South Industrial Priority Area (SIPA)
Specific Plan
Initiated March 2019
Alternate formats of this document will be provided by the City upon request. To request alternate formats contact Shannon M. Mulhall, Certified Americans with Disabilities Act Coordinator at (559) 621-8716.
## Table of Contents

Introduction .............................................................................................................. 2

Map Area ................................................................................................................. 4

Timeline ..................................................................................................................... 6

How to use this Document ....................................................................................... 8

### Plans and Policies

- **General Plan** ...................................................................................................... 15
  2014
- **Southwest Fresno Specific Plan** ................................................................. 65
  2017
- **Roosevelt Community Plan** ........................................................................ 73
  1992
- **North-Avenue-Industrial-Triangle Specific Plan** ....................................... 85
  1973

Glossary ................................................................................................................... 125
Introduction

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. Beginning as early as 1917, the City of Fresno recognized the importance of the area south of downtown due to its proximity to railroads and highways. As the city grew in size and population, the area designated for industrial uses grew as well. Each General Plan from 1956 on showed the area and reiterated its importance to the economic stability of Fresno.

The General Plan, adopted in December 2014, laid out a series of subsequent planning documents including specific plans needed for priority infill areas. The purpose of this plan is to consolidate all of the City’s adopted policies regarding the South Industrial Priority Area into one document and to analyze the long-term, cumulative impacts. These plans are intended 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.

Job creation must keep up with population growth to provide opportunities for all residents. Fresno is the 34th largest city in the US and the fifth largest city in California. The 2017 population estimate from the US Census Bureau was 527,438 which reflects a 6.7 percent increase since the 2010 Census. The City is expected to continue experiencing higher rates of population growth than the US as a whole.

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. Other markets include medical industries and green industries such as solar, biofuels, recycling, and other forms of alternative energy.

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.

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 US are competing for employers. Fresno needs to be aggressive in marketing itself and be accommodating to helping 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.
The City’s economic development plan recognizes that different strategies are needed to support differing types of industry segments, whether they are “primary” or “secondary” industries. 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.

Several components of the City’s economic development plan include strategies to support the expansion of “Export Oriented” (Primary) Industries. The first is 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 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.

**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.

To support investment and development, the City will establish a priority development program for eligible properties to facilitate implementation of the General Plan. The City has prioritized specific areas within the city limits for incentives and other benefits to accelerate investment. These include Infill Opportunity Zones, BRT Corridors, the Downtown Planning Area, and the South Industrial Priority Area. The latter includes 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.

---

1 Fresno General Plan, Chapter 2, Economic Development and Fiscal Sustainability
IM-1 Priority Areas for Development Incentives

To date, the City has undertaken Specific Plans to evaluate the environmental and fiscal impacts of development in the Downtown Planning Area and in two Infill Opportunity Zones (IOZ) both south of CA 180 – Southwest Fresno and Central Southeast Fresno. The City has additionally adopted a fee structure to minimize obstacles for investment and reinvestment in the IOZ and along the Bus Rapid Transit (BRT) Corridors which encompass established neighborhoods generally south of Herndon Avenue.

This plan and assessment of impacts focuses on the land uses and associated circulation in the South Industrial Priority Area. Following are the adopted plans and policies which encompass the City’s goals for sustainable growth in this area.
## Foundational Plans

### 1973

**North Avenue Industrial Triangle Specific Plan**

The North Avenue Industrial Triangle Specific Plan was adopted in 1973 as a multiphase plan to develop agricultural land south of Jensen Ave and north of the Central Canal between Highways 41 and 99 into a heavy industrial district. The City Council adopted the North Avenue Industrial Triangle Specific Plan and associated EIR at a public meeting on September 27, 1973 (Resolution 73-456).

### 1992

**Roosevelt Community Plan**

The Roosevelt Community Plan was adopted in 1992 as a community level refinement of the 1984 General Plan and an update of the earlier 1978 Roosevelt Community Plan. The draft plan was officially initiated by City Council in a public hearing on July 16, 1991. The Planning Commission held four public meetings in the fall of 1991 for the draft plan and associated EIR, and on January 22, 1992, passed Planning Commission Resolutions no. 10267 and 10268 recommending the adoption of the Roosevelt Community Plan with proposed modifications and the associated EIR No. 10113. The City Council held ten public meetings in the winter of 1991 and spring of 1992 on the updated Community Plan and EIR, and adopted the Plan and EIR on April 7, 1992 (Resolution 92-141).

### 2014

**Fresno General Plan**

In 2014, the City of Fresno updated the General Plan. The planning process began in mid-2010 and public outreach was extensive. Over 160 stakeholder interviews were conducted in December of 2010, and over a hundred presentations were made before neighborhood, business, educational, social, and non-profit groups. The General Plan Citizens Advisory Committee held nineteen meetings from August of 2011 to May of 2012, and the Planning Commission held four public meetings from September of 2011 to August of 2012. In addition, thirteen public workshops were held from September of 2011 to August of 2012. On August 23, 2012, the City Council initiated the draft General Plan (Resolution 2012-150). A public meeting on the draft General Plan and MEIR (SCH No. 2012111012) was held on July 29, 2014, and from August to October seven public workshops were held. The Planning Commission held two public meetings in 2014 and on December 8, 2014, passed Planning Commission Resolution no. 13312 and 13313 recommending the adoption of the General Plan and MEIR. City Council held two meetings in December and adopted the General Plan and MEIR on December 18, 2014 (Resolution 2014-226).
South Industrial Priority Area (SIPA) Specific Plan

2016

Downtown Neighborhoods Community Plan
The Downtown Neighborhoods Community Plan was adopted in October of 2016. Its purpose was to establish a vision for revitalization of the Plan Area based on input from property owners and residents, address conflicting issues in the City’s land use plans and codes to make that vision possible, and prioritize the City’s actions for implementing the plan. It was intended to be “the community’s tool for guiding successful regeneration of Downtown Fresno and its surrounding neighborhoods.” Public engagement was robust and had several phases. The first and most important phase was the initial phase in 2010 and 2011, during which at least 300 residents, business owners, and property owners from the plan area provided input, with a 21-member Citizen’s Advisory Committee making formal recommendations. This engagement process included initial outreach and discovery (stakeholder interviews, two workshops, and a Planning Commission meeting), an intense 6-day design workshop, and follow-up outreach, (three additional public meetings, release of a Draft Plan, and 4 public workshops). Outreach continued in 2015/2016 as a refined Plan Draft and the Environmental Impact Report were released. On October 12, 2016, after consideration by the Historic Preservation Commission, the relevant Council District Plan Implementation Committees, and the Airport Land Use Commission, the Planning Commission passed resolutions 13413 – 13419 recommending approval of the Downtown Neighborhoods Community Plan to the City Council. On October 20, 2016, the City Council passed Resolutions 2016-212,213, 214, and 216 certifying the Program Environmental Impact Report (SCH No. 2012041009), adopting the Downtown Neighborhoods Community Plan and amending the General Plan to incorporate it.

While this plan does not directly impact the SIPA plan area, it does cover the adjacent neighborhood. As such, it is not included in this document, but can be found online at www.fresno.gov/downtownplan.

2017

Southwest Fresno Specific Plan
The Southwest Fresno Specific Plan was adopted in October of 2017. The purpose of this plan was to provide an opportunity for the community to engage around important planning issues that were specific to Southwest Fresno and not given in-depth focus in the General Plan. The vision for the plan emerged after a multi-faceted outreach process that included 17 meetings hosted by a 21-member Steering Committee, six community workshops, 10 topic group meetings, and three community conversations. The vision included encouraging a diverse housing stock with emphasis on quality and home ownership, more retail options, safer and more connected streets for all transportation modes, more educational opportunity and job training, improvement of parks and open space, and location of new industrial development outside of Southwest Fresno. Notably, Land Use Policy LU-8.2 states, “Prioritize the “Reverse Triangle,” bounded by Jensen Avenue, Central Avenue, Highway 41, and Highway 99 as the City’s targeted area for new industrial development.” On October 18, 2017, the Planning Commission passed Resolutions 13495 – 13500 recommending approval of the Southwest Fresno Specific Plan to the City Council. On October 26, 2017, the City Council passed Resolutions 2017-299 – 303 certifying the Program Environmental Impact Report (SCH No. 2017031012), adopting the Southwest Fresno Specific Plan, and amending it into the General Plan.
How to use this Document

Multiple plans impact the SIPA

Four of the five plans defined in the previous timeline directly impact the South Industrial Priority Area. This document pulls together goals and policies from various plans into one document. We’ve included a cross-reference on policy items that are represented in more than one plan.

Cross-reference example
Chapter 6 — Public Facilities

Policy PF-6.1
Provide new adult and youth educational and job training programs in existing and new public facilities or institutions, such as offices and schools within the Plan Area or in close proximity, that prepare residents for medium- and high-wage jobs.

Policy PF-6.2
Support the current initiative to locate a new job training center accessible to Southwest Fresno residents.

Policy PF-6.3
Work with the State Center Community College District’s Board to fund and develop a community college campus within the Plan’s southern magnet core/MLK Activity Center.

Policy PF-6.4
Work with youth-oriented community organizations to develop programs that help nurture leadership and ambition in the youth of Southwest Fresno.

Policy PF-7.1
Coordinate existing training programs with the Fresno Regional Workforce Investment Board, educational institutions, and public charter schools to identify program gaps and areas of overlap.

Policy PF-7.2
Work with local schools, community groups, and non-profits to connect students and residents to existing training programs.

Policy PF-7.3
Partner with the Workforce Investment Board, or other interested organizations, businesses, schools, and residents to expand opportunities for youth jobs for after school and summer week, volunteer positions, and other skills development opportunities.

Policy PF-7.4
Establish a workforce policy to encourage businesses and City programs in the Plan Area to prioritize hiring Plan Area residents in the 93706 zip code, consistent with applicable laws.
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:** 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 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 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 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 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 Plan Horizon.

• **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.
Chapter 1 — Introduction

Overarching Principles of Resilience
3. Ample Industrial and Employment Land Ready for Job Creation

Goals of the General Plan
1. Increase opportunity, economic development, business, and job creation

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.

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.

Development of the Plan — Dwellings, Population, and Jobs

<table>
<thead>
<tr>
<th>Area</th>
<th>Type of Dwelling Unit</th>
<th>Location of Dwelling Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Multi-family and Townhouse</td>
<td>Single-family</td>
<td>Development on Sites in Current City Limits</td>
</tr>
<tr>
<td>Downtown Planning Area</td>
<td>7,800</td>
<td>1,200</td>
<td>9,000</td>
</tr>
<tr>
<td>BRT Corridors</td>
<td>6,000</td>
<td>0</td>
<td>6,000</td>
</tr>
<tr>
<td>Established Neighborhoods South of Shaw</td>
<td>4,700</td>
<td>3,000</td>
<td>5,700</td>
</tr>
<tr>
<td>Established Neighborhoods North of Shaw</td>
<td>4,000</td>
<td>2,400</td>
<td>6,200</td>
</tr>
<tr>
<td>South Industrial</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DA-1: North</td>
<td>6,500</td>
<td>10,500</td>
<td>2,600</td>
</tr>
<tr>
<td>DA-1: South</td>
<td>4,000</td>
<td>6,500</td>
<td>2,500</td>
</tr>
<tr>
<td>DA-2: North</td>
<td>500</td>
<td>2,000</td>
<td>0</td>
</tr>
<tr>
<td>DA-2: South</td>
<td>500</td>
<td>1,500</td>
<td>0</td>
</tr>
<tr>
<td>DA-3: Southeast</td>
<td>2,500</td>
<td>3,500</td>
<td>0</td>
</tr>
<tr>
<td>DA-4: East</td>
<td>5,100</td>
<td>3,800</td>
<td>0</td>
</tr>
<tr>
<td>DA-4: West</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sub Totals</td>
<td>41,600</td>
<td>34,400</td>
<td>32,000</td>
</tr>
<tr>
<td>Total Dwelling Units under General Plan Horizon</td>
<td>76,000</td>
<td>76,000</td>
<td></td>
</tr>
</tbody>
</table>

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.
Figure I-3: Residential Capacity Allocation

Established Neighborhoods
- Downtown Planning Area
- BRT Corridors Outside Downtown Planning Area
- Established Neighborhoods South of Shaw
- Established Neighborhoods North of Shaw
- South Industrial Area

Development Areas
- DA-1 North
- DA-1 South
- DA-2 North
- DA-2 South
- DA-3 Southeast
- DA-4 East
- DA-4 West

