy of adopted measures and to guide future policy formulation needed to achieve and maintain GHG emissions reduction targets.

RC-5-c GHG Reduction through Design and Operations. Increase efforts to incorporate requirements for GHG emission reductions in land use entitlement decisions, facility design, and operational measures subject to City regulation through the following measures and strategies:

- Promote the expansion of incentive-based programs that involve certification of projects for energy and water efficiency and resiliency. These certification programs and scoring systems may include public agency "Green" and conservation criteria, Energy Star™ certification, CALGreen Tier 1 or Tier 2, Leadership in Energy Efficient Design (LEED™) certification, etc.
- Promote appropriate energy and water conservation standards and facilitate mixed-use projects, new incentives for infill development, and the incorporation of mass transit, bicycle and pedestrian amenities into public and private projects.
- Require energy and water audits and upgrades for water conservation, energy efficiency, and mass transit, pedestrian, and bicycle amenities at the time of renovation, change in use, change in occupancy, and change in ownership for major projects meeting review thresholds specified in an implementing ordinance.
- Incorporate the City's "Guidelines for Ponding Basin/Pond Construction and Management to Control Mosquito Breeding" as conditions of approval for any project using an on-site stormwater basin to prevent possible increases in vector-borne illnesses associated with global climate change.
- Periodically evaluate the City's facility maintenance practices to determine whether there are additional opportunities to reduce

GHGs through facility cleaning and painting, parks maintenance, road maintenance, and utility system maintenance.

- Periodically evaluate standards and mitigation strategies for highly vehicle-dependent land uses and facilities, such as drivethrough facilities and auto-oriented development.
- RC-5-d SCS and CAP Conformity Analysis. Ensure that the City includes analysis of a project's conformity to an adopted regional Sustainable Community Strategy or Alternative Planning Strategy (APS), an adopted Climate Action Plan (CAP), and any other applicable City and regional greenhouse gas reduction strategies in affect at the time of project review.
- RC-5-e Ensure Compliance. Ensure ongoing compliance with GHG emissions reduction plans and programs by requiring that air quality measures are incorporated into projects' design, conditions of approval, and mitigation measures.
- RC-5-f Toolkit. Provide residents and project applicants with a "toolkit" of generally feasible measures that can be used to reduce GHG emissions, including educational materials on energy-efficient and "climate-friendly" products.
- RC-5-g Evaluate Impacts with Models. Continue to use computer models such as those used by SJVAPCD to evaluate greenhouse gas impacts of plans and projects that require such review.

7.4 WATER RESOURCES

Population and economic growth of Fresno will be determined, in part, by the availability of water. Fresno's water supply faces challenges and requires strategic decisions to secure its long-term availability and affordability, in light of several pressures:

- Fresno's water supply currently depends on hundreds of deep wells, which draw on
 a declining aquifer (See the Public Utilities and Services Element for more
 information).
- The City has the opportunity to use substantial surface water resources, but these require funding and construction of costly new treatment and distribution infrastructure.
- Fresno has one of the highest per capita water consumption rates in California, more than twice that of Los Angeles. More than 50 percent of water consumption in Fresno is used for landscaping, rising to 70 percent in summer months.

- The costs of wastewater treatment, both for the City and industrial users, are relatively high.
- Running groundwater pumps and conveyance systems uses a tremendous amount
 of energy. Both the amount and cost of energy are rising in spite of technological
 innovation and efforts to reduce energy demands related to the City's water supply.

Water Sources

Fresno relies on two sources for its water: groundwater and surface water. With its dry climate and low annual rainfall (11 inches), Fresno is dependent on the Sierra snowpack, two rivers, and a groundwater basin for its water needs.

Fresno's primary source of water is groundwater that is located within the existing Kings Sub-basin groundwater aquifer and watershed area, as shown in Figure RC-2. The DPU Water Division currently uses 270 wells to pump about 146 million gallons of water per day (mgd). Since the 1940s, Fresno has taken out more water from the aquifer than has naturally and intentionally seeped back in. This has created an overdraft on the system, resulting in a declining water table (approximately 100 feet in the past 80 years). This increase in the depth to the water table has contributed to water quality problems, deeper well construction, and additional energy costs (due to additional pumping required) and treatment costs. The City currently spends about \$20 million on electricity annually, of which 56 percent, or \$11.2 million, is for water and wastewater services. The vast majority of that expenditure, \$9 million, is for electricity to run groundwater pumps and conveyance.

As the groundwater level decreases, the City will be forced to continue drilling deeper wells, which will result in increased power costs to lift the deeper water from the aquifer. The groundwater level will continue to decline, possibly increasing in its rate of decline as the population drawing water from the basin increases, as shown in Figure RC-1. Other jurisdictions access the Kings Sub-basin groundwater aquifer, and so the rate of drawdown is not solely under the control of the City. Fresno is the biggest user of the aquifer, however, and thus has a large degree of influence on its condition. As it is in a position to lead, the Plan supports efforts to improve regional standards of groundwater usage and recharge.

Fresno does have other sources of water available from the San Joaquin River to the north and the Kings River to the southeast, as shown in Figure RC-2. Snow melt from the Sierras makes its way to Millerton Lake, where it is stored behind Friant Dam and released to the San Joaquin River, and to Pine Flat Reservoir, where it is stored behind Pine Flat Dam and released to the Kings River. Fresno's access to this natural surface water has been established through contracts with the United States Bureau of Reclamation (USBR) for the San Joaquin River and the Fresno Irrigation District (FID)

for the Kings River. The FID contract is renewed annually and the USBR contract is permanent.

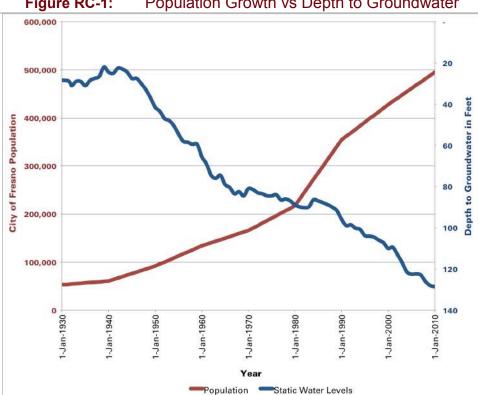


Figure RC-1: Population Growth vs Depth to Groundwater

As the City's population has grown, the demand on the City's groundwater supplies has increased. In the 1930s, groundwater was accessible at a depth of 30 feet, while in the 2000s, groundwater was accessible at depths of more than 120 feet in the ground.

Between both sources, 156,100 acre feet (af) of surface water was available to Fresno in 2010. The City diverted 79,000 af for use within the city and allowed the remaining 77,100 af to be used by California State University, Fresno and local farmers for irrigation purposes. This practice is termed in-lieu recharge, whereby groundwater pumping is offset by the use of surplus surface water, thereby leaving groundwater in storage for later use. Another advantage to this practice is that the irrigated surface water seeps through the soil to replenish the aquifer.

An acre-foot is enough water to cover an acre of land with one foot of water. It equates to about 326,000 gallons of water.

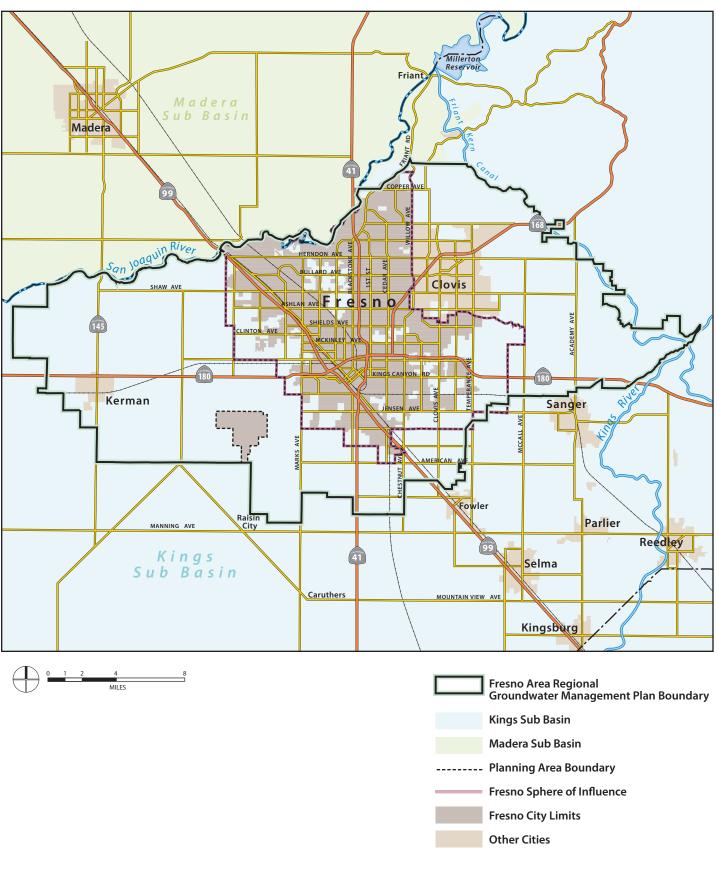
The City's Northeast Surface Water Treatment Facility (NESWTF) opened in 2004. By 2009, it helped to offset demand for groundwater by 12 percent. Because of the depth of the groundwater table in Fresno, it costs less to treat water at a surface water treatment facility than it does to pump water from the aquifer. The City of Fresno Urban Water Management Plan (UWMP) and the City of Fresno Metropolitan Water Resources Management Plan provide recommendations to increase surface water treatment capacity with phased infrastructure improvements that could shift the burden away from groundwater and allow water levels in the aquifer to balance and potentially recover over time. This will also allow the City to make use of available surface water that is not being used within the city.

If the city continues to use primarily groundwater and does not increase surface water treatment and recycled water supply capacity, the groundwater table will decrease at an increasingly higher rate as Fresno grows and the population increases. According to modeling done for Phase 2 of the City of Fresno Metro Plan, continuing to operate "status quo" will cause the groundwater table to decline an additional 85 feet below 2005 conditions by 2025. Under these conditions, 26 percent of the City's wells (69 wells) would have groundwater levels below the current pump bowl intake elevations and would not be operational, and another 13 percent of the wells (36 wells) would have groundwater levels of 15 feet or less above the pump bowl elevations, which may result in inadequate water coverage over the top of the pump bowl.



As part of the Kings Sub-basin groundwater aquifer, the Kings River, pictured here, is an important natural resource for the City of Fresno. Photo: Fresno/Clovis Convention & Visitors Bureau.

Figure RC-2: Kings Subasin Groundwater Aquifer and Watershed Area



Source: City of Fresno, 2014; Provost & Pritchard Consulting Group; California Department of Water Resources

Existing Plans and Initiatives

As noted previously, Fresno's future relies on being able to provide a dependable supply of potable water to the community. The City has adopted long-range capital and strategic programs through its City of Fresno Metro Plan, City of Fresno Recycled Water Master Plan, and City of Fresno Wastewater Master Plan. The City has also adopted the State's 2013 CalGreen Building Code, Model Water Efficient Landscape Ordinance, and Graywater Standards, which combine for a 10 to 20 percent reduction in water use in most new construction.

2010 City of Fresno Urban Water Management Plan (UWMP)

The City of Fresno UWMP sets water management goals and strategies to supply water to Fresno's population through 2030. These goals and strategies include reducing the consumption of gallons per capita per day from 300 to 243 by 2020 as mandated by the State and balancing the City's groundwater operations by 2025. To accomplish these targets will require ongoing and new conservation measures; the maximization of available surface water supplies for direct treatment and use, and intentional groundwater recharge; and the incorporation of tertiary-treated recycled water into the future water supply portfolio to meet non-potable demands in new growth areas and existing parts of the city. Implementation of the City's future water supply plan will result in a significant shift and increase in diversity in the City's water supply mix, which will enhance overall water supply reliability.

Water Conservation Efforts

The city depends on reduced consumption due to conservation as a part of its future water supply. Educating the public to reduce usage also directly affects water delivery costs. Power and treatment costs increase as the City pumps more water, so higher water use would mean higher water and sewer rates. Many of the City's water conservation measures respond to requirements in the City's United States Bureau of Reclamation (USBR) contract for 60,000 acre feet of surface water. In fact, one of the contract conditions is that the city follows USBR Best Management Practices, which were used to create the City's Water Conservation Program.

This Program includes watering restrictions in the form of a required winter and summer watering schedule; customer education on the need to conserve water and how to do so; free residential plumbing retrofits such as low flow shower heads and aerators; free system water audits, leak detection and repair; metering for all new connections and retrofits of existing connections; rebate programs for high efficiency clothes washing machines, ultra-low flush or high efficiency toilets, and urinal replacement; public information outreach programs; and water waste prohibition through watering regulations and enforcement. Demonstration gardens and drip

irrigation demonstration plots have been installed as resources to provide examples to customers.

Groundwater Recharge

An important process in a viable groundwater management plan is groundwater recharge. One source is the natural subsurface inflow recharge, which occurs when water flows from areas where the water table is higher to areas where it is lower. The Water Division has estimated that the average rate of subsurface inflow to the aquifer is 22,500 acre feet/year (af/yr). The aquifer is also recharged naturally by rainfall, unlined canals and rivers, as well as irrigation water seeping through the soil at an average estimated rate of 24,400 af/yr. Natural recharge can be impeded somewhat by human activities including pavement and buildings, which can result in enhanced surface runoff and reduction in recharge.



The Kings Sub-basin groundwater aquifer is recharged naturally by rainfall, unlined canals and rivers, and irrigation water, but human activities can impede this natural process with pavement and buildings. Photo credit: Karana Hattersley-Drayton.

To capture surface water runoff, also known as stormwater, the Fresno Metropolitan Flood Control District (FMFCD) has developed an urban drainage design concept that collects, detains and retains surface water runoff for intentional groundwater recharge in ponding basins dispersed throughout the city. FMFCD estimates they collect more than 95 percent of Fresno's urban runoff, though the percentage that actually gets

recharged and the part that is discharged to FID canals and the San Joaquin River is unknown. The FMFCD also partners with the FID and the City in a cooperative groundwater recharge program. This program provides for dry season (generally March through October) delivery of City contract imported surface water from the San Joaquin and Kings Rivers into many of the FMFCD's local ponding basins and the Cityowned Leaky Acres recharge basin. Intentional recharge can vary due to a number of factors, which could include pond availability, water delivery season, pond maintenance, or length of wet season.

Intentional recharge in Fresno has averaged 48,900 af/yr from 1990 to 2011. In 2010, intentional recharge was 53,100 af for a total groundwater recharge of 100,000 af. Groundwater pumpage in 2010 was 128,578 af which created a 28,578 af overdraft on the aquifer that year alone. This overdraft is not maintainable.

The City also recharges treated wastewater into the ground at the Fresno-Clovis Regional Water Reclamation Facility (RWRF). Around 55,000 af is percolated for recharge into the aquifer, with 30,000 af subsequently pumped out by the FID in exchange for 13,800 af of fresh surface water from the Kings River.

Stormwater Best Management Practices

The FMFCD captures approximately 100 percent of the stormwater runoff from new development and approximately 95 percent of the stormwater runoff from existing development. Capturing the runoff allows for groundwater recharge and also protects surface water quality by not allowing urban runoff, which often contains contaminants from roadways and lawns, to flow into natural creeks, rivers, and irrigation ditches. The runoff is collected in retention basins (also known as ponding basins), allowing for filtration through the soil. On average, retention basins remove 50 to 80 percent of stormwater pollutants. Additional sediment and ground water studies show that the majority of stormwater pollutant are absorbed to the top 4cm of soil and do not exceed background levels beyond 16cm. The same studies did not detect any stormwater pollutants in ground water tested beneath a retention basin serving an industrial catchment.

The FMFCD's stormwater quality management program includes specific pollution prevention and control practices for urban drainage system planning, design, construction, and maintenance. The program also includes public education to prevent stormwater pollution; commercial, industrial, and new development stormwater quality control practices; monitoring to assess stormwater impacts on receiving water and to evaluate the effectiveness of best management practices; and development and implementation of ordinances to effect and enforce stormwater quality controls.

Water Conservation

Fresno's average total per capita water consumption was 295 gallons per capita per day (gpcd) from 1991 to 2011, making Fresno one of the highest water consuming cities in California. The total per capita water production has varied between 1991 to 2011, from a low of 246 gpcd in 2011 to a high of 329 gpcd in 2001. By comparison, Clovis averages 247 gpcd, Los Angeles is 150, Phoenix is 184, and Tucson is 110.

The California Water Conservation Act of 2009 requires a statewide 20 percent reduction in urban water usage by 2020. The methodology chosen by a jurisdiction must be documented in their Urban Water Management Plan (UWMP). The City's adopted target of 250 gpcd to meet State law is a 20 percent reduction from the 313 gpcd average annual gpcd water use for the 10-year period from 1996 to 2005. The City of Fresno Metro Plan recommends a further reduction to 243 gpcd to help balance the groundwater table by 2020. This General Plan incorporates a comprehensive conservation program that has a reduction target of per capita water usage in the city's water service area of 243 gpcd by 2020 and 190 by 2035.

To meet a consumption reduction target of 243 gpcd by 2020 and 190 by 2035 will require a combination of conservation measures, including among other possible actions: incentives, appliance rebates, outreach programs and education, fixture swap, prioritized leak detection program, retrofit upon resale ordinance, as well as partnering with commercial, industrial, and institutional customers to reduce their water demand through operational improvements. The recent installation of residential water meters is anticipated to reduce water consumption, however additional water conservation measured should be explored. In the future, the City may develop a tiered water rate structure to further encourage water conservation. The biggest opportunities for water conservation are related to the reduction of outdoor water uses, particularly landscape and turf irrigation, by all customers. Measures related to outdoor water use reduction include rebates for xeriscape (drought-tolerant) landscaping for new homes, programmable irrigation, weather-based irrigation control, and turf replacement, and landscape water audit and budget program.

Recycled Water Use

Water recycling is using treated wastewater for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing, and replenishing a ground water basin (referred to as ground water recharge). Water recycling offers resource and financial savings, as potable water does not need to be used for non-drinking purposes. Wastewater treatment can be tailored to meet the water quality requirements of a planned reuse. Recycled water for landscape irrigation requires less treatment than recycled water for drinking water.

Wastewater generated from homes, businesses, and industry in the city is conveyed to the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF). The RWRF is operated by the City of Fresno and has the capacity to treat 80 million gallons a day (mgd) of wastewater. On an average day, the RWRF receives 68 million gallons of wastewater. The RWRF recycles nearly every component of influent wastewater (water, solids, and natural gas). The City releases up to 65,100 af of recycled water per year.

- 10,000 af/yr is sent directly to irrigate non-food agricultural land downstream.
- 55,100 af/yr is directed to 1,660 acres of ponds for percolation into the aquifer.
- 30,000 af/yr is then pumped from the aquifer into FID canals for reuse downstream from Fresno to nearby farmers for unrestricted irrigation use. In exchange for this recycled water, FID provides Fresno with 13,800 af of Kings River surface water.

The City does not presently have the infrastructure to route recycled water from the RWRF to existing or new development. The retrofit of existing residential uses is considered economically infeasible and impractical to implement. The use of recycled water should focus on new and existing large green spaces, industrial uses, and new development. However, the development of a gray water policy for the residential reuse of wastewater for household gardening and landscape irrigation on site may be feasible.

The City also operates a satellite facility in North Fresno called the Wastewater Reclamation Facilities (WRF) Satellite Plant. It was built to serve the Copper River development and golf course. In 2010, the plant was capable of irrigating the golf course at about 750 af/yr and future total capacity will ultimately reach about 1,000 af/yr when the surrounding development builds out.

Key Opportunities

With strategic planning and investments, Fresno will have a dependable water supply system that, in turn, will create a competitive economic advantage. Below are some considerations that are noted with regards to the City's efforts to create a viable water supply system, and many are supported by General Plan policies.

- The geologic structure of the aquifer underneath Fresno is capable of recharging to levels sufficient to support the city during drought periods if the proper infrastructure were in place.
- Conversion to conjunctive use of surface and ground water could reduce energy usage for water delivery purposes by 18 to 20 percent. The reduction in power demand for pumping water would be a reduction in both the total demand and, more significantly, during peak usage periods (a reduction in both production and

grid capacity demand). This reduction could also reduce the city's carbon footprint, potentially eliminating the equivalent of 670,000 gallons of gasoline or one year of electricity for 745 homes.

- Fresno has developed a Property Assessed Clean Energy (PACE) district that can finance water efficiency and energy efficiency upgrades.
- Fresno has the water resources available to balance the groundwater aquifer and
 create storage for dry years. This can be accomplished by implementing the UWMP
 and the City of Fresno Metro Plan. These plans call for increased surface water
 treatment facility capacity, increased intentional recharge, a local groundwater
 banking program, use of recycle water for non-potable water demands and
 aggressive water conservation measures.
- Available recycled water and untreated surface water can be used by industrial
 facilities for cooling systems and other uses without having to meet the drinking
 water standards for the rest of the city. This water supply could be distributed
 directly to future industrial facilities or parks to encourage new businesses to
 relocate to Fresno.
- Changing the practice of lining canals with concrete, or piping them through residential neighborhood developments, will allow for additional natural recharge.
- Outdoor water demand can be significantly reduced through climate-appropriate landscape design and more efficient irrigation technology, while indoor water demand can be reduced by efficient fixtures and appliances.
- Citywide, infrastructure costs and water demand can be minimized through
 efficient land use. Compact and infill development generally requires significantly
 less pipe and lower water per capita demand equating to significant per capita cost
 savings as compared to low density developments.
- Where infill development substantially increases density, or increases the building
 height, due to both the age and size of the distribution system, the distribution
 system may require upgrading to avoid negative impacts from suction created by
 booster pumps, or to provide adequate flows and pressures for increased demands.

In addition to those discussed below, the Public Utilities and Services Element contains additional objectives and policies on water supply, water quality, and reclaimed water.

OBJECTIVE

RC-6 Ensure that Fresno has a reliable, long-range source of drinkable water.

IMPLEMENTING POLICIES

- RC-6-a Regional Efforts. Support cooperative, multi-agency regional water resource planning efforts and activities on developing and implementing the Upper Kings Basin Integrated Regional Water Management Plan.
- RC-6-b Water Plans. Adopt and implement ordinances, standards, and policies to achieve the intent of the City of Fresno Urban Water Management Plan, Fresno-Area Regional Groundwater Management Plan, and City of Fresno Metropolitan Water Resources Management Plan to ensure a dependable supply of water.
- RC-6-c Land Use and Development Compliance. Ensure that land use and development projects adhere to the objective of the Fresno Metropolitan Water Resources Management Plan to provide sustainable and reliable water supplies to meet the demand of existing and future customers through 2025.
- **RC-6-d Recycled Water.** Prepare, Adopt, and implement a City of Fresno Recycled Water Master Plan.

Commentary: This plan will expand the City's wastewater recycling program by developing treatment, delivery, and users.

- RC-6-e Protect Aquifer. Oppose urban development in unincorporated areas that are not served by a wastewater treatment/management system capable of preventing the buildup of compounds that would degrade the aquifer.
- RC-6-f

 Regulate Sewage Disposal Facilities. Oppose development of new sewage disposal facilities either within the Planning Area or upgradient (north and east) of the Planning Area, unless the treatment facilities produce effluent that:
 - Will not degrade the aquifer in the long term;
 - Will not introduce contaminants into surface water that would negatively affect its potential economic use for drinking water;
 - Will not deleteriously affect downstream agricultural and urban uses; and
 - Will not degrade sensitive riparian habitat.

- RC-6-g Protect Recharge Areas. Continue to protect areas of beneficial natural groundwater recharge by preventing uses that can contaminate soil or groundwater.
- RC-6-h

 Conditions of Approval. Include in the Development Code standards for imposing conditions of approval for development projects to ensure long-term maintenance of adequate clean water resources. Require findings that adequate water supply must exist prior to any discretionary project approval for residential and commercial development requiring annexation, as required by law.
- **RC-6-i Natural Recharge.** Support removal of concrete from existing canals and change the practice of lining new and existing canals with concrete to allow for natural recharge.

OBJECTIVE

RC-7 Promote water conservation through standards, incentives and capital investments.

IMPLEMENTING POLICIES

- RC-7-a Water Conservation Program Target. Maintain a comprehensive conservation program to help reduce per capita water usage in the city's water service area to 243 gallons per capita per day (gpcd) by 2020 and 190 gpcd by 2035, by adopting conservation standards and implementing a program of incentives, design and operation standards, and user fees.
 - Support programs that result in decreased water demand, such as landscaping standards that require drought-tolerant plants, rebates for water conserving devices and systems, turf replacement, xeriscape landscape for new homes, irrigation controllers, commercial/industrial/institutional water conserving programs, prioritized leak detection program, complete water system audit, landscape water audit and budget program, and retrofit upon resale ordinance.
 - Implement the U.S. Bureau of Reclamation Best Management Practices for water conservation as necessary to maintain the City's surface water entitlements.
 - Adopt and implement policies in the event that an artificial lake is proposed for development.

- Work cooperatively toward effective uniform water conservation measures that would apply throughout the Planning Area.
- Expand efforts to educate the public about water supply issues and water conservation techniques.
- RC-7-b Water Pricing and Metering. Develop a tiered water cost structure for both residential and commercial users that will properly price water based on its true cost; require all new development to be metered for water use; and charge all customers the true, full cost of their water supply, including costs of acquisition, initial treatment, conveyance, wastewater treatment, operations, maintenance, and remediation.
- RC-7-c

 Best Practices for Conservation. Require all City facilities and all new private development to follow U.S. Bureau of Reclamation Best Management Practices for water conservation, as warranted and appropriate.
- RC-7-d **Update Standards for New Development.** Continue to refine water saving and conservation standards for new development.
- RC-7-e

 Retrofit City Facilities, and Consider Incentives Programs to Encourage Retrofitting of Other Existing Public and Private Residential and Non-Residential Facilities and Sites. Reduce water use in municipal buildings and City operations by developing a schedule and budget for the retrofit of existing municipal buildings with water conservation features, such as auto shut-off faucets and water saving irrigation systems. Prepare a comprehensive incentive program for other existing public and private residential and non-residential buildings and irrigation systems.
- RC-7-f Implementation and Update Conservation Program. Continue to implement the City of Fresno Water Conservation Program, as may be updated, and periodically update restrictions on water uses, such as lawn and landscape watering and the filling of fountains and swimming pools, and penalties for violations. Evaluate the feasibility of a 2035 conservation target of 190 gpcd in the next comprehensive update of the City of Fresno Water Conservation Program.
- RC-7-g Educate on State Requirements. Educate the residents and businesses of Fresno on the requirements of the California Water Conservation Act of 2009.

- RC-7-h

 Landscape Water Conservation Standards. Refine landscape water conservation standards that will apply to new development installed landscapes, building on the State Model Water Efficient Landscape Ordinance and other State regulations.
 - Evaluate and apply, as appropriate, augmented xeriscape, "waterwise," and "green gardening" practices to be implemented in public and private landscaping design and maintenance.
 - Facilitate implementation of the State's Water Efficient Landscape Ordinance by developing alternative compliance measures that are easy to understand and observe.
- **PACE Financing.** Develop a residential Property Assessed Clean Energy (PACE) program, if it is determined to be a feasible option, to help finance water efficiency and energy efficiency upgrades for property owners.

Commentary: The program would be administered by private parties.

7.5 ENERGY RESOURCES

Pacific Gas and Electric (PG&E) provides almost all the energy for the city of Fresno. The cost of energy services provided by PG&E is among the highest in the State. Meanwhile, the city has abundant solar resources that could be expanded to reduce dependence on costly purchased electricity, but this will take time and financial resources to implement. Green building practices can be one of the main energy savings strategies encouraged, or required, as Fresno continues to develop. How the City can develop an energy-efficient infrastructure and reduce dependence on the energy grid is a prominent issue for the Plan.

The PG&E electrical grid was established decades ago. It's been at least 30 years since a large transmission line has been built in the Central Valley. Demand for electricity in Fresno has increased 5.4 percent since 2005, placing an increased load on a finite capacity grid system. In April of 2014, PG&E disclosed plans to build a 70-mile transmission line meant to meet the Valley's growing demand for electricity. The route for this power line is proposed to the west of Fresno SOI and is expected to go into operation by 2020.

The PG&E natural gas pipeline system was established decades ago and has had limited upgrade. In 1993, a massive expansion of the natural gas pipeline that runs from Idaho's border with British Columbia to the county of Fresno was completed. Natural gas usage in Fresno has increased 9.2 percent since 2005, adding increased load on the system.

Newer development in Fresno uses energy at higher rates than older land uses, despite having newer, more efficient technology available. Also, the average single-family home consumes 40 percent more electricity than a multi-family home. According to PG&E, the highest amount of residential energy usage in Fresno appears to be in the newer, more affluent areas on the north, west, and southeast edges of Fresno.

Cost data from the recent retrofits done in Fresno shows the average investment necessary to achieve a 28 to 30 percent reduction in energy usage on a typical Fresno home is about \$25,000. Taking the 76,000 homeowners that have a need and multiplying that by the average cost per retrofit, equates to \$1.9 billion in economic activity potential in Fresno, if fully developed. When combined with the estimated \$103 million in annual energy savings through a fully deployed and subscribed existing-home retrofit program, the economic potential of comprehensively reducing energy consumption in Fresno is staggering.

The City has been active since the mid-1990s in taking steps to invest and deploy renewable energy technology and improve the energy efficiency of City-owned facilities and the community at large. Notable actions include:

- Adopting the 2013 California Energy Code;
- Developing a comprehensive free residential energy efficiency survey program (by April 2014, the City has conducted a little over 2,500 residential energy efficiency surveys to Fresno homes);
- Implementing the Fresno Energy Watch Program as part of the Fresno Small Business Energy Makeover;
- Using renewable biogas to produce electric power at the Fresno-Clovis Regional Wastewater Reclamation Facility;
- Installing solar panels at City-owned facilities (As of April 2014, the City had deployed over 4.85 megawatts of solar power on City-owned facilities, including the largest single solar farm at any airport in the nation while a 2 megawatt solar array is planned for the Fresno-Clovis Regional Wastewater Reclamation Facility);
- Requiring installation of solar energy systems in construction of any new Cityowned buildings containing at least 7,500 square feet, and a mandate to use a green building rating system standard for all new municipal buildings over 10,000 square feet.

PG&E also has energy efficiency programs operating in the Fresno area. Many of these programs are geared towards on low-income families, such as the Energy Partners

program and Middle Income Direct Install (MIDI) program. Other programs are focused on local businesses, such as the Direct Install program of the Fresno Energy Watch, the Air-Care Plus program, and numerous others.

The Fresno County Equal Opportunities Commission (FCEOC) administers the federally-funded weatherization programs focused on low-income homeowners in Fresno. These programs are designed to work in collaboration with utility funded programs operated by PG&E. There are several areas of overlap with these programs.

Private organizations, businesses, and individuals are also taking important steps locally. Fresno has the third highest deployment level for solar power among cities in California with 1,056 sites that total 12 MW of power generation capacity. The level of investment in solar power in Fresno has seen a rapid increase since 2006 with over 532 systems installed in 2010 compared with only two systems installed in 2006. In July 2009, Environment California ranked Fresno third in the State for number of kilowatts its solar projects produce and fifth for projects on roofs, with Clovis close behind at seventh.

California State University, Fresno, developed sheltered parking canopies on campus, protecting nearly 700 vehicles from the elements and supporting 3,872 photovoltaic cell panels, which generate 20 percent of the campuses electricity demand. The \$11.9 million project—the largest of its kind on a university campus—was completed in fall 2007.

Key Opportunities

Under this Plan, the City will promote household conservation of electricity, and strive to change current trends of higher energy use in newer development in order to conserve resources for future growth. Fresno also has enormous potential for solar power and will continue investing in solar energy for public facilities. Some of the key opportunities include:

ALTERNATIVE ENERGY

Current viable alternative energy sources for buildings and transportation in Fresno include solar photovoltaic electricity, solar thermal electricity, solar thermal heating, low-speed wind generated electricity, hydroelectricity, natural gas for vehicles, electricity for vehicles, and bio-methane generated electricity.

ENERGY STAR

To earn the ENERGY STAR, a home must meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency (EPA), making them 20 to 30 percent

more efficient than standard homes. Homes achieve this level of performance through a combination of energy-efficient improvements including insulation systems, high–performance windows, efficient heating and cooling equipment, and qualified lighting and appliances. In Fresno, 4,441 Energy Star qualified homes have been built, which is equivalent to eliminating 124 vehicles from the roadway, planting 205 acres of trees, or saving the environment from 1.5 million pounds of CO₂.

OBJECTIVE

RC-8 Reduce the consumption of non-renewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources.

IMPLEMENTING POLICIES

- RC-8-a Existing Standards and Programs. Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction and major renovations.
- RC-8-b Energy Reduction Targets. Strive to reduce per capita residential electricity use to 1,800 kWh per year and non-residential electricity use to 2,700 kWh per year per capita by developing and implementing incentives, design and operation standards, promoting alternative energy sources, and cost-effective savings.

Commentary: These targets represent 28 and 30 percent reductions respectively, from the 2010 rate of consumption.

- RC-8-c Energy Conservation in New Development. Consider providing an incentive program for new buildings that exceed California Energy Code requirements by fifteen percent.
- RC-8-d Incentives. Establish an incentive program for residential developers who commit to building all of their homes to ENERGY STAR performance guidelines.

Commentary: See also Policy RC-7-j on PACE financing for energy efficient retrofits.

RC-8-e Energy Use Disclosure. Promote compliance with State law mandating disclosure of a building's energy data and rating of the previous year to prospective buyers and lessees of the entire building or lenders financing the entire building.

- RC-8-f City Heating and Cooling. Reduce energy use at City facilities by updating heating and cooling equipment and installing "smart lighting" where feasible and economically viable.
- RC-8-g

 Revolving Energy Fund. Create a City Energy Fund which uses first year savings and rebates from completed City-owned energy efficiency projects to provide resources for additional energy projects. Dedicate this revolving fund to the sole use of energy efficiency projects that will pay back into the fund.
- RC-8-h Solar Assistance. Identify and publicize information about financial mechanisms for private solar installations and provide over-the-counter permitting for solar installations meeting specified standards, which may include maximum size (in kV) of units that can be so approved.
- **RC-8-i Renewable Target.** Adopt and implement a program to increase the use of renewable energy to meet a given percentage of the city's peak electrical load within a given time frame.
- RC-8-j Alternative Fuel Network. Support the development of a network of integrated charging and alternate fuel station for both public and private vehicles, and if feasible, open up municipal stations to the public as part of network development.
- RC-8-k Energy Efficiency Education. Provide long-term and on-going education of homeowners and businesses as to the value of energy efficiency and the need to upgrade existing structures on the regular basis as technology improves and structures age.

7.6 FARMLAND

Central California is one of the world's premier growing regions, with Fresno at its heart. The San Joaquin Valley is a mature agricultural area, with a well-defined pattern of farming activities. Much of the arable land is devoted to relatively stable crops, such as orchards, vineyards, and other commercial crops.

The conversion of farmland to urban uses is not the only threat to agriculture. When "leapfrog" development (development that is not contiguous to the existing urbanized area) occurs in the midst of agriculture uses, optimal crop production is precluded due to urban/agriculture conflicts. It is common for farmland to suffer disruptions and economic losses, while urban uses also suffer negative effects, such as farm-generated dust, noise and odors. Another problem exists with premature disinvestment of

farmland where future growth is anticipated but development may not occur for several years. Farmland may be purchased or held for its possible urban development value, rather than continue in agriculture production.

Policies in the Plan will help preserve farmland by incentivizing new development within and adjacent to already-urbanized land, only extending public utilities to new development that adheres to the Plan, and not expanding the City's SOI. Additional objectives and policies in this element address the broader planning issues of farmland preservation. The Healthy Communities Element also has more information on urban agriculture and expanding access to fresh, healthy foods.



Fresno is at the heart of one the premier agricultural areas in the world, and the General Plan policies will help preserve farmland.

OBJECTIVE

RC-9 Preserve agricultural land outside of the area planned for urbanization under this General Plan.

IMPLEMENTING POLICIES

- RC-9-a Regional Cooperation. Work to establish a cooperative research and planning program with the Counties of Fresno and Madera, City of Clovis, and other public agencies to conserve agricultural land resources.
- RC-9-b Unincorporated Land in the Planning Area. Express opposition to residential and commercial development proposals in unincorporated areas within or adjacent to the Planning Area when these proposals would do any of the following:
 - Make it difficult or infeasible to implement the General Plan;
 - Contribute to the premature conversion of agricultural, open space, or grazing lands; or
 - Constitute a detriment to the management of resources and/or facilities important to the region (such as air quality, water quantity and quality, traffic circulation, and riparian habitat).
- RC-9-c Farmland Preservation Program. In coordination with regional partners or independently, establish a Farmland Preservation Program. When Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is converted to urban uses outside City limits, this program would require that the developer of such a project mitigate the loss of such farmland consistent with the requirements of CEQA. The Farmland Preservation Program shall provide several mitigation options that may include, but are not limited to the following: Restrictive Covenants or Deeds, In Lieu Fees, Mitigation Banks, Fee Title Acquisition, Conservation Easements, Land Use Regulations, or any other mitigation method that is in compliance with the requirements of CEQA. The Farmland Preservation Program may be modeled after some of all of the programs described by the California Council of Land Trusts.

7.7 MINERAL RESOURCES

This section of the Resource Conservation and Resilience Element is intended to assure that cost-effective locally available mineral resources (such as rock, gravel, and sand for concrete aggregate) are protected for future use by the construction industry, and that extraction of these resources is done in a responsible manner that provides for beneficial end uses of surface mining sites, as required by the California's Surface Mining and Reclamation Act.

Aggregate mineral resources are critical to supporting urban development, as all public and private projects utilize this material for roadway paving, structural elements (foundations), and hardscape (sidewalks, curbing, gutters). Because of the demands that will be made on these mineral resources due to Fresno's projected growth, and because the City has land use authority over designated mineral resource areas, the Plan contains policies relating to mineral resource land and direction for managing mining and post-mining rehabilitation of the land.

Naturally occurring deposits of aggregate minerals must be of sufficient quality to meet engineering material specifications and must be sufficiently concentrated to justify the investment in an extraction and processing site. High-quality aggregate minerals are required for proper formulation of concrete to attain sufficient strength through the curing process. Existing and ancient riverbeds and streambeds are prime areas to look for such high-quality concrete aggregate materials, which consist of sand, gravel, and certain types of rock.

Lower-quality aggregate materials, used for base rock and asphaltic mixtures, also can be recovered from riparian corridors, but may be available in other areas as well. For instance, surface mining for base rock is common on the alluvial fans of the Coast Range along the western edge of the San Joaquin Valley.

