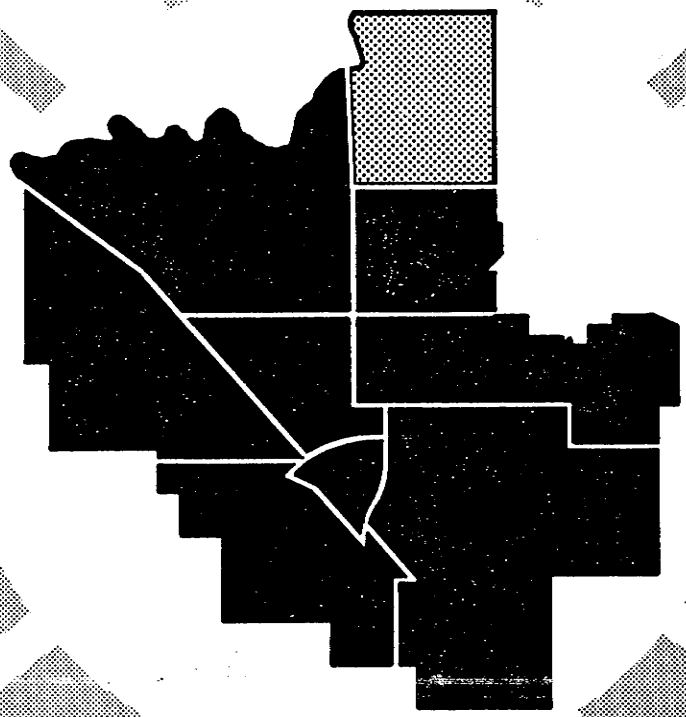
WOODWARD PARK COMMUNITY PLAN



CITY OF FRESNO
DEVELOPMENT DEPARTMENT
PLANNING AND DEVELOPMENT SERVICES DIVISION
DECEMBER 1989

1989
WOODWARD PARK COMMUNITY PLAN
and related

FINAL ENVIRONMENTAL IMPACT REPORT
No. 10100

December 1989

CITY OF FRESNO
DEVELOPMENT DEPARTMENT
PLANNING AND DEVELOPMENT SERVICES DIVISION

PREFACE

The completion of the update of the Woodward Park Community Plan was made possible only through the efforts of many individuals. The City of Fresno extends its gratitude to the following:

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TABLE OF CONTENTS

WOODWARD PARK COMMUNITY PLAN

	PAGE
INTRODUCTION	1
Background	3
Purpose	4
Significant Issues	5
Relationship To The City's General Plan	6
PLAN CONCEPT	7
LAND USE ELEMENT	13
Urban Form and Extent	14
Residential Uses	19
Commercial Uses	21
Industrial Uses	25
Public and Quasi-Public Uses	36
OPEN SPACE AND CONSERVATION	26
Public Parks, Recreation and Conservation Areas	26
Scenic Vistas	34
Equestrian Trails	35
CIRCULATION	36
Streets and Highways	36
Bikeways	41
TRANSIT	44
HOUSING	46
PHYSICAL GROWTH AND CHANGE	48
PUBLIC FACILITIES	53
Sewage Treatment	53
Sanitary Sewers	54
Public Water Supply	56
Storm Drainage	57
Fire	57
Police Protection	59
Schools	59
Solid Waste Disposal	60
ENVIRONMENTAL CONCERNS	61
Water Quality and Quantity	62
Air Quality	64
Noise	65
Flooding	69
Energy	71

FINAL ENVIRONMENTAL IMPACT REPORT

PREFACE 75

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS..... 76
- Project Description..... 76
- Conclusions..... 77
- Summary of Significant Impacts and Mitigation Measures..... 78
- List of Agencies Consulted During the EIR Process..... 84
- List of Persons/Organizations and Public Agencies Commenting on the EIR..... 85
- Comments on Draft EIR..... 85
- Response to Comments..... 137

DRAFT ENVIRONMENTAL IMPACT REPORT

INTRODUCTION AND PROJECT DESCRIPTION..... 145
- Authority and Purpose..... 145
- Project Description..... 145
- Problem Statement..... 146
- Objectives..... 147
- Advisory Committee Alternatives and Requested Plan Modifications..... 147

ENVIRONMENTAL SETTING AND SUMMARY OF IMPACTS..... 152
- General..... 152
- Present Land Use..... 152
- Socio-Economic Conditions and Population Growth..... 156
- Summary of Impacts and Mitigation Measures..... 158
- Effects Found Not To Be Significant..... 160

ENVIRONMENTAL IMPACT ANALYSIS..... 161
- Groundwater Resources..... 161
- Sewer Service..... 169
- Traffic..... 172
- Air Quality..... 181
- Noise..... 188
- Energy Consumption..... 190
- Geologic, Seismic, Soils and Agricultural Land..... 191
- Plant and Animal..... 195
- Parks and Open Space..... 199
- Flood and Storm Drainage..... 201
- Historical..... 206

Schools..... 208
Fire and Emergency Services..... 212
Police..... 213
Library..... 214

LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT.....215
Relationship Between Short-Term Uses and Long-Term Productivity/Cumulative Impacts..... 215
Significant Irreversible Changes..... 216
Unavoidable Impacts..... 216
Alternative Plan Concepts..... 217
Growth Inducing Impacts of the Proposed Plan..... 219

IMPACTS OF PLAN MODIFICATIONS..... 220

SOURCES CONSULTED..... 224

APPENDIX..... A-1
Full Text of Applicable City Council Resolutions.....A-1
Environmental Checklist.....B-1
Analysis and Recommendations Regarding the Herndon Avenue Sewer Study.....C-1
Herndon Avenue Trunk Sewer Study - Executive Summary.....D-1
Woodward Park Community Plan - Citizens Advisory Committee Recommendation.....E-1
Vista Point Standards.....F-1

LIST OF TABLES

TABLE		Page
1-0	Planned Land Uses	12
1-2.1	Plan Designation/Zone District Consistency	15
1-3.7	Dwelling Units Per Acre/Persons Per Household	21
2-1.2	Recommended Park Standards	29
EIR-1	Proposed Plan Modifications	150
EIR-2	Existing Land Uses	154
EIR-3	Summary of Significant Impacts	159
EIR-4	Major Street Service Levels	175
EIR-5	Comparison of Federal and State Air Quality Standards	183
EIR-6	1988 Estimated Emission Inventory	184
EIR-7	Fresno County Monitored Air Quality	185
EIR-8	Estimated Vehicle Emitted Air Pollutants	186
EIR-9	Current Student Capacity	209
EIR-10	Housing Type/Pupil Generation	209
EIR-11	Projected Student Population Increases	210
EIR-12	School Site Standards	211
EIR-13	Increased Significant Impacts Related to Plan Modifications	222

LIST OF FIGURES

Figure		Page
1-0	Woodward Park Community Planning Area Vicinity Map	2
1-2.2	Activity Center	17
1-2.3	Herndon Avenue Corridor	18
2-1	Open Space Resources	30
3-1	Circulation	39
3-6	Bikeways	43
4-1	FAX Bus Routes	45
6-1	Sewer Service Areas	50
6-1.1	Urban Reserve Areas	51
8-3	Projected Noise Contours - 1995	66
EIR-1	Proposed Plan Modifications	149
EIR-2	Existing Land Use	155
EIR-3	Projected Daily Traffic Volumes- Full Development 1984 Fresno General Plan Densities	177
EIR-4	Projected Daily Traffic Volumes- Full Development of Medium Low Density Residential	178
EIR-5	Projected Daily Traffic Volumes- Full Development of Medium Low Density Residential With Proposed Modifications	179
EIR-6	Agricultural Lands	193
EIR-7	Agricultural Preserve Contracts	194

SUMMARY OF LEGISLATIVE ACTIONS

PLANNING COMMISSION RESOLUTION NO. 9721, August 16, 1989

Certified Final Environmental Impact Report (EIR) No. 10100.

Identified significant adverse environmental effects and mitigation measures.

Stated the Overriding Considerations that balance benefits of the project against unavoidable environmental risks.

Found that alternatives, including "no further development," are infeasible.

PLANNING COMMISSION RESOLUTION NO. 9722, AUGUST 16, 1989

Recommended that the Woodward Park Community Plan Update Citizens Advisory Committee Recommendation with Modifications be approved.

Recommended that the 1984 Fresno General Plan be amended.

Recommended that the portion of the Alluvial - First Specific Plan within the Woodward Park Community Plan be repealed.

CITY COUNCIL RESOLUTION NO. 89-463, December 5, 1989

Certified Final EIR No. 10100.

Identified significant adverse environmental effects and mitigation measures.

Stated the overriding considerations that balance benefits of the project against unavoidable environmental risks.

Found that alternatives, including "no further development," are infeasible.

Established verfication and monitoring procedures for the availability of public services.

CITY COUNCIL RESOLUTION NO. 89-464, DECEMBER 5, 1989

Adopted the Woodward Park Community Plan Update.

Amended the 1984 Fresno General Plan.

Repealed that portion of the Alluvial - First Specific Plan within the Woodward Park Commumity Plan Area.

The full text of the City Council resolutions are contained in the Appendix.

INTRODUCTION

On January 11, 1988, the City Council received a report from the Department of Public Works detailing the results of the City of Fresno's Fiscal Impact Study of the Northeast Fresno Growth Area (November 1987). This study addressed the ability of the Woodward Park area to absorb the population increases projected by the 1984 General Plan. That report identified serious deficiencies in the northeast area's sewer, water, and circulation systems, and proposed a number of remedial measures to correct them. Upon receiving this report, the Fresno City Council directed the Development Department to initiate an update of the City's Woodward Park Community Plan.

Authorization for this update is granted by the City of Fresno's Local Planning and Procedures Ordinance, as contained in Article 6, Chapter 12, of the Fresno Municipal Code.

This plan establishes the City's statement of policy for the physical development of the Woodward Park community. As such, it represents the official policy governing the future character and quality of development within the plan's boundaries. It also establishes a service plan for the proposed distribution, extent, and capacity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.