Source: City of Fresno

Note: The Corridor along Shaw Avenue is to be supported by enhanced bus service.
### TABLE 1-41: RESIDENTIAL DEVELOPMENT CAPACITY UNDER BUILDOUT (BEYOND 2035)

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Dwelling Units on Sites in Current City Limits</th>
<th>Number of Dwelling Units in Growth Areas Requiring Annexation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Planning Area</td>
<td>10,000</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>BRT Corridors</td>
<td>10,471</td>
<td>0</td>
<td>10,471</td>
</tr>
<tr>
<td>Established Neighborhoods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South of Shaw</td>
<td>8,925</td>
<td>2,227</td>
<td>11,152</td>
</tr>
<tr>
<td>Established Neighborhoods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North of Shaw</td>
<td>9,017</td>
<td>486</td>
<td>9,503</td>
</tr>
<tr>
<td>South Industrial</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>DA-1: North</td>
<td>7,072</td>
<td>18,723</td>
<td>25,795</td>
</tr>
<tr>
<td>DA-1: South</td>
<td>9,085</td>
<td>11,564</td>
<td>20,649</td>
</tr>
<tr>
<td>DA-2: North</td>
<td>52</td>
<td>2,996</td>
<td>3,048</td>
</tr>
<tr>
<td>DA-2: South</td>
<td>206</td>
<td>2,238</td>
<td>2,444</td>
</tr>
<tr>
<td>DA-3: Southeast</td>
<td>0</td>
<td>9,092</td>
<td>9,092</td>
</tr>
<tr>
<td>DA-4: East</td>
<td>0</td>
<td>35,008</td>
<td>35,008</td>
</tr>
<tr>
<td>DA-4: West</td>
<td>775</td>
<td>7,430</td>
<td>8,205</td>
</tr>
<tr>
<td><strong>Total Dwelling Units</strong></td>
<td><strong>55,610</strong></td>
<td><strong>89,764</strong></td>
<td><strong>145,374</strong></td>
</tr>
</tbody>
</table>

1. Calculations are based on August 9, 2012 Land Use Diagram Draft Figure 2 of the Initiation Draft.
2. DA is Development Area. See Figure I-3: Residential Capacity Allocation.

Source: City of Fresno
## Chapter 2 — Economic Development and Fiscal Sustainability

### Introduction

#### TABLE 2-5: EMPLOYMENT PROJECTIONS BY TYPE, FRESNO COUNTY

<table>
<thead>
<tr>
<th>Total</th>
<th>Annual Average Employment</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2020</td>
</tr>
<tr>
<td>Total Employment</td>
<td>364,200</td>
<td>423,100</td>
</tr>
<tr>
<td>Self-Employment</td>
<td>28,400</td>
<td>30,900</td>
</tr>
<tr>
<td>Unpaid Family &amp; Private Household Workers</td>
<td>10,300</td>
<td>11,700</td>
</tr>
<tr>
<td>Total Farm</td>
<td>46,000</td>
<td>49,400</td>
</tr>
<tr>
<td>Total Nonfarm</td>
<td>279,500</td>
<td>331,100</td>
</tr>
</tbody>
</table>

#### Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percent of Total Employment</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2020</td>
</tr>
<tr>
<td>Construction</td>
<td>3.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>15.1%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Information</td>
<td>0.09%</td>
<td>0.09%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>3.7%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>7.3%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Education Services, Health Care, and Social Assistance</td>
<td>11.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>7.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Other Services</td>
<td>2.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Federal and State Government</td>
<td>5.8%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Local Government</td>
<td>12.6%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>76.7%</td>
<td>78.2%</td>
</tr>
<tr>
<td>Self-Employment, Family Workers, and Private Household</td>
<td>10.6%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Total Farm</td>
<td>12.6%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>23.3%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1. Totals may not sum precisely due to rounding.

Source: California Employment Development Department, 2013.
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 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.

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.
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 economic development efforts on a region-wide basis.

ED-1-b Monitor Trends.
Conduct biannual 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 Fresno 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.

Submit an economic development progress report to the City Council, as part of the annual General Plan Report.

ED-1-j 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 extensions 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.
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 medical-related 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 and update public 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 Target 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-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.*

**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 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.**

**ED-4-a**
- PF-6.1, PF-6.3, PF-6.4, PF-7.1, PF-7.2, PF-7.3

**ED-4-b**
- PF-6.1, PF-7.4

**ED-4-c**
- PF-6.1, PF-6.3, PF-6.4, PF-7.1, PF-7.2, PF-7.3
Chapter 3 — Urban Form, Land Use, and Design

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.
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-b Land 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.

**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.
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-11-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-11-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.
D-3 Create unified plans for Green Streets using distinctive features reflecting Fresno’s landscape heritage.

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-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.

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

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 façade 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.
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.
Chapter 4 — Mobility and Transportation

Figure MT-3 Regional Transportation
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-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:

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.
Figure MT-4: Traffic Impact Zones (TIZ)

Note: Descriptions of each TIZ can be found in Implementing Policy MT-2-c: Transportation Impact Studies.

Source: City of Fresno DARM, 2014
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-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.

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.
MT-11-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-11-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-11-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-11-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-11-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-11-f State Route 99 / Goods Movement.
Partner with Caltrans to prioritize goods movements along State Route 99.
**Chapter 5 — Parks, Open Space, and Schools**

**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 LU1), 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.
Figure POSS-3: Schools and School Districts

PUBLIC FACILITIES

- Elementary School
- Middle School
- High School
- Elementary/Middle School
- Elementary/Middle/High School
- Middle/High School
- Special School

1 Includes existing and future schools
2 Special School is a future school as defined by School District

- Planning Area Boundary
- Sphere of Influence
- City Limits

Source: City of Fresno, 2014
Chapter 6 — Public Utilities and Services

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 sewer trunk facilities or other alternatives, new or replacement, 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.
PU-5 Preserve groundwater quality and ensure that the health and safety of the entire Fresno community is not impaired by use of private, onsite disposal systems.

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.

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 sub-regional 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.

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.
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 cutins to the sanitary sewer system; and avoiding any new sewer cutins 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.
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 aboveground 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.
Chapter 7 — Resource Conservation and Resilience

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.

**RC-4-g 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 LU1: 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-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-08-05. 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.

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 communitywide 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.

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.
• 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 onsite 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 drive-through 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.

**RC-6-a Regional Efforts.**
Support cooperative, multiagency 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 up-gradient (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.
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.

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 shutoff faucets and water saving irrigation systems. Prepare a comprehensive incentive program for other existing public and private residential and nonresidential 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, “water-wise,” 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.

RC-7-i 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.

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 nonresidential 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-i 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 ongoing 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.
**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 into urban uses outside City limits, this program would require that the developer of such a project mitigated 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 Regulation, or any other mitigation method that is in compliance with the requirements of CEQA. The Farmland Preservation Program may be modeled after some or all of the programs described by the California Council of Land Trusts.
RC-11-a Waste Reduction Strategies.
Maintain current targets for recycling and reuse 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 foot printing” 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.

Create a strategic and operations plan for fulfilling the City Council resolution committing the City to a Zero Waste goal.

RC-11-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.
Chapter 9 — Noise and Safety

Figure NS-2: Existing Noise Contours (Vehicle)

Existing Noise Contours (Vehicles)

- 40 to 45 dB
- 46 to 50 dB
- 51 to 55 dB
- 56 to 60 dB
- 61 to 65 dB
- 66 to 70 dB
- 71 to 75 dB
- 76 to 80 dB
- 81 to 85 dB
- 86 to 90 dB
- 91 to 95 dB
- 96 to 100 dB
- 101 to 105 dB
- 106 to 110 dB
- 111 to 115 dB
- 116 to 120 dB
- 121 to 125 dB
- 126 to 130 dB

Source: City of Fresno, 2011; Salter Associates, 2012

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.

Figure NS-3: Future Noise Contours (Vehicle)

Future Noise Contours (Vehicle)

- 40 to 45 dB
- 46 to 50 dB
- 51 to 55 dB
- 56 to 60 dB
- 61 to 65 dB
- 66 to 70 dB
- 71 to 75 dB
- 76 to 80 dB
- 81 to 85 dB
- 86 to 90 dB
- 91 to 95 dB
- 96 to 100 dB
- 101 to 105 dB
- 106 to 110 dB
- 111 to 115 dB
- 116 to 120 dB
- 121 to 125 dB
- 126 to 130 dB

Source: City of Fresno, 2011; Salter Associates, 2012

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.
NS-1-a Desirable and Generally Acceptable Exterior.
Noise Environment. Establish 65 dBA Ldn or CNEL as the standard for the desirable maximum average exterior noise levels for defined usable exterior areas of residential and noise-sensitive uses for noise, but designate 60 dBA Ldn or CNEL (measured at the property line) for noise generated by stationary sources impinging upon residential and noise-sensitive uses. Maintain 65 dBA Ldn or CNEL as the maximum average exterior noise levels for non-sensitive commercial land uses, and maintain 70 dBA Ldn 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 Ldn 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 Ldn 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.

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 Ldn 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.
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 Ldn 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 double-glazed 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 Ldn 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-l 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 site-specific 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-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.

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 river bottom.

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-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 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-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-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.
Chapter 10 — Healthy Communities

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.

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 multimodal 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 be 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.

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-5-g Commercial Agriculture.
Continue to develop policies to allow agriculture on land greater than 50 acres in area.
**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 wellbeing, ease traffic congestion near schools, and improve air quality and community members’ overall quality of life.

**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.
Chapter 12 — Implementation

**Figure IM-1: Priority Areas for Development Incentives**

- **Downtown Planning Area**
- **Phase 1 Bus Rapid Transit Corridors (BRT)**
  - Blackstone BRT Corridor
  - Ventura Kings Canyon BRT Corridor
- **Phase 2 Bus Rapid Transit Corridors (BRT)**
  - Shaw BRT Corridor
  - California BRT Corridor
- **South Industrial Priority Area**
- **Infill Opportunity Zones (IOZ)**
- **Planning Area**
- **Sphere of Influence**
- **City Limits**

Source: City of Fresno, 2014.
**IM-2 Sequencing of Development**

Figure IM-2: Sequencing of Development

Growth Areas*

- Inside City Limits
- Growth Area 1
- Growth Area 2
- County Islands

- Planning Area
- Sphere of Influence
- City Limits

*County Islands are considered to be inside City Limits in reference to sequencing of development.

Source: City of Fresno, 2014.
Chapter 3 — Land Use

Policy LU-8.1
Plan and zone employment areas in Southwest Fresno for non-industrial businesses. All previously designated Light Industrial, Heavy Industrial, Business Park, and Regional Business Park land uses should be planned and zoned.

Policy LU-8.2
Prioritize the “Reverse Triangle” bounded by Jensen Avenue, Central Avenue, Highway 41, and Highway 99 as the City’s targeted area for new industrial development.

Policy LU-8.3
When 85 percent of the “Reverse Triangle,” bounded by Jensen Avenue, Central Avenue, Highway 41, and Highway 99, is developed with Heavy Industrial uses, designate parcels along the east side of Elm Avenue south of North Avenue for future Light Industrial uses, mixed with the Plan’s planned office uses.

Policy LU-8.4
In collaboration with the appropriate local, State, and/or federal agency, regularly enforce and evaluate performance standards on the operation of existing industrial activity related to air quality, odor, noise, and vibration in order to maintain compatibility with adjacent neighborhoods and uses.

Policy LU-8.5
Assess the compatibility of Industrial and heavy commercial land uses with existing neighborhoods through the completion of the Industrial Land Use Compatibility Study. The study should identify and adopt long-term solutions to address the findings from the assessment. Options should include greening strategies, relocation, and amortization. As a part of the planning process for the study, the City should work with the County, community, and stakeholders, such as business owners, to relocate truck routes away from neighborhoods to the extent possible. Targeted completion date of the study is January 2019.

Policy LU-8.6
Restrict residential development on or near toxic and/or hazardous sites without proper evaluation and mitigation as required by the California Environmental Quality Act (CEQA).

Policy LU-8.7
Provide transparency and create a forum between government staff, government and elected officials, community members, business owners, and other stakeholders regarding existing and proposed industrial operations.
Goal LU-11
Promote sustainable, or “green,” building standards for new development to help improve the overall air quality within the Plan Area. Green building standards reduce greenhouse gas emissions and energy and water consumption from buildings, promoting environmentally responsible, cost-effective, and healthier places to live and work.