Recycling (re-crushing) of concrete extends the available supply of mineral resources but cannot replace mining as a source of these materials. The primary reason for this is that virgin minerals are needed for formulation of concrete. Once minerals undergo the curing reaction once, they are only suited for lower-quality uses such as base rock or asphalt mixtures. Another reason that recycling cannot replace mining is that in a growing area such as Fresno, more new durable structures are created each year than are demolished.

Surface mining operations need to locate in areas where these minerals are sufficiently concentrated—where most of the material excavated consists of the desired materials, and where the mineral deposits can be easily accessed (i.e., there is relatively little "overburden" covering the deposits).

The California Surface Mining and Reclamation Act of 1975 mandates that a "classification/designation" analysis be done to provide information on the availability of mineral resource for construction and growth. The objective is to ensure that raw material will be available when needed—that this raw material will not become inaccessible for mining as the result of inappropriate land use decisions involving mineral resource areas.

The California Department of Conservation Division of Mines and Geology periodically maps high-quality concrete aggregate deposits and compiles statistics on the amount of aggregate minerals available, and consumed, within designated Production-Consumption (P-C) Regions of the State. The Department uses an "MRZ-2" designation for regionally significant deposits of high-grade sand and gravel aggregate (i.e., material suitable for making Portland Cement Concrete). Potential, but presently unproven, mineral resource areas are mapped as MRZ-3. Most of the area outside of the San Joaquin and Kings River Resource Areas has an MRZ-3 designation, and may contain economically recoverable mineral resources. However, those resources may not be of the high quality needed to formulate concrete. The City keeps these maps on file for use in development review and decision-making.

OBJECTIVE

RC-10

Conserve aggregate mineral resources within the Planning Area, as identified by the Division of Mines and Geology, and allow for responsible extraction to meet Fresno's needs.

IMPLEMENTING POLICIES

RC-10-a

Meet Future Needs. Adopt land use and resource protection regulations that support mining of the high-quality, close-to-market aggregate resources to meet the needs of the Fresno Production-Consumption Region.

RC-10-b

Zoning in San Joaquin Riverbottom. Maintain zoning consistent with on-going mineral extraction in the San Joaquin Riverbottom that also allows multiple open space uses in conformance with State law and the City's Surface Mining Ordinance.

RC-10-c

Processing-Mining Link. Accommodate only those mineral processing activities in the San Joaquin Riverbottom that are associated and colocated with mining operations when such industrial activities will sunset with the mining operation and do not stimulate unplanned growth or conversion of multi-use open space to urban uses.

RC-10-d

Manage MRZ-2 Areas. Prohibit land uses and development projects that preclude mineral extraction in potential high-quality mineral resource areas designated MRZ-2 by the California Department of Conservation Division of Mines and Geology.

RC-10-e

Existing Permits. Honor surface mining permits approved by the County of Fresno upon annexation, provided that the mining operation is in compliance with the terms of its current permit(s) and State law. Require new permit applications in the event of noncompliance, permit expiration, or permit revocation, and ensure compliance with law or regulations.

RC-10-f

Cooperate on Uniform Criteria. Work with the County of Fresno, the County of Madera, and the City of Clovis to develop uniform criteria applicable to existing, new, and altered mineral extraction sites in the San Joaquin Riverbottom.

7.8 WASTE REDUCTION

The Public Utilities and Services Element has background information on solid waste collection and disposal and policies related to these systems. This section of the Resource Conservation and Resilience Element contains policies addressing waste reduction.

OBJECTIVE

RC-11

Strive to reduce the solid waste going to landfills to zero by 2035.

IMPLEMENTING POLICIES

RC-11-a

Waste Reduction Strategies. Maintain current targets for recycling and re-use of all types of waste material in the city and enhance waste and wastewater management practices to reduce natural resource consumption, including the following measures:

- Continue to require recyclable material collection and storage areas in all residential development.
- Establish recycling collection and storage area standards for commercial and industrial facilities to size the recycling areas according to the anticipated types and amounts of recyclable material generated.
- Provide educational materials to residents on how and what to recycle and how to dispose of hazardous waste.
- Provide recycling canisters and collection in public areas where trash cans are also provided.
- Institute a program to evaluate major waste generators and identify recycling opportunities for their facilities and operations.

- Continue to partner with the California Integrated Waste Management Board on waste diversion and recycling programs and the CalMax (California Materials Exchange) program.
- Evaluate the feasibility of a residential, restaurant, and institutional food waste segregation and recycling program, to reduce the amount of organic material sent to landfill and minimize the emissions generated by decomposing organic material.
- Evaluate the feasibility of "carbon footprinting" for the City's wastewater treatment facilities, biomass and composting operations, solid waste collection and recycling programs.
- Expand yard waste collection to divert compostable waste from landfills.
- Study the feasibility and cost-benefit analysis of a municipal composting program to collect and compost food and yard waste, including institutional food and yard waste, using the resulting compost matter for City park and median maintenance.
- RC-II-b Zero Waste Strategy. Create a strategic and operations plan for fulfilling the City Council resolution committing the City to a Zero Waste goal.
- RC-II-c Industry Efforts. Support industry efforts to collect and recycle electronics, mattresses, carpets and any other recyclable products to help the region meet goals consistent with the statewide goal of at least 75 percent of all solid waste recycled by January 2020.

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HISTORIC AND CULTURAL RESOURCES ELEMENT

The Historic and Cultural Resources Element of the General Plan recognizes that an aesthetic environment and connections to culture and history are essential characteristics of a community that values its quality of life. The purpose of the Historic and Cultural Resources Element is to provide policy guidance to protect, preserve, and enhance the city's cultural and historic resources.

8.1 CONTEXT

Cultural resources are defined as the collective evidence of the past activities and accomplishments of people. Buildings, objects, features, sites, and structures with scientific, historic, and cultural value are all examples of cultural resources. Cultural resources are finite and non-renewable resources that once destroyed cannot be returned to their original state.

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area.

Historic resources are those buildings, structures, objects or sites that are generally 50 years of age and which have significance due to their association with key events, individuals or ethnic groups, or which possess high artistic values. A nineteenth century railroad station, a mid-century modern office building, an early vernacular farmhouse or an ethnic neighborhood, all have the potential to be historic resources.

Contemporary Native American resources, also called ethnographic resources, can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values.

Relationship to General Plan Goals

Historic preservation is important in economic revitalization and heritage tourism. The adaptive reuse of older buildings is also "green" and contributes to the City's commitment to become fully sustainable. The Historic and Cultural Resources Element's historic resource objectives and policies provide a philosophical context and road map for the City's historic preservation program and are implemented through the City's Historic Preservation Ordinance.



Santa Fe Depot (1899) HP#11 (National Register) Photo: Karana Hattersley-Drayton



Bing Kong Tong Association Building (1900) HP #066 Photo: Karana Hattersley-Drayton



Del Webb Building (1964) Photo: Karana Hattersley-Drayton

This Element provides objectives and policies that support the following General Plan goals:

- 6. Protect, preserve, and enhance natural, historic, and cultural resources.
 - Emphasize the continued protection of important natural, historic and cultural resources in the future development of Fresno. This includes both designated historic structures and neighborhoods, but also "urban artifacts" and neighborhoods that create the character of Fresno.
- 15. Improve Fresno's visual image and enhance its form and function through urban design strategies and effective maintenance.
- 17. Recognize, respect, and plan for Fresno's cultural, social, and ethnic diversity, and foster an informed and engaged citizenry.
 - Emphasize shared community values and genuine engagement with and across different neighborhoods, communities, institutions, businesses and sectors to solve difficult problems and achieve shared goals for the success of Fresno and all its residents.

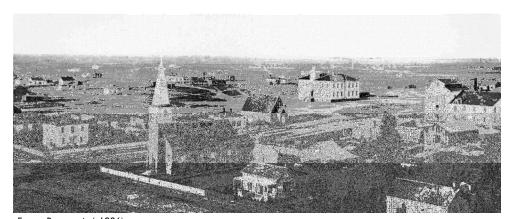
Historic Context

The Yokuts were the first residents of the Fresno area, with small tribes occupying the floodplains of the Big Dry Creek and the Little Dry Creek. There were no missions in the San Joaquin Valley but there were small Mexican era settlements such as Pueblo de las Junta, located at the confluence of the San Joaquin River and the Fresno Slough. The Spanish and Mexican influence is indicated through place names such as "Fresno," which means "ash tree" and which was first applied to the Fresno River. Following the Gold Rush of 1849, miners were drawn to the southern gold fields, and cattle ranchers and dryland farmers moved into the area.

In 1870, the Central Pacific Railroad began its diagonal push down the San Joaquin Valley. The railroad reached what is now Fresno in late April 1872. The location was uninviting at best, with barren sand plains in all directions. The nearest substantial supply of water was the San Joaquin River, 10 miles to the north. In 1872, the Contract and Finance Company, a subsidiary of the railroad, laid out the town in a rigid "gridiron" plan. The town grew slowly but in 1874 wrestled the county seat away from the former mining town of Millerton.

In 1875, the first of many agricultural colonies was developed in Fresno, drawing farming families from around the United States and from Europe. These colonies were constructed with miles of tree-lined boulevards and with water delivered to the individual farms through a lacework of canals, laterals and irrigation ditches.

Fresno was incorporated as a city in 1885, and with incorporation came improvements to the infrastructure. The 1887 boom in agriculture and land values brought prosperity to the community. In 1889 alone, buildings with an estimated value of one million dollars were erected along Mariposa Street in the heart of Downtown. By 1890, the population of Fresno was over 10,000, and land outside the original town site was subdivided into streets and lots. The depression of 1893 had little effect on the city, probably due to its agricultural base.



Fresno Panoramic (c1886) Photo: Courtesy of Fresno Historical Society Archives

The first horse drawn streetcars were introduced in 1892, and this greater mobility allowed for the construction of a variety of streetcar suburbs. Although the original "parent grid" of Fresno was parallel to the diagonal rail corridor these new subdivisions were surveyed to line up with the agricultural sections. As a consequence odd-shaped triangular lots still exist where the new grids meet the old.

By 1900, Fresno was the market center of what is now the richest farming region in the United States. Emigrants from Scandinavia, China, Japan, Armenia, Russia (Volga Germans), Mexico, and most recently Southeast Asia have contributed to the character and cultural heritage of the area.

Beginning in the early twentieth century, the Downtown was completely transformed, as elegant Victorian-style blocks and hotels were demolished and smaller buildings were eventually refaced with a modern storefront. What emerged was a more rational Classic Revival city, influenced by the latest trends in architectural design emanating from American cities such as New York, Chicago, and San Francisco, as well as international cities such as Paris.

Fresno continued to grow following World War 1, and in 1930, the city had a population of 52,513. While the Great Depression brought hardship to the city, it also resulted in the construction of a series of major civic buildings in the city through Franklin Roosevelt's "alphabet soup" of agencies. For example, the complex of buildings at Fresno's Chandler Airfield/Fresno Municipal Airport was constructed in 1936-7 with funding from the Works Progress Administration.

During and after World War II, there was a severe housing shortage as thousands of homeless transients arrived in the city, looking for agricultural work. In addition, returning servicemen and their families also needed housing. The first major post-war

subdivision completed was Mayfair, which included the first suburban shopping center. Manchester Center followed in 1955, with Fig Garden Village in 1956. Six blocks of the Downtown were converted to a pedestrian mall in 1964, with a design by landscape architect Garrett Eckbo. However, the suburban flight of the 1960s and the construction of the Fashion Fair shopping complex in 1969 helped lead to the decline of the Fulton Mall and the Downtown area.



Hmong Strawberry Farmer Courtesy of Joel Pickford



Detail, Pacific Southwest Bank Building (1923) HP #52 Photo: Karana Hattersley-Drayton

Today, Fresno is home to a diverse population, which includes descendants from the city's earliest pioneers and recently arrived immigrants. For many residents, the city still functions as a small town, despite its large size. Residents value the agricultural green belt that surrounds the city, with its geometric fields of grapevines and row crops; the Classic Revival high rise buildings along the Fulton Mall; the city's ethnic diversity; and the opportunities available for improving one's quality of life.

Fresno's Historic and Cultural Resources

HISTORIC AND ARCHITECTURALLY SIGNIFICANT BUILDINGS

As with many California towns of the nineteenth century, Fresno has a wealth of residential architectural styles. Due to fires and redevelopment in Downtown, the earliest building stock is gone, with a few notable exceptions. Examples of the late Queen Anne style survive, while the "Victorian" city has largely disappeared. Other residential building styles that are well represented in Fresno include Craftsman bungalows, Neoclassical cottages, American Foursquare, and Period Revival buildings, such as Tudors and Spanish Eclectic.



Listed on the National Register of Historic Places, the Fresno Memorial Auditorium (HP# 058) was built in 1935 in Downtown Fresno with partial funding from the PWA. For many years during the twentieth century, it was Fresno's most significant cultural facility.

Photo: Karana Hattersley-Drayton

In addition, Fresno has a vernacular tradition of building in adobe and hardpan, including mid-century modern garden office complexes constructed of stabilized adobe brick. Additional important local property types are the extant summer kitchens (backhaus) constructed by the Volga Germans, the "bungalow courts" scattered through the city's older neighborhoods and tankhouses tucked behind or adjacent to a farmhouse. The city's rail, agricultural, and ethnic history is imprinted on the landscape and in the resources, both above and below ground, which link residents to their past and provide a design aesthetic for new construction.

HISTORIC PRESERVATION PROGRAMS

In 1979, the City adopted a Historic Preservation Ordinance, which was amended and updated in 1999, 2009, and 2012. The Ordinance established both a citizens' Historic Preservation Commission and a Local Register of Historic Resources, modeled on the U.S. Secretary of the Interior's National Register of Historic Places. The Local Register includes three separate landmark programs: individual designation on the Local Register of Historic Resources, inclusion within a Local Register District, and inclusion in the Heritage Property program. In 2004, Fresno was the first city in California to be designated a "Preserve America Community" by former First Lady Laura Bush. This program recognizes communities that protect and celebrate their heritage, use their

historic assets for economic development and revitalization, and encourage people to experience and appreciate local historic resources through education and heritage tourism programs.



Garden office, 5151 N. Palm Ave. (Stevens and Zellmer) Photo: Karana Hattersley-Drayton

The City maintains a Local Register of Historic Resources that includes buildings, structures, objects, sites and districts that have sufficient integrity and are significant in Fresno's history. As of January 2014, there were 271 individual properties on the Local Register (over the years several resources have been removed from listing). Local Register properties include the Fresno Buddhist Temple (1920), the Fresno Memorial Auditorium (1935) and the Helm Building (1914).

Twenty-eight buildings and sites on the Local Register are also listed on the National Register of Historic Places. These "crown jewels" of the community include local landmarks such as the Old Fresno Water Tower (1894), the Thomas R. Meux Home (1889) and the streamline modern Tower Theatre (1939). Fourteen properties are also listed as Heritage Properties, such as the 1962 Calwa Rocket.

In addition to individual listings, Fresno has three designated historic districts: the Porter Tract (near Fresno City College), Wilson Island (near the Tower District), and

the Chandler Airfield/Fresno Municipal Airport. At least twelve other districts have been recommended through surveys, community or Specific Plans.



Detail, Tower Theater (1939) HP#190/National Register Photo: Karana Hattersley-Drayton



Old Fresno Water Tower (1894) HP#001/National Register Photo: Khalled Alkotob

NATIVE AMERICAN HERITAGE SITES

There have been sixteen Native American archeological sites recorded within the Planning Area by the Southern San Joaquin Valley Information Center (SSJVIC), a depository for information on cultural resources. According to the SSJVIC the probability of finding subsurface cultural resources is considered low to moderate in most areas, with the exception of the waterways. Current and past waterways and their surrounding regions are considered especially sensitive for cultural resources, as indigenous people utilized these areas as permanent villages, temporary camps, and task specific sites.

As part of the General Plan update process, the Native American Heritage Commission (NAHC) conducted a record search of the sacred lands file. The NAHC response listed II local Native American tribes that may have historic ties to the Planning Area, and letters of inquiry were sent, along with follow up phone calls, to the II tribal representatives; however, no responses were received. Nonetheless, the NAHC has characterized the City of Fresno as being "very sensitive" for potential impacts to Native American sacred sites and prehistoric deposits.

8.2 CITYWIDE HISTORIC AND CULTURAL PRESERVATION

The following policies are intended to maintain and enhance a citywide program for historic and cultural preservation, consistent with the State and Federal Certified Local Government program and State laws and regulations related to historic and cultural resources.

Nothing in the General Plan is intended to identify or designate any significant resources, potential significant resources, significant districts or potential significant districts. Identification and designation of resources and districts shall be done consistent with the City's Historic Preservation Ordinance and State and federal law.

Citywide Program

OBJECTIVE

HCR-1

Maintain a comprehensive, citywide preservation program to identify, protect and assist in the preservation of Fresno's historic and cultural resources.

IMPLEMENTING POLICIES

HCR-1-a Certified Local Government. Maintain the City's status as a Certified Local Government (CLG), and use CLG practices as the key components of the City's preservation program.

HCR-1-b Preservation Office, Commission and Program. Maintain the Preservation Office, Historic Preservation Commission, and preservation program to administer the City's preservation functions and programs.

HCR-1-c Historic Preservation Ordinance. Maintain the provisions of the City's Historic Preservation Ordinance, as may be amended, and enforce the provisions as appropriate.

Identification and Preservation

OBJECTIVE

HCR-2

Identify and preserve Fresno's historic and cultural resources that reflect important cultural, social, economic, and architectural features so that residents will have a foundation upon which to measure and direct physical change.

IMPLEMENTING POLICIES

HCR-2-a Identification and Designation of Historic Properties. Work to identify and evaluate potential historic resources and districts and prepare nomination forms for Fresno's Local Register of Historic Resources and California and National registries, as appropriate.

Commentary: Historic resources include buildings, structures, objects, and sites, as well as cultural and historic landscapes and traditional cultural properties (as defined by State and federal law). Examples of the latter categories include farm complexes, canal systems, signage, gardens, landscaped boulevards, and infrastructure, such as lighting and street furniture. As appropriate, nominations may be forwarded to the State Historic Resources Commission for consideration for the California Register of Historical Resources and/or the National Register of Historic Places. The Historic Preservation Commission is anticipated to play a key role in this process, including the evaluation of historic resources and districts.

HCR-2-b Historic Surveys. Prepare historic surveys according to California Office of Historic Preservation protocols and City priorities as funding is available.

Commentary: Early actions would be to survey historic resources located within the Bus Rapid Transit corridors slated for development and intensification and within the South Industrial District just south of Downtown. The results of these surveys would be posted on the City's website for use by the public and others interested in the City's historic resources.

- Project Development. Prior to project approval, continue to require a project site and its Area of Potential Effects (APE), without benefit of a prior historic survey, to be evaluated and reviewed for the potential for historic and/or cultural resources by a professional who meets the Secretary of Interior's Qualifications. Survey costs shall be the responsibility of the project developer. Council may, but is not required, to adopt an ordinance to implement this policy.
- HCR-2-d Native American Sites. Work with local Native American tribes to protect recorded and unrecorded cultural and sacred sites, as required by State law, and educate developers and the community-at-large about the connections between Native American history and the environmental features that characterize the local landscape.

Commentary: Development on archaeologically sensitive sites requires on-site monitoring by appropriate Native American consultant(s) and a qualified archaeologist for all grading, excavation, and site preparation activities that involve earth-moving operations.

HCR-2-e Alternate Public Improvement Standards. Develop and adopt Alternate Public Improvement Standards for historic landscapes to

ensure that new infrastructure is compatible with the landscape; meets the needs of diverse users, including motorists, cyclists, and pedestrians; and provides for proper traffic safety and drainage.

Commentary: City of Fresno Historic Preservation Commissioners and staff will work collaboratively to develop Alternate Public Improvement Standards for historic landscapes, such as Kearney Boulevard.

- HCR-2-f Archaeological Resources. Consider State Office of Historic Preservation guidelines when establishing CEQA mitigation measures for archaeological resources.
- HCR-2-g

 Demolition Review. Review all demolition permits to determine if the resource scheduled for demolition is potentially eligible for listing on the Local Register of Historic Resources. Consistent with the Historic Preservation Ordinance, refer potentially eligible resources to the Historic Preservation Commission and as appropriate to the City Council.
- HCR-2-h Minimum Maintenance Standards. Continue to support enforcement of the minimum maintenance provisions of the Historic Preservation Ordinance, as may be amended, and enforce the provisions as appropriate.

Commentary: The City of Fresno's Preservation staff and Commission will coordinate with the Code Enforcement division on enforcement.

HCR-2-i Preservation Mitigation Fund. Consider creating a preservation mitigation fund to help support efforts to preserve and maintain historic and cultural resources.

Commentary: Preservation mitigation funds are intended to be used for the restoration of historic properties or cultural heritage programming, and may be generated through a plan or program or other qualifying mechanism to allow for payment of fees to reduce impacts from loss of historic resources.

HCR-2-j Window Replacement. City staff will evaluate potential opportunities for identification of window replacements to ensure historic integrity is maintained while encouraging sustainability. In addition, city staff will evaluate window replacements in federally funded housing projects on a project-by-project basis with consideration for health, safety, historic values, sustainability, and financial feasibility.

HCR-2-k City-Owned Resources. Maintain all City-owned historic and cultural resources in a manner that is consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties, as appropriate.

HCR-2-l City Historic Preservation Team. Establish an inter-departmental Historic Preservation team to coordinate on matters of importance to history and preservation.

HCR-2-m

Local Register Listing. Recommend that property owners, who receive funds from the City of Fresno for rehabilitation of a property, consent to listing it on the Local Register of Historic Resources if the property meets the criteria for age, significance, and integrity. Publicly funded rehabilitation properties which may meet Local Register criteria will be presented to the City's Historic Preservation Commission for review.

HCR-2-n

Property Database and Informational System. Identify all historic resources within the city designated on the Local, State, or National register, and potential significant resources (building, structure, object or site) in existence for at least 45 years, and provide this information on the City's website.

Commentary: This information will help notify City staff, applicants and the public regarding historic resources and potential historic resources, allowing it to be incorporated into development and other projects at an early stage. Due to the passage of time and the increasing number of sites involved, it is anticipated a significant number of additional potential historic resources may be continually added to the website, and the City will strive to keep the website up to date. Inclusion of potential historic resources on the website does not make them historic resources until formally designated as required by law, and the fact that a potential historic resource is listed or not identified on the website does not preclude the City from subsequently determining it may or may not be a historical resource for the purposes of CEQA.

8.3 THE NEW CITY BEAUTIFUL

A great city is a mix of older buildings and new buildings, where the past is respected, but change is also considered vital for a healthy community. Historic preservation can play an important role in economic revitalization and heritage tourism. The adaptive reuse of older buildings is prudent and contributes to the City's commitment to

resiliency. In the Fresno Green program, described in the Context section 7.1 of Chapter 7, "New City Beautiful" policies recognize the importance of these philosophical connections by referencing the urban planning principles of the late nineteenth and early twentieth centuries, which linked art, architecture, urban planning, and health.

Fresno's history is rooted in agriculture, which still forms the basis for much of its heritage, industry, and wealth. The preservation of cultural and historic landscapes in general—and the conservation of agricultural lands in particular—is a critical component of protecting and promoting Fresno's identity. A major component of this General Plan is the preservation of nearby agricultural landscapes through the promotion of infill and compact development and the decision not to pursue expansion of the City's Sphere of Influence. The Urban Form, Land Use, and Design Element contains objectives and policies regarding the preservation of agriculture; objectives and policies presented below expand on the specific idea of supporting a New City Beautiful concept.

OBJECTIVE

HCR-3 Promote a "New City Beautiful" ethos by linking historic preservation, public art, and planning principles for Complete Neighborhoods with green building and technology.

IMPLEMENTING POLICIES

- HCR-3-a Adaptive Reuse. Promote the adaptive reuse and integration of older buildings into new projects as part of the City's commitment to nurturing a sustainable Fresno.
- **Public Art.** Collaborate with the arts community to promote the integration of public art into historic buildings and established neighborhoods. Link arts activities (such as Art Hop) with preservation activities.
- HCR-3-c Context Sensitive Design. Work with architects, developers, business owners, local residents and the historic preservation community to ensure that infill development is context-sensitive in its design, massing, setbacks, color, and architectural detailing.

Outreach and Education

OBJECTIVE

HCR-4 Foster an appreciation of Fresno's history and cultural resources.

IMPLEMENTING POLICIES

- HCR-4-a Inter-Agency Collaboration. Foster cooperation with public agencies and non-profit groups to provide activities and educational opportunities that celebrate and promote Fresno's history and heritage.
- HCR-4-b Heritage Tourism and Public Education. Promote heritage tourism and the public's involvement in preservation through conferences, walking tours, publications, special events, and involvement with the local media.
- HCR-4-c Training and Consultation. Provide training, consultation, and support in collaboration with Historic Preservation Commissioners to community members regarding Fresno's history, use of the U.S. Secretary of the Interior's Standards, and the California Historical Building Code, as time and resources allow.
- Public Archives. Maintain public archives that include information on all designated historic properties, as well as historic surveys, preservation bulletins, and general local history reference materials. Post survey reports, Historic Preservation Commission minutes and agendas, and other information of public interest on the historic preservation page of the City's website.
- **HCR-4-e Preservation Awards.** Continue to recognize the best work in preservation and neighborhood revitalization as may be appropriate through programs such as the biennial Mayoral Preservation Awards program.
- HCR-4-f Economic Incentives. Investigate the potential for developing a Mills Act program and possible sources of funding for the Historic Rehabilitation Financing Program.



The H.H. Brix Mansion (1919) HP #089 Photo: Karana Hattersley-Drayton

9

NOISE AND SAFETY

The purpose of the Noise and Safety Element is to identify the natural and man-made public health and safety hazards that exist within the Planning Area, and to establish preventative and responsive objectives and policies and programs to mitigate their potential impacts. Specifically included are strategies to mitigate noise impacts from new development and direction for noise mitigation. Hazards that are addressed include geologic and seismic hazards, flooding, wildland fires, hazardous materials, and airport safety.

9.1 CONTEXT

The noise section of this element identifies existing noise sources within the Planning Area and establishes policies, standards and programs to mitigate potential impacts through design and performance measures. This element contains policies that guide the location of industrial land uses and transportation facilities, since they are common sources of excessive noise levels, as well as the location of noise sensitive uses, such as residences, schools, churches, and hospitals.

This element also addresses safety issues, including seismic and geologic hazards, flood hazards, wildfire hazards, hazardous materials, airport safety, emergency response, and safety services. It includes policies on natural hazards mitigation planning, which respond to the Federal Disaster Mitigation Act of 2000 and the Federal Emergency Management Agency's implementing regulations and support the County's Multi-Jurisdictional Local Hazard Mitigation Plan, which the City has adopted.

Relationship to General Plan Goals

The objectives and policies of this element support the following General Plan goals:

- 9. Promote a city of healthy communities and improve quality of life in established neighborhoods.
 - Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.
- 16. Protect and improve public health and safety.

9.2 NOISE

California Government Code Section 65302(f) requires that general plans contain a Noise Element to identify and quantify potential noise problems and to provide effective policies for noise control and mitigation.

Noise Characteristics and Measurement

Noise is commonly defined as undesirable or unwanted sound. Noises vary widely in their scope, source, and volume, ranging from individual occurrences such as leaf blowers, to the intermittent disturbances of overhead aircraft, to the fairly constant noise generated by traffic on freeways. Three aspects of community noise are used in assessing the noise environment:

- Level (e.g., magnitude or loudness). Sound levels are measured and expressed in decibels (dB) with 10 dB roughly equal to the threshold of hearing. Figure NS-1 shows the decibel levels associated with different common sounds. Transient noise events may be described by their maximum A-weighted noise level (dBA).
- Frequency composition or spectrum. Frequency is a measure of the
 pressure fluctuations per second, measured in units of hertz (Hz). The
 characterization of sound level magnitude with respect to frequency is
 the sound spectrum, often described in octave bands, which divide the
 audible human frequency range (e.g., from 20 to 20,000 Hz) into ten
 segments.
- Variation in sound level with time, measured as noise exposure. Most community noise is produced by many noise sources that change gradually throughout the day and produce a relatively steady background noise having no identifiable source. People may become habituated to moderate continuous transportation-generated noise, such as that generated by roadways. Identifiable events of brief duration, such as aircraft flyovers and the passage of freight trains, are more noticeable because they cause the community noise level to vary episodically instead of gradually. A single number called the equivalent sound level or "Leq" describes the average noise exposure level over a period of time. Analysis of noise for planning purposes uses descriptors which emphasize the effect of night time noise, because during that time noise is perceived as more disruptive because background noise levels are generally lower than in the daytime, making outside noise intrusions more noticeable.

These weighted noise descriptors include:

 Community Noise Equivalent Level (CNEL) which reflects a 24-hour average of ambient sound but adds a five percent weighting factor for both evening (7 to 10 p.m.) and night-time (10 p.m. to 7 a.m.) sound; and Day-Night Average Level (L_{dn}) which reflects a 24-hour average of ambient sound but adds a 10 percent weighting factor for sound occurring during night-time hours (10 p.m. to 7 a.m.).

Both CNEL and L_{dn} reflect noise exposure over an average day with weighting to reflect the increased sensitivity to noise during the evening and night. The two descriptors are roughly equivalent. The CNEL descriptor is used in relation to major continuous noise sources, such as aircraft or traffic, and is the reference level for the Noise Element under State planning law. The general practice is to identify noise contours around transportation facilities such as airports, rail lines, highways, and major streets, and to identify noise levels at property lines from stationary sources such as industrial equipment.

Knowledge of the following relationships is helpful in understanding how changes in noise and noise exposure are perceived:

- Except under special conditions, a change in sound level of 1 dB cannot be perceived;
- A 3 dB change is considered a just-noticeable difference;
- A 5 dB change is required before any noticeable change in community response would be expected. A 5 dB increase is often considered a significant impact; and
- A 10 dB increase is subjectively heard as an approximate doubling in loudness and almost always causes an adverse community response.

Forty-five dBA is usually set as the limit on indoor noise detectable from outdoor sound sources. Sixty dBA is considered to be the sound level of normal conversation and levels within this range are often used as a limit on outdoor ambient noise levels for suburban residential areas. Outdoor ambient noise levels are permitted to be higher for urban areas and commercial sites, and higher still for industrial areas.

Noise Generation in Fresno

In the urban environment, noise generators, such as transportation corridors and industrial uses, occur in close proximity to sensitive noise receivers, such as residential uses. Some land uses potentially constitute both a noise generator and a simultaneous noise receiver, e.g., recreational sites. Fresno has special noise considerations because it has grown up around two major rail corridors, and many freight trains run through the heart of the city daily. Fresno contains three airports and has four State highways that traverse it, as well as major streets at half-mile and one-mile grid intervals, carrying large volumes of passenger vehicle

and truck traffic. Industrial and public facilities in and around the city also generate noise from processing materials and from the operation of equipment such as large pumps and backup generators. Residential and commercial uses also contribute noise from smaller equipment, such as swimming pool pumps, air conditioning units, and compressors for refrigeration.



Industrial and public facilities in and around Fresno can generate noise, and the City requires enclosure, muffling, and/or extra setbacks for stationary noise sources so that nearby properties are not exposed to excessive noise levels.

Longstanding City policy for stationary sources has been to require enclosure, muffling, and/or greater setbacks so that adjacent properties are not exposed to excessive noise levels. Nuisance noise abatement has been accomplished through the City's Noise Ordinance. Noise from transportation facilities has been controlled primarily by State and federal standards but also by distancing sensitive uses from these facilities, and by use of sound-proofing construction measures, such as masonry walls and sealed buildings.

Title 24 of the California Building Code sets out energy conservation requirements, which have also greatly helped mitigate indoor noise levels by requiring dual-pane windows and additional insulation in buildings. Federal Aviation Administration regulations for airports have supported planning and zoning designations, which have kept sensitive uses away from the noise attendant upon flight paths. Each of the three airports in

Fresno has its own noise policies and land use compatibility criteria, all of which are incorporated into this Plan.

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Existing Noise Levels

The existing noise conditions in the City were measured at nine locations from May 30 to June 1, 2012. Noise monitoring sites were selected to be representative of typical residential, commercial, and industrial sites within the Planning Area, as well as arterial roadways, elevated and below-grade freeways, and railroad crossings with and without train horn soundings. At each of the nine long-term 24-hour noise monitoring sites, day-night statistical noise level trends were recorded to develop L_{dn} values. Descriptions of each location and the measured noise levels are listed in Table 9-1.

TABLE 9-1: MEASURED EXISTING NOISE LEVELS ¹	
	Noise Level
	(dBA L _{dn)}
Railroad crossing at Shields Ave.	84
Along Railroad near W. Barstow Ave.	74
SR 41 between W. Barstow & W. Shaw Ave.	76
SR 180 near N. Peach Ave.	76
E. Shaw Ave. near N. Cedar Ave.	72
N. Blackstone Ave. near E. Ashlan Ave.	70
S. Elm Ave. near E. Jensen Ave.	68
N. Valentine Ave. between W. Ashlan & W. Holland Ave.	67
S .Fruit Ave. north of Church Ave.	65

^{1.} Values provided have been normalized to the reference distance of 100 feet.

Existing noise levels in the city are principally generated by transportation noise sources (refer to Figure NS-2: Existing Noise Contours). Vehicular traffic noise is the dominant source in most areas, but aircraft and rail activity are also significant sources of environmental noise in the local areas surrounding these operations. In several locations, industrial noise was clearly audible. However, overall average daily noise levels at existing nearby noise-sensitive receptors (e.g., residential areas) typically consist of traffic noise primarily and industrial noise secondarily. New noise-sensitive developments in close proximity to industrial land uses could be exposed to greater industrial noise levels.

Traffic Noise

The level of highway traffic noise depends on three factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Vehicle noise is a combination of the noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include: distance from the highway, terrain, vegetation, pavement type and condition, and natural and structural

obstacles. While tire noise from autos is generally located at ground level, truck noise sources can be located as high as 10 to 15 feet above the roadbed due to tall exhaust stacks and higher engines.

Future noise exposure contours for Fresno's major roadways were modeled by applying the Federal Highway Administration's noise modeling procedure, using roadway, speed, and traffic mix data from the City and projected traffic volumes based on anticipated development under the General Plan.

In establishing noise contours for land use planning, it is customary to ignore noise attenuation afforded by buildings, roadway elevations, and depressions, and the barrier effect of natural terrain features. The result is a worst-case estimate of the existing and future (projected) noise environment. The assumption is that it is more desirable to overestimate the potential noise at a future noise-sensitive development site than to underestimate the noise environment and allow for potentially incompatible land-use development. The developed noise contours for the City are conservative, meaning that the contours are modeled with minimal noise attenuation by natural barriers, buildings, with the exception of significantly depressed sections of highways.

Future development within the Planning Area will result in increased traffic volumes, thus increasing noise levels in some areas (refer to Figure NS-3: Future Noise Contours). For example, future noise levels along highways are projected to increase by two to five decibels, while noise levels along most existing roadways are projected to increase by one to five decibels. New roadways, significantly expanded roadways, or sparsely populated areas where significant new development may also experience an increase in noise levels by more than five decibels. While there will be increases in some noise levels, efforts can be taken to help minimize such instances. For example, siting noise sensitive uses away from high-noise areas (e.g., major transportation routes) and buffering noise through design will help minimize future noise-related land use conflicts.

Railroad Operations Noise

Railroad activity in Fresno primarily occurs along two rail corridors, however there are also several spur lines. Warning horns generally are signaled within one-quarter mile of a grade crossing, although the area around the Community Regional Medical Center in downtown is designated as a quiet zone. Where grade crossings exist, and warning horns and crossing alarms are signaled, individual single event noise levels associated with a train generally reach 105 dBA to 110 dBA at a distance of 100 feet from the track centerline. Away from grade crossings, train pass-by noise levels are lower, typically 85 dBA to 90 dBA at a distance of 100 feet.

Airport Noise

There are two public airports in the Planning Area, Fresno-Yosemite International Airport and Fresno Chandler Executive Airport, and one private airport open to public use, Sierra Sky Park. In conjunction with Fresno-Yosemite International Airport, the Air National Guard maintains an airbase for military flight and training operations.

Each airport has its own City of Fresno airport land use plan designed to provide for public safety. In addition, the Fresno County Airport Land Use Commission (ALUC) must prepare an Airport Land Use Compatibility Plan (ALUCP) as required by the Caltrans Division of Aeronautics for each airport. ALUC and the Federal Aviation Administration (FAA) provide guidance to local jurisdictions on determining appropriate and compatible adjacent land uses through the detailed findings and policies of ALUCPs. Among other objectives, these airport plans strive to minimize the effects of aircraft noise on communities adjacent to airports and prevent uses incompatible with airport operations from locating near the airport. This General Plan and all other City land use plans must either be compatible with the adopted ALUCP or make a statement of overriding consideration justifying its incompatibility.

Figures NS-4 through 6 depict each airport's noise and safety zones that have been established to identify the compatibility criteria to apply to any given project proposed within the airport's compatibility zones. The noise contours shown on the maps are developed following Federal Aviation Regulation (FAR) Part 150 *Airport Noise Compatibility Planning*. The Part 150 program is designed to lessen the effect of airport noise on the surrounding community as development is proposed around an airport or

the airport is modified or expanded. The specific criteria applied for each contour can be found in each airport's ALUCP, both the City's and the one prepared by the ALUC.

Major Stationary Noise Sources

Noise can result from many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and State employee health and safety regulations set by the Occupational Safety and Health Administration (OSHA) and Cal-OSHA, but exterior noise levels may exceed locally acceptable standards. Commercial, recreational, and public service facility activities can also produce noise that affects adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components that may be annoying to individuals who live nearby. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day and existing ambient noise levels.

Industrial uses in Fresno are typically located in industrial districts near freeways and commercial uses, away from residences and other sensitive noise receptors. Noise sources associated with service commercial uses such as automotive repair facilities, wrecking yards, tire installation centers, car washes, loading docks, etc., are found at various locations within the city. The noise emissions of these types of uses are dependent on many factors and are therefore difficult to quantify precisely. Nonetheless, noise generated by the these uses contributes to the ambient noise environment in immediate vicinity of these uses and should be considered where either new noise-sensitive uses are proposed nearby or where similar uses are proposed in existing residential areas.

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Existing Fresno Yosemite International Airport Noise and Safety Zones Figure NS-4:

Existing Fresno Chandler Executive Airport Noise and Safety Zones Figure NS-5:

Figure NS-6: Existing Sierra Skypark Airport Noise and Safety Zones

There are numerous park and school uses within the city. Noise generated by these uses depends on the age and number of people utilizing the respective facility at a given time and the types of activities they are engaged in. School playing field activities tend to generate more noise than those of neighborhood parks, as the intensity of school playground usage tends to be higher. At a distance of 100 feet from an elementary school playground being used by 100 students, average and maximum noise levels of 60 and 75 dB, respectively, can be expected. At organized events such as high-school football games with large crowds and public address systems, the noise generation is often significantly higher. As with service commercial uses, the noise generation of parks and school playing fields is variable.