This plan will serve at least seven functions:

1. Identification of issues and solutions at the community scale.

2. A source of information.

3. A statement of community-wide objectives.

4. An estimate of the future.

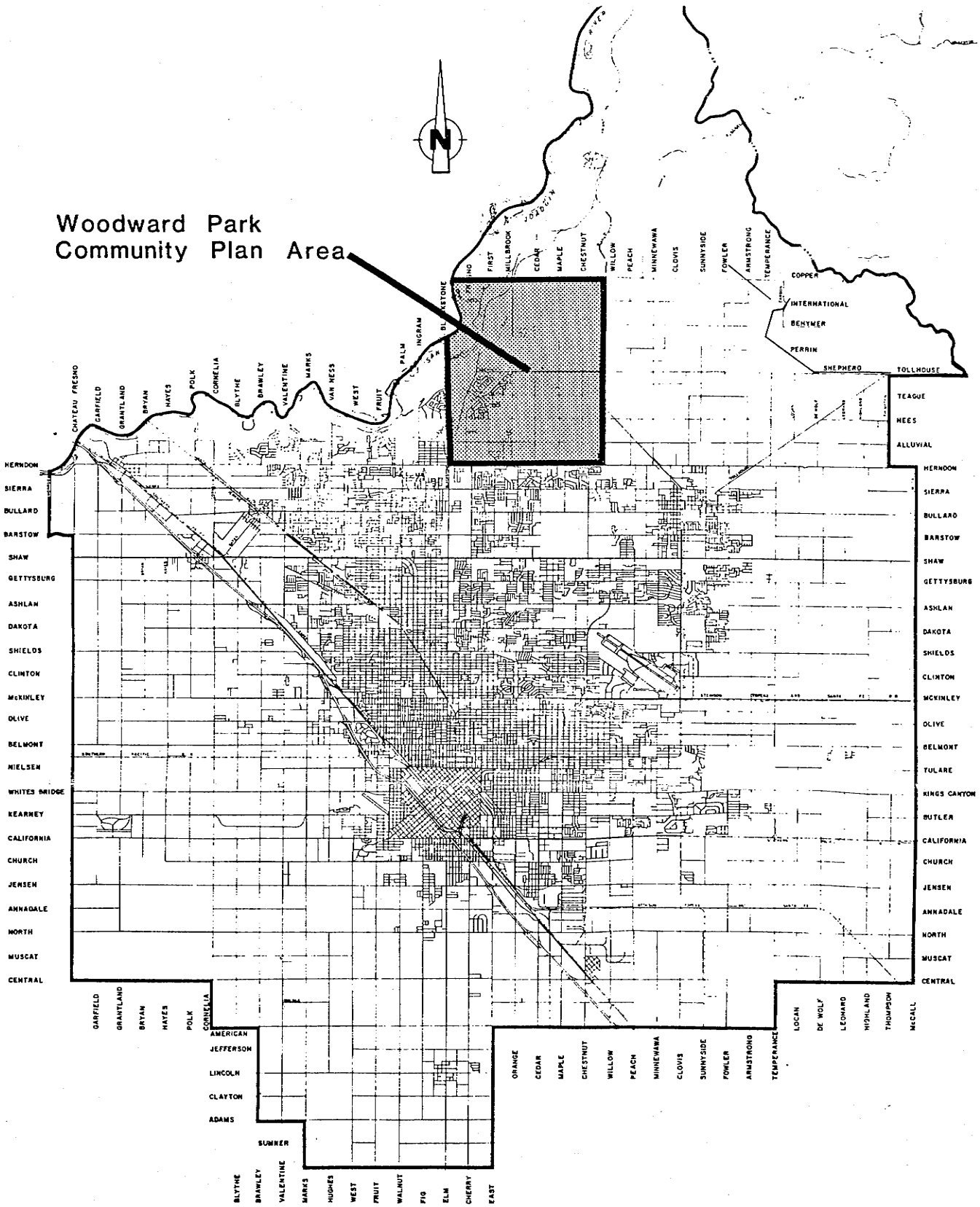
5. A decision-making guide for both public and private activities.

6. A means of coordinating and enhancing public and private investment.

7. A plan for the enhancement of the physical environment essential for human interaction and a healthy and stable economic atmosphere.

The plan is organized to provide a brief background statement and description of the planning area, a statement of its purpose, its relationship to the City's General Plan, and a roster of the significant issues to be addressed within its text. It was developed

FIGURE 1-0
Woodward Park Community Planning Area Vicinity Map



CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

with the participation of all City departments and the Woodward Park community and subjected to extensive review by the Woodward Park Update Committee, the Fresno City Planning Commission, and the Fresno City Council.

Background

Named after the Woodward Regional Park and Bird Sanctuary, the Woodward Park Community Plan encompasses approximately 13 square miles or 8,290 acres located on the northeastern edge of the City of Fresno. It is bounded on the south by Herndon Avenue, on the west by Blackstone Avenue (West Avenue was the boundary, but was changed in favor of Blackstone Avenue during the Bullard Community Plan update), on the north by the San Joaquin River and Copper Avenue, and on the east by Willow Avenue.

This planning area is a rapidly developing suburban community characterized by moderate to above-average priced single-family homes and a number of large office developments located along Herndon Avenue. The area is also located directly in the path of the City's northward growth, its population having increased from approximately 3,600 persons in 1970 to over 16,200 as of January 1, 1988. To date, development has been of a relatively high caliber and recognized for its aesthetic value. Predominant market trends, contemporary development strategies, and the willingness of its residents to become involved in neighborhood planning issues have been instrumental in the implementation of good design, increased landscaping, and the preservation of compatibility between various land uses.

Currently under development within the planning area are two planned communities located along the northern reaches of Friant Road, an expanded medical complex at Millbrook and Herndon Avenues, major office and commercial development along North Fresno Street, a new elementary school on Champlain Drive, a new Kaiser Hospital at Alluvial Avenue and Fresno Street, the expansion of Woodward Park, and numerous single-family subdivisions.

Continuation of the northward urban growth trend in the Woodward Park community has occurred primarily as a result of the following factors:

1. The construction of the Herndon Interceptor Sewer.

2. Development of regionally significant commercial services and employment centers along Shaw and Herndon Avenues.

3. Establishment of an Urban Growth Management (UGM) process which has accommodated the incremental extension of the basic street, sewer, and water systems at a cost that could be borne by the (housing) market.

4. The construction of Saint Agnes Hospital south of Herndon Avenue at Millbrook Avenue.

5. The extension of Freeway 41 northward to the San Joaquin River.

6. The availability of large holdings of land to developers and speculators.

7. The construction of a new high school at Teague and Millbrook Avenues by the Clovis Unified School District in a relatively homogeneous middle and upper-middle income area.

8. The adoption of a revised General Plan by the City of Fresno which substantially increased both the area of urbanization and its planned density.

9. The continuing development of the Woodward Regional Park by the City of Fresno

10. The lack of large areas of subdividable residential land south of Herndon Avenue, between Clovis Avenue and Freeway 99.

In response to the increasing demands of growth on the area, the City of Fresno developed the Woodward Park Community Plan in 1976. That plan was built around the concept of a community center or focal point of activity (to be developed along the east side of Blackstone Avenue, between Audubon and Alluvial Avenues) with a gradient of residential densities radiating outward toward the plan's peripheral areas. This essentially created a higher density residential core immediately adjacent to the proposed community center with progressively lower densities radiating outward, a concept the Woodward Park community continues to follow.

Purpose

The Woodward Park community is in transition. Before 1970, it was an agrarian area comprised of farms, orchards, and rural residential development. During the 1970's and 1980's, it has become one of the fastest growing urban areas of the City. Population projections of recent years forecast a continuation of growth pressures for the Woodward Park area, but these projections do not consider the real local constraints to continued urban growth. These constraints include the escalating public costs associated with fringe urban growth, citizen concern with the adequacy and equitability of public services throughout the City, the lack of revenue sources for funding-needed services at the local level, and increasing demands upon limited natural resources.

The Woodward Park Community will continue to grow despite constraints, but it can expect a transition to a more stable rate of growth which will manage and balance new development. It is the intention of this community plan to promote that stability.

This interim plan is a statement of the public land use policy that will: (1) guide development of the area in a manner consistent with the City's adopted General Plan; and (2) direct the physical growth and change of the Woodward Park community for the next five years. It will be the standard for determining the consistency of development entitlement proposals (i.e., rezonings and subdivisions) in the Woodward Park community and will provide for an internally compatible land use pattern that can be adequately accommodated by the City's existing and planned public service delivery system. The policies in this plan are intended to assure that development of individual properties will be done in a manner that enhances the physical growth of the Woodward Park community.

This plan should not be considered a static document. It is intended to provided guidance for the orderly growth of the community. In order to respond to unanticipated changes in environmental, social or economic conditions, the plan must be continually monitored and amended when necessary in order to remain relevant to community and City needs.

Once adopted, two additional steps will follow: implementation and review. Implementation is the process of putting plan policies and recommendations into effect. Review refers to the process of monitoring the community and recommending changes to the plan as conditions in the community change. Guidelines for implementation are provided in the plan, but the actual work must be based on a cooperative effort of private citizens, City officials, and other agencies. It is contemplated that organizations such as the Woodward Park Homeowners Association and other citizen groups will provide the continuity needed for a sustained, effective implementation program.

Significant Issues

A substantial increase in the intensity of urban development was planned for the Woodward Park Community Plan area by the 1984 Fresno General Plan. The majority of the area was designated for a residential density of 10 dwelling units per acre with a considerable amount of office and commercial development, including mid-rise structures. However, this increased urban intensity was not reflective of continuing residential development trends in the community (four units per acre), was disproportionate to other community areas, and could generate demands far in excess of the capacities of planned public facilities and available resources.

This update of the community plan was initiated in order to balance planned land uses with the capacity of planned public facilities and available resources and to guide future development in a manner compatible with the quality of life that characterizes the community. This section identifies those important issues that must be addressed as part of the planning effort.

1. Groundwater reserves are uncertain, both in terms of quantity and quality, and may not be able to meet the area's needs as urban development continues.

2. The capacity of major sewer trunk pipelines is limited and may not be sufficient to accommodate sewer flows generated by projected urban development.

3. The circulation system, as designed, may not be capable of accommodating the anticipated vehicular traffic demands of projected urban development.

4. Police, fire, and emergency response times may be substantially lengthened as traffic congestion increases.

5. Planned land uses no longer reflect actual development trends.

6. Area schools are experiencing overcrowding.

7. Current office and commercial land use designations may exceed projected community demands and may be improperly sited.

While this list may be far from complete, it does accurately summarize the major issues that are interacting to shape the area's land use patterns and will provide a valuable point of reference against which the plan's success or failure may be measured.

Relationship to the City's General Plan

Article 8, Section 65454, of the State of California Government Code provides that:

> "No specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the General Plan."

The City of Fresno's General Plan provides for broad-based economic growth and stability by promoting balanced growth throughout the

City. The plan designates special new growth areas in the southeastern, western, and northeastern fringes of the City, but mandates for the northeastern growth area that a feasibility study assessing the area's ability to absorb projected population increases be completed prior to the approval of any development in those areas.

The General Plan has proposed to provide for balanced growth by:

1. Promoting in-fill development in older portions of the City.

2. Facilitating the development of multiple centers at designated sites to serve as the focal point for each of the City's major communities.

3. Providing for the expansion of the City's public infrastructure in an efficient and fiscally-sound manner.

4. Limiting mid-rise development occurring outside of the City's Central Area to the Freeway 41 corridor.

The Woodward Park Community Plan is a refinement of these policies, having been designed to provide for the development of a specific community identity within the framework outlined by the General Plan and to facilitate the larger plan's implementation. It also serves as a bridge between the General Plan and specific development and improvement projects. Because of its narrower geographic boundaries, this plan represents a way of "humanizing" the General Plan -- bringing it down to a scale where residents can become familiar with the conditions of and plans for their specific neighborhoods.