Policy LU-11.1
Encourage compliance with voluntary residential and non-residential California Green Building Code (CALGreen) standards through CALGreen incentive programs.
Chapter 5 — Transportation

The truck route on North Avenue should be eliminated to avoid existing residential areas. Trucks should be rerouted from Highway 41 to Central, West, and Fig Avenues. This reroute is consistent with the recommendation from the recently completed Highway 41 + North Corridor Complete Streets Plan.

The Truck routes along Jensen Avenue between Knight and Elm Avenues and along Church Avenue between Fruit and Elm Avenues should be eliminated to avoid passing through multiple residential neighborhoods and schools. The parallel truck route along Central Avenue should be used as an alternative. Jensen and Church Avenues east of Elm Avenue should remain truck routes so that trucks can access Highway 41 and the industrial areas in the “reverse triangle” between Highways 41 and 99. Jensen Avenue west of Knight Avenue should remain a truck route to service existing industrial and future office uses south of Jensen Avenue.

Policy T-10.1
Work with existing industrial and heavy commercial businesses to identify alternative truck routes that limit negative impacts on sensitive areas while maintaining an efficient movement of goods.

Policy T-10.2
Redesign alternative truck routes that would require potential widening of streets to allow adequate width for two-way truck traffic and turning movements as well as repair/maintain roadways to ensure satisfactory pavement conditions that can withstand truck traffic.

Policy T-10.3
Improve conditions of existing and rerouted truck routes for pedestrians and bicyclists by implementing pedestrian and bicycle facilities such as reduced corner radii at intersections to slow turning vehicular traffic, protected signal phasing for truck left-turns, enhanced high-visibility crossings, protected bikeways, and wide sidewalks.
5-6 Existing, Planned, and Recommended Truck Routes

5-6 Truck Routes (map)
- MT-1-j, MT-2-i, MT-11-c, MT-11-d
- 2-2.5, 2-2.6

FIGURE 5-6 Existing, Planned, and Recommended Truck Routes

- Plan Area
- Sphere of Influence
- City Limit
- Existing Industrial Land Uses Served by Truck Routes in Southwest Fresno
- Existing Residential Land Use in Plan Area
- Recommended Elimination of Existing Truck Route
- Recommended New Truck Route
Policy T-11.1
When feasible, design new roadways and retrofit existing roadways within magnet cores, complete neighborhoods, and along special corridors to prioritize travel by walking, bicycling, and riding transit, using the complete streets design guidelines contained in this chapter. For example, if adequate or excessive vehicle traffic capacity is available, create wide sidewalks, provide pedestrian amenities, and install bicycle facilities such as separated bikeways or bike lanes, bike parking, and signage. This could be in the form of a “road diet” to transform certain corridors into multi-modal streets.

Policy T-11.2
Identify streets with excessive vehicular ROW that are opportunities to implement traffic calming and other improvements to slow traffic and provide options for multi-modal travel.

Policy T-11.3
Encourage lower vehicular travel speeds for collector and local streets in the Plan Area. This could be accomplished through traffic calming measures, narrower travel lanes, reducing the number of travel lanes, neighborhood speed watch/traffic management programs, or speed enforcement programs.

Policy T-12.1
Prioritize the implementation of facilities that encourage walking and biking, such as sidewalks, multi-use trails, and bikeways.

Policy T-12.3
Support Transportation Demand Management (TDM) programs to encourage alternative modes of travel to the single-occupancy vehicle such as transit use, car—or vanpool, rideshare, and telecommuting.

Goal T-11
Create an accessible and well-connected “complete streets” transportation network that serves community members of all ages, income groups, and abilities, and balances travel by all modes of travel such as by car, bus, bicycle, foot, or wheelchair.

Policy T-11.1
MT-8-a, MT-8-b, HC-2-a
2-4.1

Policy T-11.2
MT-1-j, MT-8-a, HC-2-a

Policy T-11.3
MT-1-j, MT-8-a
2-3.1, 2-4.1, 5-2.6

Goal T-12
Foster a healthy lifestyle in Southwest Fresno through encouraging active forms of transportation such as walking and bicycling as an alternative to motorized modes of travel.

Policy T-12.1
MT-1-j, MT-8-a, HC-2-a, HC-2-d, HC-2-e

Policy T-12.3
MT-8-a, MT-8-b
Policy T-13.1
Coordinate with the Fresno Metropolitan Flood Control District (FMFCD) Master Plan to incorporate Low Impact Development (LID) storm water management techniques with curb, gutter, and sidewalk improvements.

Policy T-13.2
Manage stormwater on-site to cleanse, diffuse, and absorb rainwater where it falls by creating rain gardens, swales, infiltration areas, and other attractive areas that bring nature and beauty into developed areas.

Policy T-13.3
Work with FMFCD to reduce or waive development impact fees if LID development is implemented onsite.

Policy T-14.1
Perform routine street maintenance to clear debris from sidewalks, bike lanes, and roadways, including regular sweeping, pavement repairs, restriping, maintenance of traffic control devices, and landscape maintenance.

Policy T-14.2
Monitor the conditions of roadways to ensure the repair and resurfacing of cracked and uneven roadway surfaces to provide a smooth and even surface for bicycling.

Policy T-14.3
Monitor the effectiveness of street lights to ensure they are lit brightly enough to improve visibility and enhance visibility and security.
Chapter 6 — Public Facilities

Policy PF-6.1
Provide new adult and youth educational and job training programs in existing and new public facilities or institutions, such as offices and schools within the Plan Area or in close proximity, that prepare residents for medium- and high-wage jobs.

Policy PF-6.2
Support the current initiative to locate a new job training center accessible to Southwest Fresno residents.

Policy PF-6.3
Work with the State Center Community College District’s Board to fund and develop a community college campus within the Plan’s southern magnet core/MLK Activity Center.

Policy PF-6.4
Work with youth-oriented community organizations to develop programs that help nurture leadership and ambition in the youth of Southwest Fresno.

Policy PF-7.1
Coordinate existing training programs with the Fresno Regional Workforce Investment Board, educational institutions, and public charter schools to identify program gaps and areas of overlap.

Policy PF-7.2
Work with local schools, community groups, and non-profits to connect students and residents to existing training programs.

Policy PF-7.3
Partner with the Workforce Investment Board, or other interested organizations, businesses, schools, and residents to expand opportunities for youth jobs for after school and summer work, volunteer positions, and other skills development opportunities.

Policy PF-7.4
Establish a workforce policy to encourage businesses and City programs in the Plan Area to prioritize hiring Plan Area residents in the 93706 zip code, consistent with applicable laws.

Goal PF-6
Provide public educational and training facilities that help foster the pursuit and achievement of higher education and higher skilled vocations.

Goal PF-7
Increase opportunities for residents to improve their job skills and employment options.
Chapter 7 — Utilities

Policy U-1.1
Coordinate the installation and upgrading of utilities between the City and County.

Policy U-1.2
Connect utilities, especially in previously undeveloped outlying areas, to the City’s existing utility system as a part of new development.

Policy U-1.3
Require developers to build or contribute towards the design and construction of expanded and upgraded utilities to serve new development projects such as sewer collection systems, electric system improvements, communication systems, and natural gas transmission and distribution lines.

Policy U-1.4
Maintain a sustainable, safe, and effective wet utilities system, including wastewater, recycled water, and irrigation, to provide a high level of wet utilities while also meeting high environmental quality standards.

Policy U-1.5
Provide adequate sewage treatment and disposal by utilizing the City of Fresno’s regional wastewater treatment plant for all existing and new development within the Plan Area.

Policy U-1.6
Explore the opportunity to integrate recycled water use into the associated improvements with buildout of the City’s recycled water system, including the potential installation of a distribution system on green field.

Policy U-1.7
Require that all new arterial street construction include undergrounding of electrical service and communications lines.
Introduction

Enhanced Circulation Planning — In addition to advocating the development of State Route 180 as a freeway, to at least Clovis Avenue, and extension to Temperance Avenue at not less than expressway standards, the extension of several major streets are provided for. Several streets would be extended southward or eastward to better serve planned industrial and residential areas. These include portions of Church, Minnewawa, Armstrong, and Butler Avenues which are added to the City’s circulation element as planned collector streets. The Plan also supports the improvement of Peach Avenue to an arterial status in a manner consistent with the area’s scenic qualities and residential character. Huntington Boulevard and Minnewawa, and Peach and Butler Avenues are designated to be protected as scenic streets.

New Growth Areas — The Community Plan continues to provide for new growth areas as identified by the 1984 General Plan. This Plan recommends that a substantial area outside the City’s Sphere of Influence (south of Jensen Avenue to North Avenue between Temperance and Minnewawa Avenues) be reserved in agricultural use. The appropriateness of expanded urbanization will be considered by the City’s next General Plan update which is scheduled for 1994.
Chapter 1 — Land Use and Urban Form

1-12.1 Facilitate new industrial development near the Fresno Air Terminal and south of Jensen Avenue between Minnewawa and Peach Avenues consistent with the uses and standards of the City’s M-1-P Zone District.

1-12.2 Support industrial development on vacant properties located adjacent to existing railroads south of Jensen Avenue and along Freeway 99.

1-12.3 Prohibit the development of new residential uses in areas designated for industrial development and pursue a long-term strategy to convert non-conforming residential properties to industrial use.

1-13.1 Industrial areas shall be designed such that industrial truck and vehicular traffic will not route through local residential streets.

1-13.2 Apply City M-1-P Zone District requirements and the following development standards to industrial development entitlements adjacent to properties zoned or planned for residential uses (except as may be modified by the Development Department in accordance with Roosevelt Plan policy 1-11.2):

a. On properties zoned for industrial manufacturing use, a landscaped setback 20 feet wide, containing deciduous and evergreen trees, shall be planted and maintained along the property line, between these properties zoned or planned for industrial manufacturing uses, and any abutting properties zoned or planned for residential uses, and along the property line abutting local streets.

b. The following wall and berm treatment shall be required for industrial manufacturing uses:

(1) A solid masonry wall six and one-half (6 1/2) feet in height shall be erected on, or along, the property line between properties zoned or planned for industrial manufacturing uses and properties zoned or planned for residential uses;

(2) A solid masonry wall, or any combination of solid masonry wall and earth berm, that provides a continuous barrier three and one-half (3 1/2) feet in height, shall be erected on or along the setback line, 15 feet from, and parallel with, the right-of-way line of abutting local streets;

(3) Earth berms shall be planted with grass or ground cover and maintained by the property owner;

d. The provisions of the City Zoning Ordinance (applicable to an approved industrial manufacturing district) shall apply to outdoor advertising for industrial manufacturing uses.
e. Place loading docks and areas on the sides of industrial manufacturing buildings that face away from, or are not less than 150 feet from, adjacent residential property.

f. Roof-mounted and detached mechanical equipment shall be screened from view and acoustically baffled to prevent the noise level of the equipment from exceeding 55 Ldn, measured at the nearest property line;

g. Within the area 75 feet wide and abutting property zoned or planned for residential use, exterior area lighting for industrial manufacturing buildings, parking areas, carports, garages, access drives, loading areas, and loading docks shall be shielded, to prevent line of sight visibility of the light source from abutting property zoned or planned for residential use.

1-14.2
Establish a public improvements program (complete with specific timelines) for necessary improvements for the City’s Enterprise Zone.

1-16.6
Initiate efforts (in cooperation with the Fresno Irrigation District, railroads and other owners of utility easements and rights-of-way) to identify and implement measures to prevent inappropriate vehicular access to these rights-of-way.

1-20.3
Support efforts to conserve prime agricultural land outside of the planned urban area and preserve those areas which contain valued natural resources and wildlife habitat or are necessary to protect the public’s health, safety, and welfare.

1-14 Facilitate the timely provision of public facilities and services to all industrial areas in an equitable manner.

1-16 Establish a network of multi-use trails utilizing creeks, canal banks, utility power line easements, railroad rights-of-way, and highway and street corridors to maximize the community’s recreational and open space resources.

1-20 Provide for the protection of sensitive or valuable open space areas.
Chapter 2 — Circulation

2-2.5
Limit designated truck routes to arterials and expressways specifically signed for that purpose, or to collector and local industrial streets which directly service planned industrial areas.

2-2.6
Locate truck access to commercial property at the maximum practical distance from adjacent or nearby residential properties.

2-3.1
Design major street alignments and transportation improvements to adequately distribute traffic while minimizing excessive noise impacts upon adjacent uses.