Noise Control - Maximum Noise Level Standards

With the proposed intensification of land uses in the city, noise control will be an increasing consideration for infrastructure and new development, particularly for infill residential projects. Major cities in California commonly consider maximum noise levels of 65 dB to be considered "normally acceptable" for unshielded residential development including outdoor space in an urban environment. Suburban and rural jurisdictions tend to prefer a 60 dB or lower threshold for residential areas. Noise levels from 65 dB to 70 dB fall within the "conditionally unacceptable" range, and those in the 70 to 75 dB range are considered "normally unacceptable."

The General Plan is consistent with noise control practice in urban areas, employing 60 dB as being a desirable level, but accepting 65 dB as being in the "normally acceptable" range for noise due to the number of transportation sources located in proximity to urban residential areas. This policy supports the development of infill residential projects, as well as non-residential infill projects by setting a realistic, achievable threshold of impact for new development.

Section 10-101 of the City's Municipal Code contains the City's Noise Ordinance, which establishes excessive noise guidelines and exemptions. Standards are set for ambient noise based on district type (residential, commercial, and industrial) and time of day. Upon adoption of the new noise limits and policies proposed in this General Plan Update, the City will commence an update of its Noise Ordinance to provide regulatory consistency with adopted policies.

Acceptable ranges for exterior noise levels in the Noise Ordinance will be updated to be consistent with this General Plan. This update will need to increase the threshold in residential districts to 65 decibels and adjust noise limits for other planned uses. The updated Noise Ordinance will also specify maximum hourly noise levels for outdoor activity areas and indoor spaces measurement standards; uniform guidelines for acoustical studies based on current professional standards; required noise mitigation standards and enforcement procedures for stationary noise sources which cause the allowable noise limits to be exceeded. Finally, the Noise Ordinance will establish performance standards for noise reduction for new developed property that may be exposed to community noise levels exceeding target acceptable noise levels for outdoor activity levels and interior spaces.

TABLE 9-2: TRANSPORTATION (NON-AIRCRAFT) NOISE SOURCES					
Noise-Sensitive Land Use ¹	Outdoor Activity Areas ²	Interior Spa	aces		
	L _{dn} /CNEL, dB	L _{dn} /CNEL, dB	L _{eq} dB ²		
Residential	65	45	-		
Transient Lodging	65	45	_		
Hospitals, Nursing Homes	65	45	_		
Theaters, Auditoriums, Music Halls	-	-	35		
Churches, Meeting Halls	65	-	45		
Office Buildings	-	-	45		
Schools, Libraries, Museums	-	-	45		

Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

^{2.} As determined for a typical worst-case hour during periods of use.

TABLE 9-3: STATIONARY NOISE SOURCES ¹				
	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. – 7:00 a.m.)		
Hourly Equivalent Sound Level (Leq), dBA	50	45		
Maximum Sound Level (Lmax), dBA	70	60		

The Department of Development and Resource Management Director, on a case-by-case basis, may
designate land uses other than those shown in this table to be noise-sensitive, and may require appropriate
noise mitigation measures.

As determined at outdoor activity areas. Where the location of outdoor activity areas is unknown or not applicable, the noise exposure standard shall be applied at the property line of the receiving land use. When ambient noise levels exceed or equal the levels in this table, mitigation shall only be required to limit noise to the ambient plus five dB.

OBJECTIVE

NS-1 Protect the citizens of the City from the harmful and annoying effects of exposure to excessive noise.

IMPLEMENTING POLICIES

NS-1-a Desirable and Generally Acceptable Exterior Noise **Environment.** Establish 65 dB_A L_{dn} or CNEL as the standard for the desirable maximum average exterior noise levels for defined usable exterior areas of residential and noisesensitive uses for noise, but designate 60 dB_A L_{dn} or CNEL (measured at the property line) for noise generated by stationary sources impinging upon residential and noisesensitive uses. Maintain 65 dB_A L_{dn} or CNEL as the maximum average exterior noise levels for non-sensitive commercial land uses, and maintain 70 dB_A L_{dn} or CNEL as maximum average exterior noise level for industrial land uses, both to be measured at the property line of parcels where noise is generated which may impinge on neighboring properties.

Commentary: The Noise Ordinance will define usable exterior areas for single family and multiple family residential and noise sensitive uses to include rear yards and other outdoor areas intended to accommodate leisure or active use, excluding front or side yard areas, and front or side porches. Balconies or roof decks facing front and side yards shall be included in designated areas to be protected from noise where these spaces are used to calculate compliance with required outdoor living area as required by adopted development standards.

- NS-1-b Conditionally Acceptable Exterior Noise Exposure Range. Establish the conditionally acceptable noise exposure level range for residential and other noise sensitive uses to be 65 dB L_{dn} or require appropriate noise reducing mitigation measures as determined by a site specific acoustical analysis to comply with the desirable and conditionally acceptable exterior noise level and the required interior noise level standards set in Table 9-2.
- NS-1-c Generally Unacceptable Exterior Noise Exposure Range. Establish the exterior noise exposure of greater

than 65 dB L_{dn} or CNEL to be generally unacceptable for residential and other noise sensitive uses for noise generated by sources in Policy NS-1-a, and study alternative less noise-sensitive uses for these areas if otherwise appropriate. Require appropriate noise reducing mitigation measures as determined by a site specific acoustical analysis to comply with the generally desirable or generally acceptable exterior noise level and the required 45 dB interior noise level standards set in Table 9-2 as conditions of permit approval.

Allowable Exterior Noise Environment for BRT and Activity Centers. Exclude residential and noise sensitive uses located along Bus Rapid Transit corridors or within Activity Centers identified by this General Plan, from exterior noise standards in Policies NS-1-a through NS-1-c where it is determined application of noise mitigation measures will be detrimental to the realization of the General Plan's mixed use policies.

Commentary: Interior noise level standards of Table 9-2 will still apply.

- NS-1-e Update Noise Ordinance. Update the Noise Ordinance to ensure that noise exposure information and specific standards for both exterior and interior noise and measurement criteria are consistent with this General Plan and changing conditions within the city and with noise control regulations or policies enacted after the adoption of this element.
- NS-1-f

 Performance Standards. Implement performance standards for noise reduction for new residential and noise sensitive uses exposed to exterior community noise levels from transportation sources above 65 dB L_{dn} or CNEL, as shown on Figure NS-3: Future Noise Contours, or as identified by a project-specific acoustical analysis based on the target acceptable noise levels set in Tables 9-2 and Policies NS-1-a through NS-1-c.
- NS-1-g Noise mitigation measures which help achieve the noise level targets of this plan include, but are not limited to, the following:

- Façades with substantial weight and insulation;
- Installation of sound-rated windows for primary sleeping and activity areas;
- Installation of sound-rated doors for all exterior entries at primary sleeping and activity areas;
- Greater building setbacks and exterior barriers;
- Acoustic baffling of vents for chimneys, attic and gable ends;
- Installation of mechanical ventilation systems that provide fresh air under closed window conditions.

The aforementioned measures are not exhaustive and alternative designs may be approved by the City, provided that a qualified Acoustical Consultant submits information demonstrating that the alternative design(s) will achieve and maintain the specific targets for outdoor activity areas and interior spaces.

- NS-1-h Interior Noise Level Requirement. Comply with the State Code requirement that any new multifamily residential, hotel, or dorm buildings must be designed to incorporate noise reduction measures to meet the 45 dB L_{dn} interior noise criterion, and apply this standard as well to all new single-family residential and noise sensitive uses.
- NS-1-i Mitigation by New Development. Require an acoustical analysis where new development of industrial, commercial or other noise generating land uses (including transportation facilities such as roadways, railroads, and airports) may result in noise levels that exceed the noise level exposure criteria established by Tables 9-2 and 9-3 to determine impacts, and require developers to mitigate these impacts in conformance with Tables 9-2 and 9-3 as a condition of permit approval through appropriate means.

Noise mitigation measures may include:

 The screening of noise sources such as parking and loading facilities, outdoor activities, and mechanical equipment;

- Providing increased setbacks for noise sources from adjacent dwellings;
- Installation of walls and landscaping that serve as noise buffers;
- Installation of soundproofing materials and doubleglazed windows; and
- Regulating operations, such as hours of operation, including deliveries and trash pickup.

Alternative acoustical designs that achieve the prescribed noise level reduction may be approved by the City, provided a qualified Acoustical Consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces. As a last resort, developers may propose to construct noise walls along roadways when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility, with no City funding.

NS-1-j Significance Threshold. Establish, as a threshold of significance for the City's environmental review process, that a significant increase in ambient noise levels is assumed if the project would increase noise levels in the immediate vicinity by 3 dB L_{dn} or CNEL or more above the ambient noise limits established in this General Plan Update.

Commentary: When an increase in noise would result in a "significant" impact (increase of three dBA or more) to residents or businesses, then noise mitigation would be required to reduce noise exposure. If the increase in noise is less than three dBA, then the noise impact is considered insignificant and no noise mitigation is needed.

By setting a specific threshold of significance in the General Plan, this policy facilitates making a determination of environmental impact, as required by the California Environmental Quality Act. It helps the City determine whether (1) the potential impact of a development project on the noise environment warrants mitigation, or (2) a statement of overriding considerations will be required.

- NS-1-k

 Proposal Review. Review all new public and private development proposals that may potentially be affected by or cause a significant increase in noise levels, per Policy NS-1-i, to determine conformance with the policies of this Noise Element. Require developers to reduce the noise impacts of new development on adjacent properties through appropriate means.
- NS-1-I Enforcement. Continue to enforce applicable State Noise Insulation Standards and Uniform Building Code noise requirements, as adopted by the City.
- NS-1-m Transportation Related Noise Impacts. For projects subject to City approval, require that the project sponsor mitigate noise created by new transportation and transportation-related stationary noise sources, including roadway improvement projects, so that resulting noise levels do not exceed the City's adopted standards for noise-sensitive land uses.
- NS-1-n Best Available Technology. Require new noise sources to use best available control technology to minimize noise emissions.

Commentary: Noise from mechanical equipment can be reduced by soundproofing materials and sound-deadening installation; controlling hours of operation will also reduce noise impacts during the morning or evening.

NS-1-o

Sound Wall Guidelines. Acoustical studies and noise mitigation measures for projects shall specify the heights, materials, and design for sound walls and other noise barriers. Aesthetic considerations shall also be addressed in these studies and mitigation measures such as variable noise barrier heights, a combination of a landscaped berm with wall, and reduced barrier height in combination with increased distance or elevation differences between noise source and noise receptor, with a maximum allowable height of 15 feet. The City will develop guidelines for aesthetic design measures of sound walls, and may commission area wide noise mitigation studies that can serve as templates for acoustical treatment that can be applied to similar situations in the urban area.

Commentary: While acoustical studies need to be sitespecific in order to appropriately assess particular settings, having prototypical design measures and noise control templates that can be applied for similar situations and contexts can facilitate infill and other development.

NS-1-p

Airport Noise Compatibility. Implement the land use and noise exposure compatibility provisions of the adopted Fresno Yosemite International Airport Land Use Compatibility Plan, the Fresno-Chandler Executive Airport Master and Environs Specific Plan, and the Sierra Sky Park Land Use Policy Plan to assess noise compatibility of proposed uses and improvements within airport influence and environs areas.

9.3 SEISMIC AND GEOLOGIC HAZARDS

Seismicity

Fresno is in one of the more geologically stable areas of California and does not lie within a known active earthquake fault zone. Although a number of faults are located within the Sierra Nevada Mountain Range, none are considered active. The nearest active fault is located by Independence, CA, approximately 100 miles to the east along the Fresno County-Inyo County boundary. Overall, seismic-related concerns (including liquefaction and subsidence) are considered fairly minor for the Planning Area. The city is not located in an Alquist-Priolo Special Fault Study Zone, that is, it has not been identified as a zone of special study around active faults. Hidden faulting in Western Fresno County did manifest itself in the Coalinga Earthquake of 1983, causing ground shaking in Fresno, but minimal damage. In the future, Fresno could be affected by major seismic events from the following active fault systems in other regions of California:

- The San Andreas Fault paralleling the Coast Ranges in western Fresno County;
- The Owens Valley Fault system in the Eastern Sierra Region of California:
- The White Wolf Fault paralleling the Tehachapi range southeast of Bakersfield
- Hidden thrust fault(s) in the west side of the San Joaquin Valley; and

 The Long Valley Caldera, a seismic and volcanic area in the Eastern Sierra that lies between Mono Lake and Crowley Lake.

The principal potential earthquake hazard for Fresno is ground shaking, which could cause damage to buildings and infrastructure elements such as bridges and pipes. The distance between Fresno and major faults minimizes this potential hazard.

Soil Hazards

Expansive soils, soil erosion, and water infiltration are issues that can cause safety concerns in Fresno.

Expansive soils are largely comprised of clays, which expand in volume when water is absorbed and shrink as the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. If the shrink-swell potential is rated moderate to high, then damage to buildings, roads, structural foundations, and pipes can occur. In the northern portion of Fresno's SOI, there are some areas of expansive clay soil that require special construction standards for foundations and infrastructure. Expansive clay problems can be surmounted by appropriate engineering design and construction techniques.

Highly erodible soils are those that are easily carried by water and, to a lesser extent, by wind. Surface erosion is more commonly visible, but subsurface erosion can lead to damage to pipes, roads, foundations, and other structural elements. Soil erosion potential is identified by a specific soil's "K Factor," which provides an indication of a soil's inherent susceptibility to erosion, absent of slope and groundcover factors. Values of K range from 0.05 to 0.43, and the higher the value, the more susceptible the soil is to sheet erosion by water. The addition of weight, such as pools and decks, onto susceptible soil, as well as private irrigation systems and the action of burrowing rodents, are factors that may aggravate land slippage. Fresno is not susceptible to soil erosion with the exception of land within 300 feet of the toe of the San Joaquin River bluffs, where the steep slopes and soil composition predispose it to instability and erosion.

Soils are also defined by their rainfall runoff potential, which is the degree to which soil allows or disallows rainfall water to infiltrate and transmit down to the groundwater table. Groups of soils having similar runoff potential under similar storm and cover conditions, absent of slope, are placed into one of four hydrologic group classifications: A, B, C or D. Definitions of the classes are as follows:

- Soil Group A. High Infiltration (Low runoff potential)—Soils having high infiltration rates, even when thoroughly wetted and consisting chiefly of deep, well drained sands or gravels. These soils have a high rate of water transmission.
- Soil Group B. Moderate Infiltration—Soils having moderate infiltration rates, even when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately fine to moderately course textures. These soils have a moderate rate of transmission.
- Soil Group C. Slow Infiltration—Soils having slow infiltration rates, even when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine textures. These soils have a slow rate of transmission.
- Soil Group D. Very Slow Infiltration (High runoff potential)—Soils
 having very slow infiltration rates, even when thoroughly wetted and
 consisting chiefly of clay soils with a high swelling potential, soils with
 a permanent high water table, soils with a clay pan or clay layer at or
 near the surface, and shallow soils over nearly impervious material.
 These soils have a very slow rate of water transmission.

Hydrological groups are used in equations that estimate runoff from rainfall. These estimates are needed for solving hydrologic problems that arise in planning watershed protection and flood prevention projects and for designing structures for the use, control, and disposal of water.

OBJECTIVE

NS-2 Minimize risks of property damage and personal injury posed by geologic and seismic risks.

IMPLEMENTING POLICIES

- **NS-2-a Seismic Protection.** Ensure seismic protection is incorporated into new and existing construction, consistent with the Fresno Municipal Code.
- NS-2-b Soil Analysis Requirement. Identify areas with potential geologic and/or soils hazards, and require development in these areas to conduct a soil analysis and mitigation plan by a registered civil engineer (or engineering geologist

specializing in soil geology) prior to allowing on-site drainage or disposal for wastewater, stormwater runoff, or swimming pool/spa water.

- NS-2-c Landfill Areas. Require proposed land uses on or near landfill areas to be designed and maintained to comply with California Code of Regulations, Title 27, Section 21190, Post Closure Land Use.
- NS-2-d Bluff Preservation Overlay Zone. Per the requirements of the Bluff Preservation Overlay Zone District and Policy POSS-7-f (Chapter 5, Parks and Open Space), the following standards shall be applicable for property located within the Bluff Preservation zone:
 - Require proposed development within 300 feet of the toe of the San Joaquin River bluffs to undertake an engineering soils investigation and evaluation report that demonstrates that the site is sufficiently stable to support the proposed development, or provide mitigations to provide sufficient stability; and
 - Establish a minimum setback of 30 feet from the San Joaquin River bluff edge for all buildings, structures, decks, pools and spas (which may be above or below grade), fencing, lighting, steps, etc.
 - An applicant may request to reduce the minimum setback to 20 feet from the bluff edge if it can be demonstrated, to the satisfaction of the City's Building Official and the Planning Director, that the proposed building, structure, deck, pool and/or spas (which may be above or below grade), fencing, steps, etc., will meet the objectives of the Bluff Preservation Overlay Ordinance. In no case shall the setback be reduced to less than 20 feet.

9.4 STORM DRAINAGE AND FLOOD CONTROL

Fresno's precipitation comes in episodic storm events, which may be severe and may cause localized flooding. The Fresno area receives inflows

of regional runoff from a large watershed to the east, and is in the path of natural drainage from the valley floor, foothills and Sierra Nevada range. The San Joaquin River, confined between bluffs, comprises the northern boundary of Fresno. Figure NS-7: Flood Plains shows the locations of the existing 100-year floodplains in the Planning Area, as mapped by FEMA's National Flood Insurance Maps.

The Fresno Metropolitan Flood Control District (FMFCD) is responsible for flood control and storm water planning and management. It was authorized as a "special act" district and established by voter approval in 1956 to serve a 54-square mile area. Since its creation the district boundaries have been expanded several times and now include approximately 400 square miles—almost the entire portion of the Fresno-Clovis Metropolitan Area, with the exception of 6.5 square miles of SEDA which has yet to be annexed to the District. Once all of SEDA is annexed, FMFCD will develop and adopt Storm Water Master Plans for SEDA based on this General Plan.

The District was formed for the purpose of acquiring and constructing flood control and drainage facilities to safely convey, discharge, store and conserve storm water received on land within the District boundaries or which flows through the District. Eight flood control reservoirs and major basin facilities have been constructed along the Big Dry Creek, Redbank Creek, Dog Creek, Pup Creek, and Fancher Creek, comprising the Fresno Stream Group. The District also serves as the local sponsor of the U.S. Army Corps of Engineers for five the flood control facilities within the Redbank-Fancher Creeks Flood Control Project.

Figure NS-7:	Existing Floodplains	
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The urban storm water drainage program provides a system comprised of storm drainage collection, conveyance, detention and retention serving planned urban and rural areas within the Fresno-Clovis environs. The adopted Storm Drainage and Flood Control Master Plan divides the service area into 163 local drainage areas. Collectively, the system has in excess of 600 miles of storm drainage pipeline and 154 local stormwater management basins together with ancillary facilities, such as storm water lift pump stations.

This system expands as the area of urbanization expands. Facilities are funded and constructed by owners/developers of properties pursuant to the City's drainage fee requirements in Fresno Municipal Code section 12-1901 et. seq., or constructed by FMFCD under publicly awarded contracts. The City also requires drainage to be directed to public streets, so that storm water travels along paved surface areas to inlets per the Fresno Municipal Code. The inlets accept the water into the storm drainage pipelines which convey water to stormwater management basins. The pipeline system is designed with a peak flow capacity to accommodate a two-year intensity storm event (50 percent probability of occurring in any given year). The basin capacity utilizes the percentage of runoff from the two-year pipeline data, but with a volume from six inches of rainfall. All basins are designed with relief systems so that additional capacity can be created by dewatering between rainfall events. The District's drainage services program includes topographic mapping; master plan engineering and facility design; system construction; and operation and maintenance.

Any infill project that increases the amount of impervious surfacing, changes the existing drainage pattern(s), and/or generates storm flows faster or greater than the existing condition could result in the existing pipeline collection system being overburdened. Typically, infill projects are required to mitigate any increase in runoff by either increasing the capacity of the existing system (i.e., build more infrastructure) or holding storm runoff on site to ensure offsite runoff does not increase.

As the owner and operator of the storm water drainage system, the District has primary responsibility for implementing the U.S. Clean Water Act requirements through a National Pollutant Discharge Elimination System discharge permit issued by the Regional Water Quality Control Board (RWQCB). This program is comprised of pollutant removal in the stormwater basins and education to avoid storm water pollution; best management practices for commercial, industrial and new development storm water quality control; monitoring to assess storm water impacts upon

the quality of receiving water; and the preparation of ordinances for adoption by local governments to enforce storm water quality control measures.

The District's programs include water conservation efforts through its design and operation of storm water drainage facilities to detain and retain water from storm events as well as receive dry season surface water supplies for groundwater recharge. Approximately 90 basins are intertied with Fresno Irrigation District (FID) canals and receive surface water through contracts with the irrigation district and the cities of Fresno and Clovis. Storm water drainage basins serving primarily residential areas are also designed to accommodate passive and active recreational activities. Recreational use of 27 basins has been accommodated by improvements including baseball and playground areas, and two basins have been specifically designed to accommodate use by individuals with disabilities, while a third accommodates a high quality little league baseball facility. District flood control and drainage facilities also provide important open space in the urban area and areas for wildlife habitat. Through a memorandum of understanding, which serves as a Section 1601 Master Streambed Alteration Agreement with the California Department of Fish and Wildlife, restoration and protection of rural streams for flood control purposes also brings long-term net benefits for fish, wildlife, water quality, native plants, and stream habitats.

To address the risks of damaging floods, the City of Fresno adopted and recently updated a Flood Plain Ordinance that meets the standards imposed by California Government Code Section 65302(g)(2). The Government Code specifies that cities should include either directly, or through adoption by reference to a flood plain ordinance (65302(g)(6)), flood hazards zones and maps on flooding in the area (65302(g)(2)(A)), goals to protect new development against flooding (65302(g)(2)(B)), and implementation measures to achieve the stated goals (65302(g)(2)(C)).

The City of Fresno Flood Plain Ordinance incorporates by reference flood hazard zones established by the Federal Emergency Management Agency (FEMA), Federal Insurance Rate Maps completed for Fresno County, and other maps as are needed to review flood risk (FMC 11-607). The Flood Plain Ordinance protects against risk to new and existing development by requiring any building proposed within a special flood hazard area to obtain a building permit and provide information specifically related to flood risk (11-613). The permit is reviewed by the Building Official, who has been designated as the Flood Plain Administrator, to ensure that the project will

be reasonably safe from flooding and will not adversely increase flood risk elsewhere (11-614, 11-616). The Ordinance also includes specific development and construction standards to minimize flood risk (11-623 to 11-636). This permit review process and the applicable standards help to implement the goals found within the Flood Plain Ordinance Statement of Purpose (11=603) and also serve to both implement and complement the Goals, Objectives, and Implementing Policies found within this General Plan.

OBJECTIVE

NS-3 Minimize the risks to property, life, and the environment due to flooding and stormwater runoff hazards.

IMPLEMENTING POLICIES

- NS-3-a

 Stormwater Drainage and Flood Control Master Plan.
 Support the full implementation of the FMFCD Storm
 Drainage and Flood Control Master Plan, the completion of
 planned flood control and drainage system facilities, and the
 continued maintenance of stormwater and flood water
 retention and conveyance facilities and capacities. Work
 with the FMFCD to make sure that its Storm Drainage and
 Flood Control Master Plan is consistent with the General
 Plan.
- NS-3-b Curb and Gutter Installation. Coordinate with Fresno Metropolitan Flood Control District (FMFCD) to install curbing, gutters, and other drainage facilities with priority to existing neighborhoods with the greatest deficiencies and consistent with the Storm Drainage and Flood Control Master Plan.
- **NS-3-c Dual Use Facilities.** Support multiple uses of flood control and drainage facilities as follows:
 - Use, wherever practical, FMFCD facilities for groundwater management and recharge; and
 - Promote recreational development of ponding basin facilities located within or near residential areas, compatible with the stormwater and groundwater recharge functions.

- NS-3-d Landscaped Buffer. City will support the development of FMFCD ponding basins including the landscaping and irrigation for the top one third of the side sloped areas consistent with the FMFCD Basin Design Criteria.
- **NS-3-e Pollutants.** Work with FMFCD to prevent and reduce the existence of urban stormwater pollutants pursuant to the requirements of the National Pollution Discharge Elimination Systems Act.
- NS-3-f Flooding Emergency Response Plans. Work with responsible agencies to update emergency dam failure inundation plans, evacuation plans and other emergency response plans for designated flood-prone areas, including the San Joaquin riverbottom.
- NS-3-g Essential Facilities Siting Outside of Floodplains. Avoid siting emergency response and essential public facilities, such as fire and police stations, within a 100-year floodplain, unless it can be demonstrated that the facility can be safely operated and accessed during flood events.
- NS-3-h

 Runoff Controls. Implement grading regulations and related development policies that protect area residents from flooding caused by urban runoff produced from events that exceed the capacity of the Storm Drainage and Flood Control Master Plan system of facilities. Place all structures and/or flood-proofing in a manner that does not cause floodwaters to be diverted onto adjacent property, increase flood hazards to other property, or otherwise adversely affect other property.
- NS-3-i

 New Development Must Mitigate Impact. Require new development to not significantly impact the existing storm drainage and flood control system by imposing conditions of approval as project mitigation, as authorized by law. As part of this process, closely coordinate and consult with the FMFCD to identify appropriate conditions that will result in mitigation acceptable and preferred by FMFCD for each project.

Commentary: The City recognizes the expertise and significant role of the FMFCD, and will give the highest

deference to its recommendations for mitigation measures, consistent with applicable law.

- NS-3-j
 National Flood Insurance Program. Continue to participate in the National Flood Insurance Program (NFIP) by ensuring compliance with applicable requirements. Review NFIP maps periodically to determine if areas subject to flooding have been added or removed and make adjustments to the Land Use Diagram Figure LU-1.
- NS-3-k

 100-Year Floodplain Policy. Require developers of residential subdivisions to preserve those portions of development sites as open space that may be subject to 100-year flood events, unless the flood hazard can be substantially mitigated by development project design.
- NS-3-I

 200-Year Floodplain Protection. Promote flood control measures that maintain natural conditions within the 200-year floodplain of rivers and streams and, to the extent possible, combine flood control, recreation, water quality, and open space functions. Discourage construction of permanent improvements that would be adversely affected by periodic floods within the 200-year floodplain, particularly in the San Joaquin riverbottom.
- NS-3-m Flood Risk Public Awareness. Continue public awareness programs to inform the general public and potentially affected property owners of flood hazards and potential dam failure inundation. Remind households and businesses located in flood-prone areas of opportunities to purchase flood insurance.
- **NS-3-n Precipitation Changes.** Work with FMFCD to evaluate the planned and existing stormwater conveyance system in light of possible changes to precipitation patterns in the future.

9.5 WILDLAND FIRE HAZARDS

Fresno's high summer temperatures, intense sunlight, and low rainfall could encourage wildland fires by drying and pre-heating combustible material and fostering spontaneous combustion of flammable material. Fresno's estimated maximum wind speed is 70 mph, which could fan blazes to a high intensity. Fire hazards are typically highest in heavily

wooded areas, as trees are a great source of fuel, as are grasslands. Given that the Planning Area is largely urbanized or working agricultural land and lacks steep topographies, wildfire threats are minimal. Although Fresno is proximate to high and very high fire hazard designated areas, the city is largely categorized as little or no threat or moderate fire hazard, which is largely attributed to paved areas. Small areas along the San Joaquin River Bluff area in northern Fresno are prone to wildfire due to relatively steep terrain and vegetation and therefore classified as high fire hazard.

Policies related to fire protection and response are located in the Public Utilities and Services Element.

9.6 HAZARDOUS MATERIALS

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. The California Code of Regulation defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness, or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed. Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications and, to a limited extent, in residential areas.

Hazardous wastes are defined in the same manner. Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Hazardous materials and hazardous wastes are classified according to four properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases).

Sites previously contaminated by hazardous materials are required to be identified and cleaned up. The contaminated sites in Fresno are largely associated with leaking underground storage tanks and are predominately clustered south of Downtown, near Fresno Yosemite International Airport and Palm Bluffs Corporate Center (northwest Fresno), and along the Union

Pacific Railroad Tracks as shown on Figure PU-3: Regional Groundwater Contamination shows the locations of known leaking underground storage tanks and known hazardous waste sites requiring cleanup under federal or State direction.

Releases, leaks, or disposal of chemical compounds, such as petroleum hydrocarbons, on or below the ground surface can lead to contamination of underlying soil and groundwater. Depending of the conditions and intensity of the release, groundwater contamination can migrate beyond the property boundary of the original release site. Disturbance of a previously contaminated area through grading or excavation operations could expose the public to health hazards from physical contact with contaminated materials or hazardous vapors. Improper handling or storage of contaminated soil and groundwater can further expose the public to these hazards, or potentially spread contamination through surface water runoff or air-borne dust.

In addition, contaminated groundwater can spread down gradient, potentially contaminating subsurface areas of surrounding properties. This also poses a threat due to the high number of private water wells and the City's reliance on groundwater as the principal potable water source. Groundwater quality is discussed in the Public Utilities and Services Element.

OBJECTIVE

NS-4 Minimize the risk of loss of life, injury, serious illness, and damage to property resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous wastes.

IMPLEMENTING POLICIES

- NS-4-a Processing and Storage. Require safe processing and storage of hazardous materials, consistent with the California Building Code and the Uniform Fire Code, as adopted by the City.
- NS-4-b Coordination. Maintain a close liaison with the Fresno County Environmental Health Department, Cal-EPA Division of Toxics, and the State Office of Emergency Services to assist in developing and maintaining hazardous material business plans, inventory statements, risk

management prevention plans, and contingency/emergency response action plans.

- NS-4-c Soil and Groundwater Contamination Reports. Require an investigation of potential soil or groundwater contamination whenever justified by past site uses. Require appropriate mitigation as a condition of project approval in the event soil or groundwater contamination is identified or could be encountered during site development.
- NS-4-d Site Identification. Continue to aid federal, State, and County agencies in the identification and mapping of waste disposal sites (including abandoned waste sites), and to assist in the survey of the kinds, amounts, and locations of hazardous wastes.
- NS-4-e Compliance with County Program. Require that the production, use, storage, disposal, and transport of hazardous materials conform to the standards and procedures established by the County Division of Environmental Health. Require compliance with the County's Hazardous Waste Generator Program, including the submittal and implementation of a Hazardous Materials Business Plan, when applicable.
- NS-4-f Hazardous Materials Facilities. Require facilities that handle hazardous materials or hazardous wastes to be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.
- NS-4-g Hazmat Response. Include policies and procedures appropriate to hazardous materials in the City's disaster and emergency response preparedness and planning, coordinating with implementation of Fresno County's Hazardous Materials Incident Response Plan.
- NS-4-h Household Collection. Continue to support and assist with Fresno County's special household hazardous waste collection activities, to reduce the amount of this material being improperly discarded.
- **NS-4-i Public Information.** Continue to assist in providing information to the public on hazardous materials.

9.7 AIRPORT SAFETY

There are two public airports in the Planning Area, Fresno-Yosemite International Airport (FYI) and Chandler Executive Airport (FCH), and one private airport open to public use, Sierra Sky Park. In conjunction with Fresno-Yosemite International Airport, the Air National Guard maintains an airbase for military flight and training operations. Each airport has its own airport land use plan designed to provide for public safety. The Fresno County Airport Land Use Commission (ALUC) provides guidance to local jurisdictions on adjacent land uses through Airport Land Use Compatibility Plans (ALUCPs). This General Plan and all other City land use plans must be compatible with the ALUCPs.

Airports may impact public safety due to the potential for aircraft crashes. Policies in this section are designed to minimize public exposure to risks associated with airport operations and to minimize the siting of land uses near airports that might interfere with airport operations. As shown earlier in this chapter, Figures NS-4 through NS-6 show each airport's safety zones, which are established to identify the land or water area surrounding the airport runways that could be impacted by an airport hazard.



Fresno Yosemite International Airport is one of two public airports in Fresno, and it has its own land use plan.

OBJECTIVE

NS-5 Protect the safety, health, and welfare of persons and property on the ground and in aircraft by minimizing exposure to airport-related hazards.

IMPLEMENTING POLICIES

- NS-5-a Land Use and Height. Incorporate and enforce all applicable Airport Land Use Compatibility Plans (ALUCPs) through land use designations, zoning, and development standards to support the continued viability and flight operations of Fresno's airports and to protect public safety, health, and general welfare.
 - Limit land uses in airport safety zones to those uses listed in the applicable ALUCPs as compatible uses, and regulate compatibility in terms of location, height, and noise.
 - Ensure that development, including public infrastructure projects, within the airport approach and departure zones complies with Part 77 of the Federal Aviation Administration Regulations (Objects Affecting Navigable Airspace), particularly in terms of height.
- NS-5-b

 Airport Safety Hazards. Ensure that new development, including public infrastructure projects, does not create safety hazards such as glare from direct or reflective sources, smoke, electrical interference, hazardous chemicals, fuel storage, or from wildlife, in violation of adopted safety standards.
- **NS-5-c Avigation Easements.** Employ avigation easements in order to secure and protect airspace required for unimpeded operation of publicly owned airports.

Commentary: Avigation easements are established in the form of land use covenants and are binding upon present and subsequent property owners.

NS-5-d Disclosure. As a condition of approval for residential development projects, require sellers to prepare and provide State Department of Real Estate Disclosure

statements to property buyers notifying of noise and safety issues related to airport operations.

NS-5-e Planned Expansion. Allow for the orderly expansion and improvement of publicly-owned airports, while minimizing adverse environmental impacts associated with these facilities.

- Periodically update airport facility master plans in accordance with FAA regulations.
- Require land use within the boundaries of the Fresno-Yosemite International Airport and Chandler Downtown Airport to conform to designations and policies specified in adopted City of Fresno compatible land use plans.
- Provide local jurisdictions surrounding the City's publicly owned airports with specific guidelines for effectively dealing with the presence and operation of these airports.

9.8 EMERGENCY RESPONSE

Police and fire protection services are addressed in the Public Utilities and Services Element.

Emergency Planning

The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The City does have an adopted Emergency Operations Plan (EOP). The EOP does not designate evacuation routes, which may not be necessary since Fresno does not face any expected natural hazards from likely sources or locations.

Local Hazard Mitigation Planning

The purpose of a Local Hazard Mitigation Plan is to reduce or eliminate long term risk to human life and property resulting from hazards, by identifying risks before they occur and putting together resources, information, and strategies for emergency response. Fresno County is the lead agency on the Multi-Jurisdictional Local Hazard Mitigation Plan (MHMP) for the county. The Fresno County Board of Supervisors has

adopted the Fresno County MHMP. It includes a City of Fresno annex which lists information most relevant to Fresno in the areas of health, infrastructure, housing, government, environment, and land use.

The MHMP meets the requirements of the Disaster Mitigation Act of 2000 (DMA). A federally-approved hazard mitigation plan enables Fresno County to apply for federal pre-disaster hazard mitigation grant funds to support mitigation projects. The DMA establishes a national hazard mitigation program to reduce the loss of life and property, human suffering, economic disruption and disaster assistance costs resulting from natural disasters. The DMA also provides a source of pre-disaster hazard mitigation funding to assist local governments in implementing effective hazard mitigation measures to ensure the continued functionality of critical services and facilities after a natural disaster.

OBJECTIVE

NS-6 Foster an efficient and coordinated response to emergencies and natural disasters.

IMPLEMENTING POLICIES

NS-6-a County Multi-Jurisdiction Hazard Mitigation Plan. Adopt and implement the Fresno County Multi-Jurisdiction Hazard Mitigation Plan and City of Fresno Local Hazard Mitigation Plan Annex.

Commentary: The federal Disaster Mitigation Act of 2000 requires that cities, counties, and special districts have a Local Hazard Mitigation Plan to be eligible to receive FEMA hazard mitigation funds. Cities and counties can adopt and use all or part of a regional multi-jurisdictional plan, such as the one prepared by Fresno County, in lieu of preparing all or part of a Local Hazard Mitigation Plan.

- NS-6-b Disaster Response Coordination. Maintain coordination with other local, State, and Federal agencies to provide coordinated disaster response.
- NS-6-c Emergency Operations Plan. Update the City's Emergency Operations Plan periodically, using a whole community approach which integrates considerations for

People with access and functional needs in all aspects of planning.

NS-6-d Evacuation Planning. Maintain an emergency evacuation plan in consultation with the Police and Fire Departments and other emergency service providers, which shows potential evacuation routes and a list of emergency shelters to be used in case of catastrophic emergencies.

Commentary: The evacuation plan will be flexible in order to consider many scenarios and multiple modes of transportation beyond private automobiles. It will provide special provisions for disadvantaged populations, such as those with physical disabilities or those with low or very low incomes, and for areas with fewer resources through neighborhood emergency preparedness programs.

- NS-6-e Critical Use Facilities. Ensure critical use facilities (e.g. City Hall, police and fire stations, schools, hospitals, public assembly facilities, transportation services) and other structures that are important to protecting health and safety in the community remain operational during an emergency.
 - Site and design these facilities to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire, and explosions.
 - Work with the owners and operators of critical use facilities to ensure they can provide alternate sources of electricity, water, and sewerage in the event that regular utilities are interrupted in a disaster.
- NS-6-f Emergency Vehicle Access. Require adequate access for emergency vehicles in all new development, including adequate widths, turning radii, hard standing areas, and vertical clearance.
- NS-6-g Emergency Preparedness Public Awareness Programs.
 Continue to conduct programs to inform the general public, including people with access and functional needs, of the City's emergency preparedness and disaster response procedures.

10 HEALTHY COMMUNITIES

The Healthy Communities Element presents a broad and comprehensive initiative to improve community health. The concept of a "healthy community" also includes household income, addressed in the Economic Development and Fiscal Sustainability Element, and environmental health issues, such as air quality, addressed in the Resource Conservation and Resilience Element. This element focuses specifically on subjects not fully discussed in other elements, in particular the relationships between the built, natural, and social environments and community health and wellness outcomes, such as death, chronic disease, and the effects of drug abuse and crime. Many community partners will help the City achieve improvements in individual, family, and community health, and their roles are explained at the end of this element.

10.1 PLANNING FOR COMMUNITY HEALTH

The World Health Organization defines health as the following:

"A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. Within the context of health promotion, health has been considered less as an abstract state and more as a means to an end which can be expressed in functional terms as a resource which permits people to lead an individually, socially and economically productive life. Health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities."

With this context in mind, this element first assesses the conditions that affect community health in Fresno, followed by a discussion of local opportunities and strategies for improving public health in the city, as well as detailed objectives and policies towards that goal.