PLAN CONCEPT

The issue of constructing major new public facilities can only be decided during a comprehensive General Plan update. It is, therefore, the intent of this plan to defer the need for the construction of major new public facilities (i.e., new trunk sewer and water treatment facility) by providing for the development of a land use plan for the Woodward Park community that utilizes existing public facilities in a manner consistent with the City's General Plan. The General Plan calls for balanced growth throughout the City, the development of a community center or focal point in each planning area, the promotion of City-wide economic growth and stability, the promotion of in-fill oriented development, and the implementation of fiscally-sound methods to expand the City's public facilities in an efficient manner.

It is also the intent of this plan to respond to the list of

issues identified in the plan as generating a need for an update. The issues are: (1) availability of potable water; (2) an incomplete and possibly inadequate circulation system; (3) unbalanced metropolitan growth; (4) regional air quality problems; (5) school overcrowding; and (6) inadequate public resources to extend and/or maintain public services.

Furthermore, it is the intent of this plan to preserve and enhance the relationship of certain regional facilities located in or near the Woodward Park area. These facilities, which serve a metropolitan-wide constituency, include Freeways 41 and 168, Friant Road and Herndon Avenue, Woodward Park, Saint Agnes Hospital and related facilities, and those existing facilities owned by the Clovis Unified School District.

Finally, it is the intent of this plan to take an aggressive position to protect and preserve the environment of the San Joaquin Riverbottom, the area's existing groundwater system extending to the north and east of the Woodward Park area, the San Joaquin River and High Sierra View Shed, and the single-family residential lifestyle prevalent in the area.

In order to accomplish this, land uses would be distributed around a mid-rise commercial/office corridor bounded by North Fresno Street, Audubon Drive, Blackstone Avenue, and Herndon Avenue. Office development would adjoin this commercial corridor, extending eastward toward North First Street and along Herndon Avenue. The plan concept would be organized such that a gradient of residential densities would radiate outward towards the plan's peripheral areas. This would mean the development of higher densities would occur near the proposed mid-rise corridor with progressively lower densities radiating outward towards Willow and Copper Avenues.

The plan's basic components are as follows:

Regional Commercial needs would be met by the proposed River Park Center located north of Alluvial Avenue, between Blackstone Avenue and Friant Road.

Neighborhood and Community Shopping needs would be met through designation of planned commercial sites restricted to the intersections of two arterial streets. The amount and distribution of commercial sites would be limited based on established population demand to preclude: (1) the generation of traffic congestion; (2) land use compatibility problems; and (3) the development of strip commercial areas.

Office Development in the Woodward Park area has been slow to materialize, but has begun to accelerate dramatically within the last two years. This plan has provided for the development of

approximately 474 acres of office-designated property, enough land to accommodate between six million and ten million square feet of office development or from four to six times the amount of existing office square footage developed along East Shaw Avenue or within the Central Area.

This level of office development would appear to exceed local demand. Therefore, it is the intent of this plan to ensure that office development does not occur at the expense of planned office development elsewhere in the metropolitan area or in a manner that would adversely affect or conflict with the regional traffic carrying role of the Woodward Park area's street system. Moreover, it must also be recognized that not all of the acreage planned for office development can or will be developed with office uses. The possibility exists that parcels planned for office uses will be forced to seek other land use designations. This may, in turn, have a significant impact on adjacent land use patterns and public facilities -- impacts that can only be fully assessed on a project-by-project basis. However, the office portion of the land use section has provided for the implementation of specific standards designed to ensure future land use compatibility and the adequacy of needed public facilities.

Medium-High Density Residential (10 to 18 units per acre) or multiple-family development would continue to constitute approximately 35 percent of the total residential housing stock for the Woodward Park community. New multiple-family uses would be limited to the area west of North First Street and a quarter-mile south of Alluvial Avenue, except where remnant parcels remain and land use compatibility can be ensured. In addition, it should be stressed that the intent of this interim plan update is to continue to preserve and perpetuate the planning area's existing single-family residential character and to discourage the development of large, unplanned apartment complexes pending substantive review of the area in the City's scheduled 1994 General Plan Update.

Medium Density Residential Development (five to ten units per acre), as characterized by the R-1 planned development, will serve as the primary buffer between commercial and office uses and single-family neighborhoods. This designation will continue to be an appropriate land use along Alluvial Avenue, Nees Avenue west of Cedar Avenue, on small, difficult to develop lots, and at all major intersections throughout the planning area.

Medium-Low Density Residential Development (two to five units per acre) will continue to comprise the bulk of all residential uses. Beginning east of First Street and north of Alluvial Avenue, this designation would extend outward toward Copper and Willow Avenues.

Low Density/Rural Residential lots (zero to two units per acre)

will identify those areas where large estate-type lots in excess of 15,000 square feet prevail.

Urban Reserve will constitute an interim land use designation to be applied in areas where insufficient information concerning sewer capacity or water availability exists to permit the designation of property for a more intensive use. Plan amendments within the urban reserve designation would only be permitted following a demonstration of serviceability of the affected property. This designation would also protect those areas where public services are questionable, would limit additional lot splits, and would allow for the orderly extension of public services by preventing urbanization without first ensuring the availability of a wide range of public services.

Open Space areas in the Woodward Park community would be broken down into three areas: (1) community park; (2) riparian/riverbottom; and (3) passive neighborhood parks. Woodward Park would continue to function as a passive park/bird sanctuary not to be developed with more intensive uses. The riverbottom would be preserved and expanded upon, with the riverbottom being restricted to open space/agricultural-type uses.

Public Facilities would be developed as follows:

Circulation. The Woodward Park area's circulation system would be designed to direct traffic away from North Cedar Avenue toward three points: (1) the future Freeway 168; (2) Herndon Avenue and Freeway 41; and (3) Friant Road and Freeway 41. It would also be designed to interface with a designated future transit corridor located adjacent to and parallel with Freeway 41. Existing transit facilities would be centered near the proposed regional center where possible, providing the basis for an expanded transit system in the area. Finally, conflicting land use patterns along Herndon Avenue and Friant Road, where property remains undeveloped, would be redesignated to avoid unnecessary congestion and potential vehicular gridlock.

Sewage Treatment and Sanitary Sewers. No new trunk sewer facilities would be extended to the Woodward Park area. The extension of a new facility would impact land use planning for the area, result in accelerated growth pressures beyond the City's Sphere of Influence, perpetuate unbalanced growth at the expense of the rest of the city, overload the area's water system and circulation system, and impair the area's overall air quality. However, through the use of flow metering, holding tanks, the possible elimination of sewer constriction points, and other peak reducing methods yet to be identified, sewer capacity for urbanization of the area can be maximized.

Public Water Supply. The current system of City wells will

continue to serve as the sole source of drinking water for the Woodward Park community. However, water resources within the Woodward Park planning area are limited and subject to contamination. It is the intent of this plan to provide for the maximization of these resources through water conservation, recharge, and the implementation of a stringent monitoring system. This plan does not envision the utilization of surface water resources for drinking purposes or the construction of any surface water treatment facilities. However, it should be noted that should the results of ongoing water studies show a need (i.e., the level of groundwater contamination increase or the production rates of on-line wells decline), surface water treatment for drinking purposes may become necessary.

Environmental concerns that must be addressed as part of any land use decision include:

Water Quality and Quantity. Existing groundwater quality and quantity is sufficient to permit the urbanization at a density of less than five units per acre in the Woodward Park community. The City currently has the ability to treat and transport, at substantial cost, 60,000 acre feet of water from Millerton Lake. However, this supply will be needed, and is utilizable at substantial lower costs, to stem DBCP intrusion elsewhere in the developed urban area. The long-term water picture in this area is only partially known, but will be detrimentally affected by any urbanization permitted north of Copper Avenue or east of Willow Avenue, north of Nees Avenue. New development may be required to be metered. Also, a water management plan for the area, including a massive recharge program, must be implemented.

Air Quality. Urbanization of the Woodward Park community will continue to adversely impact local air quality primarily due to longer work trip lengths, an increase in traffic congestion in the area, and climatic conditions. However, through reduction in land use intensities to below five units per acre, reducing vehicular congestion on both area expressways, and by extending Freeways 41 and 168, impacts can be minimized.

Noise. The major noise sources in the Woodward Park community are roadways such as Freeway 41, Herndon Avenue, Friant Road, and commercial development such as shopping centers, industrial development, and sand and gravel extraction. As growth and development occurs in the Woodward Park area, noise levels will continue to increase. It is the intent of this plan to minimize the potential, where possible, of noise impacts on area residents by: (1) preventing residential development in noise impacted areas; and (2) incorporating effective noise mitigation measures as part of the planning area's site development criteria.

The plan concept, as presented, is consistent with the City's General Plan and responsive to those issues generating the need for this plan. It will signal significant change in the area's growth patterns as managed growth becomes the City's established policy for the area. More importantly, by providing for balanced growth the plan will facilitate growth in other areas of the City that currently cannot compete, including the Central Area, Southeast Fresno, and the West Area.

TABLE 1-0
PLANNED LAND USES
(adopted December 5, 1989)

Plan Designation	No. of Units	Pop.	Acreage
Low Density Residential	108	301	72
Medium-Low Density Residential	16,119	44,972	3,537
Medium Density	3,336	9,307	443
Medium-High Density	5,175	10,402	354
Office			531
Neighborhood Commercial			65
Community Commercial			64
General Commercial			87
Regional Commercial			40
Public Facility/Church			281
Recreation/Open Space			731
Park/Ponding Basin			388
River and Rights-of-Way			404
Urban Reserve			1,353
TOTAL	24,738	64,982	8,350

Note: Low - 1.5 d.u/ac.
Med-Low - 4.5 d.u/ac. -- population 2.79 persons/household
Medium - 8 d.u/ac.
Med-High - 15 d.u/ac. -- population 2.01 persons/household

- Section acreages do not always total 160 acres.
- No adjustment made for collectors, arterials or expressways.
- River and rights-of-way include San Joaquin River and major streets.

LAND USE ELEMENT

The interim Woodward Park Community Plan land use map, together with the goals and policy/implementation measures, will implement the plan concept of the Woodward Park Community Plan. This concept provides for a major activity center, balanced growth, and gradation of densities, as described in the Introduction. The plan map is a pictorial display of the type and location of uses that achieve the plan concept. The goals and policy/implementation measures provide written statements establishing land use functions, distribution criteria, and compatibility standards. They are designed to direct development and to provide a basis of analysis for any proposed plan amendment.

The Woodward Park Community Plan activity center is not the geographic center of the community, but serves as its major focal point. It is actually located in the southwest corner of the planning area, at the hub of a regional circulation system that includes a freeway, two expressways, and several arterial and collector streets. In this location, highly intensive office, commercial, and public uses will fulfill not only community needs, but much of the surrounding metropolitan and regional area needs.