2-3.2
Locate and design multiple-family residential, commercial, office, and industrial development to avoid increasing traffic levels on local residential streets.
2-4.1
Provide bus turnouts along expressways, arterials, and collectors where appropriate.

2-4.2
Require new development to install indented curbs for bus turnouts, bus shelters, and other transit-related public improvements, where appropriate.

2-4.3
Develop park-and-ride lots at appropriate locations to support public transit and car pooling.

2-4.4
Develop one or more transfer stations to focus transit services within the Plan area.

2-4.5
Encourage the Fresno County Transportation Authority and the Council of Fresno County of Governments to consider the feasibility of constructing a mass transit system in the Freeway 180 and 168 corridors.

2-4.6
Pursue the implementation of increased frequency of bus service along arterial streets with funding from Measure “C,” state transportation funds, and local impact fees from new development.

2-4 Develop a street system and land use policies that support public transportation, thereby reducing traffic congestion and improving air quality.

<table>
<thead>
<tr>
<th>2-4.1</th>
<th>MT-8-a, MT-8-b, MT-8-c, MT-8-d</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4.2</td>
<td>MT-2, MT-8-c, MT-8-d</td>
</tr>
<tr>
<td>2-4.3</td>
<td>MT-8-d</td>
</tr>
<tr>
<td>2-4.5</td>
<td>MT-8-e</td>
</tr>
<tr>
<td>2-4.6</td>
<td>MT-8-b</td>
</tr>
</tbody>
</table>
Chapter 4 — Public Facilities and Services

4-1.1
Provide increased wastewater treatment plant capacity in a timely manner to facilitate planned urban development within the Roosevelt Community Plan Area.

4-1.2
Implement cost effective and environmentally beneficial operational and management measures to maximize the efficiency of the regional wastewater treatment facility (such as monitored industrial pretreatment programs, computerized flow modeling, peak flow reducing measures, and water conservation measures to reduce wastewater generation).

4-1.3
Monitor wastewater treatment plant flows to the extent feasible, and consider the sewer treatment impacts of land use plan changes when evaluating plan amendment proposals.

4-1.4
Require “ability to serve” findings prior to the approval of rezoning special permits, subdivisions, and parcel maps.

4-1.5
Oppose the use of septic systems, “package” treatment plants, (except for industrial pretreatment) or other non-regional sewage treatment and disposal systems within the Roosevelt Community Plan Area and its groundwater influence area, if these wastewater treatment modalities would result in discharges which could result in groundwater degradation.

4-2.4
Pursue implementation, if feasible, of a sewage flow monitoring system and a computerized flow modeling program to determine the availability of sewage collection system capacities to serve planned urban development. When available, this information shall be considered in the evaluation of plan-amendment applications.

4-2.5
Require that a finding be made by the Public Works Department that adequate sewer services can be provided to serve each proposed development prior to the approval of rezonings, special permits, tract maps, and parcel maps.
4-4.1
Coordinate with the Fresno Metropolitan Flood Control District to determine the optimum location for siting ponding basins.

4-4.2
Utilize, where possible, Fresno Metropolitan Flood Control ponding basins for groundwater recharge.

4-4.3
Develop each permanent ponding basin facility, located within or near residential areas, to maximize the potential for recreational use compatible with storm water ponding and groundwater recharge functions.

4-4.4
Encourage implementation of urban runoff management practices by the Fresno Metropolitan Flood Control District, as identified in their National Urban Run-Off Program Project Report, to assure that groundwater quality will not be adversely affected by storm water ponding and recharge activities.

4-4
Ensure the provision of adequate storm drainage facilities to protect residents and property within the plan area from flooding caused by storm water runoff.

4-4.1
PU-4-d, NS-3-a

4-4.2
NS-3-a, NS-3-c, NS-3-d

4-4.3
PU-7-e, NS-3-d

4-4.4
NS-3-h
4-8.1
Establish community sanitation programs to provide neighborhood cleanup and nuisance abatement services throughout the plan area including both incorporated and unincorporated areas.

4-8.2
Pursue expansion of the neighborhood cleanup program to serve single- and multiple-family residences three times per year; and develop and implement additional programs as necessary.

4-8.3
Support programs and new techniques of solid waste disposal (such as recycling, composting, and waste separation), to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.

4-8.4
Establish a public solid waste transfer station (which may be privately operated) utilizing locational, development, and operational measures to protect the public health, safety, welfare, and aesthetic interests.

4-8.5
Prohibit additional private or public waste disposal facilities and transfer stations which would generate an excessive amount of waste transportation and processing detrimental to the area's health, safety, welfare, and aesthetic well-being.

4-8.6
Pursue the implementation of measures to eliminate illegal tire dumping (which is an obvious and significant problem within the Roosevelt Plan area),
Chapter 5 — Environmental Concerns

5-1.1
Determine the optimum location of water recharge basins to maximize water recharge capability and develop a system of recharge basins cooperatively with the Fresno Metropolitan Flood Control District, Fresno Irrigation District, and the City Water Division.

5-1.2
Utilize all available surface water for groundwater recharge purposes (particularly in high precipitation years) to balance the groundwater aquifer’s long-term sustainable yield with projected consumption demand.

5-1.3
Work towards resolving the problem of groundwater resource deficiencies in the eastern portions of the planning area.

5-1.4
Protect planning area groundwater resources from further quality degradation. Prohibit urban development in areas not served by the regional sanitary sewer system.

5-1.5
Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation.

5-1.6
Achieve a continuing balance between competing demands for water resource usage.

5-1.7
Consider each proposal for water resource usage within the context of total planning area needs and priorities (i.e., the need to transport water, the need for groundwater recharge, flood control requirements, recreational needs, and riparian habitat preservation).

5-1.8
Maintain effective cooperative planning programs to manage water resources within the planning area.

5-1.9
Pursue adoption of a regional water management program to utilize surface and groundwater resources in a manner that ensures a long-term sustainable supply of safe drinking water and coordinate efforts to conserve surface and groundwater supplies, both local and imported.

5-1.10
Continue to pursue a cooperative multi-agency (City of Clovis/County of Fresno/City of Fresno/FMFC/FID) water study to identify aquifer characteristics and capacity, and strive to develop the best management tools feasible (including a computerized groundwater capacity and consumption model), to provide a regional water management program that would maximize water resources and minimize the potential for groundwater contamination.
5-1.11
Determine the feasibility of pursuing the conjunctive use of stormwater and recharge basins, canals, and water channels to provide community open space features such as small lakes, riparian flood channels, and wetland environments.

5-2.1
Support and encourage local, regional, state, and federal programs and actions for the improvement of air quality.

5-2.2
Continue to support the unification of air pollution control districts in the San Joaquin Valley Air Basin to achieve maximum implementation of existing laws and to provide the best available technology for air quality improvement.

5-2.3
Develop and incorporate air quality maintenance considerations in the review of all land use and development proposals.

5-2.4
Provide land use strategies and related implementation processes to facilitate the integration of compatible land uses within mixed-use developments.

5-2.5
Integrate compatible land uses, and concentrate development along major streets and near major employment areas to reduce vehicle miles traveled.

5-2.6
Develop the means to obtain or use land for on-site bus turnouts and parking areas, with attendant employee and passenger facilities.

5-2.7
Support and encourage the priority construction and improvement of Freeway 180 to Clovis Avenue as set forth in the Fresno County Transportation Improvement Act and policy 2-1.5 of this Plan.

5-2.8
Support and encourage employer implementation of staggered work hours and employee incentives to use carpools, public transit, and other measures to reduce vehicular use and congestion.

5-2.9
Continue to implement measures approved by the City in its 1990 Air Quality Policy Program.

5-2.10
Support efforts to enforce vehicle registration requirements and compliance with vehicle emission standards, and the removal of older vehicles by industrial uses as an air pollution off-set or reduction strategy.
5-3.1 Identify areas of the Community exposed to existing or projected exterior noise levels exceeding Ldn/CNEL 60 dB as noise-impacted areas.

5-3.2 Prohibit new development of residential or other noise-sensitive uses in noise-impacted areas, unless effective mitigation measures are incorporated into the project design to reduce noise levels in outdoor activity areas to Ldn 60 dB or less and interior noise levels to Ldn 45 dB or less in noise-sensitive rooms.

5-3.4 Incorporate effective mitigation measures to minimize adverse noise impacts on surrounding noise-sensitive land uses through design techniques such as:

a. Use of barriers such as walls, berms, or other buildings can reduce noise exposure when placed between the noise source and the receiver.

b. Site design: Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by sound reflection.

c. Unit design: An acceptable interior noise environment can be achieved by placing the noise-sensitive portions of a dwelling on the side of the unit farthest from the noise source.

d. Building design: The shape of building facades, as well as the orientation of the building, can influence reflected noise levels affecting adjacent buildings.

e. Noise reduction by building facades: When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades.

f. Use of vegetation: Although vegetation is not a practical method of noise control unless large tracts of dense foliage are part of the existing landscape, it can be used to acoustically “soften” the intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increase the attenuation of sound with distance.

g. Sound-absorbing materials: Absorptive materials, such as fiberglass, foam, cloth, and acoustical tiles or panels are used to reduce reflection or reverberation in closed spaces. Because such materials are easily damaged by sunlight and moisture, their application as an outdoor noise control tool is limited to special cases where the control of reflected noise is critical.

h. Inclusion of noise attenuation techniques in the design of all new arterial streets.

i. Preventing the use of outdoor mechanical equipment (and other consumer products) that generate noise levels in excess of the City’s exterior noise level standards.
5-4.1
Support the completion of the Redbank-Fancher Creek Flood Control Project and the continued maintenance of flood water retention and conveyance facilities.

5-4.2
Design new development to provide protection from potential impacts of flooding during a “100 year” flood event.

5-5.1
Promote development in areas served by public transit and other existing services. Higher residential densities should be encouraged to locate in areas served by primary public transit routes and close to the major employment centers.

5-5.2
Public facilities should be encouraged to locate in areas easily served by public transportation.

5-5.3
The energy-efficiency of new developments should be considered when land use and development review decisions are made. The City’s design techniques include provisions for solar access, for siting structures to maximize natural heating and cooling, landscaping to aid passive cooling, protection from prevailing winds, and maximum year-round solar access.

5-5.4
Encourage owners and residents of existing developments to implement programs to use energy more efficiently and to explore alternative energy source.
INTRODUCTION

The Specific Plan for the North Avenue Industrial Triangle was developed at the direction of the City Council to achieve a number of objectives. The most important was to program a course of action whereby the City of Fresno and private industry forces, working jointly, could develop an extensive heavy industrial district with rail access within the city and could avoid or minimize the problems inherent in changing a 930-acre area primarily devoted to agriculture to a smoothly functioning industrial district. By coordinating City and private efforts, the problems of drainage, water supply, sewer service, street widening and improvement, and extension of rail service and other facilities could be resolved more efficiently.

The Industrial Triangle will benefit private industry by offering an investment opportunity in an industrial subdivision developed according to a comprehensive plan, which provides fully serviced sites for a community of compatible industry. Convenient and efficient rail and truck access, an available labor market, and an attractive physical environment are additional assets.

The City would benefit from effective utilization of its resources resulting in enhancement of the tax base, economy of scale in providing services, and expanded employment opportunities within an orderly workable design for urban growth.

Conversion of the North Avenue Industrial Triangle to an industrial district will occur as a series of interrelated events. The first is the annexation of a significant portion of the district to the City to permit expenditure of capital improvement funds for the extension of city services to the district. Currently, through a series of three annexations, an additional 592 acres has been or is in the process of being incorporated into the city. This will place almost all of the area north of North Avenue within the city. The remaining 300 acres south of this street will be held in reserve for future expansion as demand warrants. However, through this specific plan, the methods of extending city services to future industrial developments in that area will have been pre-planned.

Extension of services within the North Avenue Industrial Triangle will occur in three basic phases. Phase I will achieve the basic extension of water and sewer service within the city limits. This work will be performed by the city. Additionally, in conformance with its general annexation policy, street lights and fire hydrants will be installed. Working cooperatively with the Fresno Metropolitan Flood Control District, the City will assist in the provision of permanent flood control facilities. Other projects for which the City may assume financial responsibility will also be performed. It is contemplated that the majority of Phase I projects will be commenced or completed in the 1973-74 fiscal year.
The majority of the work to be performed in Phase II will generally be the responsibility of the private developer. This will deal with the widening of streets, subdividing, and other private development. Here again, the City may be able to assist the private industry sector either by the establishment of assessment districts or minor extensions of public services. During this phase, some street rebuilding, installation of traffic signals, and the provision of additional fire protection will be achieved as demand warrants.