There are four key components that directly affect the health of the Fresno community:

- Physical health, or the medical well-being of individuals, as seen in rates of disease and death, with special consideration given to disparities in health across populations;
- 2. Environmental conditions, notably air quality, which can enhance or impede health;
- Household income, which can affect the financial ability to afford medical care and healthy food, as well as mental and social well-being, and can directly relate to other factors such as safety and access to parks; and
- 4. Safety, particularly exposure to violent crime, which has direct and indirect impacts on individuals and governments alike, reducing productiveness, opportunities, and quality of life and contributing to poor physical and mental health.

This element also discusses some of the indirect contributing factors that the City can influence, including educational attainment, access to parks and recreation, the availability of healthy food, and transportation options.

The health of the Fresno community can be directly measured in the physical health of its residents. It can also be measured in quantitative factors that contribute directly to

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¹ Ottawa Charter for Health Promotion. WHO, Geneva, 1986

health: environmental conditions, income, and safety. Several social and physical factors can also influence community health, including educational attainment; access to social services, parks, recreation, and healthy food; affordable housing and transportation options; and youth engagement.

An analysis of these direct and indirect factors will contribute to the evaluation of Fresno's current public health conditions, with community health broadly defined as physical, emotional, and social well-being. Some of these issues, such as the location and programming of public parks, are within the City's ability to plan and improve. Other issues, however, may require broad-based or indirect efforts in consultation with other public agencies and the private sector. All the issues discussed in the Healthy Communities Element are important to consider in the context of the Fresno General Plan as a comprehensive plan that reflects the interdependence of health outcomes with land use, transportation, and other public policies and practices.

A Healthy California Community²

There are many components considered when planning for healthy communities, including:

- Basic Needs for All
 - O Affordable, accessible and nutritious foods and safe drinking water
 - O Affordable, accessible, high quality health care
 - O Affordable, safe, integrated, and location efficient housing
 - O Safe, sustainable, accessible and affordable transportation options
 - Safe, clean environment
 - Access to quality schools
 - Access to affordable, safe opportunities and spaces for physical exercise and fun activities
 - Safe communities, free of crime and violence
- Safe, Sustainable Environment
 - Clean air, soil, and water
 - Green and open spaces
 - Reduced greenhouse gas emissions and other pollutants

 $^{^{\}rm 2}$ Defining a Healthy Community – CA Planners Roundtable.

- Reduced waste
- Affordable and renewable energy resources
- Nourishes the interrelationship between people, nature and the built environment

Economic and Social Vitality

- Living wage, safe and equitable job opportunities to support individuals and families
- Strong, resilient economy supportive of innovation and entrepreneurial spirit
- Healthy development of children and adolescents
- Access to high quality, affordable education from preschool through college and including vocational opportunities
- Community empowerment through robust social and civic engagement that takes into account diversity and cultural competency
- Access to opportunities to thrive regardless of income, race, ethnicity, nationality, gender, age, sexual orientation, identity, creed or disability
- An understanding of the social determinants of health and health equity as strategies to reduce health disparities affecting the most vulnerable populations
- Opportunities for exercising creativity, artistic expression and fostering imagination

• Efficient Development Patterns

- Sufficient affordable housing development in appropriate locations
- O Mix of land uses and a built environment that support walking and biking
- Multimodal, affordable transportation choices
- Safe public spaces for social interaction
- Conservation and restoration of open space and preservation of agricultural lands

Relationship to General Plan Goals

This Element provides objectives and policies that support the following General Plan goals:

 Promote a city of healthy communities and improve quality of life in established neighborhoods. Emphasize supporting established neighborhoods in Fresno with safe, well maintained, and accessible streets, public utilities, education and job training, proximity to jobs, retail services, and health care, affordable housing, youth development opportunities, open space and parks, transportation options, and opportunities for home grown businesses.

- 14. Provide a network of well-maintained parks, open spaces, athletic facilities, and walking and biking trails connecting the city's districts and neighborhoods to attract and retain a broad range of individuals, benefit the health of residents, and provide the level of public amenities required to encourage and support development of higher density urban living and transit use.
- 16. Protect and improve public health and safety.

10.2 HEALTH

Tracking the age and cause of death of local residents against State and national statistics is one simple way of measuring the physical health of the Fresno community. The prevalence of chronic illnesses and health disparities across demographic lines are other important components of evaluating the state of the city's public health. Many health statistics are collected at the county level, so this element relies on that level of data to assess the state of physical health for the city's residents. With 495,000 out of the county of Fresno's 940,000 residents, the city of Fresno makes up 53 percent of the population in the data discussed in this section.

Age and Cause of Death

The median age of death in the county of Fresno, 77.7 years old, is close to that of California (77.9) and the nation (78.2). However, another measure of age of death is years of potential life lost (YPLL) per 1,000 people. This metric computes the estimated number of years of life lost due to premature deaths against a person's theoretical life expectancy. The County of Fresno Department of Public Health performed an assessment in 2009 in partnership with the Central Valley Health Partnership Institute. In an unpublished report, they found the rate of YPLL in the county to be 28.7 years, compared to a statewide rate of 23.1 years. In other words, living in the county results in an average of 5.6 more years of lost potential lifespan per 1,000 residents, compared to the statewide rate, or 24 percent more lost years. Another study in 2011 by the Robert Wood Johnson Foundation used publicly available data for 2005-07 to find a similar disparity between county and the statewide YPLL.

The county's rate of death from cancer is comparable to the State but lower than the national average. Diabetes is a major cause of death for county residents, both

absolutely (fourth highest cause of death) and relatively, resulting in death at a rate 52 percent higher than the statewide average and 43 percent higher than the national average. Indeed, the county's diabetes death rate is one of the worst in California, ranking 56th out of 58 counties, and because diabetes is often created by a lack of exercise and poor diet, these may be major public health issues in Fresno. In addition, county residents die significantly more (a rate greater than 15 percent higher per 100,000 residents) from Alzheimer's disease, stroke, influenza/pneumonia, chronic liver disease and cirrhosis, accidents, motor vehicle accidents, and homicide, compared to the statewide and national average death rates. Overall, the county ranks in the bottom half (29 through 58) for most causes of death.

Chronic Disease-Related Risk Factors

The county ranks quite low in terms of overall health (51 out of 58 California counties) for overall health outcomes.³ The high rates of death in the county from diabetes, influenza/pneumonia, and chronic liver disease and cirrhosis suggest that notable proportions of local residents may be in chronically poor health, as those causes of death tend to be the result of longer term unhealthy living.

Health Disparities⁴

Health disparities between different racial and ethnic groups can be striking and create radically different qualities of life. Nearly 50 percent of Fresno's population is Latino/of Hispanic origin. Latinos are a population that, as a whole, often has poor health indicators in relation to other ethnicities, as Latinos experience disproportionately high prevalence of and risk factors for asthma, obesity, HIV/AIDS, teenage pregnancy, suicide, and mental health disorders. Factors contributing to poorer health outcomes among the Hispanic population include language and cultural barriers, limited access to preventative care, and lack of insurance.⁵

Obesity

The U.S. Department of Health and Human Services, through its Healthy People Initiative, set national objectives for 2010 for the proportion of the population that is overweight or obese. The target rate was set to 15 percent or less of the adult population to be overweight or obese, but that rate is far exceeded in the county. In 2005, in the county, overweight and obese adults comprised 57 percent of the adult population aged 18 to 64 years, and 65 percent for adults aged 65 and older.

³ Robert Wood Johnson Foundation. 2011 County Health Rankings, Fresno, CA.

⁴ U.S. Centers for Disease Control and Prevention, Office of Minority Health and Health Disparities, 2012.

 $^{^{\}rm 5}$ In 2012, over 30 percent of Latinos nationwide lacked health insurance (U.S. Census).

Between 2004 and 2009, the rate of students who were overweight in grades 5, 7, and 9, rose from 30.6 percent, 32.0 percent and 27.4 percent to 36.0 percent, 38.5 percent, and 33.7 percent, respectively.⁶ There is a growing body of evidence relating obesity to the consumption of sugar-sweetened beverages. Over 30 years, the average daily caloric intake has increased by nearly 300 calories. In fact, in the county, 53 percent of 2- to 11-year-olds and 69 percent of 12- to 17-year-olds consume at least one soda a day, compared to 24 percent children nationwide.⁷

Smoking

In the county, 14.4 percent of adults report being a smoker, higher than the Healthy People 2020 (HP2020) goal of 12 percent. Smoking prevalence among county youth ages 12 to 17 is 7.2 percent. When looking at the availability of tobacco products, 17 percent, 35 percent, and 49 percent of students in grades 7, 9, and 11 respectively feel that it is easy to obtain cigarettes. Undercover tobacco youth purchase surveys found that 33 percent tobacco retailers in the city attempted to illegally sell cigarettes to minors. This rate of illegal tobacco sales to minors is higher than the HP2020 target of less than 5 percent. Also, no cities in the county meet the HP2020 target of having adopted local ordinances that prohibit smoking in multi-unit housing.

Local Health Disparities

The impact of health disparities is critical to justifying the role of planning in improving public health and creating healthy communities. Health disparities are differences in health outcomes (injury, illness, and death) between different groups of people. There is broad agreement in the literature that people who live in more socially and economically disadvantaged areas are in worse health than those living in more prosperous areas."

A 2011 Community Needs Assessment of Fresno, Madera, Tulare, and Kings counties, undertaken by the Hospital Council of Northern and Central California, found several health disparities by race and ethnic group across the region. In Fresno, Latinos make up almost 47 percent of the city population; yet compared to white residents, Fresno's

⁶ California Department of Education. *California Physical Fitness Report Summary of Results.* 2009-2010; 2004-2005

⁷ California Health Interview Survey, 2005

⁸ California Health Interview Survey, 2009. Current Smoking Status-Adults and Teens.

⁹ California Healthy Kids Survey, 2007-09, County Results: Main Report San Francisco: WestEd Health and Human Development Program for the California Department of Education.

¹⁰ Krenz, V.D. Brief Evaluation Report: Tobacco Retailer Licensing Policy in Fresno County. American Lung Association. 2010.

Krenz, V.D. & Allen, Fresno County Tobacco Prevention Program Final Evaluation Report. California: Fresno County Tobacco Prevention Program. 2007

¹¹ Reducing Health Disparities through a Focus on Communities. PolicyLink, 2002.

Latino population experiences higher rates of diabetes, hospitalizations, and mortality, and higher rates of death from motor vehicle accidents. Similarly, African-American residents, who make up eight percent of the city population, experience higher hospital use and/or death rates for asthma, cancer, cardiovascular issues, diabetes, homicides, hypertension, and motor vehicle accidents compared to white residents.¹²

In the county, rates of obesity vary greatly by race, with 38 percent of Latinos obese compared to 23 percent of Whites, 22 percent of African-Americans, and just 8 percent of Asians. Only 6 percent of African-Americans in the county undertake vigorous physical exercise at least three times per week, compared to 21 percent of Whites, 24 percent of Asians, and 19 percent of Latinos.¹³

The county has a higher percentage of disabled residents (21.3 percent) than in California as a whole (19.2 percent).¹⁴ This population inherently has greater physical health needs than the rest of the population in the county.

Access to Medical and Health-Related Services

The medical dimension of health encompasses a range of services including primary care, specialty care, home health care, emergency services, mental health services, long-term care, dental care, and alternative care. Access to health care services is an important determinant of community health, since medical monitoring, advice, and care is often essential to preventing disease and improving poor health. In this context, access refers to physical proximity, as well as socioeconomic access.

Physical access to medical services is intertwined with transportation planning, because community members rely on the network of roadways, public transportation services, and walking and biking facilities to get to and from health-related facilities. The location of hospitals, medical clinics, and doctors' and dentists' offices in Fresno are such that parts of the city are underserved for residents in those areas. There are only a few medical facilities west of State Route 99, and a small number of health services in the southeastern section of the city. Northern and central Fresno has the bulk of the city's medical facilities; these are easily accessible from State Route 41, but located far from the poorest populations south of State Route 180.

¹² Hospital Council of Northern and Central California. *Community Needs Assessment.* 2011.

¹³ California Health Interview Survey. CHIS 2007. Adult, Teen, Child Public Use Files. http://www.chis.ucla.edu. Updated January 2007. As cited in Fresno Downtown Neighborhoods Health Impact Assessment.

¹⁴ Fresno Council of Governments. "Coordinated Human Services Transportation Plan." 2008.

For those families and individuals with the least resources or with physical disabilities that restrict function, public transportation systems are particularly important. To the extent that the Plan can improve the frequency and reliability of public transportation services to medical and health-related facilities within the city, this would support the wider goal of increasing access. The City does have good transit options for reaching medical care, with FAX service provided to all the hospitals in Fresno and to Children's Hospital Central California in Madera; a paratransit service, Handy Ride, also services the hospitals and other medical facilities in Fresno.

Other closely related issues are language barriers and overall health literacy. The current operational definition of health literacy used in Healthy People 2010 is, "the degree(s) to which individuals have the capacity to obtain, process and understand basic health information and services for appropriate health decisions." According to the U.S. Department of Health and Human Services, more than 90 million Americans struggle to understand basic health information. In one study in a public hospital, one-third of English-speaking patients could not read basic health materials, more than a quarter could not read appointment slips, and 42 percent did not understand labels on prescription bottles. The 2000 Census counted 20 million people who speak English poorly and 10 million who speak no English at all. In a 2002 report, the White House Office of Management and Budget estimated the number of patient encounters across language barriers each year at 66 million.¹⁵

¹⁵ U.S. National Library of Medicine National Institutes of Health. *Understanding Health Literacy and its Barriers*. CBM, 2004-1.



Physical and socioeconomic access to health care services is an important determinant of community health.

A related issue is that the county, along with the entire San Joaquin Valley, experiences a relative lack of medical physicians. The county had 2.0 physicians and surgeons per 1,000 residents in 2005, compared to a rate of 2.6 across California, or 23 percent fewer than the statewide average. ¹⁶

OPPORTUNITIES FOR IMPROVEMENT

Many of the physical health issues in this section are being addressed by the County of Fresno Public Health Department and local health care providers. However, this Plan puts in place new policies to help provide better access to physical exercise and fresh food, and to invest in efforts to lower the crime rate, in order to reduce the prevalence and impact of preventable disease. This section supports initiatives of the California Endowment in partnering with the communities of central, southeast, and southwest Fresno as part of its Building Healthy Communities campaign.

Environmental Conditions

Fresno and the San Joaquin Valley as a whole have poor air quality when measured against federal and State guidelines. The area is in nonattainment (fails to meet

¹⁶ Bengiamin, Marlene, and John Amson Capitman and Xi Change. Healthy People 2010: A 2007 Profile of Health Status in the San Joaquin Valley. Central Valley Health Policy Institute, 2008.

standards) for federal standards for PM 2.5 (particulate matter less than 2.5 micrometers in diameter) and State standards for 8-hour ozone, PM 10 (less than 10 micrometers in diameter), and PM 2.5. Fresno also is in extreme nonattainment for federal 8-hour ozone standards and severe nonattainment for State 1-hour ozone standards. Ozone is a highly reactive form of oxygen that attacks lung tissue and is particularly damaging to young children and older adults. Reducing the very high levels of ozone and significant concentrations of particulate matter from Fresno's air would be a major step to improving the health of the community.

Local actions and opportunities for improvement in air quality are addressed in the Resource Conservation and Resilience Element.

Income and Poverty

The San Joaquin Valley is one of the least affluent areas of California. Per-capita income is well below the national average, and poverty, in both urban and rural areas, is a significant problem. Valley residents have among the lowest per capita personal incomes, higher rates of unemployment, and more residents living below the Federal Poverty Level than the average for California as a whole.

According to the American Community Survey, 27.5 percent of individuals in the city were living in poverty, significantly higher than the state average of 15.3 percent. Thirty-eight percent of related children under 18 were below the poverty level.¹⁷

The 2006 Brookings Institution Study listed Fresno as the largest city in the United States with the most concentrated poverty, meaning the degree to which its poor are clustered in high-poverty neighborhoods. High poverty neighborhoods, generally defined as areas where more than 40 percent of people live below the poverty line, are in the central and southwestern part of the city including the Edison, Roosevelt and Lowell communities. Some areas within these communities had between 60 and 70 percent of people living below the poverty line in 2000. For example, the Lowell community, located in Downtown, has a population of nearly 14,000 with approximately 70 percent of individuals living below the poverty line of \$15,219 (the federal poverty threshold for a three-person family in 2004) for a family of three in 2000. Neighborhood poverty increased dramatically on the south and west sides of Fresno between 1980 and 2000, and this disparity has not changed in the past decade. Many factors have contributed to this increase in poverty. Immigrants, for example, are more likely to be poor than native-born residents. Growth patterns have also exacerbated the

 $^{^{\}mbox{\tiny I7}}$ 2008 – 2012 American Community Survey 5 – Year Estimates.

concentration of poverty. Housing in the northern part of the city caters to upperincome families, while affordable housing investment has occurred in more distressed neighborhoods.

OPPORTUNITIES FOR IMPROVEMENT

Creating more and better paying jobs in Fresno would help address household poverty; these policy opportunities are addressed in the Economic Development and Fiscal Sustainability Element. Improving the rate of education attainment, a major factor in improving income, is addressed later in this element.

The concentrations of poverty in the central, western, and southern portions of Fresno suggest several opportunities for the City, such as targeting the development of jobs that pay a living wage in and near these neighborhoods, and dispersing low-income households to more mixed income neighborhoods. It is anticipated a subsequent community plan, such as the proposed Downtown Neighborhoods Community Plan, may further refine strategies to improve household income in these areas.

Crime and Safety

The cause-and-effect relationships between community design, crime, and public health are difficult to understand, but some general relationships have been found. Notably, both the reality and the perception of safety are indicators of a neighborhood's overall economic and social health. Safety is necessary in neighborhoods in order to foster common values and to improve quality of life. In contrast, crime in neighborhoods creates fear and distrust among residents. Finally, while chronic disease is a major health challenge, many chronic disease prevention strategies—such as urban design that encourages walking and biking, provision of parks and recreation areas, and attracting grocery stores to neighborhoods—are less effective when fear and violence pervade the environment.¹⁸ Findings about this relationship include:

- Violence and fear of violence cause people to be less physically active and spend less time outdoors, and also alter people's purchasing patterns, limiting access to healthy food;
- Experiencing and witnessing violence decrease motivation and capability of eating healthfully and being active;
- Violence reduces social interactions that would otherwise contribute to community cohesion; and

¹⁸ Cohen, L., et al. "Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living." Prevention Institute, May 2010 $\,\mathrm{p}$ 1.

 Violence acts as a barrier to investment in community resources and opportunities, including those that support healthy eating and active living.

OPPORTUNITIES FOR IMPROVEMENT

The Plan continues support of the City of Fresno Police Department's efforts to prevent and investigate crime, as covered in the Public Utilities and Services Element. Target ratios of officers per 1,000 residents will be set as part of the budgetary process. A viable local approach to crime reduction and increasing perceptions of safety in Fresno communities requires attention to the physical and social environments that either support or deter crime. The physical features, layout, and design of many aspects of neighborhoods can influence crime prevention and other crime-related outcomes, such as neighborhood deterioration and residents' fear of crime. ¹⁹ In addition, the physical design of buildings and streetscapes can help to deter crime, a concept known as Crime Prevention Through Environmental Design, or CPTED, is an approach that suggests design policies for new development and opportunities to reinvest in better design for established neighborhoods.

Educational Attainment

In the United States, the poorest communities are usually also those with the highest proportions of people without a high school diploma. This is because low-income communities often have poorer quality educational systems and lack access to basic resources that would improve student performance. Poverty also places greater pressure on students to leave school early in order to earn money; and, low quality and incomplete education makes it harder to find well-paying employment, increasing the likelihood that these students grow up and continue to live in poverty. A high poverty rate may also relate to the fact that many residents are foreign-born and may have limited English-language skills, precluding them from higher paying jobs.

Not having a high school diploma is associated with several negative health outcomes. In 2002, 28 percent of adult Americans without a high school diploma lacked health insurance, in comparison to 8 percent of people with at least a Bachelor's degree. More to the point, in 2005, 22 percent of adults in the county aged 18 to 64 had no health insurance, compared to a statewide average of 14 percent.²⁰

The rate of educational attainment is not distributed equally across the city. The areas of the city with the lowest rates of high school graduates are in central and

¹⁹ Taylor, R. and A. Harrell. "Physical environment and crime." As presented to the National Justice Institute, 1996.

²⁰ Bengiamin, et. seq. 2008.

southwestern Fresno, at times exceeding 53 percent of the adult population. In contrast, northern Fresno has the highest rates of high school diplomas, with more than 88 percent of the population with diplomas in many areas. This distribution is almost identical to the poverty rate, with higher rates of poverty and lower proportions of high school diplomas appearing to correlate. About 20 percent of the adult population in the county has a college degree, compared to 27 percent statewide, and the city and county lag behind the rest of the state in residents with graduate degrees (6 percent vs. 11 percent). Moreover, about 26 percent of adult residents of Fresno have not graduated from high school, compared with less than 20 percent across the state.

Raising educational attainment is not only critical for health outcomes, but it is also essential to increasing opportunities for jobs and employment, as discussed in the Economic Development and Fiscal Sustainability Element.

OPPORTUNITIES FOR IMPROVEMENT

The City has no control over the local public schools or institutes of high education. It can, however, work with these agencies and with private educational institutions on their location and mission. Opportunities may also exist to partner with neighborhood schools as locations for public services and outreach, which may then encourage greater interest in school and opportunities for adult education and pursuit of a General Education Diploma (GED). Joint use agreements for open space and recreation facilities are discussed elsewhere in this element.

A factor in the city's low rate of educational attainment may also be its lack of appeal to people with a college degree, especially recent graduates in their twenties. Fresno has a shortage of large private employers that offer career development and high salaries and lacks the walkable mixed-use neighborhoods that appeal to this population. The City has the potential to develop these assets, however, particularly by leveraging the presence of a major California State University in the city. Possible strategies are discussed in the Economic Development and Fiscal Sustainability Element.

10.3 ACCESS TO PARKS AND RECREATION

Exercise is critical to achieving positive health outcomes. Lack of physical activity is a primary risk factor in five of the top ten causes of death in California: heart disease, cancer, stroke, diabetes, and Alzheimer's disease. It is also a primary risk factor for obesity, which itself contributes to the same prevalent causes of death. Recent statistics indicate that almost half of adult Californians (ages 18 and older) fail to meet the

national recommended guidelines for physical activity. Planners and public health practitioners recognize that community, neighborhood, and transportation system design often influences the extent to which physical activity fits into daily life, with the biggest barriers being long distances, lack of facilities, and safety concerns. When compared with people who were continually sedentary, those who increased their leisure time physical activity had 34 percent lower mortality, and those who were continually active had 45 percent lower mortality. These results did not vary in analyses stratified by obesity and functional limitations. 22

Lack of physical activity is also a significant problem in the county. Only 64 percent of children ages 5 to 17 engaged in vigorous physical activity at least three days per week.²³ County students, in grades 5, 7, and 9, lack cardio-respiratory endurance as evidenced by poor results for aerobic capacity. In 2010, two-thirds of students in grades 5, 7, and 9 did not achieve the standards in all six areas of the physical fitness test.

Access to and motivation to use physical recreation resources improves rates of physical activity, and the associated health benefits. Studies suggest people who live within walking distance (one-fourth mile) of a park are 25 percent more likely to meet their minimum recommended weekly amount of exercise. ²⁴ Public parks also serve as places for physical recreation as well as community anchors that can bolster emotional well-being.

Fresno has about 3.28 acres of parkland per 1,000 residents, compared to 5.0 in Visalia and 13.0 in Sacramento (which has 2.5 acres for neighborhood parks; 2.5 acres for community parks; and 8 acres for citywide parks, greenways and open space). In 2012 and 2013, Fresno was ranked last out of the 40 and then 50 largest U.S. cities, respectively, for ParkScore, a measure that takes into account public open space acreage, services, investment, and access. ²⁵ The City's parks are also not distributed proportionate to the population. Overall, only 40 percent of residential lots in the city are within walking distance of a public park. The northern, generally less dense, areas of the city are well served by parks, open space, and bike routes. In contrast, the central areas of Fresno south of Shaw Avenue and west of State Route 41 have fewer and smaller parks, despite being some of the denser populated portions of the city.

²¹ Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System, Chronic Disease Indicators, Physical Activity Trends for California, 2009.

²² Balboa-Castillo, T. "Physical activity and mortality related to obesity and functional status in older adults in Spain." American Journal of Preventive Medicine Vol. 40, Issue 1, 2011.

²³ California Health Interview Survey, 2009. Vigorous Physical Activity At Least 3 Days Per Week.

²⁴ Frank, L., et al. "Linking objectively measured physical activity with objectively measured urban form: findings from SMARTRAQ." *American Journal of Preventative Medicine* Vol. 28, Issue 2, 2005.

²⁵ Trust for Public Land: http://parkscore.tpl.org/rankings.php

Some schools allow unrestricted access to their grounds outside of school hours, which helps provide recreational access in areas with few parks, especially west of State Route 99. Few of the school grounds east of State Route 99 and south of Herndon Avenue are unrestricted.

OPPORTUNITIES FOR IMPROVEMENT

Priorities for this Plan include (1) to increase the amount of parks and open space available to its residents, and (2) to enhance access to parks and public recreation facilities within the central area of Fresno for those living in established neighborhoods. While the creation of large parks in the older, denser portions of the city would be difficult, there are vacant parcels in key locations to create Pocket Parks with a children's playground and a running path. The Parks, Open Space, and Schools Element addresses the amount and location of future parks and partnerships with neighborhoods needed to secure new parks and maintenance resources.

Another approach that leverages existing assets is to enter into joint use agreements with public schools in underserved areas, as these schools often have outdoor playfields and space and sometimes indoor resources. Many of the areas underserved by parks have schools located in the neighborhood. However, joint use agreements can be obstructed by the need to establish who ensures and pays for security, cleanup, and liability.

10.4 ACCESS TO HEALTHY FOOD

In addition to lack of exercise, poor diet is another major risk factor contributing to chronic disease prevalence. In the U.S., obesity and diet-related chronic disease rates are escalating; people are experiencing rising antibiotic resistance as a result of the treatment of farm animals; food, air, soil, and water are being contaminated from chemicals and pathogens related to agriculture; and natural resources such as fresh water and prime farmland are being depleted. These threats have environmental, social, and economic costs that are growing, cumulative, and unequally distributed. These issues all relate to the food system—what we eat and how it is produced.

Obesity is a particularly important concern for the healthy development of children. Childhood obesity has more than tripled in the past 30 years. The prevalence of obesity among children aged 6 to 11 years increased from 6.5 percent in 1980 to 19.6 percent in 2008. The prevalence of obesity among adolescents aged 12 to 19 years increased from

5 percent to 18.1 percent.²⁶ Obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. Children and adolescents who are obese are also at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem.^{27,28} Finally, obese youth are more likely than youth of normal weight to become overweight or obese adults, and therefore more at risk for associated adult health problems, including heart disease, Type 2 diabetes, stroke, several types of cancer, and osteoarthritis.

County children and adults are more overweight, suffer from diabetes and heart disease, are less physically active and have less access to healthy food and recreational resources than their statewide counterparts. According to the 2009 California Health Interview Survey, the percentage of overweight and obese adults in the county was 34.4 percent and 30.2 percent, compared to 33.6 percent and 22.7 percent statewide, respectively.²⁹

In some communities, healthy food access is a big factor in obesity rates, particularly where there are challenges to both physical proximity and affordability. Residents in communities with a more "imbalanced food environment" (where fast food restaurants and corner stores are more convenient than grocery stores) have more health problems and higher mortality than residents of areas with a higher proportion of grocery stores, other factors held constant.³⁰ Likewise, the presence of a supermarket in a neighborhood is linked to higher fruit and vegetable consumption and a reduced prevalence of obesity.^{31,32} In low-income neighborhoods, the addition of a supermarket has been found to increase residents' likelihood of meeting nutritional guidelines by one-third.³³

"Food deserts," defined as large and isolated geographic areas where mainstream grocery stores are absent or distant, are linked to poor food habits and associated

²⁶ Ogden, C.L., et al. "Prevalence of high body mass index in US children and adolescents, 2007–2008." *Journal of the American Medical Association*, 303(3):242–9, 2010.

²⁷ Daniels, S.R., et al. "Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment." *Circulation*, 111;1999–2002, 2005.

²⁸ U.S. Surgeon General. *Overweight and Obesity: Health Consequences*. Rockville: MD, 2001.

²⁹ California Health Interview Survey, 2009. http://www.chis.ucla.edu/main/DQ3/output.asp?_rn=0.7438928>.

³⁰ Mari Gallagher Research and Consulting Group. "Examining the Impact of Food Deserts on Public Health in Chicago."

³¹ Inagami, S., et al. "You are where you shop: grocery store locations, weight, and neighborhoods." American Journal of Preventative Medicine Vol. 31, Issue 1, 2006.

³² Sturm, R., and A. Datar. "Body mass index in elementary school children, metropolitan area food prices, and food outlet density." Public Health Vol. 119, 2005.

³³ Morland, K., et al. "The contextual effect of the local food environment on residents' diet." American Journal of Public Health Vol. 92, Issue 11, November 2002.

negative diet-related health outcomes. The 2007 report "Searching for Healthy Food: The Food Landscape in California Cities and Counties" report found that fast food restaurants and convenience stores were five times more prevalent in the county than supermarkets and produce vendors. According to the USDA Food Desert Locator, there are 12 census tracts in the county that are classified as food deserts. The distribution of retail food outlets in the county is: 50 percent fast-food restaurants, 34 percent convenience stores, 12 percent supermarkets, 3 percent produce stores, and 1 percent farmer's markets. The distribution of retail food outlets in the county is: 50 percent produce stores, and 1 percent farmer's markets.

Furthermore, 21.6 percent of the population in the county is categorized as "food insecure" compared to 16.6 percent nationwide.³⁶ The county, one of the world's top producers of fruits and vegetables, exports much of its bounty out of the county. It is not uncommon for produce from the county to be sold to a distributor who ships it out of the county, out of California or out of the U.S. for processing or packaging. The product then finds its way back to Fresno via national supermarket chains at a higher cost.

Full service grocery stores and produce markets are inconsistently distributed around Fresno, with fewer on the city's edges. The areas west of State Route 99 are largely devoid of grocery options.

³⁴ CA Center for Public Health Advocacy. Searching for Healthy Food, The Food Landscape in Fresno County. 2007.

³⁵ United States Department of Agriculture. Food Dessert Locator, Fresno County. 2011.

³⁶ Feeding America. Food Insecurity & Food Cost In the US, Fresno County. 2011



While Fresno is surrounded by some of the most productive agricultural land in the world, one in five residents in the county of Fresno is "food insecure," and less than 10 percent of residential land in the city is within walking distance to a grocery store.

Most city residents would be unable to easily walk to a grocery store, since their locations are spread out. Only 10 percent of residential land in the city is within walking distance of a grocery store or fresh produce market. Farmers markets are also unevenly distributed.

The central areas of Fresno south of Shaw Avenue and west of State Route 41—on both sides of State Route 99—are underserved by grocery stores as well as parks, with fewer and smaller parks than other parts of the city. This quadrant could be considered to be the part of Fresno with the least access to healthy living options. Smaller areas lacking healthy lifestyle access include the neighborhood between McKinley and State Routes 41, 168, and 180; the neighborhood immediately west of the fairgrounds; and the area east of State Route 41 between Herndon, Bullard, and Cedar Avenues.

Urban Agriculture

Urban agriculture is the practice of cultivating, processing, and distributing food in or around a city or town for local consumption. Urban agriculture includes farmers' markets, farm stands, community gardens, on-site garden produce market stands, and urban farms. Direct access to fresh fruits and vegetables through urban agriculture can improve food security and food safety.

The City became involved in healthy food access issues in 2007 when it was approached by several entities seeking to establish farmer's markets. One of these applicants had received grant funding, only to discover that in order to allow a farmers' market on its property, a rezoning was necessary to comply with land use regulations. As a consequence, the City has made the zoning regulations for farmers' markets more flexible. Additional initiatives for farmers' markets and other types of urban agriculture are presented in this element, and the concurrent Development Code update will offer regulations for integrating healthy community concepts into the City's regulations, consistent with General Plan policies and programs.

Another facet of urban agriculture is community gardens, which are on the rise in Fresno and in cities around the country. A community garden is a piece of land gardened by a group of people, utilizing either individual or shared plots on private or public land for the purpose of providing fresh produce and plants for the cultivators personal use as well as satisfying labor, neighborhood improvement, sense of community and connection to the environment. The land may produce fruit, vegetables, and/or ornamentals. They typically occur on a small-scale in urban and suburban areas and may be found in neighborhoods, schools, connected to institutions such as hospitals and churches, and on residential housing grounds. The benefits include:

- Recreational and community-building opportunities for residents;
- Inexpensive access to fresh, healthy produce which can serve as part of the solution to food deserts and other public health issues related to diet, including obesity;
- Business opportunities for residents to sell goods that they may grow, e.g. at farmers' markets; and
- Productive use for vacant or underutilized land.



Farmers markets provide residents with access to fresh, local produce.

OPPORTUNITIES FOR IMPROVEMENT

This Plan reflects the City's recent efforts to commit to several broad approaches to address these issues, including:

- The 2007 Fresno Green Strategy includes a policy to "encourage all city facilities (including schools) to serve at least 20 percent locally grown and organic foods beginning in 2009." While this policy was intended mostly as an economic development strategy, it has the possibility to improve healthy food access.
- As part of a multi-jurisdictional working group dedicated to improving health by improving the built environment, the City adopted a "Resolution Supporting the Collaborative Efforts of the City of Fresno Development and Resource Management Department and the County of Fresno in their efforts to Incorporate Public Health Strategies into Local Land Use, Transportation and Community Design Planning."
- Additional partnerships with the County of Fresno include Walkability Workshops in underserved neighborhoods, participation in Farmers Market and Community Garden conferences, and now, work on healthy communities in the General Plan and Development Code updates.
- The City also has been working with The California Endowment in partnership with the communities of central, southeast, and southwest Fresno as part of its Building Healthy Communities campaign.

Transportation Options

Transportation system design is related to health outcomes in a number of ways. For instance, while streets are designed to meet safety standards, negligent use by drivers, bicyclists and pedestrians can result in increased collisions or injuries. Statistics have shown traffic collisions and fatalities are substantially higher when vehicles are traveling faster, which naturally occurs on unobstructed and wide multi-lane roads. However, pedestrian injuries can be reduced more than seven-fold by slowing traffic down from 30 to 20 miles per hour miles per hour, and slowing traffic from 40 to 20 miles per hour can reduce a pedestrian's chance of being killed, if hit by a vehicle, from 85 percent to just five percent. Reasonable road widths can naturally support efforts to reduce vehicle speed. Additionally, there is also a correlation between vehicle miles traveled (VMT) and traffic collision rates. Regardless of speed, the lower the VMT, the less likely there will be a traffic collision. A design emphasis of this Plan and the Complete Neighborhoods concept is to reduce VMT. Decreasing the VMT also has the added benefit of reducing air pollution, which has a major impact on local health conditions in Fresno.

By exchanging some of those vehicle trips for non-motorized trips, a community can realize health benefits. For instance, there is evidence that for each half-mile walked per day, people are about five percent less likely to be obese (controlling for age, education, gender, and ethnicity). Almost one-third of Americans who commute to work via public transit meet their daily requirements for physical activity by walking as a part of their daily life, including to and from the transit stop.³⁷ This kind of access to routine physical activity is critical for individuals and families who lack the funds to support gym memberships or access to other private facilities.

Transit

Public transit provides travels options for people who cannot or choose not to drive, and can be a crucial means of accessing health services as well as jobs and education. The Fresno Area Express (FAX) serves about 17.5 million annual passenger trips. Figure HC-I: Public Transit shows the location of bus stops in the city and a quarter-mile radius from each, representing a normal walking distance. FAX's service area is fairly extensive, with 60 percent of residential and 94 percent of commercial land in Fresno within walking distance of a bus stop.

³⁷ Besser, L. and A. Dannenberg, "Walking to public transit: steps to help meet physical activity recommendations." American Journal of Preventive Medicine, Vol. 32, Issue 4. November 2005.

Bicycling

The City of Fresno has a long-standing policy that biking is an important activity for many reasons including exercise and health. The City Council adopted the Active Transportation Plan (ATP), which serves as an administrative and implementing guide, to increase the miles of bike lane (along roadways) and bike paths (separate rights-of way) available to bike riders. Bicycle safety is a significant concern addressed in the ATP, which will be addressed by continuing to build safe bike routes and through education.

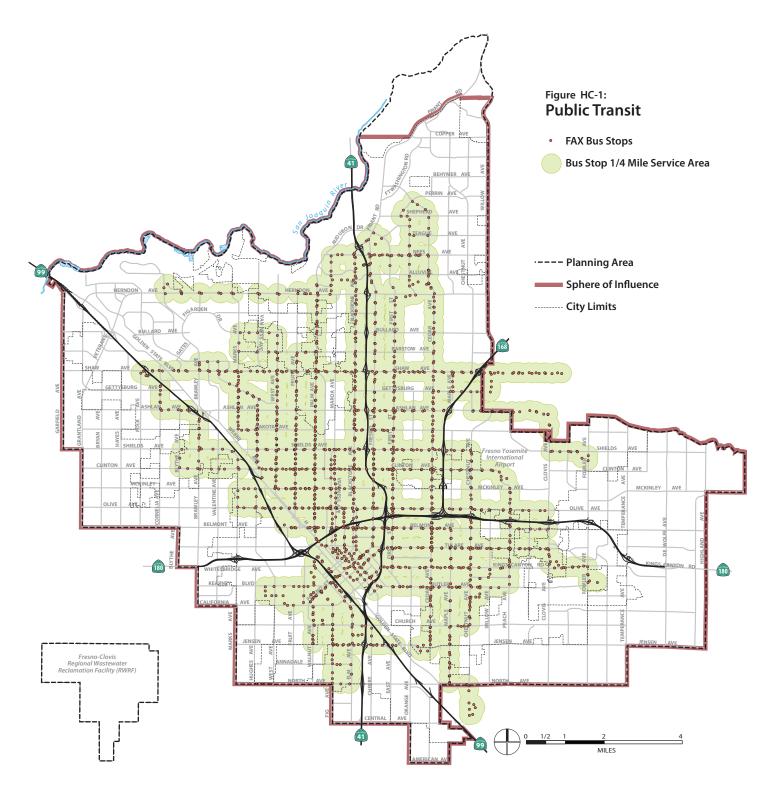
Walking

Walking delivers myriad physical and social benefits. Being able to walk to a job, the store, a park, or simply for recreation provides physical exercise, eliminates travel expenses, and can provide social cohesion and sense of place. While walking is almost always an option, as a practical matter an unpleasant environment or a perception of risk can discourage this activity. For example, walking can be discouraged by the unavailability of sidewalks in certain locations, negligent use of roadways by high-speed automobile traffic, visually uninteresting or unpleasant surroundings, the presence or threat of crime, and long distances between destinations. The City has options for addressing some of these negative factors including through land use designations, development standards, streetscape design, and police services as funding becomes available.