An extension of intensive residential, office, and commercial uses has also been planned eastward from the activity center as a corridor along the Herndon Avenue expressway. However, this area's intensity is moderated by Herndon's role as a principal east-west regional traffic carrier, and by its expressway standard which prohibits direct access. Relatively large, medium-high density residential and office complexes are planned as the predominant use, with a limited number of moderately-sized commercial developments included to serve community and commuter needs.

Beyond the activity center and Herndon Avenue corridor, a range of less intensive residential uses have been planned in a manner compatible with public facility capacities. Two secondary commercial centers to serve the community trade area are planned at the First Street/Nees Avenue intersection and the Champlain Drive/Perrin Avenue intersection. Several smaller commercial centers, office complexes, and medium-high density residential developments may be dispersed to meet local needs at appropriate locations when consistent with plan policies and criteria.

Local needs have been determined, based on the availability of public services and the population holding capacity of the overall planning area.

It should be noted that in order to avoid increasing local congestion and noise levels in planned residential areas of the community, as well as air quality impacts, commercial development must be kept to a minimum -- responding only to local needs. Furthermore, for those areas where sewer availability cannot be

guaranteed and/or groundwater supplies remain questionable, an urban reserve designation will be applied. The urban reserve designation constitutes an interim land use designation designed to protect those areas where public services are questionable and groundwater problems can be demonstrated. Plan amendments to more intensive land use designations will be permitted only upon the demonstration of serviceability of a given parcel.

Urban Form and Extent

Goal:

1-1. Designate the amount and extent of urban development necessary to accommodate planned urban growth consistent with available resources and the efficient provision of public facilities and services.

Policies and Implementation Measures

1-1.1 Within the plan boundaries, accommodate development of urban uses subject to compliance with applicable plans, policies, procedures, and standards.

~~1-1.2 Plan amendments within areas designated for urban reserve may occur only when it can be demonstrated that public services are adequate.~~

~~1-1.3 Within the designated urban reserve area, permit only that development which is consistent with the AE-5 and AE-20 zone classification.~~

Goal:

1-2. Provide for the location, diversification, and functional relationship of land uses necessary to implement the activity center, intensity corridor, balanced growth, and gradation of density concepts of the Fresno General Plan and Woodward Park Community Plan.

Policies and Implementation Measures

1-2.1 Planned uses shall be implemented in accordance with the plan designations and corresponding zone districts as set forth in Article 4, Chapter 12, of the Fresno Municipal Code (Procedures Applicable to Zoning). Amendments of the community plan to change goals, policies or planned uses shall be processed as set forth in Article 6, Chapter 12, of the Fresno Municipal Code (Local Planning and Procedures Ordinance).

~~The following table describes the land use designations, definitions, and corresponding consistent zoning.~~

~~TABLE 1-2.1~~
~~PLAN DESIGNATION/ZONE DISTRICT CONSISTENCY~~

PLAN DESIGNATION	CONSISTENT ZONE DISTRICT	CONSISTENT DENSITY
Residential Uses		
Rural	AE-5, AE-20, R-A	0-1.21 Units Per Acre
Low	R-1-A, R-1-AH, R-1-E, R-1-EH	0-2.18 Units Per Acre
Medium-Low	R-1-B, R-1-C R-1-B/PD	2.19-4.98 Units Per Acre
Medium	R-1, MH, R-1-C/PD R-1/PD	4.99-10.37 Units Per Acre
Medium-High	R-2-A, R-2, T-P, R-P*	10.38-18.15 Units Per Acre
High	R-3-A, R-3, R-4+, C-P*	18.16-43.56 Units Per Acre
Commercial Uses		
Neighborhood	C-1, C-L, C-R	
Community	C-2	
Regional	C-3, C-4	
General Heavy Strip	C-5, C-6, C-R	
Office	RP-L, R-P**, C-P** R-P, Planned Office Development C-P, Planned Office Development	
Industrial Uses		
Light	C-M, M-1, M-1-P	
Heavy	M-2, M-3	
Other Uses		
Open Space	0, AE-20	
Agricultural	0, AE-20	

* In the R-P or C-P zone district, pursuant to a Conditional Use Permit for a planned development, a maximum of 35 percent of the property may be developed with the nonresidential uses permitted in those zone districts.

** In the R-P or C-P zone district, pursuant to a Conditional Use Permit for a planned development, a maximum of 35 percent of the property may be developed with the residential uses permitted in those districts.

+ Thirty or more dwelling units per acre, in the R-4 district only, subject to a Conditional Use Permit.

NOTE: The method and procedure for determining zoning consistency in relation to this plan shall conform to Section 12-403 and Article 6 of the Fresno Municipal Code and any subsequent amendments thereto.

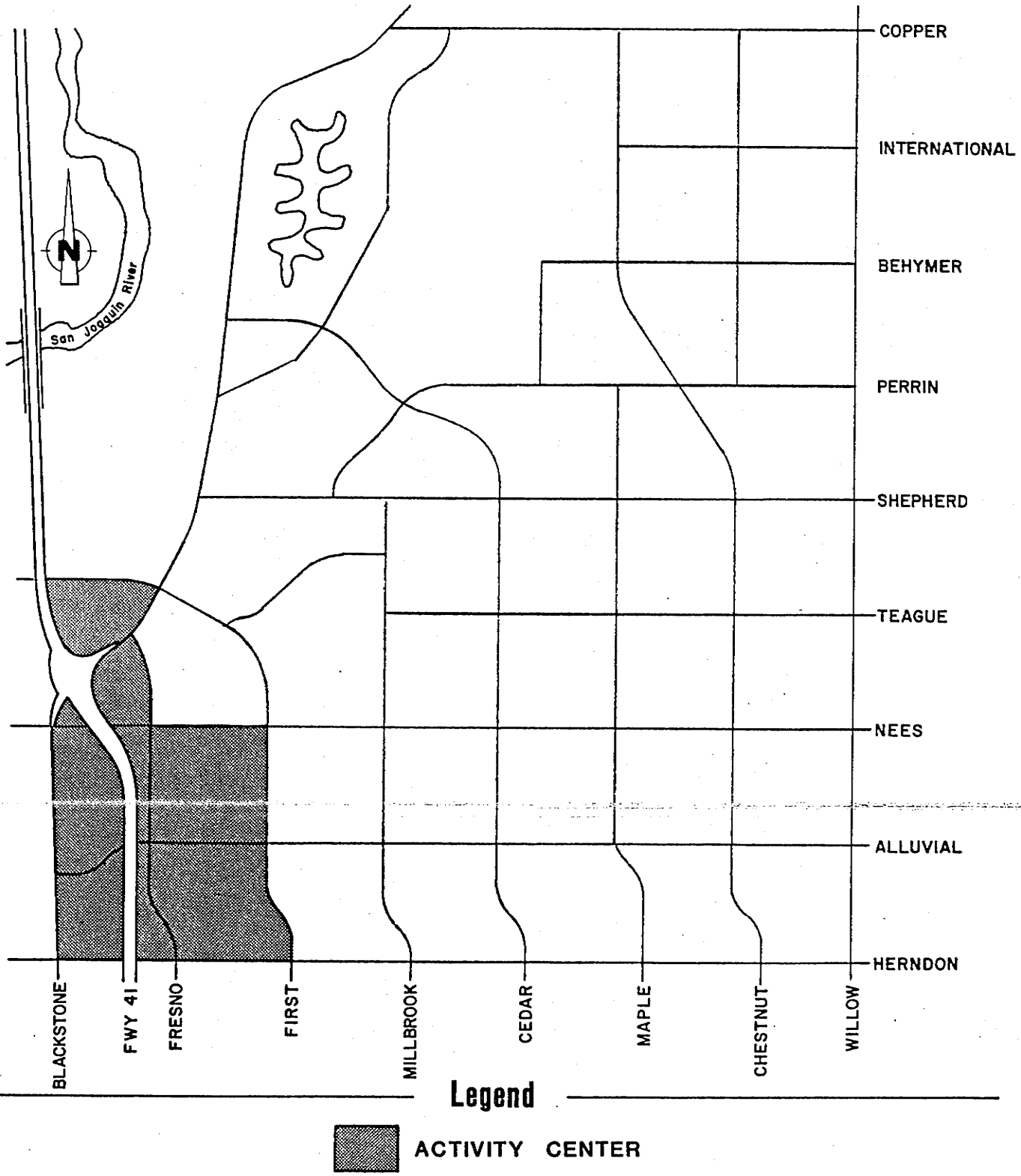
1-2.2 The Woodward Park community activity center, ~~generally bounded by Audubon Drive, Friant Road, Fresno Street, Nees Avenue, First Street, Herndon Avenue, and Blackstone Avenue (Figure 1-2.2),~~ shall serve as the focal point of community activity and travel, accommodating highly intensive residential, office, and commercial development including mid-rise structures west of Fresno Street and Friant Road.

1-2.3 The Herndon Avenue corridor, ~~generally bounded by the Spruce Avenue (quarter-mile street) alignment, Willow Avenue, Herndon Avenue, and First Street (Figure 1-2.3)~~ serves as an extension of intensive residential, office, and commercial uses that link several community planning areas.

~~1-2.4 Moderately intensive urban development including low, medium-low, medium, and medium-high density residential, small single-story office, neighborhood commercial, school, park, and quasi-public planned uses are to be distributed primarily outside of the identified high-intensity areas.~~