Phase III will deal with the area south of North Avenue, consisting primarily of planning for the installation of necessary facilities upon such time as the area is annexed and/or developed.

In order to establish uniform use provisions and property development standards throughout the North Avenue Industrial Triangle, all properties within the City that are not currently zoned for heavy industrial activity will be rezoned to M-3, heavy industrial district. Rezoning applications necessary for this will be initiated by the City of Fresno at no cost to the property owner. Those properties which are now in the unincorporated portion of the district will be similarly zoned M-3 upon annexation to the city to maintain the industrial integrity of the district.

BACKGROUND

Many factors led to the recognition of the need for joint public and private development of the North Avenue Industrial Triangle. The most important factor was that many companies experienced difficulty in locating their operations in the city of Fresno because the city had an inadequate inventory of developed or developable industrial lots to which a full range of public services could be provided.

Participation in the creation of this heavy industrial district represents the first venture by the City in overcoming this industrial land deficiency. Precedent for such action was established by the Fresno Industrial Sites Foundation, which was a non-profit venture of the Chamber of Commerce. Its basic objective was to organize the development of industrial areas in such a manner that an industrial prospect could move onto a given property and begin immediate construction of his plant. Further industrial development was continued on a smaller scale by private developers in unincorporated areas. While such development provided reasonably good industrial sites, there was a general deficiency as to availability of larger sized parcels, integrated transportation, and a full range of public services. Some of this initial development was based on a deferral of improvements and/or a relaxation of standards, which now result in some problems needing correction.

During 1970, it became apparent that the City of Fresno would have to participate in the creation of an additional heavy industrial district if the current industrial growth rate was to be continued. Preliminary discussions were undertaken with the Santa Fe Railway regarding annexation of their lands to the city. Since that initial contact, all necessary annexations have been processed, and a mutually cooperative effort for the planning for, and developing of, this district has commenced. This planning effort includes the assistance of the Chamber of Commerce, the Fresno Development Corporation, the Fresno Metropolitan Flood Control District, the Santa Fe Railway, and other individual property owners.
Based on this, the Specific Plan for the North Avenue Industrial Triangle represents a formal declaration of the steps and procedures that the City of Fresno and private industry will undertake to achieve full implementation of this joint program.
THE PLANNING AREA

The North Avenue Industrial Triangle is in an advantageous location in the southerly area of Fresno, approximately 2-1/2 miles from the center of downtown Fresno. It is in close proximity to the Fresno Metropolitan Area’s concentration of heavy industry. It is in an area designated for heavy industrial development under the Fresno-Clovis Metropolitan Area General Plan. It is at the convergence of transportation service, being adjacent to Freeway 99 and the scheduled Freeway 41. It receives direct and indirect rail service by intercontinental railroads, and is inter-connected with local and regional markets by expressways and arterials streets.

The district is close to an extensive labor pool. Land values are reasonably low, especially when it is considered that the full range of public utilities and services in the form of water, sewers, gas, and electricity are basically provided. Expansion of these services to all properties within the district may be accomplished without undue difficulty, and, to help insure the industrial viability of the district, it is the City’s commitment to assist in the extension of these basic services, particularly sewer and water.

LAND USE

Because the North Avenue Industrial Triangle is at the beginning stage of its industrial growth, the predominant land use feature of the area is still agricultural production. This is particularly true of the industrial reserve area south of North Avenue where the larger holdings are located. In the northern portion of the district, a tendency for some agricultural production to be abandoned in favor of vacant holdings is being experienced, indicating that near term conversion to industrial usage would be practicable.

Industrial development is currently concentrated in the northern section of the district, primarily between Annadale and Jensen Avenue. The concentration of new construction is occurring on the east side of East Avenue, between this street and Freeway 99. Industrial subdivision has recently commenced, generally providing smaller sized lots for users who do not need rail service. This has occurred adjacent to both East and Cherry Avenues.

Residential development within the district follows the rural pattern, being generally comprised of groups of small parcels located in isolated strips along major streets. Overall quality of housing is generally substandard, with the exception of units recently relocated as a by-product of freeway construction. The addition of these relocated units to the district’s housing inventory is occurring primarily along Cherry Avenue in the area held in reserve for future industrial expansion.

Residential development in an industrial district represents some problems to industrial development. The two uses are not compatible with each other, and residential parcels are generally too small to be utilized effectively by heavy industry. As the district develops to industrial uses, it is expected that residential uses will be phased out through the interaction of market demands, and that the residential building sites of the district will be reassembled into usable industrial parcels.
**ZONING**

The area of the North Avenue Industrial Triangle is zoned either M-1, light manufacturing district, or M-3, heavy industrial district, excepting for a small area of R-A, single-family residential district, on the north side of North Avenue west of Cherry Avenue. Zoning in the industrial reserve area is divided relatively equally between R-A and AE-5, five-acre agricultural district, excepting two M-3 parcels adjacent to the North Central Canal.

Ultimately, and in conformance with the General Plan and the Specific Plan for the North Avenue Industrial Triangle, all 930 acres of the district will be rezoned to M-3 to assure that all properties will have the widest range of industrial uses possible and that property development standards will be uniform.

This will not correct the residential-industrial incompatibility mentioned above. However, within the City portion of the district, residential development will become a non-conforming use, which may legally be continued and maintained, but cannot be expanded.

This will place a ceiling upon the level of industrial-residential conflicts, thereby helping to maintain and protect the industrial environment of the district. It should also help accelerate the removal of residential units through the market demand process.

This condition will not apply to the R-A portion of the reserve area, which will temporarily remain under the jurisdiction of Fresno County. Here, residential development may continue. Should it be expanded much beyond its present level, particularly along Cherry Avenue, a situation could occur under which a wider distribution of residential units could prevent creation of a viable industrial development in that area.
Figure 2: Existing Land Use
CIRCULATION

With the completion of the circulation system designed for this area, the North Avenue Industrial Triangle will have the most extensive combination of freeways, arterial streets, and collector streets of any industrial district in the Fresno Metropolitan Area. As a result, it will also have the most efficient industrial street system in the Fresno area.

Two freeways will provide regional access for the North Avenue Industrial Triangle. These are the existing Freeway 99 and Freeway 41, which are scheduled for construction sometime after 1977. The freeway system will furnish an important secondary benefit in that this will be the only industrial district, which will enjoy almost complete separation or isolation from adjoining incompatible land use areas because of the buffering effect.

Two arterial streets traverse the North Avenue Industrial Triangle, furnishing access to the freeway system and providing access to the balance of the metropolitan area. Jensen Avenue is fully developed, with the exception of its median islands.

North Avenue is a fairly well-paved, two-lane street, which is partially widened in the area of its interchange with Freeway 99. It will ultimately be completely widened to a four-lane divided street with appropriate median islands within a 106-foot right-of-way. This is provided for by Official Plan Line #62 jointly adopted by the City and County of Fresno. Tractor-trailer movements should not be a problem on this street if property frontages are large enough and access controls are designed properly. A possible exception to this may be the residential uses on small lots between Cherry Avenue and Freeway 41. If these smaller parcels cannot be aggregated into larger industrial lots upon expiration of the residential use, suitable access may not be capable of being designed for that area.

Three collector streets provide for the basic north-south movements in the district. Orange Avenue is a narrow two-lane road with pavement in moderate condition. Official Plan Line #72 provides for the widening of this street. It will be necessary to analyze the expected future truck movements on this street to ascertain the validity of the presently called for 84-foot right-of-way. Should that be excessive, the Official Plan Line would be redesigned. East and Cherry Avenues are two-lane streets having pavement in fair-to-good condition. These streets are currently experiencing piecemeal widening as individual abutting properties are developed. These streets will ultimately have undivided four-lane roadways within 84-foot rights-of-way.

All other streets, except for the private cul-de-sac westward from East Avenue on the Dorothy Avenue alignment, will be local streets with 48 feet of paving within a 64-foot right-of-way. Annadale Avenue, which is in poor condition, will be severed by Freeway 41. Recently installed cul-de-sac streets have been developed to industrial standards. These are Commerce Avenue, Annadale Avenue east of East Avenue, and Date Avenue. Dorothy Avenue is an incompletely developed street, which should be terminated in a cul-de-sac. Future local streets will be developed as an option of subdivision.
Upon completion of annexation, the basic street lighting system will be installed by the City. Upon subdivision, or development of individual properties, the balance of the system will be installed by developers. As traffic demands warrant, the major intersections will receive traffic signals.

Sidewalks have been developed only spasmodically within the district. Present development standards require sidewalks on arterial and collector streets. In view of the fact that no heavy pedestrian movements are expected within the district, the minimum sidewalk width consonant with state standards will be permitted.

**PUBLIC UTILITIES**

The North Avenue Industrial Triangle is very well served by a basic network of public utilities, particularly in the northern portion of the district. Primary electrical service is 12,000 volts, which is extended along all streets in the district. Gas distribution occurs in 12-inch and 16-inch transmission lines throughout the district, with local service being performed by two-inch and four-inch high-pressure distribution lines.

**WATER SERVICE**

Distribution of water service within the district is based upon a primary network of 10-inch and 12-inch mains and local distribution upon a secondary network of eight-inch lines. Only the northern portion of the district is currently served, with primary distribution having been extended on Cherry Avenue to Date Avenue, and on East Avenue to Commerce Avenue. Newly developed subdivisions have been provided with water. Existing mains will be extended to North Avenue where they will be interconnected with existing water service outside the district at Elm Avenue.

It is contemplated that as many as four pump stations may be required in the area if heavy water-using industries locate to the district. It is premature to specify the exact number of pump stations that should be installed, but no matter what the ultimate demand for water will be, an adequate volume of water for all purposes can be made progressively available.
SEWER SERVICE
The North Avenue Industrial Triangle is very well provided with sewer service with most of the industrial facilities being adjacent to, or connected to, existing sewer lines. The area is traversed by trunk lines serving other portions of the metropolitan area, with Jensen Avenue having a 48-inch line, North Avenue a 60-inch line, and Cherry Avenue a 36-inch line. Sewer lines on all north-south streets are capable of providing immediate service to abutting properties.

For the area north of North Avenue, only three sewer lines will need to be installed to provide service to all street frontages. These will be either eight-inch or ten-inch lines on Dorothy, Annadale, and North Avenues. The industrial reserve area south of North Avenue will ultimately be sewered by lines of appropriate size as development requires. To accommodate certain special developments, it can be foreseen that publicly maintained sewer lines will have to be placed within easements. This will be permissible, but will require installation of cast-iron pipe rather than the conventional vitrified clay or transite pipes normally allowed.

FLOOD CONTROL
The North Avenue Industrial Triangle has not reached the level of development sufficient to cause serious drainage problems. Topography is almost flat with a slight slope and with the general elevation dropping about five feet per mile. A moderate amount of land filling will be needed in some areas, and a flood control program will be necessary as drainage and runoff characteristics are modified through the construction of buildings and paving of parking facilities.

The area encompasses parts of three drainage districts. The area west of Cherry Avenue is in District KK. Storm waters will be controlled by surface flow, with ultimate pickup at Annadale Avenue for delivery to a drainage basin west of Freeway 41. The drainage divide east of Cherry Avenue is the Ward Ditch, which separates District LL on the north from District AW on the south. District LL will be served by a drainage basin centrally located north of Annadale Avenue, while District AW will be served by two smaller basins south of North Avenue.

Flood control will be managed by the Fresno Metropolitan Flood Control District. The City of Fresno will participate in the installation of the District LL drainage basin, the initial facility to be installed in the North Avenue Industrial Triangle. However, as an interim measure, flood control may have to be handled on a temporary basis for each lot developed until the proposed drainage basins are put into operation. It is recognized that the development of temporary on-site drainage facilities by the developer represents a double payment for flood control service, a condition that the City and flood control district is attempting to prevent.

While the flood control district and the City will begin the initial phase of the drainage system detailed in the Flood Control Element, the development of a complete drainage system will be financed by drainage fees paid by developers at the time building permits are issued, allowing installation of facilities as industrial development occurs.
PROTECTIVE SERVICES

Two levels of protective services, police protection and fire suppression, are provided in the North Avenue Industrial Triangle. In the unincorporated area, police protection is provided by the Sheriff’s Office, and fire suppression is provided by the MidValley Fire Department. Within the City portion of the area, these services are provided by the City’s Police Department and the Fire Department.