Creating additional safe walking and biking routes to schools for children is an important part of the city's circulation system and a priority for this Plan. Providing these features will allow for physical activity opportunities, help with school attendance, and bolster the role of schools as community resources.

OPPORTUNITIES FOR IMPROVEMENT

This Plan's transportation and mobility policies are intended to further improve the safety and efficiency of the system for all users; this will promote a better environment for walking, biking and the use of transit. This Plan also supports opportunities to increase the number of persons who bicycle to work—or bicycle mode split—from just less than one percent of total commuters to work, to a much greater proportion. Completion of the city's planned bicycle lane and path network will make travel around Fresno by bicycle more feasible. The Mobility and Transportation Element addresses many of these issues.



Source: City of Fresno Public Transportation (FAX), 2014.

Safe and Affordable Housing³⁸

Housing can have direct and indirect effects on community health. Physical housing characteristics have been linked directly to several adverse health outcomes. For example, the presence of dampness and mold leads to increased risk of respiratory and other illnesses, while dilapidated and abandoned housing increases the risk of accidental injury among residents and is associated with increased emotional stress. Lead exposure from lead-based paint is one of the largest environmental health hazards facing children throughout the nation, and yet about three-quarters of the nation's housing stock built before 1978 contains some lead-based paint. Population density and overcrowding have also been associated with increased chances of contracting infections and sustaining injury. Based on findings such as these, it follows that well-constructed and managed housing can avoid health problems associated with allergens, neurotoxins, other indoor air quality issues, disease exposure and stress due to overcrowding, and neighborhood safety issues as well.

Not only is there evidence that poor quality housing directly causes negative health effects, but affordable and higher quality housing may have indirect health benefits, too. Affordable housing may improve health outcomes by freeing up resources for nutritious food and health care, and may reduce stress by providing families with greater residential stability, self-esteem, and sense of security and control over their environments.³⁹ Home ownership in general has been associated with reduced morbidity and mortality risk.⁴⁰

To really get at solutions for ensuring housing affordability beyond those already identified in the Housing Element, Fresno may also need to think about factors addressed by other General Plan elements that contribute to the lack of affordability. For example, family budgets must also factor in the cost of transportation when considering where to live. Compact, mixed-use communities with a balance of housing, jobs, and stores and easy access to transit have lower transportation costs because they enable residents to meet daily needs with fewer cars, the single biggest transportation cost factor for most households. So, efforts to increase walkability of neighborhoods, a key theme in this Plan, may also result in overall increases in affordability for Fresno residents.

 $^{^{38}}$ The Housing Element adopted in 2016 is in a companion volume of this General Plan.

³⁹ Center for Housing Policy. "The positive impacts of affordable housing on health; a research summary." 2007.

⁴⁰ Filakti, H., and J. Fox. "Differences in mortality by housing tenure and by car access from the opcs longitudinal study." *Population Trends.* 81:27-30, 1995.

OPPORTUNITIES FOR IMPROVEMENT

One of the City's primary planning considerations is to address the need for increasing the affordable housing opportunities for low- and moderate-income households, with special emphasis on persons with disabilities, people experiencing homelessness, large families, persons living in substandard housing, and persons paying rent that exceeds 50 percent of their monthly income. As part of the implementation of the Housing Element, programs are identified each year to improve both the quantity and quality of the affordable housing stock in the city. Other considerations include upgrading the city's infrastructure needs in low- and moderate-income neighborhoods, initiating programs to reduce crime, undertaking a code enforcement program and reducing homelessness.

Given its limited budget and fiscal capabilities, the City is working in close partnership with agencies such as the Fresno Housing Authority to contribute to the creation and rehabilitation of safe, affordable housing. The relatively low cost of land and ample supply of housing in the area also means that the market generally provides a supply of affordable housing on its own, although Fresno's incomes are well below the state average and what is considered affordable in some parts of the state may not be in Fresno. This General Plan designates areas for higher densities and calls for by-right zoning to implement higher densities in the Development Code update consistent with the City of Fresno Housing Element. New policies to improve housing overlap with other issues, such as supporting housing that better serves an aging population and implementing the State's newest building code, the CALGreen Code.

Youth Engagement and Empowerment

Engaging the younger members of our community is important to shaping the city's direction. They offer a valuable voice and direction as the future stewards of our community. Soliciting youth feedback and input in designing public programming or infrastructure (parks, schools, etc.) that directly serve youth can provide significant benefits to institutions and neighborhoods. Youth are an important constituency when it comes to long-term care of investments (brick and mortar and time); if they help design and build something, they have proven they will take care of it.⁴¹

OPPORTUNITIES FOR IMPROVEMENT

Fresno has a Youth Engagement Team (YET) that is a collaborative network of 14 youth serving organizations. The idea is that young people should have a voice in their communities, with the chance to be advocates for change and to participate in the

 $^{^{41}}$ Comments from leaders at the Fresno Youth Leadership Institute – September 30, 2011.

decision-making process on issues that affect them. Tasks undertaken include researching and documenting local issues, creating campaigns to shift community attitudes, drafting suggestions for and working with local governments to enact policy change, and learning leadership skills necessary to inspire others to get involved. Through the YET work in collaboration with the Building Healthy Communities campaign, youth and adult partnerships are currently working to engage youth in policies surrounding transportation, education equity and urban land use. Some of these initiatives and partnerships include:

- Students United to Create a Climate of Engagement, Support and Safety (SUCCESS) led by Youth Leadership Institute. The goal of SUCCESS project is to ensure equal learning opportunities for all students in the Fresno Unified School District (FUSD) through creating healthy school climates that support positive youth development. Currently, the SUCCESS team is working on recommendations to improve FUSD discipline policies and procedures to ensure behavior is addressed fairly and effectively. The goal of the program is to measure school attendance and reduce the number of school days missed due to suspension and expulsion.
- Summer Night Lights (SNL), led by the City of Fresno Parks, After School, Recreation and Community Services (PARCS). The SNL program aims to address youth violence prevention in key neighborhoods in Fresno where youth violence is most prevalent, by offering support services and measuring local violent crime data. SNL currently operates at Romain Park and Holmes Park. The underlying goal is to reduce the violence in the areas of these two parks, as measured by Fresno Police Department crime data, particularly violent crimes involving youth.
- Fresno Youth Council for Sustainable Communities, led by the Center for
 Multicultural Cooperation. The California Center for Civic Participation, Center for
 Multicultural Cooperation and the Wangari Maathai Center, have established Youth
 Councils for Sustainable Communities in Fresno, Sacramento and the Bay Area.
 The purpose is to ensure that youth are engaged in important decisions that will
 help transform communities into thriving, healthy places that preserve the
 environment and provide economic opportunities for all people.
- Fresno Boys and Young Men of Color, led by Stone Soup Fresno. Stone Soup
 Fresno is working to ensure boys and young men of South East Asian heritage are
 included in local research and policy efforts to improve local health, education and
 economic outcomes for boys and young men of color.

Furthering the engagement of the Fresno's youth in these civic activities is a cost effective way for the City to reduce crime, increase educational attainment, and improve a number of health indicators across all populations. This Plan includes specific policies to support the YET program and also provides clear opportunities with

its own departments, such as PARCS, and expand collaborative efforts with local schools.

Building Healthy Communities Initiative

The City has been coordinating with community groups to address priorities of residents in south Fresno – generally those neighborhoods south of State Route 180. One such group, The California Endowment, has launched a "Building Healthy Communities Initiative." The Building Healthy Communities Initiative addresses a broad range of land use and social issues, which include:

- Ensure that the built environment is clean, well maintained and conducive to
 health in all city neighborhoods and includes adequate and equitable provision of
 sewer and water within a reasonably priced homeownership market.
- Establish effective education and job training for area youth that is both academic and trade oriented.
- Ensure that underserved neighborhoods are included in strategies for job creation, including opportunities for home grown business development.
- Actively seek opportunities to create and maintain safe parks of all sizes in every city neighborhood to provide families with spaces to interact with their neighbors and promote physical activity.
- Create opportunities both public and private for the Downtown neighborhoods that include entertainment, stores (retail, food, clothing etc.), parks, recreation centers and after school programs, especially for youth.
- Acknowledge and address attitudes within the government institutions, economic systems and law enforcement culture toward immigrant and ethnic minority communities that perpetuate inequality.
- Develop a system of transportation that responds to the needs of the most vulnerable sectors of the community, including focused bus routes for specific geographic areas of need and/or particularly vulnerable subgroups (e.g. the elderly, disabled and farm workers).
- Provide accessible healthcare services beyond emergency care.
- Establish an equitable system of public safety that supports community while also reducing crime.

Although these matters are not identified policies of this Plan, it is a stated policy of this Plan to coordinate with community groups such as those engaged in The California Endowment Building Healthy Communities Initiative to address community land use priorities.

10.5 OBJECTIVES AND POLICIES

The vision for this element strives to:

- Increase access to medical and health services for underserved areas and populations at greater risk for poor physical health.
- Design new development and redevelopment to promote physical activity, access to fresh and healthy food, and deter crime.
- Continue programs to improve regional air quality.
- Expand access to infrastructure and community programs that facilitate healthy living, such as parks, recreation facilities, bike paths, and community gardens.
- Support transportation and housing options that are affordable, reliable, effective, and safe.

OBJECTIVE

HC-1 Work with neighborhood associations of local residents, businesses, and institutions on neighborhood and community health initiatives.

IMPLEMENTING POLICIES

HC-1-a Neighborhood Associations. Promote the establishment of formal and self-sufficient "neighborhood associations" of local residents, businesses and institutions who are committed to working together and with others in Fresno to achieve the health, safety, recreation, employment, business development, property maintenance and other goals of their neighborhoods.

Commentary: Neighborhood associations can help coordinate with the City on setting priorities and obtaining feedback on programs and projects that are implemented.

- HC-1-b

 Local Health Workshops. Work with health providers, schools, religious institutions, neighborhood associations and others to develop and maintain a program of regular health workshops (and mobile health clinics) operated by medical service providers and hosted in local neighborhood facilities such as schools, parks, religious institutions, businesses, and parking lots.
- HC-1-c Neighborhood Care Facilities. Support public agencies and private sector groups who provide care facilities in neighborhoods and job centers through new partnerships and incentives, and create

opportunities to provide healthy, secure environments for Pre-K children, older adults, and people with disabilities.

HC-1-d Cultural Sensitivity. Work with providers to ensure that additional health care services are offered in a way that is culturally sensitive and linguistically appropriate for the diverse communities in Fresno.

Commentary: The City will encourage collaborative partnerships between the County of Fresno Health Department; California State University, Fresno; medical professionals; community-based agencies; service providers; schools; and local agencies.

OBJECTIVE

HC-2 Create complete, well-structured, and healthy neighborhoods and transportation systems.

IMPLEMENTING POLICIES

HC-2-a Healthy Neighborhoods. Promote the design of Complete Neighborhoods whose physical layout and land use mix allow for walking to local stores and services, biking, and transit use; foster community pride; enhance neighborhood identity; encourage public safety; are family-friendly; and address the needs of residents of all ages and abilities.

Commentary: Related policies are in the Urban Form, Land Use and Design Element.

- HC-2-b Supportive Housing. Continue to promote the availability of group housing facilities, emergency residential shelters, and similar housing arrangements throughout the city consistent with State and federal law.
- HC-2-c Prevent Crime through Design. Incorporate Crime Prevention Through Environmental Design (CPTED) principles and best practices into project review procedures for new development and major renovations.
- HC-2-d Mobility for Carless Population. Improve multi-modal mobility for populations that do not have access to a car by connecting neighborhoods to major destinations, including parks; civic facilities; educational institutions; medical facilities; employment centers; shopping destinations; and recreation areas.

Commentary: Details and related policies in the Transportation and Mobility Element describe how this will accomplished with a variety of modes.

HC-2-e

Bike and Pedestrian Network. Continue to promote alternative modes of transportation through development and maintenance of a citywide pedestrian and bicycle network.

OBJECTIVE

HC-3 Create healthy, safe, and affordable housing.

IMPLEMENTING POLICIES

HC-3-a Universal Design. Work with residential developers to update the City of Fresno Universal Design Standard to facilitate incorporation of lifecycle design principles in new residential development and make these options available to purchasers, to help community members stay in their homes and neighborhoods as they age.

Commentary: This idea is valuable to the concept of creating Complete Neighborhoods. Another common term is "visitability," referring to the desire for friends or family of any age or physical ability to be able to visit the home. A life cycle or "visitable" house includes fixed accessible features (wider doors and halls, open floor spaces, clear traffic patterns, etc.), what many people understand to be "universal design" principles. Lifecycle housing also provides for adaptable features, such as wall reinforcement for later installation of grab bars, or removable base cabinets for future knee space, to accommodate wheelchairs.

HC-3-b Housing-Related Illness Assessment and Testing. Support efforts to provide community assessment and testing programs for housing-related illnesses (i.e. blood lead levels, respiratory health, and skin conditions).

Commentary: Work collaboratively with the American Lung Association to support assessment and testing of housing related illnesses through best practice program, such as the Master Home Environmentalist Program.

HC-3-c Housing Services. Publicize housing programs and help residents make the connection between federal, State, County, City, private, and community-based housing services and local government resources related to rehabilitation and affordable housing improvements.

Commentary: Recommendations from the National Center for Healthy Housing's "Housing and Health: New Opportunities for Dialogue and Action" will help the City implement this policy.

HC-3-d Green Standards for Affordable Housing. Provide appropriate incentives for affordable housing providers, agencies, non-profit, and market rate developers to use LEED and CALGreen Tier 1 or Tier 2 standards or third-party equivalents.

Commentary: The City will publicize the health, environmental, and long term economic and maintenance benefits of applying LEED, CALGreen for third-party equivalents to projects in Fresno.

- HC-3-e

 Health Services and Medical Facilities in Underserved Neighborhoods.

 Publicize existing health programs and help residents make the connection between County and community-based health services and medical facilities. Work with hospitals and the County of Fresno Health Department to increase siting and development of medical clinics and medical facilities.
- HC-3-f

 New Drive-Through Facilities. Incorporate design review measures in the Development Code to reduce vehicle emissions resulting from queued idling vehicles at drive-through facilities proximate to residences.

Commentary: This action will help the City achieve the health benefits associated with improved neighborhood air quality through reduced auto-related emissions.

HC-3-g Residential Compatibility. Consider developing a program with community stakeholders to address compatibility of industrial and heavy commercial uses and zoning with established neighborhoods.

OBJECTIVE

HC-4 Improve property maintenance.

IMPLEMENTING POLICIES

HC-4-a Business Maintenance Standards. Update property maintenance standards, codes, and enforcement provisions to include businesses.

Commentary: Updated maintenance standards will provide additional enforcement options related to certain types of businesses, such as

"corner stores," which due to their nature and location have significant impacts on a healthy environment.

HC-4-b Local Business Assistance. Assist local store owners in established neighborhoods in identifying low-cost solutions to comply with physical accessibility requirements under the Americans with Disability Act. Provide financial assistance to qualifying businesses.

Commentary: The City will use multi-lingual outreach to include and support small business owners not fluent in English.

HC-4-c Residential Maintenance Standards. Consider the development of a residential housing inspection program to provide a structured review, evaluation and correction process to prevent substandard housing.

Commentary: This improvement program will be initiated in targeted neighborhood areas with high concentrations of substandard and poorly maintained residential properties.

- HC-4-d Cooperative Compliance Monitoring. Work with "neighborhood resident associations" to monitor and enforce basic property maintenance standards to ensure neighborhood cleanliness and safety, and prevent blight-causing conditions.
- HC-4-e Code enforcement. Conduct resident outreach, including to diverse populations, to assess the accessibility and adequacy of the City's code enforcement procedures and modify them as needed.
- **HC-4-f Chronic Violators.** Design and implement procedures to address chronic code violations at single properties.

OBJECTIVE

HC-5 Promote access to healthy and affordable food.

IMPLEMENTING POLICIES

HC-5-a

Healthy Grocery Incentives. Adopt regulations and incentives in the Development Code for locating healthy food grocery stores to increase communitywide healthy food access, with an emphasis on the attraction of grocery stores to established neighborhoods deficient in grocery stores and access to healthy and fresh food.

 Establish definitions and standards for "healthy food grocery stores" in order to ensure that businesses meeting that description have access to incentives developed with them in mind.

Commentary: Criteria is to be established and should consider including in the store: (1) dedicate at least 50 percent of retail space for a general line of food and non-food grocery products intended for home preparation, consumption, and use; (2) dedicate at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats-poultry-fish, and frozen foods; and/or (3) dedicate at least 500 square feet of retail space for fresh produce.

- Provide flexibility for established neighborhoods with corner stores and markets to meet the intent of a healthy grocery store, but with a lower square footage of produce area;
- Offer incentives for suitable sites that could be developed as healthy food grocery stores (with a focus on neighborhood areas with little or no access);
- Expedite permit processing as resources are available for healthy food grocery store development;
- Enable potential new healthy food grocers to consolidate parcels and/or make necessary improvements; and
- Allow for grocery stores that use less space, require less parking, and focus on the day-to-day needs of nearby residents.
- HC-5-b Food Assistance Awareness. Support local agencies and community groups in increasing community awareness of and participation in existing federal food assistance programs, such as the Women, Infants, and Children (WIC) nutrition program and the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps).
- HC-5-c Refrigeration Assistance for Local Stores. Work with philanthropic and community institutions to create a revolving fund granting zero-interest loans to neighborhood convenience stores for the purchase of refrigeration and other fixtures necessary to allow for the sale of fresh produce.
- HC-5-d Work with Farmers Markets. Promote comprehensive listing of all farmers markets in Fresno and support local agencies and community groups in working with farmers' markets to accept WIC and EBT by

providing technical assistance, such as providing an exchange or voucher system.

HC-5-e

Food Policy Council. Participate in the creation of a Fresno Food Policy Council with community-based groups to study the food system as a whole and recommend changes to appropriate agencies regarding food policy that increase access.

Commentary: The Fresno Food Policy Council will include stakeholders from many sectors of the food system, e.g., anti-hunger and food justice advocates, educators, employees of non-profits involved in food system reform, government officials, farmers, grocers, chefs, business people, food processors, and food distributors. Opportunities for youth involvement in the work of the Fresno Food Policy Council will also be provided, as well as the County of Fresno Health Department's Transformation Project and the Central California Obesity Prevention Program.

HC-5-f

Urban Agriculture. Promote a full range of urban agriculture activities, including farmers' markets, farm stands, community gardens, on-site garden produce market stands, and urban farms. Support associations involved in these activities, which can be accomplished by a combination of the following:

- Amend the FMC to provide clear and concise permitting procedures regarding Community Gardens, On-site Garden Produce Market Stands, and Urban Farms that allow sale of foods grown locally.
- Create a policy for reduced planning entitlements and plan check fees
- Make publically available an inventory of City-owned surplus land that could be used for urban agriculture.
- Continue to allow and promote community gardens in Cityowned parks.
- Support the planning of community gardens within walking distance of high-density residential areas to compensate for the reduced amount of open space in these areas.
- Emphasize opportunities for urban agriculture in all areas of the city, schools, parks, residential food deserts, and especially in areas of the city with a relatively high proportion of "food insecure" individuals.

Commentary: These provisions will supplement the availability of fresh produce in the city, while encouraging social cohesion, supporting local farmers, and reducing greenhouse gases.

HC-5-g Commercial Agriculture. Continue to develop policies to allow agriculture on land greater than 50 acres in area.

OBJECTIVE

HC-6 Improve access to schools and their facilities for the community.

IMPLEMENTING POLICIES

HC-6-a Safe Routes to Schools. Continue to improve the conditions for youth walking and bicycling in the areas surrounding schools by working with the school districts including Fresno USD, Clovis USD, Central USD, Sanger USD, and Washington Union USD, as well as California State University, Fresno, Fresno Pacific University, and State Center Community College District to implement a safe routes to school program. Prioritize identified safe routes to school infrastructure improvements in annual transportation improvement budgets.

Commentary: The program will identify schools and neighborhoods where the program is most needed, and engage local residents in safe routes to school workshops. This will enhance students' health and well-being, ease traffic congestion near schools, and improve air quality and community members' overall quality of life.

- HC-6-b Site Schools on Safe Streets. Work with all school districts operating in Fresno and private and charter schools to locate and design new school sites so they are located on safe streets.
- HC-6-c Work with School Districts on Facilities Agreements. Work with school districts to promote the use of schools as community wide facilities. Help broker agreements between recreation organizations and school districts.

Commentary: To make these agreements viable, the City will need to resolve issues over security, maintenance, liability, fees, and other contractual obstacles with all the school districts operating within the city.

HC-6-d New School Strategies. Advocate for school siting standards that allow smaller neighborhood schools. Allow new schools to be constructed in existing urbanized areas, and design schools to be focal points of community life.

OBJECTIVE

HC-7 Establish priorities and mechanisms for park facilities improvements linked to effectiveness and improving health.

IMPLEMENTING POLICIES

Prioritization System for Parks Improvements. Link park facility improvement priorities to a ranking system keyed to public health and safety and recreational goals, prioritize gaps in local park service areas (especially in the areas west of State Route 99, and in south central and southeast Fresno), and respond with options for pocket parks and other walkable open space amenities.

Commentary: The best options may involve joint use and improvement of ponding basins and school-owned land.

HC-7-b Performance-Based Capital Improvements. Establish a performance-based priority system for capital improvements, based upon the health and recreation goals ranking system, as one of as one of the items the City must consider prior to constructing capital improvements.

Commentary: Unlike traditional capital improvements programs, a performance-based priority system establishes a ranking scale that measures each component (e.g., pool, court, bench, or trail) of its system against the scale related to public health. For example, it might be a one-to-three scale in which one is below expectations, two indicates that the component can meet its intended function for a given period of time, and three means that it exceeds expectations. A performance-based park planning approach will take the conversation beyond "How many acres are there?" to "How well are the parks serving the community?"

HC-7-c Funding Mechanisms for Open Space Maintenance. Work with neighborhood associations and business and homeowners organizations to establish community facilities districts or pursue other citywide financing mechanisms to generate funds for maintenance of new parks and open space, or to improve the level of maintenance of existing facilities based upon neighborhood needs and priorities.

Commentary: Options may include a voter-approved sales tax initiative for park maintenance and related needs.

HC-7-d Integrated Pest Management. Formulate and implement an Integrated Pest Management Program to reduce the use of pesticides at Cityowned parks and landscape areas.

OBJECTIVE

HC-8 Support programs, leadership, and opportunities for Fresno's youth.

IMPLEMENTING POLICIES

HC-8-a Out-of-School Youth Programs. Work with public agencies, community-based organizations, and school districts including Fresno USD, Clovis USD, Central USD, Sanger USD, and Washington Union USD to support the development of a unified and central student leadership entity for out-of-school time in Fresno, including the development of citywide standards.

- Define and promote a public image and message on the youth development approach;
- Create and engage in activities that build the field of youth development;
- Promote broad-based support and facilitate connections to schools and community resources;
- Develop programs that encourage involvement by youth of all abilities.
- Develop and increase access to resources; and
- Develop programs and learning communities through technical assistance and consultation.⁴²

HC-8-b Youth Leadership Program. Work with the Youth Leadership Institute, Center for Multi-Cultural Communication, and other youth-oriented community organizations, including organizations that provide services for youth with disabilities, to design, support, promote, and

⁴² This program is modeled on "How after-school programs can most effectively promote positive youth development as a support to academic achievement: A report commissioned by the Boston After-School for All Partnership." Wellesley, MA: Wellesley Centers for Women. National Institute on Out-of-School Time, 2003.

seek funding for a youth leadership program to involve youth directly in planning for services and programs.

Commentary: Involvement will yield contact with caring adults, and youth leadership creates innovation in programming and facilities and helps young people shape the future of their communities. Enabling and valuing the contributions of young people is critical to keeping them involved.

- HC-8-c Job Training, Apprenticeships, and Placement. Work with the Workforce Investment Board, or other interested organizations, businesses, schools, and residents to create an expanded youth job development partnership, helping connect local businesses to teens for after school and summer work, volunteer positions, and other skills development opportunities.
- **HC-8-d Youth Master Plan.** Work with local youth groups and organizations to seek adequate funding for City staff time, consultants, and participating neighborhood and community organizations to formulate a Fresno Youth Master Plan based upon appropriate youth goals related to land use, transportation, housing and other General Plan Elements.

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HOUSING ELEMENT CHAPTER

The purpose of the Housing Element is to provide residents, public officials, and the general public with an understanding of the city's housing needs and the goals, policies and programs that have been developed to help meet those needs. The Housing Element provides analysis of i) the city's existing, projected and special housing needs; ii) a land inventory for residential development; iii) household characteristics; iv) adequate sites to provide for the needs of households at all income levels; v) governmental and nongovernmental constraints; and vi) a statement of the communities' goals, polices, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing.

The 2015-2023 Housing Element was adopted on April 28, 2016 by Resolution No. 2016-60 and amended April 13, 2017, by Resolution No. 2017-107. It is included as a separate document.

12 IMPLEMENTATION

The Fresno General Plan provides specific policy guidance for implementation in each of the Plan elements, which also establishes a basis for coordinating City actions with adjacent jurisdictions, and regional and State agencies. This element describes the implementation process summarizes the major City actions; the implementing policies in each element of the Plan provide details that will program development. A summary of the implementing policies is also provided, showing which City officials and departments are responsible for these actions, and what the timelines are expected to be. The specific timing of Plan implementation will be dependent on the City's budgetary resources and staffing and may vary depending on how market forces affect development. The Annual Report on the General Plan will keep City officials and others up-to-date on Plan implementation.

12.1 OVERVIEW

This Implementation Element provides guidance and policies for the process of implementing the Fresno General Plan. The first section of the element presents elected officials, commissions, and departments of the City that are involved in the implementation process with an overview of their responsibilities. The next section of the element describes the City's role in the implementation process through the City's Capital Improvement Program (CIP) and fiscal management strategies. Then, the relationship between the Plan and the regulatory system that guides private sector development is described. It includes an overview of the Development Code (Code) and other regulations and presents information on streamlining California Environmental Quality Act (CEQA) review and the sequencing of development. Lastly, the element includes a table with detailed actions, responsible parties, and corresponding policies that are needed to implement the Plan.

The CIP will be the primary means of scheduling and funding public infrastructure improvements of citywide benefit, consistent with the General Plan Economic Development and Fiscal Sustainability Element policies. To implement the goals of this Plan revised or new master plans for specific facilities and services may be necessary. The City has completed many studies, master plans, and management plans for City facilities and infrastructure, including the BRT Master Plan (2008), Long Range Transit Master Plan (2002), Bicycle, Pedestrian and Trails Master Plan (2010), Urban Water Management Plan (2010), Metro Water Plan (2014), Recycled Water Master Plan (2013), and the Wastewater Collection Plan (2006). Additional master plans that could enhance the goals of this Plan will need to be evaluated and may include plans such as a parks, recreation, and open space plan and a bikes and trails implementation plan. As part of the Plan implementation the City will completely reassess fees for levels of service. The public facility development impact fees of the City or other special districts will need to be reviewed and updated as necessary. Special assessment districts or other means of financing improvements benefiting specific areas, such as the South Industrial Area, employment centers adjacent to the Airport, and new neighborhoods, may be needed.

In many areas, the Plan implementation will depend on actions of other public agencies and of the private sector, which will fund most of the development and related infrastructure, consistent with California and US constitutional requirements of nexus and proportionality. The Plan will serve as a coordinating function for private sector decisions; it also provides a basis for action on concept plans and individual development applications, which must be consistent with the Plan.

The idea of concept plans, presented in the Urban Form, Land Use, and Design Element, will be further developed by, and have regulations provided in, the new Development Code. After the adoption of the General Plan, the City also anticipates

that the new Development Code will establish updated procedures for making findings for General Plan conformity decisions in new regulating and zoning implementation provisions. The City will reevaluate the General Plan every five years using information from, but not limited to, market demand studies and analysis to determine land use needs.

The major implementation process for land use proposals will be updating and administering the Code through the Zoning Map and development review procedures. The City's zoning ordinance is being updated by the preparation of the Code following the adoption of the Plan in order to implement the goals, objectives, policies, and planned land uses of the Plan. The Code will modify and add zone districts reflecting the designations on the General Plan Land Use Diagram. The Code will also update the City's Subdivision Ordinance to amend or add provisions related to land dedication and improvements for public facilities such as public streets, schools, parks, paths or trails, and waterway corridors, and reservation of sites for the community facilities, consistent with current State law.

12.2 RESPONSIBILITIES

Implementing the General Plan will involve the Mayor, the City Council (Council), the Planning Commission (Planning Commission), and other City boards, committees, commissions, and departments. The City also will need to consult with Fresno County, Madera County, the City of Clovis, the City of Sanger, and other public agencies about implementation proposals that affect their respective areas of jurisdiction. The principal responsibilities that City officials and staff have for the Plan implementation are briefly summarized below; details on their powers and duties are defined in the Fresno Municipal Code (FMC) and the Charter of the City of Fresno.

Mayor

The City of Fresno is a "strong mayor" city, in which the Mayor serves as the top-level executive for the organization. The Mayor appoints the City Manager, who is the chief administrator of the City and has overall responsibility for the day-to-day implementation of the Plan, and the members of the Planning Commission with Council approval. The Mayor also prepares and submits the City budget, which includes the Capital Improvement Plan, to the Council, and may also recommend legislation to the Council. These responsibilities are delineated in the City's Charter.

City Council

The City Council is the governing body of the City and is vested with all powers of legislation in municipal affairs. As the legislative body, the Council is responsible for

adoption of the Plan, subject to Mayoral veto or referendum, and any amendments to the Plan. The Council also adopts the zoning and subdivision ordinances embodied in the Development Code, including the Official Zone Map, to implement the Plan, and approves final subdivision maps consistent with the Plan. The Council also may adopt community plans, neighborhood plans and Specific Plans, among others, as needed for General Plan implementation, and it hears appeals from the Planning Commission regarding certain development project decisions. The Council also approves a CIP and budget to carry out the Plan.

Planning Commission

The Planning Commission hears, reviews, and makes recommendations to the City Council on development, land use, and environmental issues, including the Plan, zoning and subdivision ordinances, and other land use regulations. The Planning Commission may also prepare and recommend adoption of design guidelines and Specific Plans, community plans, Concept Plans, neighborhood plans as needed for Plan implementation. Finally, the Commission is responsible for tentative map approvals under the City's Subdivision Regulations, if it finds them to be consistent with the Plan and Specific Plans and certain development project review, as specified in the Development Code, and for other implementation actions, as specified in the Plan elements or in the Development Code.

Historic Preservation Commission

In 1979, the Council adopted the City's Historic Preservation Ordinance (HPO) and updated it in 1999, 2010 and 2012. It established the City's Historic Preservation Commission and a Local Register of Historic Resources (Local Register), patterned after the 1966 National Register of Historic Places. Fresno's Local Register thus serves to protect and preserve buildings, structures, objects and sites which are (generally) at least 50 years of age and which have both historic significance as well as integrity.

The HPO provides for three separate local landmark programs: individual designation on the Local Register, inclusion within a Local Register District and the Heritage Property program. The HPO provides legislative mechanisms to protect certain cultural resources, including:

- Heritage Properties, defined as a resource which is worthy of preservation because
 of its historical, architectural or aesthetic merit but which is not proposed for and
 is not designated as an Historic Resource under the HPO.
- Historic Resources, defined as any building, structure, object or site in existence
 generally more than 50 years which possesses integrity of location, design, setting,
 materials, workmanship, feeling and association, and is associated with historic
 events or with the lives of persons significant in Fresno's past, or embodies the

distinctive characteristics of a type, period or method of construction, or represents the work of a master or possesses high artistic values; or reflects, important information about prehistory or history, and has been designated by the Council to the Local Register as required by the HPO.

- Local Historic Districts, defined as resources related to one another in a clearly distinguishable way or any geographically definable area which possesses a significant concentration, linkage or continuity of sites, buildings, structures or objects united historically or aesthetically by plan or physical development. Contributors to Historic Districts are any building, structure, object or site that contributes to the significance of the specific Local Historic District. The Local Historic District must be significant as well as identifiable, and must meet the Local Register Criteria for listing on that Register including formal designation by the Council as required by the HPO.
- National Register Historic Districts is a local district that must be significant as well as identifiable and meet National Register Criteria for listing on that Register.

Unlike properties considered for the Local Register, there is no age, integrity or historic significance requirements for a Heritage Property. As with all landmark programs under the HPO, the owner of a Heritage Property may use the California Historical Building Code (CHBC), a more flexible way to meet health and safety standards. In addition to the CHBC, historic property owners may claim a federal tax credit for commercial properties placed in service prior to 1936 and may find some leniency under local zoning. The City participates in the Certified Local Government (CLG) Program administered by the California State Office of Historic Preservation. CLGs benefit from expedited review of some federally funded projects and may also apply for pass-through grants from the federal government. However, a CLG must also meet a variety of requirements to maintain this status, including a Historic Preservation ordinance, a citizen's commission, an inventory of local historic properties, adequate public participation and compliance with CEQA.

Projects that comply with the Secretary of the Interior's Standards may qualify for a categorical exemption under CEQA and a finding of no adverse effect under Section 106 of the National Historic Preservation Act. The use of these criteria and standards make environmental review faster, more efficient, and reduce costs and delays.

Development and Resource Management

The City's Development and Resource Management Department (DARM) focuses on public and private property development throughout the city and prudent management of the city's land and water resources, and public infrastructure. It manages both development and neighborhood services through downtown and neighborhood revitalization, long range land use planning, new development entitlements, building

permit issuance, building plan reviews, inspections, code enforcement, housing grant programs, and resource efficiency programs for residential and commercial properties.

Specific duties related to Plan implementation include, preparing zoning and subdivision ordinance amendments and design guidelines for Planning Commission review and City Council approval; reviewing development applications; and conducting investigations and making reports and recommendations on planning and land use, zoning, subdivisions, development plans and environmental controls. DARM also coordinates activities with numerous school districts and community college districts related to school and college sites. Finally, DARM has the primary responsibility for preparing the annual report on the Plan and conducting the five-year review. These reporting requirements are described in Chapter 1 of the Plan.

DARM also includes the Building and Safety Services Division, which is responsible for permit processing, plan review, and inspection services for public and private projects; the Community Revitalization Division which has a strategic and proactive focus on code enforcement and neighborhood revitalization services; the Parking Division, which focuses on parking facility management, vehicle code enforcement, citation management, and abatement of abandoned vehicles left on city streets; and the Housing and Community Revitalization Division, which administers housing grant programs and offers programs and services that provide affordable housing opportunities and directs implementation of the Housing Element of the Plan. DARM also administers the City's Historic Preservation Program. In collaboration with other departments, DARM facilitates development reviews to enhance investment and job creation in Fresno.

Public Works

The City's Department of Public Works (DPW) is responsible for planning, design, and development of public infrastructure projects; traffic and transportation engineering, including bike lanes, paths and sidewalks; street maintenance; public parking; and engineering support to DARM for private development project and subdivision infrastructure review. DPW also handles the review of current development applications, subdivision maps, public improvement plans, encroachment permits, and development in the flood zone. In addition, DPW manages construction inspection for permits it issues and is responsible for the design and construction of the projects included in the CIP. DPW is presently managing the City's Parks, After School, Recreation and Community Services (PARCS) Department's landscape maintenance efforts.

Parks, After School, Recreation and Community Services (PARCS)

The City's Parks, After School, Recreation and Community Services (PARCS) Department offers numerous parks, including regional parks, neighborhood parks,

action sports facilities, play structures and golf courses. PARCS owns and maintains many community and neighborhood centers that are open to the public and offer various programs for all ages. In addition, PARCS offers several trails for the community to enjoy.

The PARCS maintenance program also aims to rehabilitate, through various sources of funding and capital improvements, at least one park per year. Development of new parks is also a priority. In Fiscal Year 2014 construction began on Martin Ray Reily Park. There are plans to begin construction in the immediate future on Inspiration Park, which will accommodate the needs of the disabled community and is the only one of its kind in the Central Valley.

Fresno Area Express

Through the California Department of Transportation, the City offers public transit with the Fresno Area Express (FAX) bus services and Handy Ride Paratransit Service. FAX provides 16 fixed-route bus lines and Handy Ride offers a demand-response service for people with disabilities. FAX is the largest mass public transportation provider in the San Joaquin Valley. In 2016, the City's Bus Rapid Transit (BRT) is expected to implement "Phase 1" service to provide improved service reliability and travel time along two corridors (Blackstone Avenue and Ventura Avenue/Kings Canyon Road) along with enhanced bus service along Shaw Avenue.

Airports

The City's Airports Department is responsible for the safe, secure, and efficient operation of Fresno Yosemite International Airport (FYI) and Fresno Chandler Executive Airport (FCH). This includes compliance with federal, State and local regulations, managing and growing business relationships, planning and implementing CIPs to keep the both airports infrastructure viable into the future, marketing the airports, and maintaining and developing air service at FYI.

Public Utilities

The City's Department of Public Utilities (DPU) provides water, wastewater, and solid waste services within the city limits and a few other select locations. The DPU - Water Division manages and operates the City of Fresno's water system. It delivers drinking water to urban residential, commercial, and industrial customers in the city and many of the County Islands, and it plans long-range water supply. The DPU - Wastewater Management Division is responsible for the operation and administration of the Fresno-Clovis Regional Wastewater Reclamation Facility, sanitary sewer lines, and provides recycled treated wastewater for irrigation. The DPU - Solid Waste and Recycling Division collects residential solid waste, recyclables, and greenwaste. Specific

implementing responsibilities are established in the Mobility and Transportation, Public Facilities and Services, Resource Conservation and Resilience, and Noise and Safety elements of the Plan.

Other Utilities

The County of Fresno handles hazardous waste disposal and operates the regional landfill. The Fresno Metropolitan Flood Control District provides flood control and urban storm water services to the city. PG&E provides power services through electricity and natural gas to homes, business, and industry.

Police and Fire Departments

Within the City, responsibility for public safety is assigned to the City's Police and Fire Departments. The Police Department is responsible for preventing crime and maintaining law and order, while the Fire Department is responsible for fighting urban and wildland fires, as well as emergency response and rescue. Both departments coordinate with the County and State on mutual aid. Specific implementing responsibilities under the Plan are established in the Public Utilities and Services Element.