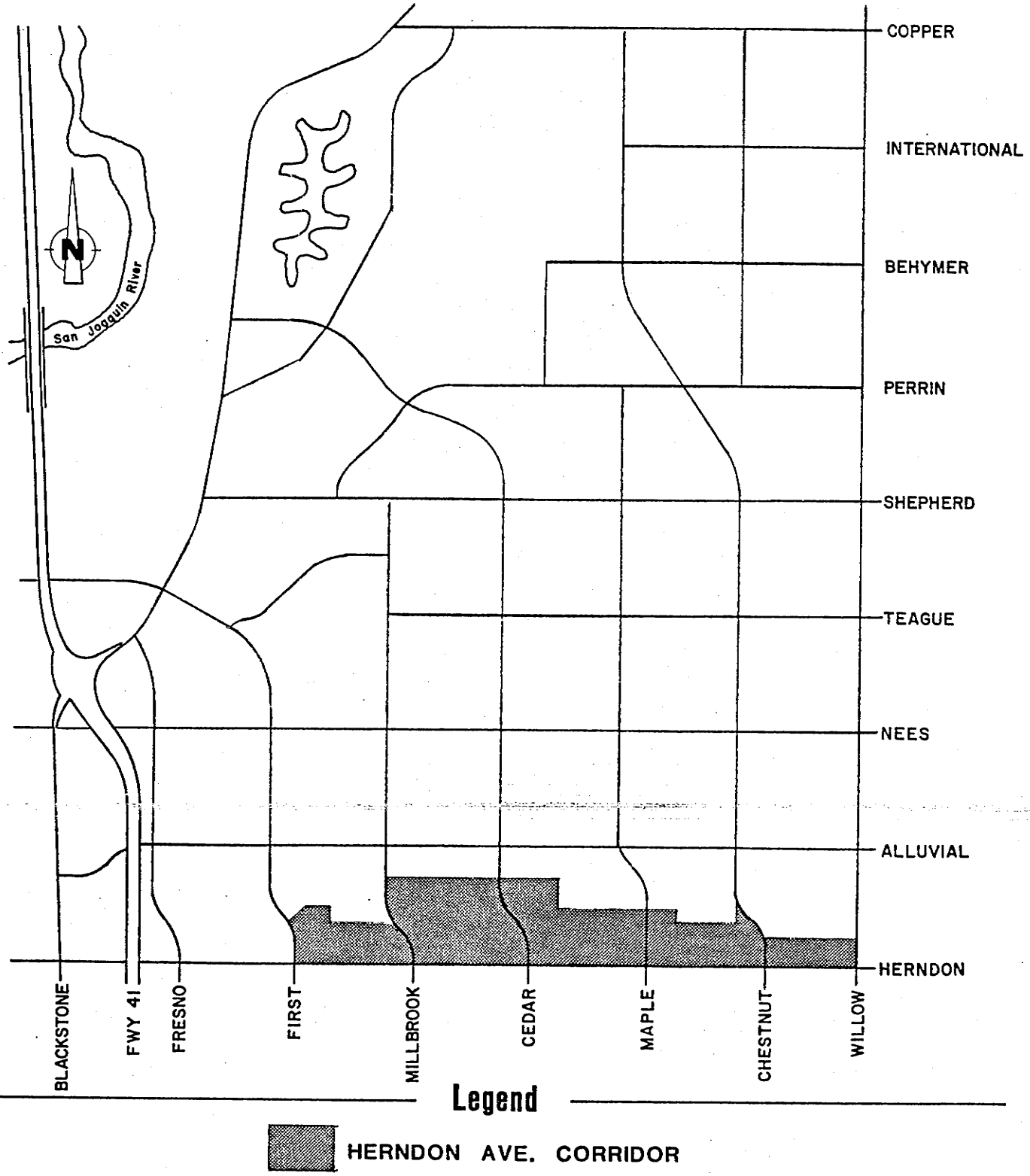
~~1-2.5 Agricultural uses are designated for the urban reserve area in order to discourage the premature urbanization of agricultural land until such time as urban development is determined appropriate in accordance with adopted plans, policies, and procedures.~~

FIGURE 1-2.2
Woodward Park Community Planning Area



CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

FIGURE 1-2.3
Woodward Park Community Planning Area



CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

Residential Uses

The Woodward Park community is located on the northeast fringe of the metropolitan area and was originally planned to function as a moderately intensive residential community, compatible with nearby agricultural and open space resources. Over the past decade, single-family residences have been developed as the prevailing land use, although development pressures for intensive residential uses have been strong. However, there has also been an increasing awareness of the public facility and resource constraints to urbanization. In response to past commitments and current information, medium-low density residential uses are planned to continue as the prevailing land use with more intensive development accommodated where appropriate.

Goal:

1-3. Plan for a diversity of residential types, densities, and locations in order to achieve plan goals with respect to providing housing opportunities, balanced urban growth, efficient use of resources and public facilities, and maintenance of a safe, attractive, and stable community.

Policies and Implementation Measures

1-3.1 Focus medium-high density residential uses within the activity center and Herndon Avenue corridor in order to meet housing needs for convenient access to employment, services, and transportation facilities.

1-3.2 In order to provide a desirable range and distribution of housing opportunities, medium-high density residential uses may be considered appropriate for sites outside the activity center and Herndon Avenue corridor, subject to compliance with the following criteria:

a. The site shall either have direct access to a major street or to a local street of sufficient capacity that does not pass through single-family neighborhoods prior to intersecting a major street and will not prevent the completion of a previously committed or needed local street circulation system.

b. The total number of potential multiple-family residential dwelling units utilizing the medium-high density residential designation within the Woodward Park Community Plan shall not exceed 35 percent of the total number of dwelling units planned for the Woodward Park Community Plan area.

~~c. The site is less than three acres in size, exclusive of rights of way.~~

~~d. The shape of the site is too narrow or shallow to accommodate local street access to single-family residential lots or the proximity to other uses (the site is bounded on two or more sides by major streets, office or commercial uses) is not conducive to single-family residential uses.~~

e. Assurance that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and surrounding community in accordance with adopted plans, policies, and development standards.

1-3.3 Density Transfer. Through the Conditional Use Permit process and as part of a unified project on one parcel or contiguous parcels, the residential density of part of the site may exceed the maximum density allowed by the plan designation -- provided that a portion of the site is developed at less than the maximum density permitted such that the entire project site density does not exceed the maximum density permitted under the applicable plan designation and that the density transfer will not reduce the desirability of surrounding areas for development of planned uses.

1-3.4 Mixed use development of a medium-high density residential designated site may be developed using the R-P or C-P zone districts in accordance with the zoning consistency and development standards of the Zoning Ordinance.

1-3.5 Medium density residential planned developments are appropriate for those sites that meet some, but not all, of the criteria for medium-high density residential use. An increased density, together with design flexibility, will facilitate the desirable and compatible development of a difficult parcel without reducing the level of service provided by planned public facilities.

~~1-3.6 The medium-low density residential designation shall be the predominant residential land use outside of the activity center and Herndon Avenue corridor.~~

~~1-3.7 The following dwelling units per acre (gross area excluding major street right-of-way) and persons per household averages shall be used to project population holding capacity and demands upon public services.~~

~~TABLE 1-3.7~~

~~DWELLING UNITS PER ACRE/PERSONS PER HOUSEHOLD~~

DESIGNATION	UNITS/ACRE	PERSONS/HOUSEHOLD
Rural	0.5	2.79
Low	1.5	2.79
Medium-Low	4.5	2.79
Medium	8.0	2.79
Medium-High	15.0	2.01
High	N/A	N/A

1-3.8 The following design guidelines shall be considered for application to all multiple-family residential development entitlements adjacent to land that is designated for single-family residential use. These measures are not prescriptive and may be modified where determined appropriate by the City of Fresno in order to best serve the health, safety, and welfare of the community. These measures may be waived where the adjacent single-family residential designated land is developed with or approved for a nonresidential use.

a. Outdoor recreational areas, game courts, swimming pools, and solid waste collection areas on properties zoned for multiple-family residential uses shall be oriented away from properties zoned or planned for single-family residential uses.

b. Parking areas, carports, garages, accessory structures, and access drives shall be separated from abutting properties zoned or planned for single-family residential use with a landscaped setback 15-feet wide in conjunction with a solid masonry wall six-feet high on the property line.

c. Multiple-family buildings greater than one-story (20 feet) in height shall be prohibited within 75 feet of property zoned or planned for single-family residential use.

Commercial Uses

The plan concept focuses office and commercial development within the activity center and Herndon Avenue corridor in order to take advantage of significant land use, public facility, and transportation attributes. These two areas provide a wide range of commercial and office development opportunities ranging from mid-rise buildings and a regional shopping center to small office complexes and convenience or commuter commercial centers. Outside of these high

intensity areas, office and commercial uses will be located to support the residential character and avoid unanticipated demands upon public facilities.

In order to provide a reliable and consistent basis upon which to make land use decisions, the plan establishes criteria for the amount and location of office and commercial uses according to neighborhood and community needs. These criteria will provide adequate development opportunities to facilitate the economic benefits of a competitive market while promoting neighborhood stability and the efficient distribution of resources.

Goal:

1-4. Plan for the appropriate location, size, and intensity of office and commercial developments necessary to meet metropolitan, community, and neighborhood needs in a manner consistent with the plan's concept of urban form and function with the objective of efficiently managing public facilities and resources.

Policies and Implementation Measures

1-4.1 Concentrate high intensive office and commercial developments, including mid-rise buildings where permitted by Section 12-321 of the Zoning Ordinance, serving metropolitan or community needs within the identified Woodward Park activity center consistent with that area's office, community, general heavy strip, and regional commercial designations.

1-4.2 Accommodate intensive office developments (one- to four-story buildings) serving metropolitan-wide community needs and commercial developments serving community and commuter needs within the Herndon Avenue corridor consistent with the office, community commercial, and neighborhood commercial designations.

1-4.3 Distribute a limited amount of moderately intensive commercial and office developments to serve community and neighborhood needs outside of the community's major activity center and Herndon Avenue corridor consistent with the demand factors and location criteria identified as follows:

~~a. Limit the maximum aggregate area of land designated for neighborhood and community commercial uses within the Woodward Park Community Plan to ratios of one acre per 1,000 people and .8 acres per 1,000 people, respectively.~~

~~b. Limit the maximum aggregate area of land designated for office use by the Woodward Park Community Plan~~

~~to a ratio of .5 acres per 1,000 people, excluding the office uses designated within the activity center and Herndon Avenue corridor.~~

c. Assure that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and the surrounding community in accordance with adopted plans, policies, and development standards.

d. Allow commercial uses to be developed only within unified shopping centers with a minimum site area of 2.5 acres located at the intersection of two arterial streets.

e. "Limit retail commercial uses to a maximum area of 10 acres at an intersection and distribute the commercial development between two corners of the intersection. At the two identified community commercial nodes where up to 25 acres may be developed, the total acreage may be distributed on three corners of the intersection."

f. "Limit office uses to structures of one-story (20 feet) in building height, unless developed as part of a unified development planned in conjunction with the plan area's two defined community commercial nodes, with a maximum floor area ratio of 25 percent of the lot area (Fresno Municipal Code Section 12-321-A.5). Limit office uses to building sites that do not exceed four acres in area located adjacent to existing or planned commercial uses with direct access to a major street except office uses in a unified development planned in conjunction with the plan area's two defined community commercial nodes.

g. Allow the location of day care centers outside of office designated areas on sites that have direct access to a major street and are specifically limited to child day care center use.

h. Locate new commercial development away from planned schools.