Properties within the City receive a full range of police service, including regular mobile patrol. This higher level of protective service will be immediately provided to additional properties within the district upon completion of their annexation to the City.

Upon annexation, the City’s urban level of fire protective services will be substituted for the rural fire service currently provided for unincorporated areas. In most instances, especially where city water and fire hydrants are provided, the rural Class 8 insurance rating may be reduced to the City’s Class 2 insurance rating. An exception to this would be for fire exposures located more than 300 feet from a City fire hydrant, or more than 300 feet from the front property line. In these cases, a Class 9 insurance rating would occur. In the case of industrial development of the deeper parcels, a Class 2 insurance rating is achievable through the private extension of on-site water lines and the provision of suitable fire hydrants. To help the industrialist to achieve even lower insurance premiums, the North Avenue Industrial Triangle could be designated a sprinklerized district in which all fire exposures would be protected by sprinkler systems installed through joint public and private funding.

Regarding the availability of hydrants within 300 feet of the property to be served, as water mains are extended, fire hydrant risers will be installed at appropriate intervals to permit installation of the hydrant as new industrial facilities are constructed.

At the present time, City fire suppression will occur from the station located at Church and Holly Avenues. To improve fire protection capabilities for both the North Avenue Industrial Triangle and West Fresno, the Church Avenue station will be relocated to a site on Cherry Avenue south of Jensen Avenue.

RAIL SERVICE

The middle portion of the North Avenue Industrial Triangle receives rail service via a Santa Fe Railway lead track. Potentially, more than half of the undeveloped land in the district is capable of receiving this service. To achieve this, the lead track would have to be extended in a loop crossing North Avenue and leaving the district at its southeast corner to interconnect with the main line east of Cedar Avenue. There is only one grade crossing on East Avenue at the present time. To achieve a full level of rail service in the district, it will be necessary to develop additional grade crossings on Cherry, North, East, and Orange Avenues within the district, and Cedar Avenue outside the district.
The extension of the lead track with full protection, including street lights and gates, will be the sole responsibility of the Santa Fe Railway because of the private ownership aspects of the development. However, as rail service is a prime prerequisite to the success of a heavy industrial district, the City of Fresno will assist wherever possible in this extension.

IRRIGATION

Irrigation water for agricultural production is provided by two facilities—the North Central Canal and the ward Ditch. The North Central Canal distributes water on an areawide basis, and will have to remain as a permanent facility. The Ward Ditch should be considered as a short-lived facility that should either be phased out or replaced. This constitutes a major problem within the district.

A basic objective of establishing an industrial district would be the conversion of agricultural lands to industrial uses, but while this is occurring, the legal commitment to continue irrigation water service must be met. The subdivision or development of the land adjacent to the Ward Ditch will require that the ditch be pipelined. This is illogical in that an expensive, permanent alternative will have to be developed to serve a temporary use.

The situation concerning the ditch is that two properties, totaling approximately 60 acres, are located on the west side of Freeway 41, outside the North Avenue Industrial Triangle. They have water rights, which will remain in effect until the freeway is constructed. Two properties between Cherry Avenue and the freeway utilize water, and one property on the west side of East Avenue does the same. These properties have the right to receive water until the agricultural use is voluntarily abandoned, or until such time as an alternate solution is agreed upon. Achievement of a solution will require cooperation between the public and private parties affected by this problem. Potential alternatives range from the outright acquisition of these properties by a public agency, the purchase of agricultural or irrigation rights from the property owners, to the development of an alternative water supply.
SPECIFIC PLAN PROPOSALS

OBJECTIVE
Implementation of this Specific Plan will help achieve the objective of causing industrial expansion with the City of Fresno in conformance with the goals and policies of the Fresno-Clovis Metropolitan Area General Plan (1958) and with those of the Interim Policy Plan. Within the context that the North Avenue Industrial Triangle is only a part of the Fresno-Clovis Metropolitan Area, conformance of this specific plan with the City’s goals and policies will occur in the following respects:

General Plan Goals:
To achieve orderly development of the Metropolitan Area by providing a workable design for urban growth;

To develop a well-balanced land use pattern to meet the needs of all residents of the Metropolitan Area and to strengthen the local economy.

General Plan Policy:
As shown on the General Plan map, to foster industrial development in the South Fresno Community of the Metropolitan Area. (However, it should be noted that as a result of the modification of planning community boundaries, the North Avenue Industrial Triangle has become a part of the West Fresno Community.)

Interim Policy Plan - General Goal:
To achieve orderly development in the Metropolitan Area by providing a workable design for urban growth;

To secure a well-ordered, healthy, economic development and equal employment opportunities for all residents.

Interim Policy Plan - Urban Growth and Development Goal:
To promote development and redevelopment within areas already adequately serviced by municipal utilities and protective services.

Interim Policy Plan - Urban Growth and Development Policy:
To encourage development within the present corporate limits of the city.

a. Supply levels of municipal services sufficiently high to encourage and retain development within the present corporate limits of the city.

b. Develop industrial park sites and promote their occupancy through a City Industrial Development Committee.

c. Utilize metropolitan, community, and specific plans as the basis for zoning decisions in order that the County Tax Assessor may rely upon the adopted plans as the basis for determining fair market value.

---

1 The Plan Proposals referenced in this section of the North Avenue Industrial Triangle Specific Plan refer to the 1958 Fresno-Clovis Metropolitan Area General Plan, which is no longer current. The current Fresno General Plan was adopted December 18, 2014.
Interim Policy Plan - Economic Goal:
To increase the real income and the real wealth benefit from the economy for all residents of the City of Fresno.

Interim Policy Plan - Economic Policies:
To promote the creation of more jobs in Fresno;
To upgrade the quality of employment opportunities in Fresno;
To promote a broader range of economic activities and jobs in Fresno;
To promote expansion of existing business and industry in Fresno;
To advance the career skills of the labor force in Fresno;
To promote a more optimal and equitable distribution of development in Fresno;
To expand the tax base of the City of Fresno;
To pursue a program of well-planned and administrated industrial park development in Fresno by developing a specific detailed plan for industrial park development.

Interim Policy Plan - Land Use Goal:
To promote a pattern of industrial development in the Fresno Clovis Metropolitan Area which will meet the economic needs of both the individual and community in a complementary relationship with the total range of urban land uses.

Interim Policy Plan - Land Use Policies:
To promote planned industrial development so as to reduce land use conflict with neighboring activities;
   a. Conflicting commercial and residential land uses should be eliminated in industrial areas;
   b. Prime industrial areas should be provided with adequate area for expansion which is protected from encroachment by conflicting uses;
   c. Application of design principles should be required at the fringe of industrial areas to reduce potential conflict with adjoining areas.

To promote planned industrial development, to promote economy in the provision of local services, and maximize the attractiveness of local industrial sites.
   a. Industry should be located only in areas, which can be efficiently served by public services and utilities as determined in the Urban Growth and Development Element.
   b. Industrial concentrations should be located only in areas, which can be efficiently served by metropolitan and regional transportation facilities.
   c. Industrial land uses should be clustered with reference to their common needs and compatibility in order to maximize the operational efficiency of similar activities.
Interim Policy Plan - Transportation and Circulation Policy:
To develop a transportation system as broadly based as possible, to maintain and enhance Fresno’s regional economic position, so as to assure that all components of a transportation system may be inter-related with public and private commercial and industrial expansion programs and redevelopment programs.

LAND USE ELEMENT
With the adoption of the Fresno-Clovis Metropolitan Area General Plan on July 17, 1958, the Fresno City Council signified that heavy industrial development would be the most appropriate land use for the North Avenue Industrial Triangle. The area north of North Avenue was designated as lands susceptible to industrial development within the planning period of that General Plan. The area south of North Avenue was designated as an industrial reserve area. With the amendment of the General Plan on August 27, 1964, the City Council designated the entire North Avenue Industrial Triangle as a heavy industrial district. The implication of these actions is that they establish a planning history in excess of 15 years, during which it has been contemplated that this area would be developed to heavy industrial uses.

The statement of purpose of the M-3 district states, “The M-3, heavy industrial district, is intended to provide for the establishment of industrial uses essential to the development of a balanced economic base.” In keeping with the purpose of the General Plan, the Specific Plan for the North Avenue Industrial Triangle has as its basic objective the creation of a completely serviced, self-contained industrial district permitting the fullest range of industrial activity. To accomplish this, all lands within the city portion of the district not presently zoned M-3 will be rezoned to that category. As additional lands are annexed, their zoning classification will also be changed to M-3.

The effects of this rezoning program will be as follows: The uses permitted and the property development standards will become uniform. Those heavy industrial uses, permitted under the conditional use permit process, could be located in the area, but under reasonable controls which would protect the environment against the impacts of smoke, odor, dust, or visual appearance. Height limitations would be removed, which represents neither an advantage nor disadvantage in that few new industrial facilities exceed a two-story height.

Adoption of M-3 zoning will not remove the residential-industrial land use conflicts within the district. However, such rezoning will place a ceiling on the amount of this conflict, and will offer an eventual economic incentive for the reassembly of residential sites into industrial parcels.

The effect of not rezoning all properties would be the retention of dissimilar use provisions within the district and perpetuation of residential uses within an industrial complex, both of which would be detrimental to the industrial environment. Perpetuating the residential patterns is not an adequate alternative in that it would constrain the city’s capability of developing an industrial street system, particularly on North Avenue where this street interchanges with Freeway 41.
Figure 3: Rezoning
Land Use Phasing:

Phase I
Upon adoption of the ordinance approving the Specific Plan for the North Avenue Industrial Triangle, and under City Council initiation, rezone those properties that are within the City of Fresno and zoned other than M-3 to M-3.

Phase III
Upon annexation of properties within the North Avenue Industrial Triangle which are currently within the unincorporated area of the district, rezone those properties zoned other than M-3 to M-3.

CIRCULATION ELEMENT
The circulation pattern and functional classification of streets in the North Avenue Industrial Triangle have been predetermined by the Circulation Element of the Fresno-Clovis Metropolitan Area General Plan. This was to provide an industrial street system capable of supporting the heavy industrial activity expected and planned for in this district. Due to the need for constructing streets, which can handle the movement of tractor-trailers and other heavy equipment, it is offered that there are no practical alternatives to the construction of this street system.

Freeways
Construction of Freeway 41 will be undertaken as a function of the California State Department of Transportation. The responsibility imposed upon the City of Fresno and the County of Fresno in this project will be the preparation of North Avenue to accept traffic movements to and from the freeway. Increased traffic movements on North Avenue to the freeway interchange will be generated as industrialization of the North Avenue Industrial Triangle continues. This will cause adverse impacts upon the residential areas located between Cherry Avenue and the freeway. This cannot be avoided if the goal of industrialization of the North Avenue Industrial Triangle is to be achieved.

Arterial Streets
The two arterial streets traversing the North Avenue Industrial Triangle are Jensen and North Avenues. Jensen Avenue has been completed with the exception of constructing its median islands. This delay reflected the concerns of the property owners on the south side of this street that heavy trucks would not have adequate access to their businesses. To remove this conflict, the specific plan proposes the construction of an access road extending from Cherry Avenue to the rear of these properties, and then extending northward to Jensen Avenue. As was originally proposed, development of this access road would be by assessment district.

The need for constructing this access road is variable, depending upon the value judgments employed. Should the property owners affected by the proposed assessment district determine that the access road was not in their best interests, it would not be constructed. However, such a decision would not
Figure 4: Circulation
remove the need for developing the Jensen Avenue median islands. As traffic volume increases, this street will have a potentially dangerous mixture of fast-moving, light vehicles and slow-moving, heavy vehicles. Should the necessary median islands impede the turning movements of heavy trucks, the truckers would then adopt alternative travel patterns to facilitate their mobility. An alternative routing, for example, would be a movement off of Freeway 99, which would result in northbound travel on Cherry Avenue, leading to a right turn movement onto Jensen Avenue for access to those properties.

North Avenue is protected by Official Plan Line #62, which provides for constructing his street as a divided four-lane road within a 106-foot right-of-way. It will be extremely important to both the abutting property owners and the City that the efficiency of either the future industrial activity or of the use of this roadway should not be impaired by improperly designed accessways.