Other Commissions, Committees, Councils, Counties, and Partnering Agencies

The City has a number of standing commissions and advisory committees, and appoints City representatives to several non-municipal governing boards, which may assist in the Plan implementation endeavors as directed or requested by the Administration and the Council. These currently include:

- Bicycle and Pedestrian Advisory Committee
- Disability Advisory Commission
- Downtown Neighborhoods Community Advisory Committee
- Fulton Corridor Specific Plan Community Advisory Committee
- Fulton/Lowell Design Review and Specific Plan Implementation Committee
- Housing and Community Development Commission
- Mayor's Industrial Council
- Tower District Design Review and Specific Plan Implementation Committee
- Utility Advisory Committee

Partnering Agencies include:

- Fresno County Economic Opportunities Commission
- Fresno County Transportation Authority
- Fresno Housing Authority
- Fresno Madera Area Agency On Aging Board
- Fresno Metropolitan Flood Control District
- Fresno Mosquito Abatement District
- Fresno Regional Workforce Investment Board
- San Joaquin River Conservancy
- San Joaquin Valley Air Pollution Control District
- Transit Rate And Services Committee
- Transit Security Advisory Committee
- Fresno Irrigation District
- Fresno County Local Agency Formation Commission
- Fresno County Council of Governments
- Fresno County
- Madera County
- City of Clovis
- City of Sanger
- California State University, Fresno
- State Center Community College District
- Fresno Unified School District
- Clovis Unified School District
- Central Unified School District
- Sanger Unified School District
- Washington Union Unified School District

The Plan does not envision any substantive change in the responsibilities assigned to these commissions, committees, councils, counties and partnering agencies except to the extent that new policies and programs may expand the scope of discussion relative to their assigned responsibilities.

Transition for "Redevelopment" Programs

During the preparation of this Plan, the State of California passed legislation that terminated the existence of Redevelopment Agencies (RDAs) throughout the State. Fresno's RDA worked to redevelop blighted land, rehabilitate structures, and build infrastructure within its six designated project areas and to develop affordable housing. The RDA previously played a major role in the implementation of the General Plan, but with the end of the City's RDA program, the Successor Agency to the Redevelopment Agency of the City of Fresno will take a more limited role in financing the Plan's implementation and will be supplemented with other efforts. The City's Infill Development Act and the Mayor's Fresno General Plan Implementation and Infill Finance Task Force, both discussed below, recommended a number of initiatives and incentives to implement major components of the Plan. A number of these recommendations have been integrated into the Plan and the Code. The purpose will continue to be focused on the removal of blight and encouraging reinvestment in Fresno.

12.3 INFILL INITIATIVES

Two important initiatives by the City informed development of this element: the Infill Development Act championed by Councilmember Brand and adopted by the City Council on November 1, 2012, and Mayor Swearengin's Fresno General Plan Implementation and Infill Finance Task Force formed in 2013. Understanding them provides background information for the specific implementation roles and responsibilities of those involved and the summary of implementation actions, which follows.

Infill Development Act

The Council passed the Infill Development Act (Act) on November 1, 2012. Recognizing the inherent design, policy, and cost challenges to developing infill properties, the Act was intended to begin finding creative solutions and incentives to implement a successful infill development program across the city. The Act created an Ad Hoc Council Subcommittee on Infill Development to improve the business climate in the City and improve the City's relationship with the private sector. That work has been incorporated into the Business Friendly Fresno initiative convened by the Mayor and Council. In addition, the Subcommittee examined other incentives and policy recommendations to promote infill development in Fresno, including financial incentives, infrastructure incentives, and regulatory incentives, among others. The Act also called on the Mayor to convene a task force specifically focused on addressing the funding gap associated with infill and rehabilitation projects within established neighborhoods throughout the city. Recommendations from the Infill Finance Task Force are summarized below. The policy recommendations from the Infill Finance Task

Force and Ad Hoc Council Subcommittee are integrated into the Plan, the Code, and assessed by the General Plan Master Environmental Impact Report (MEIR).

BUILD Act

The passage of the BUILD Act (Best Utilization of Infill Lot Development) of June 2013 represented a creative and practical approach toward addressing the problem of incentivizing infill development in the City of Fresno by waiving fees on properties in core neighborhoods where there would be no impact to major streets, streetlights, parks, police and fire.

The Act's goal is to make infill development more financially attractive to developers who are considering building in the urban core. Moving forward, the BUILD Act should be promoted and considered a model as city staff consider future incentives to infill development.

Fresno General Plan Implementation and Infill Finance Task Force

The Mayor of Fresno created the Fresno General Plan Implementation and Infill Finance Task Force (Task Force) with support from the White House's Strong Cities, Strong Communities (SC2) initiative, the U.S. Environmental Protection Agency's Office of Smart Growth, and Governor Brown's Office of Planning and Research. The Mayor and the Governor's Office of Planning and Research jointly convened the Task Force, which included many of California's leading development, finance, legal, and policy experts to participate on the Task Force in 2013. In addition, the Task Force included local public and private developers, as well as Councilmembers Steve Brandau and Paul Caprioligio.

Recognizing the current challenges associated with infill development, the Task Force was charged with identifying specific strategies to support infill development in the City. The group began its work by evaluating the different types of neighborhoods and commercial districts that exist in the established parts of the city and quickly assessed that, depending on the type, age, and location of the neighborhood or commercial area, different strategies would be needed to support reinvestment in different parts of the city. In other words, while there are some overarching recommendations for all of Fresno's established neighborhoods, the Task Force recommended different strategies based on three different priority areas which are depicted in Figure IM-I: Priority Areas for Development Incentives and include:

Established Neighborhoods Generally South of Herndon Avenue. Included within
this broad area are neighborhoods that are the most distressed in the city and
among the most distressed in the nation. These areas need catalytic reinvestment.
There are other neighborhoods in this area that are not currently distressed, but
do need strategic investments now in order to prevent decline. Finally, some

neighborhoods in this area are perfectly healthy today, but may be surrounded by neighborhoods that are starting to decline.

- BRT Corridors. The Task Force recognized the importance of the Bus Rapid Transit
 investment and its potential to, over time, support mixed-use, transit-oriented
 development along its corridors. The BRT priority corridors include the first phase
 along Blackstone Avenue and Ventura Avenue/Kings Canyon Road, and the second
 phase along Shaw Avenue and California Avenue.
- Downtown Planning Area. The Downtown Planning Area includes the Central Business District, Civic Center and other Downtown Centers, Chinatown, South Stadium/South Van Ness, and Downtown neighborhoods and special districts. Together, these districts form the civic and cultural heart of the City. BRT and enhanced transit will connect established neighborhoods generally south of Herndon Avenue to a functioning, vibrant Downtown.

The Task Force identified the major barriers to infill and revitalization that the Plan implementation strategy should seek to address and made a number of specific recommendations, many of which are integrated into the fiscal management strategies presented in the Economic Development and Fiscal Sustainability Element. The greatest barrier is the dilemma that infill development and/or adaptive reuse of historic buildings can cost too much relative to the return on those investments from rental, leased, or sale income. As a result, lending institutions often view development in established neighborhoods as a higher risk proposition than greenfield sites in more affluent suburbs and are unwilling to provide traditional financing for the projects. As traditional financing has flowed almost exclusively in the Fresno Area for decades to greenfield development, the market for projects in established neighborhoods is further undermined, creating a vicious cycle that is difficult to break. Redevelopment funds historically could be used to address the "risk gap" associated with development in established neighborhoods, but that is no longer an available tool in the State of California. And, given the City's fragile financial position, public sector financial capacity to address the "risk gap" does not exist.

An additional barrier cited by developers is the cost of infrastructure improvements that are required to support development in established neighborhoods. The older the neighborhood is, the older its infrastructure. For developers to invest, either in substantial rehabilitation of existing buildings or in new construction on underutilized or vacant land in established neighborhoods, they have to absorb the cost of replacing the aging infrastructure. Given the overall weakness of the Fresno economy, that additional cost can make infill and rehabilitation unaffordable for investors.

The Task Force also identified as a barrier the lack of experience among local developers in navigating available subsidy programs for infill and revitalization projects.

There are some financing tools that are available in California, but the local development community and City staff are largely inexperienced in working with these programs. They are complex and onerous, but can be mastered as they have been in other markets in California. While it may not be desirable in the medium and long-term to rely on these types of financing tools for redevelopment and reinvestment in Fresno's established neighborhoods, in the short-term, these tools can be of use in addressing the financing "risk gap." Improving the technical capacity of the local development community and City staff is an achievable goal that is included in the Task Force's recommendations.

Lastly, the Task Force cautioned against spreading energy and resources too thinly across the City and instead called for focusing on smaller geographic areas in order to leverage private investment. The following points summarize the Task Force's recommendations:

- Identify all potential funding mechanisms to replace infrastructure in established neighborhoods and improve service levels. New development alone cannot absorb the cost of replacing infrastructure that today serves existing residents and neighborhoods. While new development must pay for its portion of any "upsizing" required to support increased densities and infrastructure requirements, there must also be sources of public financing of infrastructure to absorb the cost attributed to replacements and repairs that would be needed to serve existing residents. Examples include community facilities districts (Mello-Roos districts), infrastructure financing districts, and State and federal grants. Other cities in California have also leveraged naming rights of parks and other public amenities to generate a revenue stream that can be applied to public improvements. In addition, the Task Force identified ways in which the City could better position itself as a strong investment relative to municipal credit bond market. Doing so would help strengthen the City's ability to borrow money to pay for public infrastructure, and could also reinforce the strength of the "Fresno brand" to other lending institutions needed to finance private development projects.
- Close Funding Gap for Development. The Task Force recommended the following
 as strategies needed to address the risk gap for early infill and revitalization
 projects. Over time and if projects are successful, this will become less of an issue
 as the market is proven and becomes viable for traditional financing.
 - O State Loan Guarantee Program The City should join similar cities in California and petition the Governor and the legislature to create a loan guarantee program for reinvestment in low income, environmentally challenged areas of the state. Such a program would generate virtually no risk to the State's finances but would make infill markets viable within inland parts of California.

- Modify the City's Impact Fee Program Today, the City's impact fee program is based on building public facilities that are unrealistic in today's fiscal climate. The impact fee program should be re-evaluated with a realistic plan for needed public facilities. It should also take into consideration that rehabilitation and infill projects within established neighborhoods already have infrastructure in place and, therefore, should not have to "pay twice" for infrastructure that already exists. Modifying the impact fee program in such a manner would likely result in low to no-cost impact fees for development in infill areas, which would help address the funding gap.
- Property Tax Abatement or Rebate The Task Force recommended putting an incentive in place for property owners to improve their properties in neighborhoods generally south of Herndon Avenue. For the program to serve as a meaningful incentive, State legislation would likely be required although the City could use federal housing grant funds or other local sources of funds to at least create an incentive program in the short term.
- O Developer Technical Assistance/"Concierge" The City could retain an expert in community development finance with knowledge of the various State and federal assistance programs available to support infill development to help walk developers through the options.
- Streamlined Development Review Process Expediting and streamlining the development review process helps to reduce uncertainty for developers, which can lower their costs. The intent of the forthcoming Downtown Development Code and various land use plans is to make more projects permissible "by right" if they conform to the plan in order to streamline the development process.
- O Crowdfunding "Crowdfunding" is quickly becoming a common way to bring together interested citizens and investors to help address the risk gap. Fundrise.com is one such example and has been used to complete several redevelopment projects in major U.S. cities. Peeve's, a local public house and restaurant on Fulton Mall, secured the funding it needed to expand its public market through the crowdfunding site Kickstarter.com.
- Share the Risk & Reward through Partnerships. Residents, major employers such as hospitals, institutions such as colleges, and utility companies all benefit from the economic, environmental, and social benefits brought by infill development. Engaging these institutions on Downtown revitalization, for example, is a key to improving the city. Such collaborations have been extremely successful in cities across the U.S. They are a true win-win.
- Change Perceptions. Strengthening public perceptions of Fresno as a good investment choice can also help foster infill development in untested or marginal areas. Recent residential projects in the Downtown Planning Area have done well, but they still required a subsidy in order to cover development costs. In order to

realize the goals of this Plan, the City must continue to change perception of the Downtown and other infill areas so that they are viewed as safe, vibrant, and enriching places to live. Promoting the positive improvements that are taking place in neighborhood schools is a critical component to changing perceptions about Fresno's established neighborhoods, as is improving the aesthetic quality of these neighborhoods, and forming property owner associations that can put on events and positively "brand" their neighborhoods.

12.4 IMPLEMENTATION IN THE PUBLIC REALM

Various public sector entities will play an important role in implementing the Plan by shaping the public realm through the funding, building, and regulating of infrastructure and development projects. The CIP includes a list of public works projects that the City intends to design and construct in coming years. Creating a long-term CIP for City-sponsored projects is a new requirement of this Plan under Policy RC-I-b in the Resource Conservation and Resiliency Element. Under the Charter and this Plan, the City Council through the budget process will review the CIP to determine whether funding for improvements and services will implement the Plan. Specifically, the Plan policies in Chapters 6 and 7 anticipate that the Council will review funding for all City-funded improvements and public services, particularly projects in the CIP requiring any of the following Council actions:

- Acquisition of land for public purposes;
- Disposition of land;
- Street vacations; and
- Authorization or construction of public buildings or structures.

The City Council also has the authority to comment on CIPs prepared by school districts, community college districts, and utility providers. These CIPs, and any annual revision proposed to them, are to be forwarded to the City at least 60 days prior to adoption for the City's review for consistency with the Plan.

Infrastructure Priorities And Phasing

Infrastructure and revenue allocation priorities for the Plan implementation will be established in consultation with City departments, guided by policies found in multiple locations in this Plan, as well as take into consideration recommendations from the Fresno General Plan Implementation and Infill Finance Task Force. These latter recommendations will be periodically updated by the DPU and DPW.

The phasing of future infrastructure projects will be determined by the policies in this Plan in consultation with the relevant City departments and determined by the amount of funding available from federal, State, local, and private sources. Priority will be given to serving established neighborhoods, including established neighborhoods generally south of Herndon Avenue (as shown in Figure 1M-1: Priority Areas for Development Incentives), along BRT and enhanced transit corridors, and in the Downtown Planning Area, consistent with the Plan policies. Most desirable, from a fiscal perspective are projects that are revenue-producing, meaning they would create positive impacts on the City's property tax base and the City's retail base or otherwise generated needed revenues that could flow to the General Fund.

Public Works Standards

Following adoption of the Plan, the Public Works Standards and the subdivisions regulations for the City will be updated to be in conformance with the Plan and the Development Code, when adopted. Public Works design and improvement standards apply to all subdivisions in the city and will be imposed on a subdivider as a condition of approval of a tentative map or parcel map. Exceptions to design standards may be approved if the City finds that an alternative design substantially conforms to the intent of the standards of this chapter and to the Plan.

Updated standards in the Code will address:

- Block dimensions: maximum length and width;
- Lot sizes and provisions for a diversity of lot sizes in subdivisions;
- Major utility easements for major utilities, such as high-tension lines and utility trunk lines, to ensure they are incorporated into subdivisions as open space or recreation use and connect with a regional trail system;
- A continuous street system, so that new streets, alleys, bicycle facilities, and pedestrian ways connect to other streets, alleys, bicycle facilities, and pedestrian ways to form a continuous vehicular, bicycle, and pedestrian network;
- Urban tree canopy, with street trees spaced to provide continuous shade for pedestrians;
- Sidewalks, which must be constructed to City standards on both sides of the street or be consistent with an approved pedestrian access plan on qualifying subdivisions involving private streets;
- Parks and playgrounds which are generally centrally-located in new neighborhoods will abut public streets for improved access; and
- Detention basins, which can be designed for multiple uses and treated as an amenity in new neighborhoods.

12.5 IMPLEMENTATION BY THE PRIVATE SECTOR

The private sector will be instrumental in implementing the Plan in the private realm, which will be overseen by the City's regulations. To this end, the City will use a variety of regulatory mechanisms and administrative procedures to implement the Plan. Overall legislative responsibility for the Plan implementation is vested in the City Council, which by ordinance has delegated certain responsibilities to the Planning Commission, the DARM Director and other City departments (e.g. the DPU, the DPW, the Police Department and the Fire Department). The Plan calls for the revision and adoption of a new Development Code to ensure that the Plan policies will be implemented and that environmental resources earmarked for protection in the Plan will be preserved. Other regulatory mechanisms, including subdivision standards and processes, building and housing codes, CIP, and environmental review procedures, also will be used to implement Plan policies.

Zoning Regulations In The Development Code

After adoption of the General Plan, the City's Development Code (Code) will be structured to translate plan policies into specific use regulations, development standards, design standards, and performance criteria that will govern development on individual properties and development sites. The Code will also include regulations for landscaping, on-site parking and loading, signs, antennas and wireless communications facilities, and affordable housing density bonus provisions, among other regulations. The Plan establishes the policy and implementation framework, while the Code prescribes standards, rules and procedures for development along with criteria and findings required for acting on project applications. The Zoning Map (the "Official Zone Map") will provide more detail than the Figure LU-1: Land Use Diagram, consistent with this Plan.

The Plan calls for several new zoning districts. Regulations for these districts will be established as part of the comprehensive zoning update following the Plan update. The use regulations and development standards for existing zoning districts will undergo amendments to conform to Plan policies. Density and intensity limits, consistent with the Plan's land use classifications, will also be updated. For purposes of evaluating Plan consistency, the density of proposed projects will be rounded up or down to the nearest whole number, as appropriate.

¹ The General Plan anticipates that the Development Code and the Official Zone Map will be further amended and refined by a code for the Downtown Planning Area.

The City will bring the Code into conformance with the Plan within a reasonable period of time. The City will take steps to ensure projects are consistent with the General Plan, which may include an interim zoning ordinance or other actions as appropriate. In the future, if the Plan is subsequently amended, the Code and Zoning Map may also need to be amended to maintain consistency between the documents.

Finally, the goals, objectives, and policies of this Plan are long-term in nature. As part of Plan implementation, future refinement and updates of the Code may be needed to translate those long-term objectives and policies into regulations and standards, supported by appropriate permitting procedures, in order to address emerging needs and conditions and gradually fulfill the policy direction of the Plan. Timing of these refinements will be guided by the various stages of implementation, the City's accomplishments and budgetary resources, and the sequencing of development concepts, which are in this chapter, updated as may be appropriate, as contemplated within the planning horizon of the Plan.

Consistency Between the General Plan and Development Code

As mentioned above, the City will implement many General Plan policies through the Code. To realize the City's land use, housing, and open space policies zoning designations will be amended. A fundamental link between the Plan and zoning is land use/zoning consistency. Table 12-1 shows how the updated zoning districts in Fresno are consistent with the land use designations of this Plan. This will facilitate administration and ensure a closer link with Plan policies because new zones will mirror classifications on the Land Use Diagram. Planned development still will be permitted, but with a flexible process that will be "findings-driven" and have specific criteria for approval.

TABLE 12-1: GENERAL PLA ZONING DISTRICTS CONSI		SIGNATIONS AND	
General Plan Land Use Designation	Development Code Zoning District		
Buffer	В	Buffer	
Residential			
Low Density	RE	Residential Estate	
	RS-1	Residential Single Family, Extremely Low Density	
	RS-2	Residential Single Family, Very Low Density	
	RS-3	Residential Single Family, Low Density	
Medium Low Density	RS-4	Residential Single Family, Medium Low Density	
Medium Density	RS-5	Residential Single Family, Medium Density	
Medium High Density	RM-MH	Mobile Home Park	

	RM-1	Residential Multi-Family, Medium High Density
Urban Neighborhood	RM-2	Residential Multi-Family, Urban Neighborhood
High Density	RM-3	Residential Multi-Family, High Density
Mixed-Use		
Neighborhood	NMX	Neighborhood Mixed Use
Corridor/Center	CMX	Corridor/Center Mixed Use
Regional	RMX	Regional Mixed Use
Downtown		
Downtown Neighborhood	DTN	Downtown Neighborhood
Downtown General	DTG	Downtown General
Downtown Core	DTC	Downtown Core
Commercial		
Main Street	CMS	Commercial - Main Street
Community	CC	Commercial - Community
Regional	CR	Commercial - Regional
General	CG	Commercial - General
Highway and Auto	СН	Commercial - Highway and Auto
Recreation	CRC	Commercial - Recreation
Employment		
Office	0	Office
Business Park	BP	Business Park
Regional Business Park	RBP	Regional Business Park
Light Industrial	IL	Light Industrial
Heavy Industrial	IH	Heavy Industrial
Other		
Open Space	OS	Open Space
	PR	Parks and Recreation
Public Facilities	PI	Public and Institutional

Subdivision Regulations

No subdivision of land may be approved under California law and the City's subdivision regulations unless its design and proposed improvements are found to be consistent with the Plan, including the open space plan. Dedication of land for park facilities will be required for subdivisions above a certain size, consistent with the policies and standards prescribed by the Plan and the subdivision regulations. The subdivision regulations also can require dedication of land for elementary schools, riparian habitat and reservation of land for fire stations, libraries, bike paths, transit facilities, and other public facilities.

After adoption of the Plan, the City's subdivision regulations will be amended to conform to Plan policies. Subdivision approval will continue to require findings of consistency with the Plan as a condition of approving parcel maps and tentative maps. Reservation requirements for bus turnout facilities and bike and pedestrian facilities also will be included to carry out Plan policies for appropriate projects. The subdivision

ordinance will require connections between new streets and existing streets and will ensure that adequate public rights-of-way are provided, consistent with the policies for transportation and mobility facilities of this Plan and City standards. Facilitating use of solar energy with appropriate lot layouts and roof orientations to maximize efficiency of collector systems and provision of solar access easements will also be addressed.

Building and Housing Codes

Under California law (Government Code Section 65567) no building permit may be issued, no subdivision map approved, and no open-space zoning ordinance adopted, unless the proposed construction, subdivision or ordinance is consistent with local open-space plan. This plan is the Parks, Open Space, and Schools Element of the General Plan.

To provide an administrative mechanism to ensure consistency with the Plan, the City will establish a requirement for zoning permits or other forms of zoning clearance before building and grading permits are issued. The City does not currently have this specific type of clearance.

Energy Conservation

The Code will establish standards and regulations, supported by guidelines and administrative review procedures for subdivision design to provide for passive or natural heating or cooling opportunities and for other measures that conserve nonrenewable energy resources, consistent with the Plan. Design measures to accomplish these objectives may include, but are not limited to, the arranging of streets, lots, buildings and landscaping. The purpose of such design measures will be to provide solar access for active solar water and space heating systems and passive space heating, minimize solar heat gain in the summer, and take advantage of prevailing breezes. These measures will be crafted so that there will not be an impact on the maximum allowable density otherwise allowed.

At such time as the City has adopted solar access standards, and when required as a condition for approval of a tentative map, the Code will require subdividers to dedicate or make an irrevocable offer of dedication of easements for the purpose of assuring that each parcel or unit in the subdivision for which approval is sought has the ability to receive sunlight across adjacent parcels or units in the subdivision for any solar energy system. The dimensions and locations of such easements will need to be consistent with any standards for solar access adopted by the City Council.

Permit Streamlining

The State's Permit Streamlining Act, enacted in 1977, was intended to expedite the processing of permits for development projects by setting various time limits within which government agencies must either approve or disapprove permits. The City of Fresno has followed and will continue to follow the regulations in the Permit Streamlining Act. DARM will coordinate zoning, environmental review, and any other development review procedures to ensure compliance with the Permit Streamlining Act requirements.

In October 2013, the Mayor commissioned an external Task Force and an internal Action Team to provide recommendations to ensure that development was streamlined and processes clarified. This lead to the creation of the Development Review Committee (DRC), launched in January 2014, managed from within DARM, and includes representatives from all City departments that provide input on development projects within the city. The DRC serves as the single point of contact to customers with the goal of offering a friendly and welcoming atmosphere thus setting the tone for positive and productive future interactions.

Fee Policies, Reductions, And Exemptions

The City Council and Mayor will continue to work with relevant directors of City departments and stakeholders to establish and implement an impact fee program that is based on (1) realistic public infrastructure requirements given the current fiscal climate and (2) a recognition that public infrastructure already exists in infill project areas. As a result, projects completed within established neighborhoods should have lower infrastructure requirements and fee reductions or exemptions. The new impact fee program will need to define which projects qualify for lower fees and/or exemptions, based on the types and locations of projects and other criteria. Finally, the expectation of this Plan is that the Council will establish a ministerial process for receiving the fee reductions or exemptions to facilitate infill development; this will be a detailed and firmly established program with "by right" provisions for automatic reductions with minimal oversight, and discretionary review would be preferable to a case-by-case approval process and consistent with the principles of fiscal sustainability presented in the Economic Development and Fiscal Sustainability Element.

Code Enforcement

The Code will include provisions for the enforcement of the Code's land use regulations, development standards and other provisions and the Plan. The various departments, officials, and public employees of the City will enforce the requirements of the Code to ensure that all issued permits and licenses conform to the provisions of the Code and implement the Plan. The DARM Director or his/her designee will enforce

all provisions of the Development Code related to the construction, conversion, alteration, addition of any building or structure and regarding all uses in the city.

12.6 DEFINING AND SUPPORTING INFILL

The City will remove regulatory obstacles to infill development, by first adopting the Code with a streamlined permitting and approval process; by-right standards; reduced parking requirements; and streamlined CEQA review, using existing legislative authority. It will also adopt an adaptive reuse and historic preservation program with enabling provisions in the Code. The City Council may enter into Development Agreements for individual projects on a case-by-case basis, under provisions of applicable law, which can advance infill development.

The City also can establish Community Facilities Districts (CFDs) in geographically defined areas, with the consent of two-thirds of the proposed district's voters. Once the CFD's are approved, the City can directly issue bonds to pay for building facilities that are then repaid through an increment on top of the baseline property taxes paid by property owners in the CFD. By contrast, maintenance districts are typically self-financed through tax revenue, and do not involve bonds. Similarly, the City can create an Infrastructure Financing District (IFD), in which increased property values are used to pay back bonds, rather than through an addition to the baseline property tax. Neither of these options are currently used for infill developments.

Non-profits and other agencies also can issue a bond, in which case the developer is responsible for obtaining the bond directly from those agencies. The proceeds are then used to provide a financing mechanism to build the infrastructure; the City does not administer the bond where it is not the issuer.

Under this Plan, the City will retain the option to issue a bond for a "build" (and maintenance) CFD, if necessary, but the Council has no current plans to do so. The City may seek approval of a "shelf registration" for financing multiple CFDs and IFDs. The City's name and "brand" can be used to invite financial institutions to bid on master financing programs for key projects. In addition, the City can raise revenue for infrastructure projects by selling advertising space and naming rights to major facilities, such as its BRT system.

The City also anticipates completing and adopting the Downtown Neighborhoods Community Plan and, assuming the State program for the High-Speed Train system proceeds, a station area master plan to further support infill development in the Downtown. Additionally, forming partnerships with public, private, and non-profit entities will advance infill development as these institutions expand and develop infill sites to meet facility and housing needs as they grow.

Lastly, as noted by the Fresno General Plan Implementation and Infill Development Task Force, the City can play a very important role in shifting the perception of the Downtown Planning Area and other infill areas so they become attractive places for investors. These established neighborhoods need to be viewed as safe and vibrant places in order to attract market rents and sale prices that can support the cost of development. Neighborhood branding can greatly assist the effort to change the perception of different areas in the city. Through efforts like the Downtown Fresno Partnership or a similar association with civic leaders, the City will support improvements that help change perceptions of the neighborhood. These strategies will include promoting safety, removing litter, improving the landscaping, recruiting businesses, supporting maintenance and marketing, and organizing and promoting Downtown events. The creation of local "community development corporations," which may be formed with guidance and resources available from State and federal job training and economic development programs. The California Community Economic Development Association can also assist in these efforts in neighborhoods across Fresno.

Priority Investment in Established Neighborhoods

The Plan focuses a reasonable proportion of future development within the city's existing footprint to fulfill the Plan policy that roughly half of development through the year 2035 occurs in infill locations. This Plan policy is not expected to be fulfilled in a linear or "one-to-one" pattern and may progress in an uneven pattern due to market forces and the timing of incentives. However, the City expects to make steady progress toward all the goals and objectives, and fulfillment of this Plan policy is expected to occur at or near the close of General Plan Horizon in 2035. To support investment and infill development, the City will establish a priority development program for eligible properties, using "infill development," as defined in the Glossary, to facilitate implementation of this Plan and gain the benefits of permit streamlining and other incentives that State law provides for qualifying infill development.

Substantial rehabilitation, as defined by the California Building Code, and new construction within the city limits that is consistent with Public Resources Code 21061.3 can qualify as infill development. Development outside the city limits or in areas of the city that are less than 10 years old will be considered "new development."

While infill development will help achieve the overall goals of the Plan, the City will prioritize specific areas within the city limits for incentives and other benefits to

accelerate reinvestment and rehabilitation. The following priority areas are identified in Figure IM-1: Priority Areas for Development Incentives.²

- "Infill Opportunity Zones" (IOZs) Established Neighborhoods Generally South of Herndon Avenue, including many of Fresno's established neighborhoods, which are in need of both large, catalytic reinvestment projects, as well as smaller-scale strategic interventions;
- BRT Corridors, including the Phase 1 corridors along Blackstone Avenue and Ventura Avenue/Kings Canyon Road and the Phase 2 corridors along Shaw Avenue and California Avenue;
- Downtown Planning Area, which includes the Central Business District, Civic Center and other Downtown centers, Chinatown, South Stadium/South Van Ness, Downtown neighborhoods and special districts; and
- South Industrial Area, including much of Fresno's established heavy industrial uses, which may need infrastructure investment to meet the needs of major job-creation industry sectors, as well as improvements to enhance current business operations.

The City will implement a number of strategies to support investment in these priority areas.

Strategic Sequencing of Development

Following the adoption of the Plan, the City will focus on infill development as well as new development within Growth Area 1 based on planned infrastructure expansion, public service capacity, and fiscal considerations. The boundaries of these areas are shown in Figure 1-3: Residential Capacity Allocation as Development Areas 1 North, 1 South, 2 North, and 2 South and depicted in 1M-2: Sequencing of Development as Growth Area 1.

Growth Area 2 needs critical infrastructure improvements, and the City does not anticipate that funding for this area can be committed in the near-term. Due to these limitations, the City will need to establish a method to monitor investment within infill areas and Growth Area 1 prior to approving development in areas subject to the restrictions enumerated in the City/County Memorandum of Understanding (MOU). As part of upcoming negotiations with the County for an updated MOU, the City will explore options to create a plan that allows for student-serving uses, such as housing

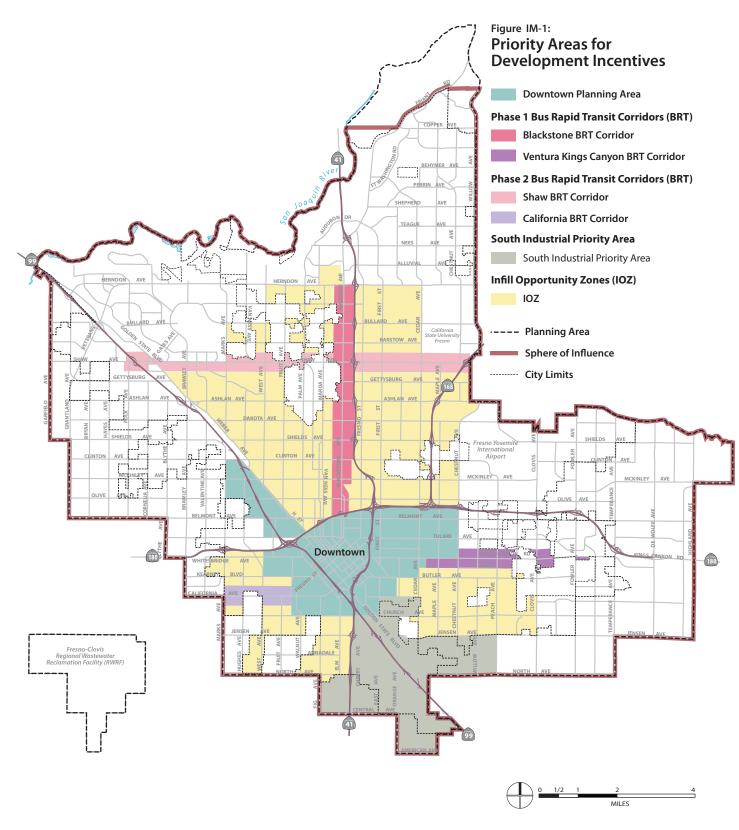
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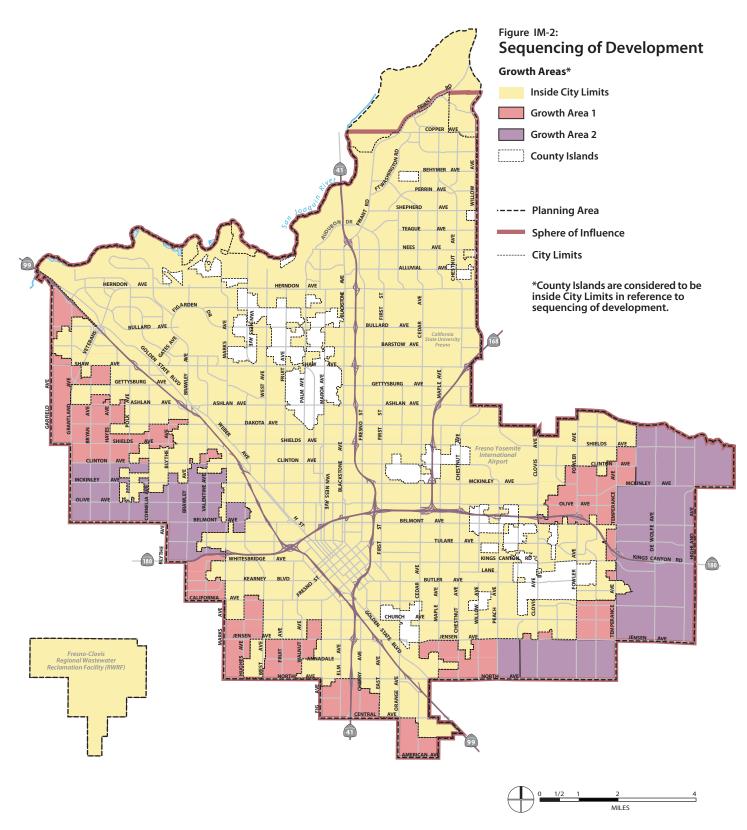
 $^{^2}$ These priority areas are consistent with the recommendations from the Fresno General Plan Implementation and Infill Finance Task Force

and related commercial uses, to be developed in conjunction with the new State Center Community College District Southeast campus.

The recommendations for annexations into the City will comply with the MOU. Whatever method is ultimately adopted, the City should implement an easy-to-track, objective, transparent measurement that can be used to determine the appropriate timing for allowing development in areas subject to the restrictions enumerated in the MOU for new growth. The City will use strategic phasing to achieve the overall goals of the plan, as opposed to annual limits of some sort that place unrealistic controls on the local market.



Source: City of Fresno, 2014.



Source: City of Fresno, 2014.

Growth Areas

While roughly one half of the city's development will be within infill areas through 2035, the other half or so of the city's development will be in growth areas, which include unincorporated land planned for urban use. There will be no incentives or public financial assistance programs for new development that would not otherwise qualify for aid in these areas, and development projects in the growth areas will be obligated to pay their fair and proportional payment of fees and all development mitigation costs. Public and private development in these growth areas will proceed under the supportive sequencing detailed above.

12.7 SUMMARY OF IMPLEMENTATION ACTIONS

The following table summarizes implementation actions that will be undertaken to carry out the policies proposed in each element of the Plan except the adopted Housing Element, which already has implementation actions to implement Plan policies. The Housing Element implementation actions will be regularly updated and revised as required by State law.

The first column in each table lists the implementation actions for each element, and the second column lists the policies for each element (by policy number) that will be enacted by the action. The third column names the parties involved in implementing the action, with responsibilities detailed in the FMC and in some of the Plan policies. Some of these entities are listed by acronym in the table, including the City Manager (CM), the City Attorney's Office (CAO), the Development and Resource Management Department (DARM), the Department of Public Works (DPW), the Department of Public Utilities (DPU), the Fresno Area Express Department (FAX), and Parks, After School, Recreation, and Community Services (PARCS). The fourth column provides a timeframe for implementing the action, ranging from ongoing efforts to 1 – 20 years. The Annual Report on the Plan will provide an opportunity to update the timeframe, as budget and staffing resource constraints may dictate changes in the overall timeframe for the implementing actions. Finally, if the Plan policy is discretionary, the implementation action also is discretionary.