1-4.4 The following design measures shall be considered appropriate for application to office, commercial, and other nonresidential development entitlements adjacent to land that is designated for single-family residential use. These standards are not prescriptive, and may be modified through the development entitlement process in order to best serve the community's health, safety, and welfare or waived where the adjacent land is developed with a nonresidential use or approved for nonresidential development entitlements (zoning, special permit).

a. All loading and storage areas shall be screened from view of adjoining property zoned or planned for residential uses by a combination of landscape planting and a solid masonry wall. All loading spaces shall be located not less than 150 feet from the boundary of any residential property; however, the proximity of loading areas may be reduced to not less than 40 feet from the boundary of residential property if the Director of the Development Department or the Planning Commission finds that additional screening and noise attenuating methods have been designed to adequately protect adjoining residential property. All storage shall be within an enclosed structure. Outdoor storage is expressly prohibited.

b. Roof-mounted and detached mechanical equipment for commercial and office uses shall be screened from view and acoustically baffled to prevent the noise level rating for the equipment from exceeding 55 Ldn measured at the nearest property line.

c. A landscaped setback 20-feet wide containing deciduous and evergreen trees shall be planted and maintained along the property line between commercial and office uses and abutting properties zoned or planned for residential uses and along abutting local streets provided, however, that this requirement shall not apply to those parcels of land which are one acre or less in size or to parcels larger than one acre subject to Director review and approval of landscape plans.

d. No commercial or office building shall be constructed within 50 feet of the property line of abutting properties zoned or planned for residential uses.

e. The following wall and berm treatment shall be required for commercial uses and office uses:

(1) A solid masonry wall six feet in height, an earth berm six feet in height or any combination of solid masonry wall and earth berm which provides a continuous barrier six feet in height, shall be erected on or along the property line between properties zoned or planned for commercial and office uses and properties zoned or planned for residential uses.

(2) A solid masonry wall three and one-half feet in height, an earth berm three and one-half feet in height or any combination of solid masonry wall and earth berm which provides a continuous barrier three and one-half feet in height, shall be erected on or along the set-back line 20 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.

f. The provisions of the approved commercial or office district shall apply to outdoor advertising for commercial and office uses, excepting freestanding signs in a commercial district, wherein there shall be permitted one freestanding sign containing the name of buildings and occupants or groups thereof, and shall be not more than 125 square feet in area and not more than 20 feet in height, and shall not be located within any required landscaped setback or landscaped transition setback area.

g. Within an area 100 feet wide abutting property zoned or planned for residential use, exterior area lighting for parking areas, carports, garages, access drives, and loading areas for commercial and office uses shall be shielded to prevent line of sight visibility of the light source from abutting property zoned or planned for residential use.

Industrial Uses

The Woodward Park Community Plan contains no provisions for the standard light industrial-type use, whether it be light manufacturing or warehousing. Industrial needs have been more than met in the Pinedale area, in the City of Clovis, and in the City of Fresno's Enterprise Zone. The plan does, however, recognize the existence of certain agricultural and resource recovery-related activities which would normally fall into the industrial zoning classification and provides for their continued existence. Specific industrial uses falling into this category would be packing sheds, cold storage facilities, and sand and gravel recovery operations.

Goal:

1-5. Accommodate industrial activities that support agricultural and resource recovery uses and do not stimulate unplanned growth or premature conversion of agricultural and open space land to urban use.

Policies and Implementation Measures

1-5.1 Industrial activities shall be permitted only accessory to agricultural uses in accordance with the "AE-20" and "AE-5," Exclusive Agricultural Zone Districts, and the "0," Open Space Zone District.

Public and Quasi-Public Uses

This plan has established a new land use designation designed to encompass those public and quasi-public uses such as government-owned facilities, large churches, and schools. This designation has been created to provide for the more efficient use of public services, to enhance land use compatibility, and to allow for the identification of potentially major traffic generators. More specifically, by removing the traditional underlying residential land use designation normally used for these uses, substantial savings in the areas of sewer capacity and water services may be realized.

Goal:

1-6. Guide the location and intensity of public and quasi-public uses to support the planned urban form, relationship of land uses, and community identity.

Policies and Implementation Measures

1-6.1 Governmental and public utility and other quasi-public service offices should be ~~limited to local~~ facilities serving the immediate surrounding community and located within the community's activity center areas or Herndon Avenue corridor.

1-6.2 ~~Public~~ schools should be encouraged -- ~~and private schools required~~ -- to locate with vehicular access directly onto a major street, and pedestrian access oriented to a controlled major street intersection or the quarter-mile point along a major street.

1-6.3 Places of worship shall be located in accordance with the criteria applicable to ~~multiple-family residential uses~~ (Policy 1-3.2.a, ~~c,~~ d and e). ~~For sites in excess of three acres, a plan amendment designating the property for quasi-public facility use shall be required; but in any event, it must still conform to the requirements of Policy 1-3.2 a, d and e.~~

OPEN SPACE AND CONSERVATION

Public Parks, Recreation and Conservation Areas

It is the intent of this section to guarantee the preservation of the Woodward Park community's open space resources, to manage its

mineral resources, and to facilitate the area's current and future recreation needs. Open space planning is important in that not only does it provide protection for valuable mineral deposits and sensitive environments threatened by urbanization as well as protection from potential hazards such as flooding, but because it also provides for the psychological well-being of the community by offering an opportunity for relaxation and a change of pace from daily tasks. Through planning, open space resources can be organized to meet the community's needs for hiking, jogging, fishing, relaxation, and other recreational pursuits.

The open space element of this plan seeks to specifically provide for the continued expansion of the Woodward Regional Park as a passive park and bird sanctuary, the preservation of the San Joaquin Riverbottom, the development of neighborhood parks, and the implementation of a system of hiking and jogging trails, bike paths, and equestrian trails. It further seeks to ensure positive coordination with the Clovis Unified School District to maximize the availability of open space resources.

Goal:

2-1. Provide for the continuing development of a public park system that promotes the community's park and recreation needs at varying levels.

Policies and Implementation Measures

2-1.1 The public park system shall be ~~classified as follows~~, ~~to be~~ developed in accordance with the standards specified in the City's Master Plan of Parks, Facilities, Recreation, and Community Services:

Mini Parks (Pocket Parks) - Small (less than one acre) parks located near higher density development when adequate open space and recreational opportunities within the project area are not available.

School Grounds/Play Fields - School sites comprise a large inventory of recreational open space areas providing recreational space for organized activities such as soccer, youth baseball, tennis, exercise, and gym areas.

Neighborhood Parks - A passive park, five to ten acres in area, designed to serve residents living within a one-mile radius of the site or between 10,000 and 15,000 residents.

Community Parks - This park services an area within a two to four-mile radius of the site, and serves a population of between 50,000 and 80,000 residents.

It has lighted sport fields and specialized equipment not found in a neighborhood park.

The community park is the nucleus of the park system where members of the community congregate for area-wide functions or programs. At the heart of the park is the community center of 25,000 to 30,000 square feet, which provides at least the following facilities and services:

a. Gymnasium (with men's and women's showers and lockers).

b. Multipurpose room.

c. Meeting rooms.

d. Senior's activity center.

e. Administrative offices.

f. Snack bar and kitchen facilities.

Regional Parks - Regional parks are developed to serve residents living within each quadrant of the City. The park serves a population of approximately 100,000 residents, with a size of generally 100 or more acres. The regional park offers nonprogrammed nature-oriented recreational opportunities. Improvements include picnic shelters, hiking trails, lakes, streams, public gardens, and facilities not normally located in an urban setting.

Ponding Basins - The Fresno Metropolitan Flood Control District (FMFCD) provides many open space opportunities through the public use of recharge facilities that the FMFCD maintains as open play fields. There are currently three neighborhood parks in the City located within basin areas, with several more large basins turfed by FMFCD. Because the FMFCD has a continual funding source for attaining new basins and a good working relationship with the City, it is likely that basins will continue to provide important open space areas.

~~2-1.2 The City of Fresno's public park program for the Woodward Park community should adhere to the following standards:~~

~~TABLE 2-1.2~~
~~CITY OF FRESNO~~
~~RECOMMENDED PARK STANDARDS~~

PARK TYPE	ACRES/ 1,000	SIZE RANGE	POPULATION SERVED	SERVICE AREA
Playfield/ Schoolground	-----	1-2.5 ac.	3-5,000	1/4-1/2 mi.
Neighborhood	0.75	5-10 ac.	10-15,000	1/2-1 mi.
Community	0.25	15-20 ac.	50-80,000	2-4 mi.
Regional	2.00	100+ ac.	100,000	1/2 hr. drive
TOTAL	3.00			

2-1.3 Neighborhood parks shall be established at the locations designated on the community plan map and shall be funded by UGM fees. When there is 95 percent funding of the UGM district, the park shall be built within two years.

2-1.4 Encourage the Fresno Metropolitan Flood Control District to landscape and fully improve existing and future designated ponding and any designated recharge facilities for the aesthetic benefit of the community at large. In any event, the City shall encourage that portion of each facility which is visible from an adjacent street frontage to be landscaped.

2-1.5 In urban areas where space is unavailable for a park site, the City shall pursue the development of public jogging trails/bike paths, to be developed adjacent to public streets and to be a minimum width of 15 feet (measured from the adjacent curb face), of which eight feet must be paved with asphaltic concrete, said development to be the responsibility of the underlying property owner (see illustration in Appendix).

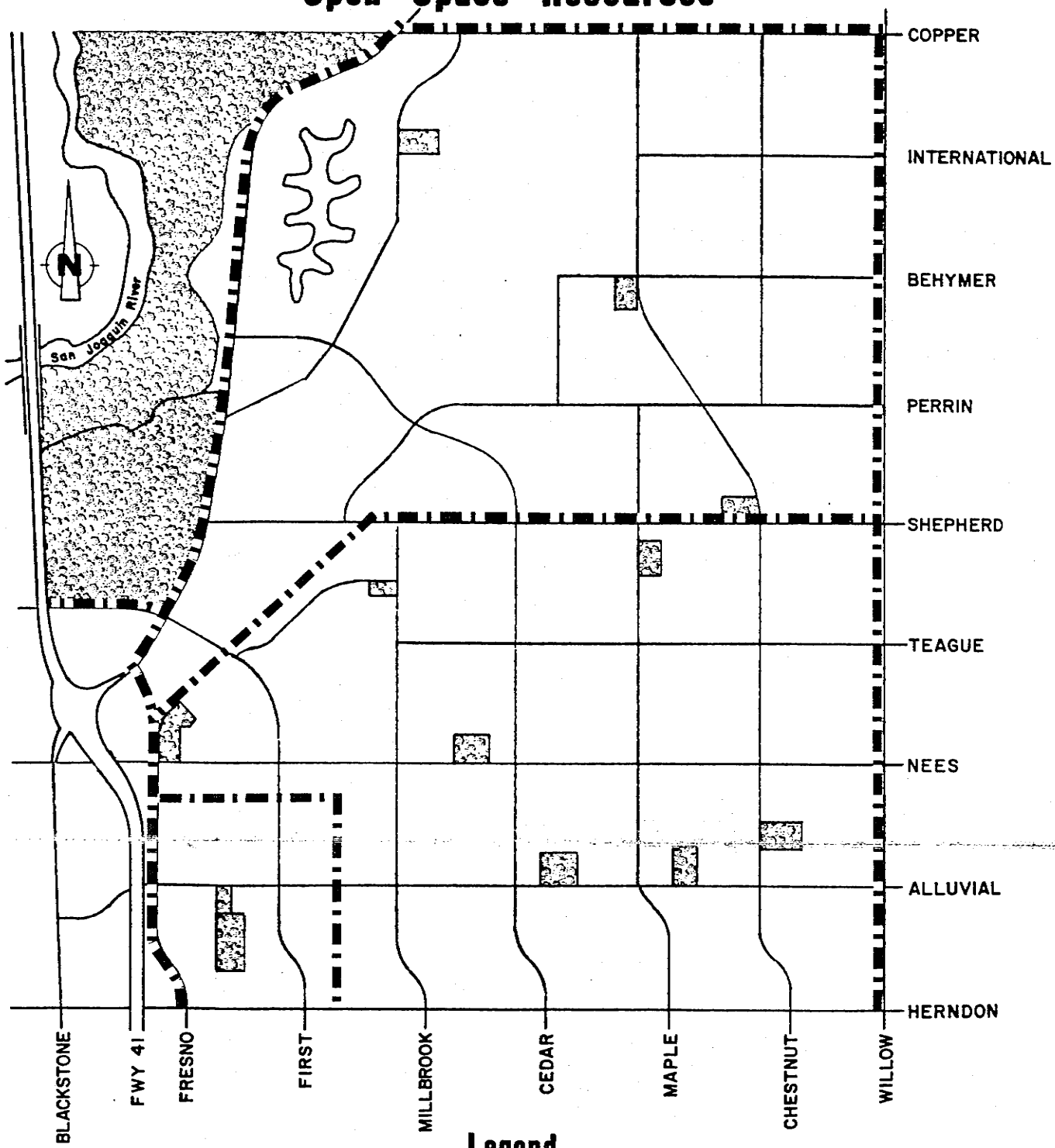
Goal:

2-2. Provide for the preservation of the San Joaquin Riverbottom's natural, scenic, and recreational resources through the preservation of open space areas located therein.