To help achieve the greatest safety possible, two requirements of this specific plan will deal with access control. It will be required that the City Traffic Engineer review and approve the access proposals for properties abutting North Avenue within the City portion of the North Avenue Industrial Triangle as a condition of issuing building permits. It will also be required that all truck movements into loading facilities occur on the property being served and that accessways and loading facilities be designed so that trucks may enter and leave properties with a forward movement only.
**Figure 5: Street Design**

**Figure 6: Rail Crossing Design**
Collector Streets
The street standards of the Circulation Element of the Fresno-Clovis Metropolitan Area General Plan will control the development of collector streets. Unless a different street width is determined to be either feasible or necessary, and determined by an analysis of the projected type and volume of traffic movements, the requirement for a 68-foot, undivided, four-lane road within an 84-foot right-of-way will prevail. This will be accomplished by a uniform 12-foot dedication on each side of East and Cherry Avenues. To accommodate the anticipated high volume of heavy truck movements, a curb return of 50-feet will also be required at major intersections.

Conditions on Orange Avenue differ somewhat in that the right-of-way is protected by Official Plan Line #72, which calls for a variable dedication. It is felt that the required 84-foot right-of-way is excessive and that it could be reduced to the 64-foot local collector status. Consequently, it is the recommendation of this specific plan that the official plan line be reanalyzed to determine if such a reduction can be made.

To provide greater safety of movement, the street standard at railroad grade crossings should be increased to provide sufficient space for installing crossing gate equipment. As shown in the Street Standards diagram, it is recommended that the collector street standard be increased to 92 feet at the point the track crosses the roadway.

Local Streets
The standard for a local street is a 48-foot road within a 64-foot right-of-way. To allow truck-turning movements within a cul-de-sac bulb terminating a local street, the bulb should have radii of 65 feet for the road and 73 feet for the right-of-way.

Conventionally, the precise locations for local streets are specified in the Circulation Element of a specific plan. The lack of local street coverage is intentional in this specific plan to permit the widest reasonable latitude in designing industrial subdivisions in the North Avenue Industrial Triangle. To eliminate possibilities of creating landlocked parcels or lots with inadequate street access, the City staff will assist property owners and industrial developers in designing street networks needed for development of industrial lots.
Circulation Equipment

The installation of street lights, traffic signals, street name signs, and other street furniture will be accomplished in accordance with city standards, and conforming to city codes and regulations.

Sidewalks will be required on arterial and collector streets, but not on local streets. They would not be required on Orange Avenue if the official plan line requirements are reduced to a 64-foot right-of-way. It is the recommendation of this specific plan that a four-foot sidewalk area be constructed adjacent to the curb to provide an unobstructed 4-1/2 foot overall width within the eight foot sidewalk area. To achieve this, utilities and street furniture should be placed in the area behind the sidewalk wherever possible. The 3-1/2 foot utility strip should be kept clear and retained for landscaping. It could not be utilized with asphaltic paving for parking or other on-site uses.

Circulation Phasing:

Phase I
Establish procedures for City Traffic Engineer review of access control for North Avenue. Conduct analysis of Orange Avenue Official Plan Line (OPL #72) and prepare new plan lines if warranted. Install street lights at existing intersections and at existing industrial developments. Implement revised street standards adopted in the Specific Plan.

Phase II
Construct the Jensen Avenue median islands. Upon approval of the necessary assessment district, construct the Jensen Avenue access road. Through a combined public and private program, widen Orange, East, and Cherry Avenues. Through private subdivision, open new local streets. Expand the street lighting system as industrial development progresses. Install traffic signals as demand warrants. Install sidewalks on those arterial and collector streets where this facility is required.

Phase III
Construct Freeway 41. Widen North Avenue. Improve Orange, East, and Cherry Avenues and Parkway Drive south of North Avenue. Install street lights upon annexation of properties south of North Avenue.
Figure 7: Street Lighting
PUBLIC FACILITIES ELEMENT

The requirements for public facilities became generally defined when the General Plan originally designated the North Avenue Industrial Triangle as a heavy industrial district. It follows that the district should have an adequate public water supply, which would permit the processing of raw materials, meet public health requirements, and provide adequate fire protection potentials. Public sewer service is a mandatory requirement to assure collection and adequate treatment of liquid industrial wastes. Because of the serious potential for a conflagration of major magnitude, a high level of fire protective service is essential. Relative to Fresno's flat terrain, the need for appropriately located and sized flood control facilities is a necessary undertaking, and, within legal and economic possibilities, the problems associated with the distribution of irrigation water should be addressed.

In general terms, the usage of the services enumerated above would be more intense in an industrial district than in other districts. In order to develop the self-contained industrial district proposed in this specific plan, there would be no practical alternatives to providing the levels of service recommended below. Of all the services recommended, the two most urgently needed are water and sewers. These also represent the facilities, which the City can provide most readily, in terms of both immediacy of installation and contributions of developmental front money.
Figure 8: Water Service
Water Service

The ultimate level of water consumption in the North Avenue Industrial Triangle will not be known until the district is substantially developed to industrial use. No matter what this demand level will be, an adequate volume of water for all purposes can be made progressively available. In order to assure this, it is contemplated that as many as four pump stations may have to be acquired and developed if a large number of high water-demand industries locate in the district.

At this early stage of development, only generalized statements can be made concerning water quality control conditions. The location of high intensity industrial development in the North Avenue Industrial Triangle should not affect the quality of water in the underground water supply because industrial liquid wastewater will not be recirculated through the underground reservoir. Potential drawdown of the water table cannot be predicted at this time. There is a potential that the drawdown may be minimal by virtue of the fact that this district is at a lower elevation than most of the city of Fresno, which would cause it to receive a portion of its water supply by hydrostatic pressure through the city’s interconnected water distribution system.

As a general statement of present conditions, water service is not yet provided south of Annadale Avenue. Under the recommendations of this specific plan, water service will be extended in three basic phases, as follows:

**Phase I**

Existing service on Cherry and East Avenues will be extended to North Avenue. Service on North Avenue will be extended from Elm Avenue, westerly of the district to interconnect the Cherry and East Avenue water lines with the balance of the city’s water system.

**Phase II**

Through a combination of private extensions, as properties are developed, and future extensions by the city, water service will be provided on Annadale and Dorothy Avenues. Extension of service on North Avenue will occur as demand requires, or when service to Orange Avenue becomes necessary. Install city water pump stations as needed.

**Phase III**

For the industrial reserve area south of North Avenue, service extension would not be contemplated until such time as the area is either annexed to the city or special water demand conditions require it. In order to provide effective water service to this area, extensions southward along Parkway Drive, Orange, East, and Cherry Avenues will have to be interconnected by a water main placed adjacent to the North Central Canal.

A secondary, but equally important function of the water distribution system is the provision of standby water for firefighting. Seventeen fire hydrants were recently installed in the northern portion of the district, which was just annexed to the city, in conformance with city policy. As the Phase I water main extension occurs, fire hydrant risers will also be installed so that any industrial development adjacent to these mains can receive immediate installation of one or more fire hydrants.
Figure 9: Sewer Service
Sewer Service

The basic sewer network for the North Avenue Industrial Triangle is already installed, permitting immediate connection for the greater portion of the properties located north of North Avenue. Under the recommendations of this specific plan sewer service will be extended in three basic phases, as follows:

Phase I
Annadale Avenue will receive 8-inch service westward from Cherry Avenue to the east boundary of the Freeway 41 alignment. 10-inch service will be extended from Cherry Avenue to East Avenue for the remaining portion of this street.

Phase II
Combined public and private extensions will achieve 8-inch service on Dorothy Avenue and the remaining portion of Orange Avenue not presently sewered.

Phase III
A 10-inch sewer will be placed parallel to the 60-inch sewer trunk line on North Avenue between Cherry Avenue and Freeway 41 to serve the residential pocket in this area. Such service will be to eliminate potential damage to the trunkline from placing too many small connections within a short distance. Cherry, East, and Orange Avenues, and Parkview Drive in the industrial reserve area would receive combinations of 10-inch and 8-inch service at such time as the area is either annexed to the city or special sewer service demand conditions require it.

There are no practical alternatives to the installation of this proposed sewer system. The collection of liquid industrial wastes is imperative to prevent possible contamination of the underground water supply. Such collection will require that these wastes are transported to the city’s sewer treatment plant for processing. At this early stage of development, it cannot be ascertained what effects the industrialization of the North Avenue Industrial Triangle will have upon the operation of that treatment plant.

Increasingly, the federal and state governments are issuing regulations requiring local sewer agencies and other liquid waste dischargers to meet discharge controls; any industry, which will produce liquid waste of unusual character may be subject to one or more controls, which would be uniform throughout the Fresno Metropolitan system. The Fresno City Public Works Department will furnish the industrial developer with all essential information in this regard.
Figure 10: Flood Control
Flood Control
The basic engineering of the proposed flood control facilities has been completed. Barring minor changes, which would occur because of regrading some of the larger, centrally located properties, the recently designed flood control requirements will remain firm. The generally flat terrain and proposed land use of the district dictates that there are no alternatives to providing the level of flood control service recommended. Until such time as the phasing schedule recommended below can be completed, it should also be borne in mind that some properties might have to furnish temporary on-site drainage facilities.

Phase I
Acquire Drainage Basin LL and perform preliminary work preparatory to installation of drain lines and excavation.

Phase II
Excavation of Drainage Basin LL and installation of storm drain lines throughout District LL. Installation of curbs and gutters on west side of Cherry Avenue to facilitate surface drainage flow for District KK. Installation of storm drain line on Annadale Avenue to be coordinated with development of Drainage Basin KK, west of the North Avenue Industrial Triangle. On an interim basis, where needed, provide temporary on-site drainage facilities where development occurs prior to extension of flood control storm drain lines.

Phase III
Acquire and excavate Drainage Basins AW-1 and AW-2, and install storm drain lines. Eliminate temporary on-site drainage facilities in Districts KK, LL, and AW.
Figure 11: Irrigation
Irrigation
Delivery of irrigation water, via the Ward Ditch, must be maintained until such time as the agricultural lands receiving this service discontinue their agricultural use. In order to subdivide those properties most susceptible to short-term industrial development, the developers must bear the expense of pipelining this ditch to assure continued delivery of this water. This represents the construction of an expensive, permanent facility to serve a use, which will ultimately be phased out. In this situation, there is an opportunity for the developers to participate with the city in a joint solution on a cost-sharing basis, which will serve both public and private interests. Towards this, two alternative solutions are recommended, either of which could be applied.

Phase I

Alternative A
Through a mutual funding program, construct a city water pumping station, which, as a secondary function to providing water service to the district, will provide delivery of irrigation water at the presently scheduled delivery rate allowed irrigation uses.

Alternative B
Through a mutually funded program construct wells on the affected agricultural properties, which will provide equal water deliveries in exchange for discontinuance of Ward Ditch service.
PROTECTION SERVICES ELEMENT

Part of the recommendations covered in the protective services element deal with the installation of physical facilities and with those services the city can make available to the industrialist on an optional basis.

Figure 12: Fire Protection
Fire Protection
It is recommended in this specific plan, in conformance with the Planned Variations Neighborhood 1, West Fresno Preliminary Plan, that the Church Avenue fire station be relocated to a site on Cherry Avenue, somewhat more than 300 feet south of the intersection of Jensen and Cherry Avenues. The station should be designed to hold two fire companies to permit expansion of fire protection services when industrial growth in the North Avenue Industrial Triangle warrants it.

In conformance with the proposals being formulated by the Fire Control Systems Task Force appointed by the Mayor, it is recommended that the North Avenue Industrial Triangle be designated as a sprinkler district in which all buildings, permanent structures, and fire hazardous open-air storage will ultimately be equipped with automatic sprinkler systems. Until such a program was adopted on a citywide basis, this would be a voluntary program in which the city staff would analyze existing facilities or building plans for new facilities to assist the developer with the installation of such a system. The benefits, which would result from this would be a substantial savings in insurance premiums for the industrialist and the development of a higher level of fire protective service at reduced costs for the City of Fresno.

Phase I
Acquire the Church Avenue replacement station site.

Phase II
Construct the replacement station site and initially operate the station with the existing manpower and equipment from the Church Avenue station. Institute on a voluntary basis the designation of the North Avenue Industrial Triangle as a sprinkler district. When industrial demand warrants, equip and man a second company at the Cherry Avenue Station.

Police Protection
The full range of police services will be made available in a conventional manner immediately as lands are annexed to the City of Fresno. Additionally, it is a recommendation of this specific plan that the North Avenue Industrial Triangle be designated as a police protective district, with participation by property owners and industrial developers to be on a voluntary basis. Under this designation, the owners of existing facilities may have their properties examined by police personnel to learn what methods or procedures should be followed to make their properties safer from vandalism and burglary attempts. The same service may be obtained at the time the industrial developer submits his building plans for staff review.