Implementation Actions	General Plan Policies	Responsible Parties	Timing
Economic Development and Fiscal S	Sustainability		
Build relationships with the Fresno business community and improve the business climate through development of a comprehensive economic development strategy, expanded marketing, a "buy local campaign," an annual economic development progress report, and a possible economic development web portal.	ED-1-a, ED-1-b, ED-1-c, ED- 1-d, ED-1-e, ED-1-f, ED-1-g, ED-1-h, ED-1-i, ED-1-j, ED-3- a, ED-3-b, ED-3-c, ED-3-d, ED-3-e, ED-3-f	Mayor, City Council, DARM, CM, CAO, Fresno EDC	1-5 years
Identify sites that would be suitable for new business development and expansion, prioritizing infill sites and districts.	ED-1-d, ED-1-e, ED-1-f, ED- 3-d, ED-3-e, ED-3-f, ED-5-a	DARM, Planning Commission	1-5 years
Improve access to resources and capital by providing technical and financial support, creating partnerships for initial capital, and establishing a revolving loan program.	ED-2-a, ED-2-b, ED-3-a, ED-3-b, ED-3-c	Mayor, City Council, DARM, CM, CAO	Ongoing
Utilize economic development tools, bonuses and incentives, reduced fees for infill projects and other resources to attract businesses.	ED-1-d, ED-1-e, ED-1-f, ED- 1-g, ED-1-j, ED-2-a, ED-2-b, ED-3-a, ED-3-b, ED-3-c, ED- 3-d, ED-3-e, ED-3-f	Mayor, City Council, DARM, DPW, CAO, CM	Ongoing
Retain talented people and attract new talent to the city; increase educational attainment and relevant job skill levels in the Fresno workforce.	ED-1-h, ED-3-a, ED-4-a, ED-4-b, ED-4-c, ED-4-d, ED-4-e, ED-4-f	Mayor; City Council; DARM; Fresno County Office of Education; Workforce Investment Board; California State University, Fresno; Fresno Pacific University; State Center Community College; and various technical schools and training institutes	Ongoing
Prepare and implement measures to achieve fiscal sustainability.	ED-5-a, ED-5-b, ED-5-c, ED- 5-d, ED-5-e, ED-5-f, ED-5-g, ED-5-h, ED-5-i	Mayor, DPW, DARM, City Council, CAO, CM	5-20 years
Coordinate, establish partnerships, and strengthen relationships with other local and regional public and private entities, including California State University, Fresno.	ED-1-h, ED-4-a, ED-4-b, ED- 4-c, ED-4-d, ED-4-e, ED-4-f	Mayor; City Council; DARM; California State University, Fresno; Fresno Pacific University; State Center Community College	5-10 years

Implementation Actions	PLEMENTATION ACTIONS General Plan Policies	Responsible Parties	Timing
Urban Form, Land Use and Design		. artioo	
Continue to implement housing programs that support a diversity of neighborhoods, activities, and housing types in the Fresno Planning Area, while accommodating market/cost constraints.	UF-1-a, UF-1-b, UF-1-c, UF-1-d, UF-1-e, UF-1-f, UF-13-a, LU-2-a, LU-2-b, LU-2-c, LU-2-d, LU-2-e, LU-5-b, LU-5-c, LU-5-d, LU-5-e, LU-5-f, LU-5-g, LU-5-f, LU-5-j, LU-5-j	DARM, Planning Commission, City Council, CAO	1-5 years
Prepare and implement measure to locate roughly one-half of future residential development in infill areas and locate roughly one-half of future residential development in Growth Areas.	UF-1-a, UF-1-b, UF-1-c, UF-1-d, UF-1-e, UF-1-f, UF-12-a, UF-12-b, UF-12-c, UF-12-d, UF-12-e, UF-12-f, UF-12-g, UF-12-h, UF-13-a, LU-1-a, LU-2-a, LU-2-b, LU-2-c, LU-2-d, LU-2-e, LU-2-f	DARM, Planning Commission, City Council, CAO	Ongoing
Prepare design guidelines and concept plans that improve the urban form and enhance multi-modal connectivity across the city.	UF-12-a, UF-12-b, UF-12-c, UF-12-d, UF-12-e, UF-12-g, UF-12-h, UF-13-a, UF-14-a, UF-14-b, UF-14-c	DARM, Planning Commission, City Council, DPW, FAX, CM	5-20 years
Implement a comprehensive citywide land use planning strategy to facilitate infill development and provide for a diversity of housing types, building forms, and land uses.	LU-1-a, LU-1-b, LU-1-c, LU-1-d, LU-1-e, LU-1-f, LU-1-g, LU-2-a, LU-2-b, LU-2-c, LU-2-d, LU-2-e, LU-2-f	DARM, Planning Commission, City Council, CAO, Mayor, CM	1-5 years
Adopt and implement plan(s) and regulations for Fresno's Downtown and surrounding land uses to supplement and support the Downtown.	LU-1-a, LU-1-b, LU-1-c, LU-1-d, LU-3-a, LU-3-b, LU-3-c, LU-9-a, LU-9-b, LU-9-c, LU-9-d, LU-9-e, LU-9-f, LU-9-g	DARM, Planning Commission, City Council, CAO, CM	1-5 years
Support Fresno's established residential neighborhoods, with priority investments in community infrastructure and services in areas with the greatest need.	LU-1-a, LU-2-d, LU-2-e, LU-4- a, LU-4-b, LU-4-c, LU-5-a, LU-5-b, LU-5-c, LU-5-d, LU-5- e, LU-5-f, LU-5-g, LU-5-h, LU- 5-i	DARM, Planning Commission, City Council, DPW, FAX, CAO, CM	5-10 years
Adopt regulations and programs to retain and improve Fresno's established commercial areas and promote industrial development.	LU-6-a, LU-6-b, LU-6-c, LU-6-d, LU-6-e, LU-6-f, LU-6-g, LU-7-a, LU-7-b, LU-7-c, LU-7-d, LU-7-e	DARM, Planning Commission, City Council, DPW, FAX	5-10 years
Adopt regulations and programs to provide for civic and institutional land uses.	LU-8-a, LU-8-b, LU-8-c, LU-8- d	DARM, Planning Commission, City Council, Mayor, CAO	1-5 years
Promote regional cooperation and coordination among local jurisdictions on land use and planning issues and the provision of public services, infrastructure, and economic development.	LU-10-a, LU-10-b, LU-10-c, LU-11-a, LU-11-b, LU-11-c	DARM, Planning Commission, City Council, Mayor, Fresno County	5-10 years
Strengthen the city's image, create a "sense of place," and enhance all "gateway" routes that enter Fresno, as identified by the City. Encourage design that celebrates the cultural and ethnic diversity of Fresno.	D-1-a, D-1-b, D-1-c, D-1-d, D-1-e, D-1-f, D-1-g, D-1-h, D-1-i, D-1-j, D-2-a, D-2-b, D-2-c, D-3-a, D-3-b, D-3-c, D-3-d, D-6-a, D-6-b	DARM, Planning Commission, City Council, CM, CAO	10-20 years
Adopt and apply local urban form, land use, and design policies to	D-7-a, D-7-b, D-7-c		

TABLE 12-2: SUMMARY OF IM	PLEMENTATION ACTIONS	S FOR PLAN POLI	CIES
Implementation Actions	General Plan Policies	Responsible Parties	Timing
specific neighborhoods and locations.			
Prepare urban design guidelines for development review and implementation plans for programs that improve the community's appearance.	D-3-a, D-3-b, D-3-c, D-3-d, D-4-a, D-4-b, D-4-c, D-4-d, D-4-e, D-4-f, D-4-g, D-4-h, D-5-a, D-5-b, D-5-c, D-5-d, D-5-e	DARM, Planning Commission, City Council, CAO	1-5 years
Mobility and Transportation			
Provide and maintain a safe, multimodal, efficient, and equitable transportation system across the city, including in established and planned neighborhoods.	MT-1-a, MT-1-b, MT-1-c, MT-1-d, MT-1-e, MT-1-f, MT-1-g, MT-1-h, MT-1-i, MT-1-j, MT-1-k, MT-1-l, MT-1-m, MT-1-n, MT-1-o, MT-1-p, MT-2-a, MT-2-b, MT-2-c, MT-2-d, MT-2-e, MT-2-f, MT-2-j, MT-2-h, MT-2-j, MT-2-j, MT-2-j, MT-2-k, MT-2-j, MT-4-a, MT-4-b, MT-4-c, MT-4-d, MT-4-e, MT-4-j, MT-4-k, MT-4-j, MT-4-k, MT-5-a, MT-5-b, MT-5-f, MT-6-a, MT-6-b, MT-6-c, MT-6-d, MT-6-e, MT-6-h, MT-6-m, MT-6-h, MT-6-m, MT-6-h, MT-6-m, MT-6-h, MT-6-m, MT-6-h, MT-8-b, MT-8-c, MT-8-a, MT-8-b, MT-8-c, MT-8-a, MT-8-b, MT-8-c, MT-8-a, MT-8-b, MT-8-c, MT-8-a, MT-8-b, MT-8-c, MT-9-a, MT-9-b, MT-9-c, MT-9-c, MT-9-e, MT-9-f	CM, CAO, City Council, Mayor, DARM, Planning Commission, DPW, FAX, Bicycle and Pedestrian Commission	10-20 years
Utilize the existing and proposed transportation system efficiently, and provide adequate resources to operate and maintain it.	MT-1-k, MT-1-l, MT-1-m, MT- 1-n, MT-1-o, MT-1-p, MT-2-a, MT-2-b, MT-2-c, MT-2-d, MT- 2-e, MT-2-f, MT-2-g, MT-2-h, MT-2-i, MT-2-j, MT-2-k, MT-2-l	CM, CAO, City Council, Mayor, DARM, Planning Commission, DPW, FAX	1-5 years
Adopt regulations and programs to identify, promote, and preserve scenic or aesthetically unique corridors.	MT-3-a, MT-3-b	DPW, City Council, Mayor, DARM, CM, FAX	5-10 years
Fund road-width reductions in neighborhoods that would most benefit from narrower streets, while ensuring the streets retain the ability to convey major storm flows and underground infrastructure.	MT-1-g, MT-1-h, MT-1-i, MT- 1-j, MT-2-d, MT-2-k	DPU, DPW, FAX, Fresno Metropolitan Flood Control District, City Council, CM, CAO, Mayor, DARM, Planning Commission	Ongoing
Provide and maintain a continuous, safe, and accessible bikeway system; a well-integrated network of pedestrian facilities; and a network of multi-purpose pedestrian, bicycle, and limited access paths and trails.	MT-4-a, MT-4-b, MT-4-c, MT-4-d, MT-4-e, MT-4-f, MT-4-g, MT-4-h, MT-4-i, MT-4-j, MT-4-k, MT-5-a, MT-5-b, MT-5-c, MT-5-d, MT-5-e, MT-6-c, MT-6-b, MT-6-e, MT-6-f, MT-6-e, MT-6-i, MT-6-i, MT-6-i, MT-6-i, MT-6-i, MT-6-i, MT-6-i, MT-6-i, MT-6-n, MT-6-n	CM, CAO, City Council, DPW, PARCS, Mayor, DARM, Planning Commission, Bicycle and Pedestrian Commission, FAX	Ongoing

TABLE 12-2: SUMMARY OF IM Implementation Actions	PLEMENTATION ACTION: General Plan Policies	Responsible	Timing
Implementation Actions	General Flan Folicies	Parties	riiiiiig
	7-a, MT-7-b, MT-7-c		
Provide feasible, efficient, frequent, and safe public transit options to the maximum number and diversity of people practicable.	MT-8-a, MT-8-b, MT-8-c, MT- 8-d, MT-8-e, MT-8-f, MT-8-g, MT-8-h, MT-8-i, MT-8-j, MT-9- a, MT-9-b, MT-9-c, MT-9-d, MT-9-e, MT-9-f	FAX, CM, CAO, City Council, DPW, Mayor, DARM	Ongoing
Establish strategic, supportive parking programs and standards, including demand-oriented pricing for on-street parking.	MT-10-a, MT-10-b, MT-10-c, MT-10-d, MT-10-e, MT-10-f	FAX, CM, CAO, City Council, DPW, Mayor, DARM, Planning Commission	1-5 years
Support the goods movement transportation system with capacity increasing and inter-modal connectivity enhancing improvements.	MT-11-a, MT-11-b, MT-11-c, MT-11-d, MT-11-e, MT-11-f	CM, CAO, City Council, DPW, Mayor, FAX	5-10 years
Continue to improve municipal airport facilities and Fresno Yosemite International Airport, while complying with federal regulations, enhancing safety, minimizing adverse effects, and promoting the local economy.	MT-12-a, MT-12-b, MT-12-c, MT-13-a, MT-13-b, MT-13-c, MT-13-d, MT-13-e, MT-13-f	FAX, CM, CAO, City Council, DPW, Mayor, Airports Department	5-10 years
Parks, Open Space and Schools			
Provide an expanded, safe, high quality, and diversified park system throughout the city, including infill and Growth Areas. Support efforts to refine and apply the Valley Arboretum concept, particularly in areas of the city with the greatest deficiencies, based on ParkScore or comparable methodology.	POSS-1-a, POSS-1-b, POSS-1-c, POSS-1-d, POSS-1-e, POSS-1-f, POSS-1-g, POSS-2-a, POSS-2-b, POSS-2-c, POSS-2-d, POSS-3-b, POSS-3-c, POSS-3-d, POSS-3-e, POSS-3-f, POSS-3-f, POSS-3-f, POSS-3-f, POSS-5-g	PARCS, City Council, Mayor, CM, CAO, DARM, DPW	10-20 years
Utilize park land efficiently, and design and manage parks for the entire Fresno community.	POSS-3-a, POSS-3-b, POSS-3-c, POSS-3-d, POSS-3-e, POSS-3-f, POSS-3-g, POSS-3-h, POSS-3-i	PARCS, City Council, Mayor, CM, DARM, DPW	Ongoing
Pursue sufficient and dedicated funding for acquisition, operation, and maintenance of Fresno parks, including pocket parks created by residential subdivisions.	POSS-4-a, POSS-4-b, POSS-4-c, POSS-4-d	PARCS, City Council, Mayor, CM, DARM, DPW, CAO	5-20 years
Provide for long-term preservation, restoration, enhancement, and enjoyment of plant, wildlife, and aquatic habitat, particularly along the San Joaquin River corridor.	POSS-5-a, POSS-5-b, POSS-5-c, POSS-5-d, POSS-5-e, POSS-5-f, POSS-5-g, POSS-6-a, POSS-6-b, POSS-7-a, POSS-7-b, POSS-7-c, POSS-7-d, POSS-7-e, POSS-7-f, POSS-7-g, POSS-7-h, POSS-7-i	PARCS, City Council, Mayor, CM, CAO, DARM, DPW, San Joaquin River Conservancy	5-20 years
Collaborate with school districts to find appropriate locations and campus sizes for schools to meet the needs of all students and neighborhoods.	POSS-8-a, POSS-8-b, POSS-8-c	Fresno County Office of Education, Fresno County School Districts, DARM, City Council, Mayor,	Ongoing

TABLE 12-2: SUMMARY OF IM	PLEMENTATION ACTIONS	S FOR PLAN POLI	CIES
Implementation Actions	General Plan Policies	Responsible Parties	Timing
		CAO, CM	
Collaborate with institutions of higher learning in Fresno, especially California State University, Fresno, Pacific University and Fresno City College to enhance the City's workforce, job creation, and economic development.	POSS-9-a, POSS-9-b, POSS- 9-c	Mayor; City Council; CAO; CM; DARM; California State University, Fresno; Fresno Pacific University; State Center Community College District	Ongoing
Public Utilities and Services Provide the level of law enforcement	PU-1-a, PU-1-b, PU-1-c, PU-	Fresno County	Ongoing
and crime prevention services necessary to maintain a safe, secure, and stable urban living environment.	1-d, PU-1-e, PU-1-f, PU-1-g, PU-1-h, PU-1-i, PU-1-j	Sheriff's Office, City of Fresno Police Department, CAO, CM, City Council, Mayor	Origoning
Ensure the Fire Department's staffing and equipment resources are sufficient to meet all fire and emergency service level objectives and are provided in an efficient and cost effective manner.	PU-2-a, PU-2-b, PU-2-c, PU-2-d, PU-2-e, PU-2-f, PU-2-g, PU-3-a, PU-3-b, PU-3-c, PU-3-d, PU-3-e, PU-3-f, PU-3-g, PU-3-h, PU-3-i	City of Fresno Fire Department, CAO, CM, City Council, Mayor	Ongoing
Provide adequate trunk sewer and collector main capacities to serve existing and future urban development. Use the Regional Wastewater Treatment and Reclamation Facility, together with supplemental subregional facilities, for sewage treatment and disposal.	PU-4-a, PU-4-b, PU-4-c, PU- 4-d, PU-4-e, PU-6-a, PU-6-b	DPU, DARM, City Council, Mayor, CAO, CM	Ongoing
Protect groundwater quality from private on-site disposal systems. Adopt regulations and programs to promote reduction in wastewater flows and develop facilities to reuse reclaimed water and biosolids.	PU-5-a, PU-5-b, PU-5-c, PU- 7-a, PU-7-b, PU-7-c, PU-7-d, PU-7-e, PU-7-f	DPU, City Council, Mayor, CAO, CM	Ongoing
Continue to manage the City's water facilities on a strategic timeline basis.	PU-8-a, PU-8-b, PU-8-c, PU-8-d, PU-8-e, PU-8-f, PU-8-g	DPU, DARM, City Council, Mayor, CAO, CM	Ongoing
Provide adequate solid waste facilities and services.	PU-9-a, PU-9-b, PU-9-c, PU- 9-d, PU-9-e, PU-9-f	DPU, DARM, City Council, Mayor, CAO, CM	5-10 years
Resource Conservation and Resilier			
Utilize existing and future public infrastructure efficiently, and adopt priority improvement programs for neighborhoods with the greatest needs.	RC-1-a, RC-1-b, RC-1-c, RC- 1-d, RC-1-e, RC-1-f, RC-1-g, RC-1-h	DPU, DPW, DARM, FAX, City Council, Mayor, CAO, CM	Ongoing
Adopt regulations and programs to cromote land uses that conserve resources, and engage, educate, isten to, and enlist the support of the community for resource conservation.	RC-2-a, RC-2-b, RC-3-a, RC-3-b, RC-3-c	City Council, Mayor, DARM, Planning Commission, PARCS, CAO, CM	1-5 years

TABLE 12-2: SUMMARY OF IM	PLEMENTATION ACTIONS	S FOR PLAN POLI	CIES
Implementation Actions	General Plan Policies	Responsible Parties	Timing
Achieve and maintain compliance with State and federal air quality standards for criteria pollutants and reductions in greenhouse gas emissions, in collaboration with other jurisdictions and agencies in the San Joaquin Valley Air Basin.	RC-4-a, RC-4-b, RC-4-c, RC- 4-d, RC-4-e, RC-4-f, RC-4-g, RC-4-h, RC-4-i, RC-4-j, RC-4- k, RC-5-a, RC-5-b, RC-5-c, RC-5-d, RC-5-e, RC-5-f, RC- 5-g	City Council, Mayor, CAO, CM, DARM, Planning Commission, San Joaquin Valley Air Pollution Control District	Ongoing
Adopt regulations and programs to insure that Fresno has a reliable, long-range source of drinkable water, and promote water conservation through standards, incentives, and capital investments.	RC-6-a, RC-6-b, RC-6-c, RC-6-d, RC-6-e, RC-6-f, RC-6-g, RC-6-h, RC-6-i, RC-7-a, RC-7-b, RC-7-c, RC-7-d, RC-7-e, RC-7-f, RC-7-g, RC-7-h, RC-7-i	DPU, City Council, Mayor, CAO, CM, DARM, DPW	10-20 years
Adopt regulations and programs to require conservation measures and the use of alternative energy sources.	RC-8-a, RC-8-b, RC-8-c, RC- 8-d, RC-8-e, RC-8-f, RC-8-g, RC-8-h, RC-8-i, RC-8-j, RC-8-k	DPU, City Council, Mayor, CAO, CM, DARM, DPW	1-5 years
Protect agricultural land outside of the area planned for urbanization under this General Plan.	RC-9-a, RC-9-b, RC-9-c	DARM, City Council, Mayor, DPU	Ongoing
Adopt regulations and programs to conserve aggregate mineral resources within the Planning Area, and allow for responsible extraction to meet Fresno's needs.	RC-10-a, RC-10-b, RC-10-c, RC-10-d, RC-10-e, RC-10-f	DARM, City Council, Mayor, DPU	1-5 years
Reduce the solid waste that goes to landfills.	RC-11-a, RC-11-b, RC-11c	DPU, DARM, City Council, Mayor, CAO, CM	10-20 years
Historic and Cultural Resources			
Formulate and implement a comprehensive preservation program to identify, protect, and assist in the preservation of historic and cultural resources, including necessary zoning.	HCR-1-a, HCR-1-b, HCR-1-c, HCR-2-a, HCR-2-b, HCR-2-c, HCR-2-d, HCR-2-e, HCR-2-f, HCR-2-g, HCR-2-h, HCR-2-i, HCR-2-j, HCR-2-k, HCR-4-e, HCR-4-f	City Council, DARM, Mayor, Historic Preservation Commission	Ongoing
Identify and preserve Fresno's historic and cultural resources that reflect important cultural, social, economic, and architectural features.	HCR-1-a, HCR-1-b, HCR-1-c, HCR-2-a, HCR-2-b, HCR-2-c, HCR-2-d, HCR-2-e, HCR-2-f, HCR-2-g, HCR-2-h, HCR-2-i, HCR-2-j, HCR-2-k, HCR-2-l, HCR-2-m, HCR-2-n, HCR-4-e, HCR-4-f	City Council, DARM, Mayor, Historic Preservation Commission	Ongoing
Adopt regulations and programs to promote a "New City Beautiful" ethos, and foster an appreciation of Fresno's history and cultural resources.	HCR-3-a, HCR-3-b, HCR-3-c, HCR-4-a, HCR-4-b, HCR-4-c, HCR-4-d, HCR-4-e, HCR-4-f	City Council, DARM, Mayor, Historic Preservation Commission, Public Art Committee	Ongoing
Noise and Safety	NO 4 = NO 4 = NO 4 NO	DADM M	4.5
Update the Noise Ordinance and establish performance standards for acceptable and unacceptable exterior and interior noise standards, particularly in mixed-use residential areas and the Downtown Planning Area.	NS-1-a, NS-1-b, NS-1-c, NS- 1-d, NS-1-e, NS-1-f, NS-1-g, NS-1-h, NS-1-i, NS-1-j, NS- 1k, NS-1-l, NS-1-m, NS-1-n	DARM, Mayor, Planning Commission, City Council, CAO, CM, DPU, DPW	1-5 years

Implementation Actions	General Plan Policies	Responsible Parties	Timing
Establish noise mitigation measure requirements for new development, including transportation projects.	NS-1-i, NS-1-g, NS-1-m, NS- 1-n, NS-1-o	DARM, Mayor, Planning Commission, DPW, City Council, CAO, CM, DPU, DPW, FAX	1-5 years
Incorporate new noise thresholds in the City's environmental review process, and review all projects that may be affected by or cause a significant increase in noise levels.	NS-1-i, NS-1-j, NS-1-k, NS-1- I, NS-1-m	DARM, Mayor, Planning Commission, DPW, City Council, CAO, CM	1-5 years
Implement land use and noise exposure compatibility provisions with Fresno's airport plans.	NS-1-p	DARM, Planning Commission, Mayor, DPW, City Council, CAO, CM, Fresno Yosemite International Airport, Fresno- Chandler Airport, Sierra Sky Park Airport	1-5 years
Adopt regulations and programs as appropriate to minimize the risk of property damage and personal injury posed by seismic and geologic risks, as well as flooding and stormwater runoff hazards.	NS-2-a, NS-2-b, NS-2-c, NS-2-d, NS-3-a, NS-3-b, NS-3-c, NS-3-d, NS-3-e, NS-3-f, NS-3-g, NS-3-h, NS-3-i, NS-3-j, NS-3-k, NS-3-l, NS-3-m, NS-3-n	DPU, DPW, FAX, DARM, Planning Commission, DPW, City Council, CAO, CM	Ongoing
Adopt regulations and programs as appropriate to minimize the risk of loss of life, injury, and property from the use, transport, treatment, and disposal of hazardous waste and materials.	NS-4-a, NS-4-b, NS-4-c, NS- 4-d, NS-4-e, NS-4-f, NS-4-g, NS-4-h, NS-4-i	DPU, DPW, FAX, Mayor, DARM, Planning Commission, DPW, City Council, CAO, CM	Ongoing
Adopt regulations and programs as appropriate to minimize exposure to airport hazards.	NS-5-a, NS-5-b, NS-5-c, NS- 5-d, NS-5-e	DARM, Planning Commission, Mayor, DPW, City Council, CAO, CM, Fresno Yosemite International Airport, Fresno- Chandler Airport, Sierra Sky Park Airport	Ongoing
Continue to respond in a coordinated and efficient manner to natural disasters.	NS-6-a, NS-6-b, NS-6-c, NS- 6-d, NS-6-e, NS-6-f, NS-6-g	Mayor, DPU, DPW, FAX, DARM, Planning Commission, DPW, City Council, CAO, CM	Ongoing
Healthy Communities			
Coordinate and strengthen relationships with neighborhood associations, businesses, and local institutions to implement community health initiatives.	HC-1-a, HC-1-b, HC-1-c, HC- 1-d	Mayor, DPU, DPW, FAX, DARM, Planning Commission, DPW, City Council, CAO, CM, County of	5-10 years

TABLE 12-2: SUMMARY OF IM	PLEMENTATION ACTION	S FOR PLAN POLI	CIES
Implementation Actions	General Plan Policies	Responsible Parties	Timing
		Fresno	
Adopt regulations and programs to create complete and healthy neighborhoods and transportation systems.	HC-2-a, HC-2-b, HC-2-c, HC-2-d, HC-2-e, LU-1-a, LU-1-b, LU-1-c, LU-1-d, LU-1-e, LU-1-f, LU-1-g, LU-2-a, LU-2-b, LU-2-c, LU-2-d, LU-2-e, LU-2-f, MT-1-a, MT-1-b, MT-1-c, MT-1-a, MT-1-f, MT-1-f, MT-1-g, MT-1-h, MT-1-i, MT-1-j, MT-1-k, MT-1-j, MT-1-m, MT-1-n, MT-1-n, MT-1-a, MT-2-a, MT-2-b, MT-2-c, MT-2-d, MT-2-a, MT-2-i, MT-2-j, MT-2-d, MT-2-i, MT-2-j, MT-2-j, MT-2-j, MT-4-a, MT-4-b, MT-4-c, MT-4-d, MT-4-a, MT-4-i, MT-4-j, MT-4-k, MT-5-a, MT-5-b, MT-5-c, MT-5-d, MT-5-b, MT-6-a, MT-6-b, MT-6-c, MT-6-d, MT-6-b, MT-6-i, MT-6-d, MT-6-i, MT-6-i	Mayor, DPU, DPW, FAX, DARM, Planning Commission, DPW, City Council, CAO, CM	5-20 years
Adopt regulations and programs and support efforts to create safe, healthy, and affordable housing, and to improve property maintenance.	HC-3-a, HC-3-b, HC-3-c, HC-3-d, HC-3-e, HC-3-f, HC-3-g, HC-4-a, HC-4-b, HC-4-c, HC-4-d, HC-4-e, HC-4-f	Mayor, City Council, CM, CAO, Planning Commission, DARM, DPU, DPW	5-20 years
Adopt regulations and programs to continue promoting access to healthy and affordable food.	HC-5-a, HC-5-b, HC-5-c, HC- 5-d, HC-5-e, HC-5-f, HC-5-g	Mayor, City Council, CM, CAO, Planning Commission, DARM	5-10 years
Continue to improve access to schools and their facilities.	HC-6-a, HC-6-b, HC-6-c, HC- 6-d	Mayor, City Council, CM, CAO, Planning Commission, DARM, Fresno Unified School Districts, Clovis USD, Central USD, Sanger USD, Washington USD	1-5 years
Adopt regulations and programs to improve park facilities to support public health.	HC-7-a, HC-7-b, HC-7-c, HC- 7-d	Mayor, City Council, CM, CAO, PARCS, DPU, DPW, Planning Commission, DARM	5-10 years
Support Fresno's youth with programs and leadership	HC-8-a, HC-8-b, HC-8-c, HC-8-d	Mayor, City Council, CM, CAO, PARCS,	Ongoing

TABLE 12-2: SUMMARY O	F IMPLEMENTATION ACTIO	NS FOR PLAN PO	LICIES
Implementation Actions	General Plan Policies	Responsible Parties	Timing
opportunities, developed in collaboration with youth.		Fresno Unified School District (USD), Clovis USD Central USD, Sanger USD, Washington USD),

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GLOSSARY

100-Year Flood. That flood event that has a one-percent chance of occurrence in any one year.

500-Year Flood. The magnitude of a flood expected to occur on the average every 500 years, based on historical data. The 500-year flood has a 1/500, or 0.2 percent, chance of occurring in any given year.

Acreage, Gross (or Acres, Gross). Area of a site calculated to the centerline of bounding streets and other public rights-of-way.

Acreage, Net (or Acres, Net). Area of a site excluding land to be dedicated for required easements for vehicles and rights of way, either public or private; land dedicated to be hazardous and unbuildable; and land to be dedicated for schools and parks or other facilities dedicated for public use. The General Plan calculates residential density on net acreage, defined as the land area of a lot remaining after dedication of all areas for major streets, schools, regional trails, certified wetlands or floodplains, and land underneath large electric transmission lines (e.g. transmission towers).

Activity Center. A type of urbanized development that can occur at multiple scales based upon its planned density, intensity, and location. Activity Centers typically include buildings with mixed land uses integrated with and connected by multiple modes of transit, including walking, biking and public transit, providing a single destination where people can live, work, and shop. Activity Centers, as defined for use in this General Plan, are Mixed-Use designated areas along BRT and other transit corridors. Mixed-use designations within the Downtown Planning Area are considered the Primary Activity Center for the purpose of this General Plan. See Primary Activity Center.

Affordable Housing. Affordable Housing as defined by the State of California, which generally considers housing to be affordable when a household pays less than 30% of its gross monthly income for housing, property taxes, insurance, and utilities.

Alternative Public Improvement Standards. Modification of adopted street standards.

Aquifer. An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Archeological Resource. Places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area.

Arterial. Four- to six-lane divided (median island separation) roadways, with somewhat limited motor vehicle access to abutting properties, and with the primary purpose of moving traffic within and between neighborhoods and to and from freeways and expressways. In addition to major street intersections, appropriately designed and spaced local street intersections may allow left-turn movements to and from the arterial streets.

Attainment Status. Under amendments to the Federal Clean Air Act, the EPA has classified air basins or portions thereof, as either "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the national standards have been achieved.

Best Management Practices (BMP). The combination of conservation measures, structure, or management practices that reduces or avoids adverse impacts of development on adjoining site's land, water, or waterways, and waterbodies.

Buffer. A land use designation that is intended to separate urban uses from long-term agricultural uses in order to preserve long-term viable agricultural areas.

Bus Rapid Transit (BRT). A bus-based mass transit system with specialized design, services, and infrastructure to improve system quality and remove the typical causes of delay. BRT combines the speed, reliability and amenities of rail-based rapid transit systems with the flexibility of buses.

BRT Corridor. A transportation corridor that allows for express bus service with such features as dedicated stops and/or travel lanes, or signal priority (early green to go ahead of other cars) to allow for faster travel times. BRT corridors in the City include, but are not limited to: Blackstone/Abbey corridor from Downtown to Audubon; Ventura/Kings Canyon Corridor from Downtown to Clovis Avenue, with future phases to east of Temperance; Shaw Avenue; California Avenue Corridor from Downtown to Hughes/Marks to connect a proposed Veteran's Community Transit Village with the Downtown.

Buy Local. A preference to buy locally produced goods and services over those produced farther away.

California High-Speed Rail Authority. California State Agency responsible for planning, designing, building and operation of the first high-speed rail system in the nation, the California High-Speed Train.

California High-Speed Train. High-speed train service being designed to connect the mega-regions of California. By 2029, the system is to run from San Francisco to the Los Angeles basin and the Central Valley in under three hours at speeds capable of over 200 miles per hour. The system is to eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations.

Capital Improvement Program (CIP). The multi-year scheduling of public physical improvements based on studies of fiscal resources available and the choice of specific improvements to be constructed.

Carbon Dioxide (CO2). The most common of the greenhouse gases, CO2 is emitted as a result of fossil fuel combustion, with contributions from cement manufacture.

Carbon Dioxide Equivalent (CO2e). A standard measurement for assessing total greenhouse gas emissions, scaling emissions of non-CO2 greenhouse gases based on their relative global warming potential compared to CO2.

Carbon Footprint. The amount of greenhouse gases and specifically carbon dioxide emitted by something (as a person's activities or a product's manufacture and transport) during a given period.

Carbon Monoxide (CO). A colorless, odorless gas formed by the incomplete combustion of fuels, which is toxic because of its tendency to reduce the oxygen-carrying capacity of the blood.

City (capitalized) and city (non-capitalized). Capitalized "City" refers to the municipal entity and its functions as a local government entity which is also referred to as "City of Fresno" while non-capitalized "city" refers to the geographical area or the people of Fresno which is also referred to as "city of Fresno."

City of Fresno (capitalized City) and city of Fresno (non-capitalized city). See City (Capitalized) for "City of Fresno" and city (non-capitalized) for "city of Fresno" for definitions.

Citywide (capitalized) and citywide (non-capitalized). References to "Citywide" are in relation to a characteristic, regulation or other factor that occurs within the incorporated boundaries of the City of Fresno while "citywide" may refer to occurrences within the Fresno Planning Area (FPA).

City Council. The City Council is the governing body of the City of Fresno and, except where expressly limited by the City Charter, is vested with all powers of legislation in municipal affairs. As the legislative body, the City Council is responsible for adoption of the Plan, subject to Mayoral veto or referendum, and any amendments to the Plan.

City Limits. The incorporated boundaries of the City of Fresno.

Climate Change. Climate change, or global climate change, refers to a change in the average climate of the earth that may be measured by wind patterns, storms, precipitation, and temperature. The baseline by which these changes are measured originates in historical records identifying temperature changes that have occurred in the distant past, such as during previous ice ages.

Climatized Plant. A plant that has acclimated to the environment in which it will be planted for landscaping purposes prior to planting thus preparing the plant to maintain performance across a range of environmental conditions.

Code. See Development Code for definition.

Collector. Two- to four-lane undivided (opposing travel lanes not separated by a median island) roadways, with the primary function of connecting local streets and arterials and neighborhood traffic generators and providing access to abutting properties.

Community Development Corporation (CDC). A not-for-profit organization incorporated to provide programs, offer services and engage in other activities that

promote and support community development. CDCs usually serve a geographic location such as a neighborhood. They often focus on serving lower-income residents or struggling neighborhoods. They can be involved in a variety of activities including economic development, education, community organizing and real estate development. These organizations are often associated with the development of affordable housing.

Community Facilities District (CFD). A method used by local government to finance public improvements and services. A CFD is created by a sponsoring local government agency. The proposed district includes all properties that will benefit from the improvements to be constructed or the services to be provided. A CFD cannot be formed without a two-thirds majority vote of residents living within the proposed boundaries. Or, if there are fewer than 12 residents, the vote is instead conducted of current landowners. In many cases, that may be a single owner or developer. Once approved, a Special Tax Lien is placed against each property in the CFD. Property owners then pay a Special Tax each year. If the project cost is high, municipal bonds are sold by the CFD to provide the large amount of money initially needed to build the improvements or fund the services.

Community Garden. A cooperatively-managed garden in an urbanized area. Community gardens can be a source of fresh produce and provide learning opportunities for community members.

Community Institution. An organization or establishment founded for a specific purpose, such as a hospital, religious institution, school, community center, or hospital.

Community Noise Equivalent Level (CNEL). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night from 10 p.m. to 7 a.m.

Community Park. A park of more than 10 and up to 40 acres in size (typically at least 20 acres), which helps define a community or district and is intended to serve the more active recreational needs of persons who live or work within a two to four-mile radius. These parks typically include facilities such as lighted sport fields and a community center building with a gym, meeting rooms, and restrooms. Other features may include swimming pools, tennis courts, concession stands, community defining pubic art, courtyard or plaza.

Community Plan. A refinement of the General Plan for a component geographic area of the General Plan. A community plan advances the provisions of the General Plan to a

more precise level of detail. A community plan is adopted, amended, or repealed by resolution of the City Council.

Compatible. Capable of existing together without conflict or ill effects.

Complete Neighborhood. Refers to a neighborhood where one has safe and convenient access to the goods and services needed in daily life. This envisions a variety of housing options, grocery stores and other commercial services, quality public schools, public open spaces and recreational facilities, active transportation options and civic amenities. An important element of a Complete Neighborhood is that it is built at a walkable and bikeable human scale, and meets the needs of people of all ages and abilities.

Complete Streets. Streets which are designed and operated to enable safe, attractive, and comfortable access and travel for all users, including motorists, pedestrians, bicyclists, children, seniors, individuals with disabilities, and users of public transportation.

Concept Plan. A framework for growth which identifies future land uses, major road networks, and other challenges and opportunities for growth within the larger area adjacent or surrounding a proposed project. Concept plans require project implementation to involve coordination between new growth areas and existing development that includes subdivisions, some of which were built many years ago, in order to achieve Complete Neighborhoods. Concept Plans may include parks, schools, trails, and other public services and amenities. Concept Plans should demonstrate how subdivisions, proposed commercial and other developments may impact surrounding properties, and how connectivity amongst the sites will be achieved.

Connectivity. The quality of street patterns and pedestrian paths that allow for through movement between and within neighborhoods.

Connector. Two- to three-lane undivided roadways planned to provide access to larger, well integrated neighborhoods typically 40 to 160 acres in size and generally having a range of residential densities and one or more supporting uses, such neighborhood serving recreational open space, school, civic, quasi-public and shopping.

Conservation. The management of natural resources to prevent waste, destruction, or neglect.

Consistent. Free from variation or contradiction. Policies and programs in the General Plan are to be consistent, not contradictory.

Council. See City Council for definition.

County (capitalized) and county (non-capitalized). Non-capitalized county refers to the geographical area or the people of the county of Fresno. Capitalized County refers to the local government which is also referred to as either the County of Fresno or Fresno County.

County Island. Unincorporated land surrounded by the city.

Criteria Air Pollutants. Six pollutants identified by EPA under the federal Clean Air Act that are pervasive in urban environments and for which State and national health-based ambient air quality standards have been established. These are ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM), and lead.

Cultural Resource. Collective evidence of past activities and accomplishments of people. Buildings, objects, features, sites, and structures with scientific, historic, and cultural value are all examples of cultural resources.

Curb Cut. The opening along the curb line at which point vehicles or other wheeled forms of transportation may enter or leave the roadway. Curb cuts are essential at street corners for wheelchair users.

Day-Night Average Sound Level (Ldn). The A-weighted average sound level for a given area (measured in decibels) during a 24-hour period with a 10 dB weighting applied to night-time sound levels (after 10 p.m. and before 7 a.m.). The Ldn is approximately numerically equal to the CNEL for most environmental settings.

Decibel (dB). A unit of measurement used to express the relative intensity of sound as heard by the human ear describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Decibel, A-weighted (dBA). The "A-weighted" scale for measuring sound in decibels; weights or reduces the effects of low and high frequencies in order to stimulate human hearing. Every increase of 10 dBA doubles the perceived loudness though the noise is actually ten times more intense.

Dedication. The commitment by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction

over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are required by the city as conditions of approval on a development.

Dedication, In-lieu of. Certain cash payments which may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Density. The number of residential dwelling units per acre of land. Densities specified in the General Plan are expressed in units per net acre. (See "Acreage, Net.")

Density Bonus. The allocation of development rights that allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location. Under California State Law, residential projects that provide affordable housing may be entitled to as much as a 35 percent increase of the underlying zone district.

Detention Area. A detention area is an area in the natural environment where rainwater runoff and stormwater naturally collects. Human activity and construction of homes have the effect of changing the size and shape of a detention area.

Detention Basin. Facilities classified according to the broad function they serve, such as storage, diversion or detention. Detention facilities are constructed to retard flood runoff and minimize the effect of floods.

Developer. An individual who, or business which, prepares land for the construction of buildings or builds or causes to be built physical building space for use primarily by others, and in which the preparation of the land or the creation of the building space is in itself a business and is not incidental to another business or activity.

Development. The physical extension and/or construction of urban land uses. Development activities include but are not limited to: subdivision of land; construction or alteration of structures, roads, utilities, and other facilities; installation of septic systems; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetation cover (with the exception of agricultural activities). Routine repair and maintenance activities are not considered as "development."

Development Code. Refers to the proposed City of Fresno Municipal Code, Chapter 15, Development Code which will contain the City's zoning and subdivision regulations and

is proposed to be the new planning, zoning, and development implementing code. This code is to be adopted following the adoption of this General Plan.

Development Area. Development Areas are specifically defined geographic areas within the General Plan used to manage urban development through the application of policies and implementation measures to assure that commensurate urban public facilities and improvements are provided as necessary to accommodate the planned development. See Figure 1-3 for representation of Development Areas.