Policies and Implementation Measures

2-2.1 Preserve and enhance the remaining riparian areas in the San Joaquin Riverbottom ~~by rezoning the entire area to an "O," Open Space, designation~~.

FIGURE 2-1
Woodward Park Community Planning Area
Open Space Resources



Legend

Bike Path / Multi-Purpose Pedestrian Trail

Parks / Ponding Basins / Riverbottom

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

2-2.2 Urge the State Lands Commission to determine the extent of public ownership and public trust interest in the riverbottom.

2-2.3 Support the concept of a river parkway system for the riverbottom in coordination with Fresno County, Madera County, public interest groups, property owners and the State of California.

2-2.4 Support the expansion of the Woodward Regional Park into the riverbottom.

2-2.5 Establish the San Joaquin bluffs/river trail as part of a river parkway concept.

2-2.6 Require that the bluff vista points designated in this plan are developed in accordance with the specific standards set forth in the Appendix of this plan.

2-2.7 Maintain and enforce the requirements of the "BP," Bluffs Preservation Overlay District.

2-2.8 Allow for the extraction of the sand and gravel resources in the riverbottom in conformance with the Surface Mining and Reclamation Act and ~~existing~~ Conditional Use Permits.

2-2.9 Limit recreation uses within the San Joaquin Riverbottom and bluffs to activities such as hiking, fishing, horseback riding, picnicking, and camping that infringe minimally on natural vegetation and wildlife.

2-2.10 Complete studies addressing the limitations of the area's biotic community and hydrological status prior to the approval of any project in the San Joaquin Riverbottom.

2-2.11 Encourage the Fresno Metropolitan Flood Control District to actively monitor the impacts of storm water discharge into the San Joaquin River. Discharge of runoff from commercial or industrial land uses shall be prohibited.

2-2.12 Prohibit the location of any solid waste facilities of any type and/or transfer stations in the riverbottom.

Goal:

2-3. The City of Fresno shall provide for the conservation of

significant mineral resources located within the boundaries of the Woodward Park community while protecting the natural environment and surrounding uses from the adverse effects of mineral extraction operations.

Policies and Implementation Measures

2-3.1 Provide for the conservation of significant mineral resources by cooperating with the County of Fresno and the State of California in identifying and mapping areas containing these deposits.

2-3.2 Prohibit the development of land uses that preclude mineral extraction within existing or potential surface mining areas, as identified in the Conservation Element of the City's General Plan.

2-3.3 Develop and maintain maps and descriptions of potential mineral and energy resources as a basis for policy and program implementation.

2-3.4 Document current sand and gravel quarries, including the status and duration of existing permits and approvals, to avoid near-term land use conflicts and provide a basis for compliance monitoring.

2-3.5 Support local mapping and research programs of the California Division of Mines and Geology and federal agencies that locate and describe mineral and energy resource deposits.

2-3.6 Cooperate with governmental agencies and educational institutions to arrange for the development and exchange of information on mineral resources.

2-3.7 Establish buffer zones of compatible uses ~~(such as industry and agriculture)~~ adjacent to mineral resource zones.

2-3.8 Require discretionary approval for specific development proposals for mineral extraction.

2-3.9 Pursue the procedures and requirements of the California Environmental Quality Act to minimize land use conflicts and reduce environmental impacts of all proposed resource extraction operations.

2-3.10 Design resource extraction operations to maintain the integrity of areas of "high environmental quality" and of scenic areas designated by the City.

2-3.11 Require all mineral extraction permits to be predicated on appropriate reclamation plans that meet the standards of the City, the State Mineral and Reclamation Act, and the ~~implementing~~ guidelines of the State Mines and Geology Board. Reclamation/restoration of the sites shall be done as each phase of development or extraction is completed.

Goal:

2-4. Provide adequate on-site usable open space for individual residential projects.

Policy and Implementation Measure

2-4.1 Require a minimum of 25 percent of the net area of a multiple-family residential or cluster planned development site to be developed as usable open space. Usable open space is defined as being easily accessible to the units served, clustered to provide adequate space for passive usage (i.e., by children for unstructured play, adult conversations, walking, sitting, etc.), and landscaped in a manner that is conducive to its use. The 25 percent calculation of usable open space may include private yard/patio space and community water features, but shall not include required building setbacks, driveways, and parking area.

Goal:

2-5. Preserve prime agricultural lands and protect existing farming operations from encroaching urbanization.

Policies and Implementation Measures

~~2-5.1 Preserve prime farmland for continued agricultural use to the fullest extent feasible consistent with the protection of the environment, public safety and well-being, and the planned, orderly, efficient development of the urban area~~.

~~2-5.2 Encourage project development proposals that result in the in-filling of existing urban areas, including small parcels of farmland that have become surrounded by urban or industrial uses~~.

~~2-5.3 The boundaries for planned urban uses shall be drawn~~

~~as straight as circumstances permit in order to eliminate "peninsular effects" (i.e., intrusions of farmland into urban areas or vice versa).~~

~~2-5.4 Continue to recognize the agricultural preserve contracts (i.e., Williamson Act) and promote the enrollment of all prime farmland within its domain that remains outside of its anticipated urban growth area. The City should assist eligible landowners in becoming aware of the Act, preparing contracts, and securing tax benefits. Scenic or resource conservation easements should be explored as a suitable means for protecting prime farmland that is located adjacent to residential areas and where the property does not qualify for inclusion in the agricultural preserve program.~~

Scenic Vistas

The Woodward Park Community Plan area's location along the San Joaquin River, near the Sierra Nevada Mountain Range, provides opportunities for scenic vistas and visual quality which is unique to the Fresno Metropolitan Area. Although scenic vista points have not been previously identified within the Woodward Park Community Plan, public ownership of the bluff top area and existing vehicular access points facilitate its establishment. These vista points would accommodate limited public access in order to allow passive recreational enjoyment of the panoramic views.

Goal:

2-6. Provide opportunities for the public's visual enjoyment of the unique scenic qualities of the San Joaquin River's riparian environment and the alpine vistas of the Sierra Nevada Mountain Range.

Policies and Implementation Measures

2-6.1 Develop a minimum of two vista points along the San Joaquin River Bluff.

2-6.2 Encourage the preservation and enhancement of eastward-oriented vistas in the designing of residential streets and open space features (such as east-west street alignments which are also compatible with State Subdivision Map Act design requirements to facilitate passive heating and cooling opportunities).

2-6.3 Implement designated recreation trails and bikeways linking open space features of the community plan to facilitate access to, and enjoyment of, these passive recreational opportunities.

Equestrian Trails

An equestrian trail system is proposed for the planning area that would provide for the location of a combination horse/pedestrian trail system in the San Joaquin Riverbottom, ~~another along a substantial portion of the Southern Pacific Railroad line running from Fresno Street and Nees Avenue to Shepherd and Willow Avenues, and a continuous trail along the planning area's northern and eastern fringes to be developed in a manner that would allow for future connections to the City of Clovis's planned equestrian trail system.~~ These multipurpose trails, approximately 25 feet in width, must allow for a nine-foot clearance aboveground and for the development of a suitable composite surface that can accommodate both equestrian and pedestrian traffic. In addition, provisions for staging (horse trailer parking) and watering areas should also be encouraged.

Goal:

2-7. Provide for the development of a comprehensive equestrian trail system within the Woodward Park community that is free from conflict with vehicular traffic.

Policies and Implementation Measures

2-7.1 Implement an equestrian multipurpose trail in the riverbottom area.

~~2-7.2 Provide for an equestrian trail along Copper and Willow Avenues that would link the planned City of Clovis equestrian trail system to the proposed San Joaquin River trail system.~~

2-7.3 Ensure that equestrian trails are compatible with pedestrian right-of-ways.

2-7.4 Evaluate the feasibility of using utility easements for the development of future equestrian trails.

~~2-7.5 Plan for the utilization of the Southern Pacific Railroad line as a possible equestrian trail should that railroad be abandoned.~~

2-7.6 Provide for the development of staging (horse trailer parking) and watering areas periodically along each trail.

~~2-7.7 Explore use of the Enterprise Canal as an equestrian trail.~~

CIRCULATION

Streets and Highways

In the City of Fresno, major streets are normally planned on an alternating grid basis, with collector and arterial streets spaced at half-mile intervals and relieved on an irregular basis by existing expressways and Freeways 99 and 41. In the Woodward Park area, the normal grid system is incomplete primarily due to the proximity of the San Joaquin River and previous land use decisions.

Because of this, much of the traffic generated in the community will be forced to utilize either the Freeway 41 corridor or Cedar Avenue to access the rest of the metropolitan area. In order to minimize the resulting potential for increased congestion, the area's circulation system has been redesigned to direct traffic away from North Cedar Avenue toward three points: (1) the future Freeway 168; (2) Herndon Avenue and Freeway 41; (3) Friant Road and Freeway 41; and to interface with a designated future transit corridor located adjacent to and parallel with Freeway 41.

Existing transit facilities would be centered near the proposed regional center, where possible, providing the basis for an expanded transit system in the area. Finally, conflicting land use patterns along Herndon Avenue and Friant Road, where property remains undeveloped, would be redesignated to avoid unnecessary congestion and potential vehicular gridlock.

Goal:

3-1. Provide for a safe and efficient street system that promotes the efficient movement of people and goods throughout the Woodward Park area.