Phase II
Institute on a voluntary basis the designation of the North Avenue Industrial Triangle as a police protective district.
Figure 13: Rail Service
RAIL SERVICE

A basic objective of this specific plan is to assure the highest level of transportation service possible within the district. To accomplish this, the City of Fresno will assist the Santa Fe Railway in extending its lead track throughout the district, but with the stipulation that the extension of this private facility is to be at the expense and scheduling of the railroad.

The primary concern of this specific plan is directed to the crossing of North Avenue by the lead track. Because of the potential traffic flows on this street, only one grade crossing on North Avenue can be permitted within the North Avenue Industrial Triangle. However, a number of equally good one-eighth mile crossing points exist within the district. For the purpose of representing this crossing on the specific plan map, the location adjoining the property owned by the Santa Fe Railway is shown, but with the understanding that those locations designated by an asterisk would be allowed as substitutes.

The one-eighth mile crossing points, as a general rule, will also be required on the collector streets. The location of the lead track in the industrial reserve area south of North Avenue represents a schematic location only. The basic purpose is to indicate approximately how the lead track loop may be interconnected with the Santa Fe Railway mainline east of Cedar Avenue. When the final design of this lead track is being determined, the Santa Fe Railway and affected governmental agencies will have to collaborate extensively in determining the precise crossing points.
## PHASE I: CAPITAL IMPROVEMENT PROGRAM
### NORTH AVENUE INDUSTRIAL TRIANGLE

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Project Cost</th>
<th>Reimbursables</th>
<th>Ultimate Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLOOD CONTROL — DISTRICT LL DRAINAGE BASIN</strong>&lt;br&gt;Acquire 18-acre site and install minor piping on Annadale and East Avenues.</td>
<td>$175,000</td>
<td>$122,250</td>
<td>$52,750</td>
</tr>
<tr>
<td><strong>WATER SERVICE</strong>&lt;br&gt;Extension of existing service on Cherry and East Avenues to North Avenue; interconnection of North Avenue service with Elm Avenue; installation of 36 fire hydrant risers less hydrants.</td>
<td>$131,200</td>
<td>$65,600</td>
<td>65,600</td>
</tr>
<tr>
<td><strong>SEWER SERVICE</strong>&lt;br&gt;Installation of sewers on Annadale Avenue, from East Avenue to east boundary of Freeway 41.</td>
<td>$45,000</td>
<td>45,000</td>
<td>0</td>
</tr>
<tr>
<td><strong>STREET LIGHTING</strong>&lt;br&gt;Install street lights on south side of Jensen Avenue, and underground existing electrical service. Balance of existing developed area to be covered by P.G. &amp; E. installation at no installation charge.</td>
<td>$45,000</td>
<td>0</td>
<td>45,000</td>
</tr>
<tr>
<td><strong>FIRE PROTECTIVE SERVICE</strong>&lt;br&gt;Acquire fire station replacement site for Church Avenue Station.</td>
<td>$40,000</td>
<td>40,000</td>
<td>0</td>
</tr>
<tr>
<td><strong>IRRIGATION SERVICE</strong>&lt;br&gt;Correct problem of Ward Ditch through substitution of alternate irrigation water supply through jointly funded program.</td>
<td>$52,000</td>
<td>$26,000</td>
<td>26,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$488,200</td>
<td>$298,850</td>
<td>$189,350</td>
</tr>
</tbody>
</table>
PHASING SCHEDULE

PHASE I: PUBLIC EFFORT

Phase I deals with the public expenditures the City of Fresno and the Fresno Metropolitan Flood Control District will make to install public facilities and to provide public services within the North Avenue Industrial Triangle.

Land Use Element
- Rezone those properties within the City of Fresno zoned other than M-3 to M-3, by City-initiated applications.

Circulation Element
- Establish procedures for City Traffic Engineer review of access development for North Avenue.
- Conduct analysis of Orange Avenue Official Plan Line (OPL #72) and prepare new plan lines if warranted.
- Install street lights at existing intersections and at existing industrial developments.
- Implement revised street standards adopted in the Specific Plan.

Public Facilities Element

Water Service
- Extend existing service on Cherry Avenue to North Avenue.
- Extend existing service on East Avenue to North Avenue.
- Extend service on North Avenue to interconnect the Cherry and East Avenues water lines with the balance of the city’s water system at Elm Avenue.

Sewer Service
- Install sewer on Annadale Avenue between East Avenue and the Freeway 41 alignment.

Flood Control
- Acquire Drainage Basin LL.
- Perform preliminary work preparatory to installation of major drain lines and excavation.

Irrigation
- Alternative A
  Construct a city water pumping station to provide, as a secondary function, substitute irrigation water at present delivery schedules.

- Alternative B
  Construct wells on affected agricultural properties in exchange for discontinuance of Ward Ditch service.

Protective Services Element

Fire Protection
- Acquire Church Avenue replacement station site.
PHASE II: COMBINED PUBLIC AND PRIVATE EFFORT

Phase II deals with the private expenditures the industrial developer and/or subdivider will make. In order to develop his property, plus those additional public expenditures which the City will need to make to maintain public safety or to assist industrial growth in the North Avenue Industrial Triangle.

Circulation Element
- Construct Jensen Avenue median islands.
- Construct Jensen Avenue access road.
- Widen Orange Avenue.
- Widen East Avenue.
- Widen Cherry Avenue.
- Develop new local streets through subdivision activity.
- Expand street lighting system.
- Install traffic signals, as warranted.
- Install sidewalks.

Public Facilities Element

Water Service Extensions as Needed:
- Extend service on Annadale Avenue.
- Extend service on Dorothy Avenue.
- Extend service on North Avenue east of East Avenue.
- Extend service on Orange Avenue.
- Provide service to new subdivisions.
- Install city water pump stations.

Sewer Service Extensions as Needed:
- Extend service on Orange Avenue.
- Extend service on Dorothy Avenue.

Flood Control:
- Excavate Drainage Basin LL.
- Install storm drain lines throughout District LL.
- Install curbs and gutters on west side of Cherry Avenue for surface drainage flow to District KK.
- Install storm drain line on Annadale Avenue in coordination with development of Drainage Basin KK.
- Provide temporary on-site drainage facilities if and when needed.

Protective Services Element

Fire Protection
- Construct Cherry Avenue Station.
- Institute the North Avenue Industrial Triangle sprinkler district.
- Equip and man a second company at the Cherry Avenue station.

Police Protection
- Institute the North Avenue Industrial Triangle police protective district.
PHASE III FUTURE ACTIONS
Phase III deals with preplanning the installation of necessary facilities upon such time as the unincorporated portions of the North Avenue Industrial Triangle are annexed to the City and developed.

Land Use Element
  • Rezone those properties annexed to the City of Fresno zoned other than M-3 to M-3.

Circulation Element
  • Construct Freeway 41.
  • Widen North Avenue.
  • Improve Orange Avenue south of North Avenue.
  • Improve East Avenue south of North Avenue.
  • Improve Cherry Avenue south of North Avenue.
  • Improve Parkway Drive.
  • Install street lights upon annexation of properties south of North Avenue.

Public Facilities Element
  Water Service
    • Extend water service south of North Avenue as properties are annexed, or as industrial demand warrants.
    • Interconnect extended water services with balance of city water system.
  Sewer Service
    • Construct a 10-inch parallel sewer for existing residential service along side the North Avenue 60-inch trunk line.
    • Extend sewer service south of North Avenue as properties are annexed, or as industrial demand warrants.
  Flood Control
    • Acquire and excavate Drainage Basins AW-land AW-2.
    • Install drain lines in District AW.
    • Eliminate temporary on-site drainage facilities in Districts KK, LL, and AW.
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.

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

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.

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.

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 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 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.

**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.

**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 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 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 entirely 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.

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 City of Fresno Municipal Code, Chapter 15, Development Code which contains the City’s zoning and subdivision regulations and is the new planning, zoning, and development implementing code.

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 I-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 community plan that refines the Downtown Planning Area. A visionary document that lays 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.

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.

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).

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.

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.

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’s City Limits. See City Limits for definition.

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.
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 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.

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.

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).

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 in existence more than fifty 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 HPO.

**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.

**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 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.

**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.

**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.

**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.

**Mitigation.** A specific action taken to reduce environmental impacts. Mitigation measures are required as a component of an environmental impact report (EIR) if significant 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 multistory 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.

**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.

**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 affordable housing or allow flexibility with parking requirements.

**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.

**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.

**Ponding Basin.** See Detention Basin for definition.

**Primary Activity Center.** The Downtown mixed-use areas that are located within the Downtown Planning Area.

**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.”

**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.

**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.

**Site Area.** The land area of a lot remaining after dedication of all areas for public streets, regional trails, and certified wetlands or floodplains.

**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.

**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 Connector, Collector, Arterial, Super-arterial, Expressway, or State Route.

**Street, Local.** Shall mean a street which is not a major street.

**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.

**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 Oriented Developments can occur within a Transit Village. For the purposes of this Plan a Transit Village is an Activity Center.

**Transportation Demand Management.** 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 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 12-4.501:

> “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).”

**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.

**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.

**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.** See Development Code.
List of Acronyms

BRT: Bus Rapid Transit
Caltrans: California Department of Transportation
CalGreen or CalGreen Code: California Green Building Standards Code
CAP: Climate Action Plan
CBC: California Building Code
CBD: Central Business District
CEQA: California Environmental Quality Act
CIP: Capital Improvement Program
CLG: Certified Local Government
CNEL: Community Noise Equivalent Level
COFCG or FCOG: Council of Fresno County Governments
COG: Council of Governments
CSUF: California State University, Fresno
CUSD: Clovis Unified School District
CWMA: Consolidated Waste Management Authority
DARM: City of Fresno Development and Resource Management Department
dB: Decibel
dBA: Decibel A-Weighted
DDC: Downtown Development Code
DNCP: Downtown Neighborhoods Community Plan
DNL: Day-Night Average Noise Level
DPM: Diesel Particulate Matter
DPU: City of Fresno Department of Public Utilities
DPW: City of Fresno Department of Public Works
du: Dwelling Unit
du/ac: Dwelling Units per acre (measure of density)
EIR: Environmental Impact Report (CEQA)
EPA: Environmental Protection Agency
FAX: Fresno Area Express
FEMA: Federal Emergency Management Act
FCSP: Fulton Corridor Specific Plan
FID: Fresno Irrigation District
FMC: Fresno Municipal Code, also known as the Municipal code of Fresno
FMFCD: Fresno Metropolitan Flood Control District
FPU: Fresno Pacific University
FUSD: Fresno Unified School District
FYI: Fresno Yosemite International Airport
GED: General Education Diploma
GHG: Greenhouse Gases
GIS: Geographic Information Systems
GP: General Plan
HSR: California High Speed Rail
IDA: Infill Development Act
LAFCO: Fresno Local Agency Formation Commission
LEED: Leadership in Energy and Environmental Design
Leq: Equivalent Sound Level
**Glossary & Acronyms**

**Ldn:** Day-Night Average Sound Level

**MEIR:** Master Environmental Impact Report

**mgd:** Million gallons per day
(water or wastewater)

**MOU:** Memorandum of Understanding

**NESWTF or SWTF:** Northeast Surface Water Treatment Facility

**NFIP:** National Flood Insurance Program

**PACE:** Property Assessed Clean Energy

**PG&E:** Pacific Gas and Electric

**RTP:** Regional Transportation Plan

**RWRF:** Fresno/Clovis Regional Wastewater Reclamation Facility

**SCCCD:** State Center Community College District

**SIP:** State Implementation Plan (Air Pollution)

**SJVAPCD:** San Joaquin Valley Air Pollution Control District

**SJVAB:** San Joaquin Valley Air Basin

**SOI:** Sphere of Influence

**Sq. Ft.:** Square Feet

**SR:** State Route

**SWMP:** Storm Water Management Plan

**SWTF:** Surface Water Treatment Facility

**TAZ:** Traffic Analysis Zone

**TOD:** Transit Oriented Development

**TTCIS:** Traffic, Transportation and Connectivity Impact Study

**UGM:** Urban Growth Management

**UP:** Union Pacific Railroad

**USBR:** United States Bureau of Reclamation

**USD:** Unified School District

**UWMP:** Urban Water Management Plan