Disadvantaged Unincorporated Communities (DUCs). Settled places not within city limits where the median household income is 80 percent or less than the statewide median household income.

Downtown. The area in the city of Fresno bound by State Routes 99, 41 and 180.

Downtown Core. See Downtown for definition.

Downtown District. See Downtown for definition.

Downtown Neighborhoods Community Plan (DNCP). A subsequent community plan to further refine the Downtown Planning Area. Considered a visionary document that will lay out the community's long-term goals for the Downtown Plan Area and provides detailed policies concerning a wide range of topics, including land use and development, transportation, the public realm of streets and parks, infrastructure, historic resources, and health and wellness.

Downtown Planning Area. Refers to the land area addressed by the Downtown Neighborhoods Community Plan and includes the Central Business District, Civic Center and other Downtown centers, Chinatown, South Stadium/South Van Ness, Downtown neighborhoods and special districts. It is represented in Figure LU-1.

Drought-Tolerant Plants. Plants that are adapted to arid or drought conditions. Once established these plants are able to withstand long periods of dryness without deterioration, going several weeks or a season between watering.

Easement. A right given by the owner of land to another party for specific limited use of that land. An easement may be acquired by a government through dedication when the purchase of an entire interest in the property may be too expensive or unnecessary; usually needed for utilities or shared parking.

Economic Base. Basic economic sectors in a community are those that make products and services that are sold outside the community, thereby creating income for local workers and companies.

Endangered Species, California. A native species or sub-species of a bird, mammal, fish, amphibian, reptile, or plant, which is in serious danger of becoming extinct throughout all or a significant portion of its range, due to one or more factors, including loss in habitat, change in habitat, over-exploitation, predation, competition, or disease. The status is determined by the State Department of Fish and Game together with the State Fish and Game Commission.

Endangered Species, Federal. A species which is in danger of extinction throughout all or a significant portion of its range, other than the species of the Class Insect determined to constitute a pest whose protection under the provisions of the 1973 Endangered Species Act, as amended, would present an overwhelming and overriding risk to humans. The status is determined by the US Fish and Wildlife Service and the Department of the Interior.

Environmental Impact Report (EIR). A document used to evaluate the potential environmental impacts of a project, evaluate reasonable alternatives to the project, and identify mitigation measures necessary to minimize the impacts. The California Environmental Quality Act (CEQA) requires that the agency with primary responsibility over the approval of a project (the lead agency) evaluate the project's potential significant impacts in an Environmental Impact Report (EIR).

Environmental Justice. Environmental Justice refers to the fair treatment of all people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

Equivalent Sound Level (Leq). A single-number representation of the fluctuating sound level in decibels over a specified period of time. It is a sound-energy average of the fluctuating level.

Established Neighborhoods. Development inside the city limits that is more than 10 years old.

Erosion. The process by which material is removed from the earth's surface (including weathering, dissolution, abrasion, and transportation), most commonly by wind or water.

Expansive Soils. Soils which swell when they absorb water and shrink as they dry.

Expressway. Four- to six-lane divided (median island separation) roadways primarily serving through and crosstown vehicle traffic, with at-grade major street intersections located at approximately one-half mile intervals and no driveways for direct motor vehicle access to abutting property.

Farmland Classification. California Department of Conservation system for categorizing farmland with respect to its potential for agricultural productivity based on soil type and other physical characteristics.

Fault. A fracture in the earth's crust forming a boundary between rock masses that have shifted. An active fault is a fault that has moved recently and which is likely to again. An inactive fault is a fault which shows no evidence of movement in recent geologic time and little potential for movement.

Findings. Findings are defined as the results of an investigation, carried out by an investigating team.

Fire Department. The City of Fresno Fire Department for definition.

Fiscal Analysis. Analysis focused on the city's General fund budget, comparing costs of providing services and maintaining public facilities with the primary revenue source available to cover these expenditures. The analysis is designed to inform key planning and policy parameters associated with the General Plan.

Flashover. The temperature point at which the heat in a room, area or region is high enough to ignite all flammable material simultaneously.

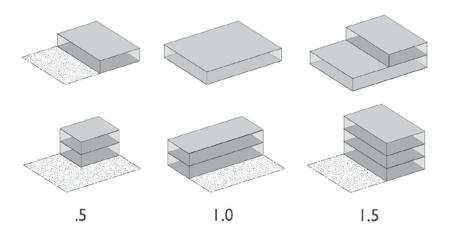
Floodplain. An area adjacent to a lake, stream, ocean or other body of water lying outside the ordinary banks of the water body and periodically inundated by flood flows. Often referred to as the area likely to be inundated by the 100-year flood.

Flood Zone. The relatively level land area on either side of the banks of a stream that is subject to flooding under a 100-year or a 500-year flood.

Floor Area, Gross. The total horizontal area in square feet of all floors within the exterior walls of a building, but not including the area of unroofed inner courts or shaft enclosures.

Floor Area Ratio (FAR). The ratio between gross floor area of structures on a site and gross site area. Thus, a building with a floor area of 100,000 square feet on a 50,000 square-foot lot will have a FAR of 2.0.

Examples showing the concept of FAR:



Food Insecure. The term used to describe people who have insufficient quantities of food available on a consistent basis, have insufficient resources to obtain appropriate foods for a nutritious diet, and do not use food appropriately based on knowledge of basic nutrition and care, as well as adequate water and sanitation. There are two levels of food insecurity as defined by the USDA: Low food security and very low food security.

Food Value Chain. A food venture that links producers, processors, marketers, food service companies, retailers and supporting groups such as shippers, research groups and suppliers designed to increase competitive advantage through collaboration. A Value Chain can be defined as a strategic partnership among inter-dependent businesses that collaborate to progressively create value for the final consumer resulting in a collective competitive advantage.

Form-Based Code. A method of regulating development to achieve a specific urban form. Form-Based Codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city of county regulations.

Freeway. Freeways provide intra- and inter-regional mobility. Freeway access is restricted to primary arterials via interchanges. Multiple-lane divided (median island separation) roadways on adopted State route alignments servicing through and crosstown traffic, with no access to abutting property and no at-grade intersections. Freeways are under the jurisdiction of the State, outside the control of the City.

Fresno. A general reference to a geographic area located within the jurisdiction of the City of Fresno and its sphere of influence.

Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF). Operated by the City of Fresno this facility provides wastewater treatment services for the greater Fresno metropolitan area in order to protect public health and the environment. It is located at Jensen and Cornelia avenues in southwest Fresno. Wastewater generated from homes and businesses in the Fresno/Clovis metro area travels through 1,500 miles of sanitary sewer lines to the Facility. Currently, the RWRF is a biological, secondary level treatment plant. Future capital improvement projects will upgrade this facility to be able to treat a portion of the incoming wastewater to a tertiary level.

Fresno Fire Department. See Fire Department for definition.

Fresno Police Department. The City of Fresno Police Department for definition.

Fresno's City Limits. See City Limits for definition.

Fulton Corridor Specific Plan (FCSP). A subsequent Specific Plan to further refine the Downtown Planning Area and more specifically the Fulton Corridor.

General Fund. Monies from local property and sales taxes, and other revenue sources, that pay for City of Fresno services.

General Plan. This document, including the adopted Housing Element, which is an integrated, internally consistent, comprehensive, and long-range set of goals, objectives, policies, implementation measures and diagrams for the general physical development of the city and any land outside the City's boundaries which bears relation to the City's planning.

General Plan Buildout. The level of development characterized by full occupancy of all developable sites in accordance with the General Plan Buildout does not necessarily

assume parcels are developed at maximum allowable intensities. General Plan Buildout will occur past 2050.

General Plan Horizon. The level of development predicted to occur by 2035, in accordance with the General Plan.

Goals and Related Terms:

Goal. A goal is a general direction-setter. It is an ideal future end related to the public health, safety or general welfare. A goal is a general expression of community values and, therefore, may be abstract in nature and is generally not quantifiable or time-dependent.

Objective. An objective is a specified end, condition, or state that is an intermediate step toward attaining a goal. It should be achievable, and preferably measurable.

Policy. A policy is a specific statement that guides decision-making and indicates a commitment of the local legislative body to a particular course of action to accomplish goals and objectives.

Implementation Measure. An implementation measure is an action, procedure, program or technique that carries out general plan policy.

Global Warming Potential. The relative impact of each greenhouse gas on climate change, on a scale based on the impact of carbon dioxide, whose Global Warming Potential (GWP) is 1.

Graywater. Wastewater generated from wash hand basins, showers and baths, which can be recycled on-site for uses such as water closet flushing, landscape irrigation and constructed wetlands. It often includes discharge from laundry, dishwashers and kitchen sinks.

Green Building. A Green Building generally refers to one that is environmentally friendly in terms of energy consumption, or the waste they produce during its entire life-cycle. A Green Building will have little or no significant impact on the environment. Green buildings are scored by rating systems, such as the Leadership in Energy and Environmental Design (LEED) rating system developed by the U.S. Green Building Council, Green Globes from GBI and other locally developed rating systems.

Green Building Rating System. A building certification system that rates or rewards relative levels of compliance or performance with specific environmental goals and requirements. Rating systems and certification systems are frequently used

interchangeably. Green building rating systems address every project type from single-family houses and commercial buildings to entire neighborhoods and are available for new construction and existing buildings. The goal of rating systems is to improve the design and operations of buildings so that they operate in a more sustainable manner by addressing what the buildings industry has identified as the major aspects of green buildings (i.e., siting, energy, water, greenhouse gas, materials, indoor environment, recycled content, thermal comfort, daylighting, moisture control, acoustics, building system controls, integrated design and commissioning).

Green Enterprise. A business functioning in a capacity where minimal negative impact is made on the local or global environment, the community, or the economy and may have progressive environmental and human rights policies. A business that incorporates principles of sustainability into each of its business decisions, supplies environmentally friendly products or services that replaces demand for nongreen products and/or services, is greener than traditional competition, and has made an enduring commitment to environmental principles in its business operations. A business that participates in environmentally friendly or green activities to ensure that all processes, products, and manufacturing activities adequately address current environmental concerns.

Green Streets. An aspect of the city's urban forest which consists of well-balanced variety and spacing of trees and continuous canopy for shading and visual continuity of each streetscape.

Green Technology. The development and application of products, equipment and systems used to conserve the natural environment and resources, which minimizes and reduces the negative impact of human activities.

Greenhouse Gases. Greenhouse gases are gases in the atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. Carbon dioxide, methane, and ozone are examples of greenhouse gases.

Greenway. A greenway is a long, narrow piece of land, where vegetation is encouraged, which is managed for public recreation and slow travel.

Groundwater. Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge. The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage (i.e. aquifers).

Growth Area. All land within the City's SOI, as of December 31st, 2012, but outside of the City Limits that requires annexation to be incorporated into the City of Fresno.

Habitat. The natural environmental of a plant or animal.

Hazardous Material. A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. The California Code of Regulation defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness, or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed.

Hazardous Waste. Materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Hazardous materials and hazardous wastes are classified according to four properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases).

Healthy People 2020. Healthy People 2020 is a 10-year agenda for improving the Nation's health. It is a multiyear process that reflects input from a diverse group of individuals and organizations. More information can be found at http://www.healthypeople.gov/2020/default.aspx.

High-Speed Rail and High-Speed Train. Rail services with top speeds of 110 MPH to 150 MPH or higher, as defined by the U.S. Department of Transportation. See also California High-Speed Train.

Highway. A public roadway that is publicly maintained and open to the public for purposes of vehicular travel to connect cities and towns.

Historic Resource. Any building, structure, object or site generally in existence more than 50 years which possesses integrity of location, design, setting, materials,

workmanship, feeling and association, and is associated with historic events or with the lives of persons significant in Fresno's past, or embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master or possesses high artistic values; or reflects, important information about prehistory or history, and has been designated by the City Council to the Local as required by the Historic Preservation Ordinance.

Historic Structure. A structure deemed to be historically significant based on its visual quality, design, history, association, context, and/or integrity.

Household. An occupied housing unit.

Impact Fee. A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code § 54990 specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Impervious Surface. Any material which reduces or prevents absorption of water into land.

Implementation. Actions, procedures, programs, or techniques that carry out policies.

Infill. The terms "infill area" and "infill development" are intended to be used interchangeably, and shall be defined as consistent with the definition of "infill area" set forth in Objective UF-12 as follows: "Locate roughly one-half of future residential development in infill areas—defined as being within the City on December 31, 2012—including the Downtown core area and surrounding neighborhoods, mixed-use centers and transit-oriented development along major BRT corridors, and other non-corridor infill areas, and vacant land." To the extent that the City must comply with alternative statutory definitions, the definitions of "infill" contained within Public Resources Code 21061.3 and CEQA Guidelines 15332, as may be amended, may apply.

Infill Opportunity Zone (IOZ). General or specifically defined geographic areas for which policies and implementation measures are established to promote development or planned land uses. Includes many of Fresno's established neighborhoods, which are in need of both large, catalytic reinvestment projects and small-scale strategic interventions.

Infrastructure. Permanent utility installations, including roads, water supply lines, sewage collection pipes, and power and communications lines.

Integrated Pest Management. A broad-based approach to pest control that takes into consideration all available pest control techniques as well as subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. It emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms. This includes managing insects, plant pathogens and weeds.

Intelligent Transportation System (ITS). The application of advanced information and communications technology to surface transportation in order to achieve managed traffic signal timing coordination which improves traffic operations and increases traffic-carrying capacity, while reducing unnecessary congestion and decreasing air pollution emissions.

Intensity. Refers to the relative magnitude of the use or activity which may occur upon a given property or area of land and is typically reflected by the ratio of building area to land area calculated as floor area ratio (i.e. the building area divided by the land area). Intensity may also be measured by other characteristics such as the rate at which the uses of a property generate demand for water consumption, demand for wastewater disposal or generates demand for travel such a private vehicle, public transportation, bicycling or walking.

Intersection Capacity. The maximum number of vehicles that has a reasonable expectation of passing through an intersection in one direction during a given time period under prevailing roadway and traffic conditions.

Intrusive Noise. That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or information content as well as the prevailing noise level.

ISO Rating. This rating considers a community's fire defense capacity versus fire potential, and then uses the score to set property insurance premiums for homeowners and commercial property owners.

Jobs-Employed Residents Ratio. Total jobs divided by total employed residents (i.e. people who live in the area, but may work anywhere). A ratio of 1.0 typically indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

K Factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Land Use Designation. See Use for definition.

LEED. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System[™] is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

Level of Service, LOS (traffic). A qualitative measure describing operational conditions within a traffic stream and the perception of motorists and/or passengers regarding these conditions. A level of service definition generally describes these conditions in terms of such factors as traffic volumes, speed and travel time, delays at traffic signals, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. The LOS grades are:

LOS A: represents free-flow travel with an excellent level of comfort and convenience where individual vehicles are virtually unaffected by the presence of other vehicles.

LOS B: a stable operating condition, but the presence of other vehicles begins to be a noticeable, though slight. Freedom to select desired speeds is relatively unaffected, but there is a slight reduction in comfort, convenience, and maneuvering freedom.

LOS *C:* a stable operating condition, but this level marks the beginning of congestion and the operation of individual users is affected by the intersection with others in the traffic stream.

LOS D: represents high-density and crowded but stable traffic flow condition. Users experience substantial restriction in speed and freedom to maneuver with drivers experiencing generally poor level of comfort and convenience.

LOS E: represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Small increases in traffic volume will cause breakdown in traffic movement.

LOS *F*: is used to define forced or breakdown conditions (stop-and-go). This condition exists when the amount of traffic exceeds the amount that can travel to a destination. Long queues of vehicles can form behind these bottleneck points with the queued traffic traveling in a stop-and-go fashion.

Liquefaction. A sudden large decrease in the shearing resistance of cohesion less soil, caused by a collapse of the structure by shock or strain, and associated with a sudden but temporary increase of the pore fluid pressure.

Low Impact Development. Site planning and development features that reduce impermeable surface areas and increase infiltration, such as use of permeable paving, vegetated swales, and water retention facilities.

Major Streets. See "Streets, Major" for definition.

Maximum Contaminant Level. Standards that are set by the Environmental Protection Agency for drinking water quality in Title 40 of the Code of Federal Regulations. The limit is usually expressed as a concentration in milligrams or micrograms per liter of water.

Median Strip. The dividing area, either paved or landscaped, between opposing lanes of traffic on a roadway.

Minerals. Any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and bituminous rock, but excluding geothermal resources, natural gas, and petroleum (Public Resources Code Section 2005).

Mitigation. A specific action taken to reduce environmental impacts. Mitigation measures are required as a component of environmental assessments (EIR) if measures are identified.

Mitigation Measures. Action taken to avoid, minimize, or eliminate environmental impacts. Mitigation includes: avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of

the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and compensating for the impact by repairing or providing substitute resources or environments.

Mixed Use. A development type consisting of a diversity of both residential uses and nonresidential uses, which may include but are not limited to office, retail, public, or entertainment, in a compact urban form with a strong pedestrian orientation.

Vertical Mixed-Use. A development that contains at least one multi-story mixed-use building.

Horizontal Mixed-Use. An integrated mixed-use development consisting of adjacent residential and non-residential uses.

Mode (transportation). Each form of transportation is a mode: public transit, bicycling, walking, and driving.

Mode split (transportation). The proportion of trips that use each mode of transportation.

Multi-modal. Supporting more than one mode of transportation.

Neighborhood Center. Mixed use area located within a neighborhood that provides local services and amenities that build upon the character and identity of the surrounding neighborhoods and communities. Neighborhood Centers can have, as a focus, public facilities such as parks or community center, or include neighborhood scale commercial centers with multi-modal access directly to the neighborhoods it is located within. They have a lower intensity of use than an Activity Center located within a transit corridor.

Neighborhood Park. A park of more than 2 and up to 10 acres in size, which provides basic recreational activities for neighborhoods located generally within a one-mile radius. These parks contribute to neighborhood identity and accommodate a range of facilities, such as play fields and courts, children's play structures, picnic tables, restrooms, and may include a small center with a multi-purpose room, but also passive recreational features such as walking trails, community gardens, or nature areas.

Nitrogen Oxides (NOx). Chemical compounds containing nitrogen and oxygen; reacts with volatile organic compounds, in the presence of heat and sunlight to form ozone. It is also a major precursor to acid rain.

Noise Attenuation. Reduction of the level of a noise source using a substance, material, or surface.

Noise Contours. Lines drawn about a noise source indicating equal levels of noise exposure. CNEL and Ldn are the metrics utilized herein to describe annoyance due to noise and to establish land use planning criteria for noise.

Open Space. Any parcel or area of land or water that is essentially unimproved. The General Plan designates privately-owned rural/grazing lands, and devoted open space areas as defined by California planning law.

Overdraft. A groundwater basin is in overdraft conditions when the amount of water being drawn out exceeds the amount of water being recharged.

Overlay District. A zoning designation that may be applied in addition to the "underlying" zoning district, to meet a specific, additional goal, such as to encourage protection to environmentally sensitive areas.

Ozone. A compound consisting of three oxygen atoms that is the primary constituent of smog. It is formed through chemical reactions in the atmosphere involving volatile organic compounds, nitrogen oxides, and sunlight. Surface level Ozone can initiate damage to the lungs as well as damage to trees, crops, and materials. There is a natural layer of Ozone in the upper atmosphere, which shields the earth from harmful ultraviolet radiation.

"Package" Treatment Plants. A pre-engineered and pre-fabricated method of treating wastewater with an aerobic process to remove most pollutants from water. The final effluent can be released safely into the environment such as receiving streams, rivers, etc. Treated non-potable water can also being used as a new source of water to promote agricultural and aquaculture production, industrial uses, water sustainability, and reclamation uses such as irrigation, wash down, and artificial recharge.

Paleontological Resources. The mineralized remains of prehistoric plant and animal life, not including human remains or artifacts—also known as fossils.

Park Ratio. The amount of parkland in acres per 1,000 residents.

Parkway. A wide road with trees and grass along the sides and often in the middle.

Particulate Matter (PM-10 and PM-2.5). Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. PM-10 and PM-2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM-10 and PM-2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects.

Peak Hour. The busiest one-hour period for traffic during a 24-hour period. The PM peak hour is the busiest one hour period of traffic during the evening commute period. The AM peak hour is the busiest one hour period during the morning commute.

Pedestrian-Oriented Development. Development designed with an emphasis on the street sidewalk and on pedestrian access to the building, rather than an auto access and parking areas.

Performance Standards. A statement representing a commitment by a public agency to attain a specified level or quality of performance through its programs and policies.

Plan. See General Plan for definition.

Planning Area. Refers to the land area addressed by a General Plan, including land within the city limits and land outside the city limits that bears a relation to the City's planning. This area is not all intended for development; the General Plan Land Use Diagram shows the future development area. The Planning Area established by the City of Fresno includes all areas within the City's current City limits, including the Fresno-Clovis Regional Wastewater Reclamation Facility, the area within the current Sphere of Influence (SOI), and an area north of the most northeasterly portion of the city.

Planning Commission. The City of Fresno Planning Commission. The Planning Commission hears, reviews, and makes recommendations to the City Council on development, land use, and environmental issues, including the General Plan, zoning and subdivision ordinances, and other land use regulations. If authorized, the Planning Commission also approves and denies projects.

Pocket Parks. A park of 0.5 to 2.0 acres in size, which is intended to serve the needs of a smaller, specific neighborhood located within a half-mile radius of the pocket park. Pocket Parks should include amenities to draw neighbors to the park such as a tot lot, picnic bench, or shade structure.

Ponding Basin. See Detention Basin for definition.

Police Department. See Fresno Police Department for definition.

Preservation Mitigation Fund. A fund established to support efforts to preserve and maintain historic and cultural resources. The fund could be used for the restoration of historic properties or cultural heritage programming, and may be generated through a plan or program or other qualifying mechanism to allow for payment of fees to reduce impacts from loss of historic resources.

Primary Activity Center. The Downtown mixed-use areas that are located within the Downtown Planning Area.

Rare or Endangered Species. A species of animal or plant listed in Sections 670.2 or 670.5, Title 14, California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened, or endangered.

Regional Park. A large park of more than 40 acres in size, which is meant to serve a large number of residents across a broad area of the city, or around 100,000 residents. Regional parks typically include community park features that allow for a variety of sports and active recreation. A park less than 40 acres in size may also be defined as a Regional Park if it provides unique recreational opportunities, such as a zoo or access to the San Joaquin River.

Renewable Energy. Any naturally occurring, theoretically inexhaustible source of energy, as biomass, solar, wind, tidal, wave, and hydroelectric power, that is not derived from fossil or nuclear fuel.

Residential Density. See Density for definition.

Retention Area. A pond, pool, lagoon, or basin used for the storage of water runoff, which is not pumped to another location.

Right-of-Way. A continuous strip of land reserved for or actually occupied by a road, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary storm sewer or other similar use, which may be an easement, fee (ownership) or other interest in land.

Riparian. Characteristic vegetation relating to or located on the bank of a natural watercourse often described as "riparian corridors."

San Joaquin Valley Blueprint. A regional planning effort that originated in 2006 when the eight Councils of Governments in the San Joaquin Valley began developing a common vision for the Valley to help guide land use and transportation decisions. The Blueprint is intended to help urban areas in Fresno County to better deal with existing and expected future growth-related challenges to public resources, housing, mobility, health, air quality and environment. More information can be found at http://www.valleyblueprint.org.

Satellite Treatment and Reclamation Facility. Satellite wastewater systems are used to treat wastewater at or near the point of waste generation and reuse. Satellite treatment plants generally do not have solids processing facilities; solids are returned to the collection system for processing in a central treatment plant located downstream. Individual satellite systems can be used for water reclamation and reuse for applications such as landscape irrigation, toilet flushing, cooling applications, and water features. Use of satellite systems is predicated on the assumption that the existing collection system can be utilized for the transport of solids and reduced flow. Onsite reclamation systems may obviate the need for large-scale dual piping systems, which are generally prohibitively expensive in urbanized areas and reduce the need to expand existing treatment plants to meet future growth projections.

Satellite Treatment Plants. See Satellite Treatment and Reclamation Facility for definition.

Seismic. Caused by or subject to earthquakes or earth vibrations.

Sensitive Receptors. Persons or land users that are most sensitive to negative effects of air pollutants. Persons who are sensitive receptors include children, the elderly, the acutely ill, and the chronically ill. The term "sensitive receptors" can also refer to the land use categories where these people live or spend a significant amount of time. Such areas include residences, schools, playgrounds, child-care centers, hospitals, retirement homes, and convalescent homes.

Short-Range Transit Plan. A document that assesses the existing conditions for a transit system, projects' short term (usually five year) demand, and outlines a plan for meeting those needs.

Shrink-Swell Potential. The extent to which a soil expands in volume when water is absorbed and shrinks as the soil dries. Expansive soils, with a high shrink-swell potential, are largely comprised of clays.

Significant Effect. A beneficial or detrimental impact on the environment. May include, but is not limited to, significant changes in an area's air, water, and land resources.

Siltation. The process of silt deposition. Silt is a loose sedimentary material composed of finely divided particles of soil or rock, often carried in cloudy suspension in water.

Site Area. The land area of a lot remaining after dedication of all areas for public streets, regional trails, and certified wetlands or floodplains.

Smart Growth. An urban planning and transportation theory that concentrates growth in compact walkable urban centers to avoid sprawl. It also advocates compact, transitoriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices. Smart growth values long-range, regional considerations of sustainability over a short-term focus. Its sustainable development goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.

Smart Growth Principles. There are ten accepted principles of smart growth and they are: create a range of housing opportunities and choices; create walkable neighborhoods; encourage community and stakeholder collaboration in development decisions; 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; and take advantage of compact building design.

Solar Power. Energy from the sun that is converted into thermal or electrical energy, either directly using photovoltaics, or indirectly using concentrated solar power.

Solid Waste. General category that includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood.

Special Districts. As identified by DNCP, Downtown Development Code or Fulton Corridor Specific Plan (Central Business District, Cultural Arts District, Civic Center, Chinatown, South Stadium, South Van Ness Specific Plan), a precise plan or based on, and consistent with, the General Plan and the Community Plan within which it is located, and shall contain precise land use designations, regulations, programs, and legislation that are required for the systematic implementation of the General Plan and Community Plan.

Special Status Species. Any species which is listed, or proposed for listing, as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act. It also includes any species designated by the U.S. Fish and Wildlife Service as a "candidate" or "species of concern" or species identified on California Native Plant Society's Lists 1A, 1B, or 2, implying potential danger of extinction.

Specific Plan. Refers to a plan that provides detailed design and implementation tools for a specific portion of the area covered by a general plan. A Specific Plan may include all regulations, conditions, programs, and/or proposed legislation which may be necessary or convenient for the systematic implementation of any general plan element(s).

Sphere of Influence (SOI). The ultimate service area of an incorporated city, as established by the Fresno Local Agency Formation Commission (LAFCo).

State. Non-capitalized state refers to the geographical area or the people of state of California. Capitalized State refers to the state government which is also referred to as the State of California.

State Route (Officially Known as State Highway Route). A number assigned to a California state highway.

Stationary Source. A source of air pollution that is not mobile, such as a heating plant or an exhaust stack from a laboratory.

Stormwater Runoff. Surplus surface water generated by rainfall that does not seep into the earth but flows overland to a watercourse.

Stormwater Management. A coordinated strategy to minimize the speed and volume of stormwater runoff, control water pollution, and maximize groundwater recharge.

Street, Major. Shall mean a roadway designated by the General Plan Circulation Diagram as a Collector, Arterial, Super-arterial, Scenic, Expressway, State Route, or other road identified on the City's Circulation Plan.

Street, Local. Shall mean a street which is not a major street.

Student Generation Rate. The number of new students that is projected to occur with new housing units.

Subsidence. Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas.

Superarterial. Four- to six-lane divided (median island separation) roadways with a primary purpose of moving multiple modes of travel traffic to and from major traffic generators and between community plan areas.

Threatened Species, California. A species of animal or plant is endangered when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors; or when although not presently threatened with extinction, the species is existing in such small numbers that it may become endangered if its environment worsens. A species of animal or plant shall be presumed to be rare or endangered as it is listed in Sections 670.2 or 670.5, Title 14, California Code of Regulations; or Title 50, Code of Federal Regulations Sections 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

Threatened Species, Federal. A species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Total Dissolved Solids (TDS) Total dissolved solids comprise inorganic salts and small amounts of organic matter that are dissolved in water. The principal constituents are usually calcium, magnesium, sodium and potassium and the anions carbonate, bicarbonate, chloride, sulphate and, particularly in groundwater, nitrate (from agricultural use).

Toxic Air Contaminant. An air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. Toxic air contaminants include more than 700 chemical compounds that have been determined to have potential adverse health impacts.

Transit Oriented Development. A development or planning concept typified by the location of residential and commercial districts around a transit station or corridor with high quality service, good walkability, parking management and other design features that facilitate transit use and maximize overall accessibility.

Transit Village. A predominantly residential community with some nearby retail activities planned around a transportation hub, such as a bus stop or train station, with the intent to make it convenient for village dwellers to get to/from work or run errands and travel via a public transportation network. Some key components are a core commercial area with offices and retail surrounding a transit stop supported by high density residential and mixed-use development with progressively lower-density development spreading outward from the center with a focus on creating a sense of place, common places, such as public squares and civic centers, and diversified housing. Multiple Transit Orientated Developments can occur within a Transit Village. For the purposes of this Plan a Transit Village is an Activity Center.

Transportation Demand Management (TSM). Measures to improve the movement of persons and goods through better and more efficient utilization of existing transportation systems (e.g., streets and roads, freeways and bus systems) and measures to reduce the number of single-occupant vehicles utilized for commute purposes.

Transportation System Management. A set of strategies that largely aim to reduce GHG emissions by reducing congestion, primarily by improving transportation system capacity and efficiency. TSM strategies may also address a wide range of other externalities associated with driving such as pedestrian/driver safety, efficiency, congestion, travel time, and driver satisfaction. Some TSM strategies are designed to reduce total and systemic congestion and improve system-wide efficiency, while other strategies target particularly problematic areas where improvements could greatly affect congestion, safety, efficiency, and GHG emissions.

Trip Generation. The number of vehicle trip ends associated with (i.e., produced by) a particular land use or traffic study site. A trip end is defined as a single vehicle movement. Roundtrips consist of two trip ends.

Urban Area. The area planned for residential, commercial, industrial, civic and institutional uses under this General Plan.

Urban Artifacts. Include infrastructure (such as Work Projects Administration 'WPA' stamped sidewalks), street furniture (such as "pineapple" lampposts), signage and other amenities that help to define the urban landscape and create a sense of place.

Urban Form and Urban Design. Refers to the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

Urban Growth Management (UGM). The City of Fresno's Urban Growth Management (UGM) identifies methods for providing municipal services, facilities, or improvements to serve proposed development. Its purpose is better defined in the City's Development Code describing the UGM process in Section 12-40.501:

"An integral part of Urban Growth Management is a process referred to herein as the Urban Growth Management Process. The Urban Growth Management Process is intended neither to prevent any development or growth nor to permit free or disorganized development or growth in the Urban Growth Management Area. Such process is instead intended to identify the demands on municipal facilities, improvements, or services created by any proposed residential, commercial, industrial, or other type of development and to provide the means for satisfying such demands; to identify any deleterious effects of any such development and protect the city and its residents against such effects by minimizing the costs of municipal facilities, improvements, and services; and to maintain a high quality of such facilities, improvements, and services. (Added Ord. 76-6, § 1, eff. 2-22-76; Am. Ord. 98-54, § 2, 8-27-98)."

Urban Parkway. Local streets lined with trees and landscaping and ample pedestrian space.

Use. The purpose for which a lot or structure is or may be leased, occupied, maintained under the Development Code and General Plan land use designation.

Vehicle Miles Traveled (VMT). A measure of both the volume and extent of motor vehicle operation; the total number of vehicle miles traveled within a specified geographical area (whether the entire country or a smaller area) over a given period of time.

View Corridor. The line-of-sight (identified as to height, width, and distance) of an observer looking toward an object of significance to the community (e.g., ridgeline, river, historic building, etc.).

Walkable. A characteristic of an area in which a variety of housing types, retail uses, parks, schools and other destinations are in close proximity and well-connected by streets and paths that provide a good pedestrian environment.

Waste Diversion. The prevention and reduction of generated waste through source reduction, recycling, reuse, or composting. Waste diversion generates a host of environmental, financial, and social benefits, including conserving energy, reducing disposal costs, and reducing the burden on landfills and other waste disposal methods.

Wastewater Treatment "Package" Plants. See "Package" Treatment Plants for definition.

Water Recycling. The reuse of tertiary-treated wastewater for landscaping, industrial cooling, irrigation, groundwater recharge, or other uses.

Watershed. The total area above a given point on a watercourse which contributes water to the flow of the watercourse; the entire region drained by a watercourse.

Wetlands. Areas that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mud flats, and fens.

Wildlife Corridor. A natural corridor, such as an undeveloped ravine, that is frequently used by wildlife to travel from one area to another.

Williamson Act. Known formally as the California Land Conservation Act of 1965, it was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban and suburban development. The program entails a ten-year contract between an owner of land and (usually) a county whereby the land is taxed on the basis of its agricultural use rather than the market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement.

Zero Waste. A philosophy that encourages the redesign of resource life cycles so that all products are reused. No trash is sent to landfills and incinerators. It is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. It means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.

Zoning Code and Zoning Regulations. Presently City of Fresno Municipal Code, Chapter 12, Articles 1,2,3, 4 and 4.5 comprise the "Comprehensive Zoning Ordinance" and can be referred to as "Zoning Ordinance of the City of Fresno". The present Zoning Ordinance and many other Articles of Chapter 12 will be repealed and replaced by updated Code provisions in a new Development Code. Use of these terms normally will be in reference to old implementing tools to be replaced.

LIST OF ACRONYMS

ABC: State Department of Alcoholic

Beverage Control

CalGreen or CalGreen Code: California Green Building Standards Code

af/yr: acre feet/year

CAP: Climate Action Plan

ADA: Americans with Disabilities Act

CARB: California Air Resources Board

ADT: Average daily traffic

CBC: California Building Code

ALUC: Airport Land Use Commission

CBD: Central Business District

ALUCP: Airport Land Use Compatibility Plan

CDFG: California Department of Fish

and Game

ATP: Active Transportation Plan

CEQA: California Environmental

Quality Act

BNSF: Burlington Northern Santa Fe

Railway

CFCs: Chlorofluorocarbons

BRT: Bus Rapid Transit

cfs: Cubic feet per second

CALEA: Commission of Accreditation

for Law Enforcement Act

CIP: Capital Improvement Program

Caltrans: California Department of

Transportation

CLG: Certified Local Government

CMP: Congestion Management DNL: Day-Night Average Noise Level Program **DPM:** Diesel Particulate Matter CNEL: Community Noise Equivalent Level DPU: City of Fresno Department of **Public Utilities** CO2e: Carbon Dioxide Equivalent DPW: City of Fresno Department of **Public Works COFCG or FCOG:** Council of Fresno **County Governments** du: Dwelling Unit **COG:** Council of Governments du/ac: Dwelling Units per acre **CSUF:** California State University, (measure of density) Fresno **DWR:** Department of Water Resources **CUSD:** Clovis Unified School District EDB: Ethylene dibromide CWMA: Consolidated Waste Management Authority EIR: Environmental Impact Report (CEQA) **DARM:** City of Fresno Development and Resource Management Department EPA: Environmental Protection Agency dB: Decibel FAR: Floor Area Ratio (measure of intensity) dBA: Decibel A-Weighted FAX: Fresno Area Express **DBCP:** Dibromo-3-Chloropropane **FEMA**: Federal Emergency Management **DDC:** Downtown Development Code Act DMA: Disaster Mitigation Act of 2000 FCSP: Fulton Corridor Specific Plan **DNCP:** Downtown Neighborhoods FID: Fresno Irrigation District Community Plan

FLYP: Fresno's Leading Young **IDA:** Infill Development Act Professionals **ISO:** Insurance Services Office FMC: Fresno Municipal Code, also known as the Municipal code of Fresno **LAFCO:** Fresno Local Agency Formation Commission FMFCD: Fresno Metropolitan Flood **Control District** LEED: Leadership in Energy and Environmental Design FPU: Fresno Pacific University Leq: Equivalent Sound Level FUSD: Fresno Unified School District Ldn: Day-Night Average Sound Level **FYI:** Fresno Yosemite International Airport LOS: Level of Service GCC: Global Climate Change LPPO: Local Planning Procedures Ordinance GED: General Education Diploma LUST: Leaking Underground Storage **GHG:** Greenhouse Gases Tank GIS: Geographic Information Systems **MEIR:** Master Environmental Impact Report GP: General Plan mgd: Million gallons per day (water or wastewater) GPCC: General Plan Citizens Advisory Committee MOU: Memorandum of Understanding gpcpd: gallons per capita per day (water use) NAHC: Native American Heritage Commission **GWP:** Global Warming Potential **NAICS:** North American Industry

HSR: California High-Speed Rail

HHW: Household Hazardous Waste

Classification System

NESWTF or SWTF: Northeast Surface SCCCD: State Center Community Water Treatment Facility College District NFPA: National Fire Protection **SCS:** Sustainable Community Strategy Association SEGA: Southeast Growth Area NFIP: National Flood Insurance Program SEDA: Southeast Development Area (formerly SEGA) OSHA: Occupational Safety and Health Administration SIP: State Implementation Plan (Air Pollution) PACE: Property Assessed Clean Energy SJVAPCD: San Joaquin Valley Air PG&E: Pacific Gas and Electric Pollution Control District PM-2.5: Suspended particulate matter SJVAB: San Joaquin Valley Air Basin 2.5 microns or less in diameter **SNAP:** Supplemental Nutrition PM-10: Suspended particulate matter 10 Assistance Program microns or less in diameter **SOI:** Sphere of Influence ppb: Parts per billion Sq. Ft.: Square Feet ppd: Pounds per person per day (waste) SR: State Route **ppm:** Parts per million (10⁶) by volume **SWMP:** Storm Water Management Plan or weight **SWTF:** Surface Water Treatment RHNA: Regional Housing Needs Facility Allocation TAZ: Traffic Analysis Zone RTP: Regional Transportation Plan TCE: Tetrachloroethylene RWRF: Fresno/Clovis Regional Wastewater Reclamation Facility

TCP: Trichloropropane

TOD: Transit Oriented Development **USDA:** United States Department of

Agriculture

TTCIS: Traffic, Transportation and

Connectivity Impact Study **UWMP:** Urban Water Management

Plan

UGM: Urban Growth Management

VMT: Vehicle Miles Traveled

UP: Union Pacific Railroad

VOC: Volatile Organic Chemicals

USBR: United States Bureau of

Reclamation WIC: Women, Infants and Children

USD: Unified School District **YET:** Youth Engagement Team

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