Policies and Implementation Measures

3-1.1 The public street system shall be classified, as follows, with development to occur in accordance with adopted Public Works standards.

Freeway - Provide service to through-traffic exclusively, with no access to abutting property and no at-grade intersections.

Expressways - Provide service to through-traffic via four or six-lane divided roadways with no access to abutting property. Utilizes at-grade intersections.

Super Arterial - Six-lane divided roadway with no full-median breaks permitted between the half-mile points,

being characterized by limited access from abutting properties, whose primary purpose is to move traffic in and out of the plan area.

Arterials - Four to six-lane divided roadway, with limited access to abutting properties, whose primary purpose is to move traffic in and out of the plan area.

Collectors - Four-lane undivided roadway, whose primary function is to connect local streets with arterials and to provide access to abutting properties.

Locals - Utilized exclusively for property access with through-traffic actively being discouraged.

~~3-1.2 Design local residential streets to discourage through and/or nonresidential traffic~~.

3-1.3 Where two classified streets (e.g., arterial and collector) form a "T" intersection, a local street shall not be the fourth leg of the intersection.

~~3-1.4 Promote a level of Service "D" as the maximum acceptable level of congestion on all public streets within the Woodward Park area~~.

~~3-1.5 Prior to the approval of any development north of International Avenue, between North Millbrook and Maple Avenues, a comprehensive local street system shall be plan lined with direct links to Millbrook, Copper, Maple, and International Avenues.~~

Goal:

3-2. Protect and enhance the carrying capacity of all major streets within the planning area.

Policies and Implementation Measures

3-2.1 Space and coordinate traffic signals to minimize vehicular delay.

3-2.2 Provide additional right-of-way and pavement width to accommodate turn lanes at intersections in accordance with Department of Public Works standards.

3-2.3 New single-family residential lots shall not be allowed to front on a major street unless it can be satisfactorily demonstrated that no feasible alterna-

tive means of access can be provided to the property. Evaluation of alternative means of access shall include the consideration of frontage roads, backup treatment, and substantial redesign of the subdivision proposal.

3-2.4 Full-median breaks on arterials may be provided only at quarter, half, and one-mile intersections, to be developed with left-turn lanes at each break.

3-2.5 Consider the construction of grade separations for all expressway intersections unable to meet an "E" level of service.

Goal:

3-3. Minimize the impact of commercial and through-traffic on the Woodward Park area's circulation system and on sensitive land uses.

Policies and Implementation Measures

3-3.1 Minimize the number of driveway access points on all major streets to protect traffic flows.

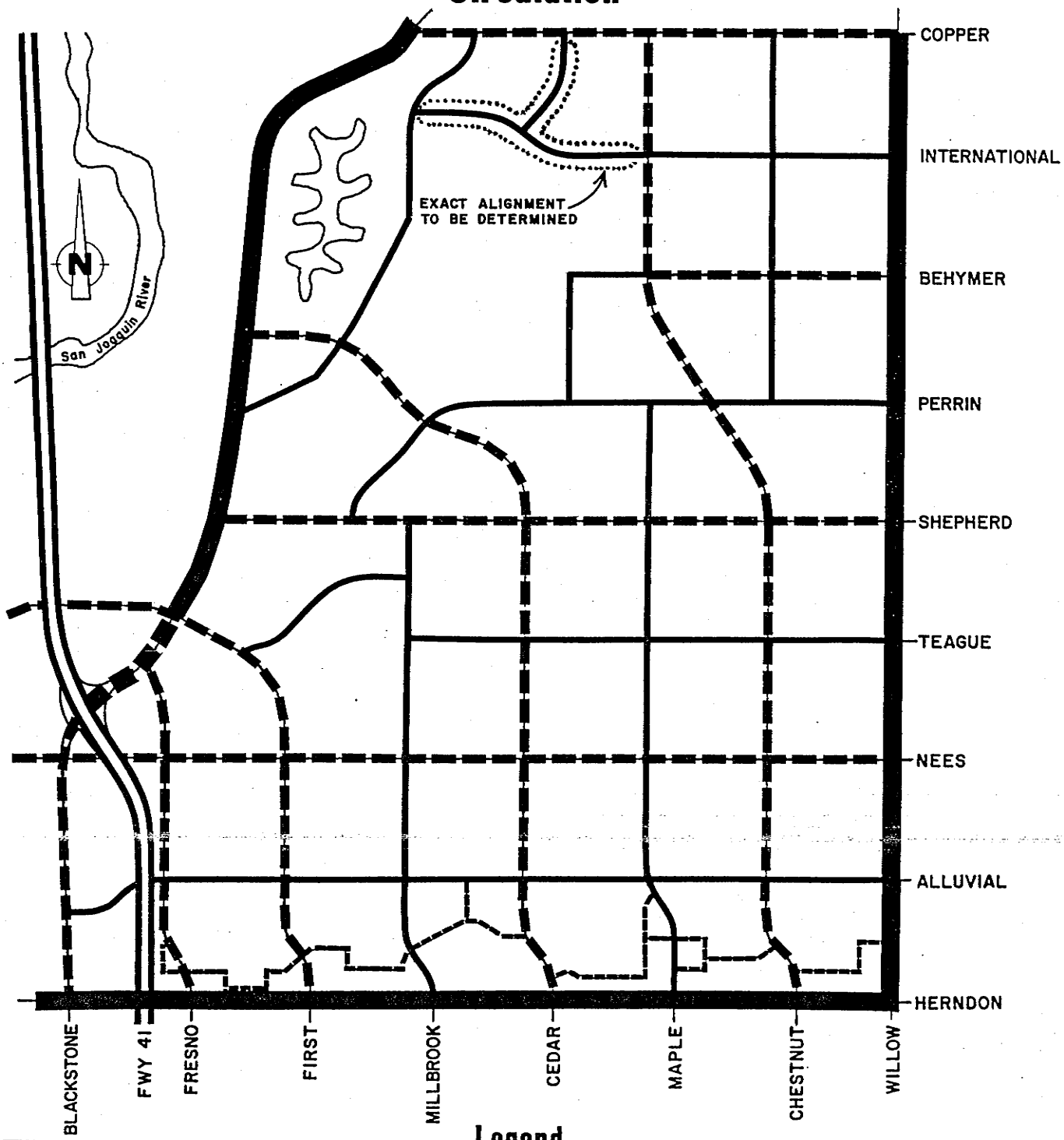
3-3.2 Retail commercial development at the intersection of an expressway and a major street shall gain access to the major street at least one-eighth (1/8) of a mile from the intersection. Signalized access shall be located no closer than a quarter of a mile from an expressway, except as modified by a specific traffic study or environmental impact report.

3-3.3 Prohibit the approval of additional commercial development on expressways beyond that already planned in order to protect that classification of streets important for a metropolitan-wide traffic-carrying role.

3-3.4 Require mitigation measures to lessen the effect of traffic noise along expressways on adjacent residential property for all new residential uses (pursuant to the Noise Element of the General Plan, Title 24 of the California Administrative Code and the Expressway Overlay District, Section 12-224 of the Fresno Municipal Code) and encourage such measures for existing residential property to the extent feasible.

3-3.5 Design access to collectors and arterials from commercial and office uses to minimize traffic disruption.

FIGURE 3-1
Woodward Park Community Planning Area Circulation



Legend

- Freeway
- Expressway
- Super Arterial
- Arterial
- Collector
- Herndon corridor local street

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

3-3.6 Limit designated truck routes to arterials and expressways specifically signed for that purpose.

3-3.7 Prohibit truck traffic from non-truck routes except as necessary for direct property access.

3-3.8 Locate truck access to commercial property at the maximum practical distance from adjacent or nearby residential properties.

Goal:

3-4. Provide for a street system that creates a positive image of the Woodward Park area and contributes to the area's residential quality of life.

Policies and Implementation Measures

3-4.1 Provide and maintain landscaping on both sides and in the median of arterial streets.

3-4.2 Provide and maintain landscaping on both sides of collector and local streets, inclusive of the mouth of local streets.

~~3-4.3 Prohibit parking on all major streets where these streets are planned for bike lanes.~~

3-4.4 Design transportation improvements to minimize noise impacts on adjacent uses.

3-4.5 Design local street systems to minimize through-traffic movements and include short block lengths to discourage excessive speeds.

3-4.6 Planned expressways and arterials shall be developed with a mandatory 20-foot landscaped setback, except where a multipurpose trail is proposed.

3-4.7 Develop Audubon Drive as a scenic boulevard with a 50-foot landscaped setback to be measured from the property line

3-4.8 Designate Shepherd Avenue as a scenic boulevard to be developed with a 30-foot landscaped setback to be measured from the property line.

3-4.9 Designate Millbrook Avenue, between Copper Avenue and Fort Washington Road, a scenic boulevard wherein the

existing eucalyptus grove and landscape patterns will be preserved.

3-4.10 Apply the Expressway Area (EA) Overlay District to Herndon Avenue, ~~Willow Avenue~~, and Friant Road.

3-4.11 Recognize the scenic highway designations of Friant Road, North First Street, and Audubon Drive, as specified in the 1984 Fresno General Plan.

Goal:

3-5. Provide for a street system that is supportive of public transportation.

Policies and Implementation Measures

3-5.1 Identify the need for the location and implementation of bus turn lanes, bus bays, and bus stops. The Public Works Department shall work in conjunction with the Fresno Area Express (FAX).

3-5.2 Develop a transit terminal to focus transit services in the area in the immediate vicinity of Freeway 41 and Nees Avenue.

3-5.3 Encourage the Fresno County of Governments to initiate a study of the feasibility of constructing a mass transit system in the Freeway 41 corridor paralleling the freeway.

3-5.4 Minimize the impacts of development on the circulation system. Review all site plans, development entitle- ments, and plan amendments with respect to its impact on the transportation system, and require revisions as necessary.

3-5.5 Prevent streets and intersections from degrading below level of Service "D" (as defined in a level of ser- vice ordinance) due to new development or expansion of existing development ~~with a three-part mitigation program: adjacent right-of-way dedication; access improvements; and, an area-wide impact fee~~.

Bikeways

In order to provide a continuous and well-integrated bikeway system

linking open spaces and major public uses, the Woodward Park Community Plan directs the implementation of bikeways along all major streets. These bikeways are to be implemented primarily as bike lanes along the outside edges of the street pavement. Where an additional ten feet of street width is not provided, this will necessitate the prohibition of on-street parking. However, it must be recognized that future increases in traffic volumes and congestion due to increasing urbanization or overintensified development of major street intersections could generate competing demands for use of available street width.

Goal:

3-6. To provide a continuous and easily accessible bikeway system within the Woodward Park Community Plan area.

Policies and Implementation Measures

3-6.1 Develop a continuous bikeway system that provides linkages to other bicycle facilities and access to major traffic generators such as commercial centers, school, recreational areas, and major public facilities.

3-6.2 Provide geographical coverage of the Woodward Park community with a bikeway system developed generally at half-mile or less intervals.

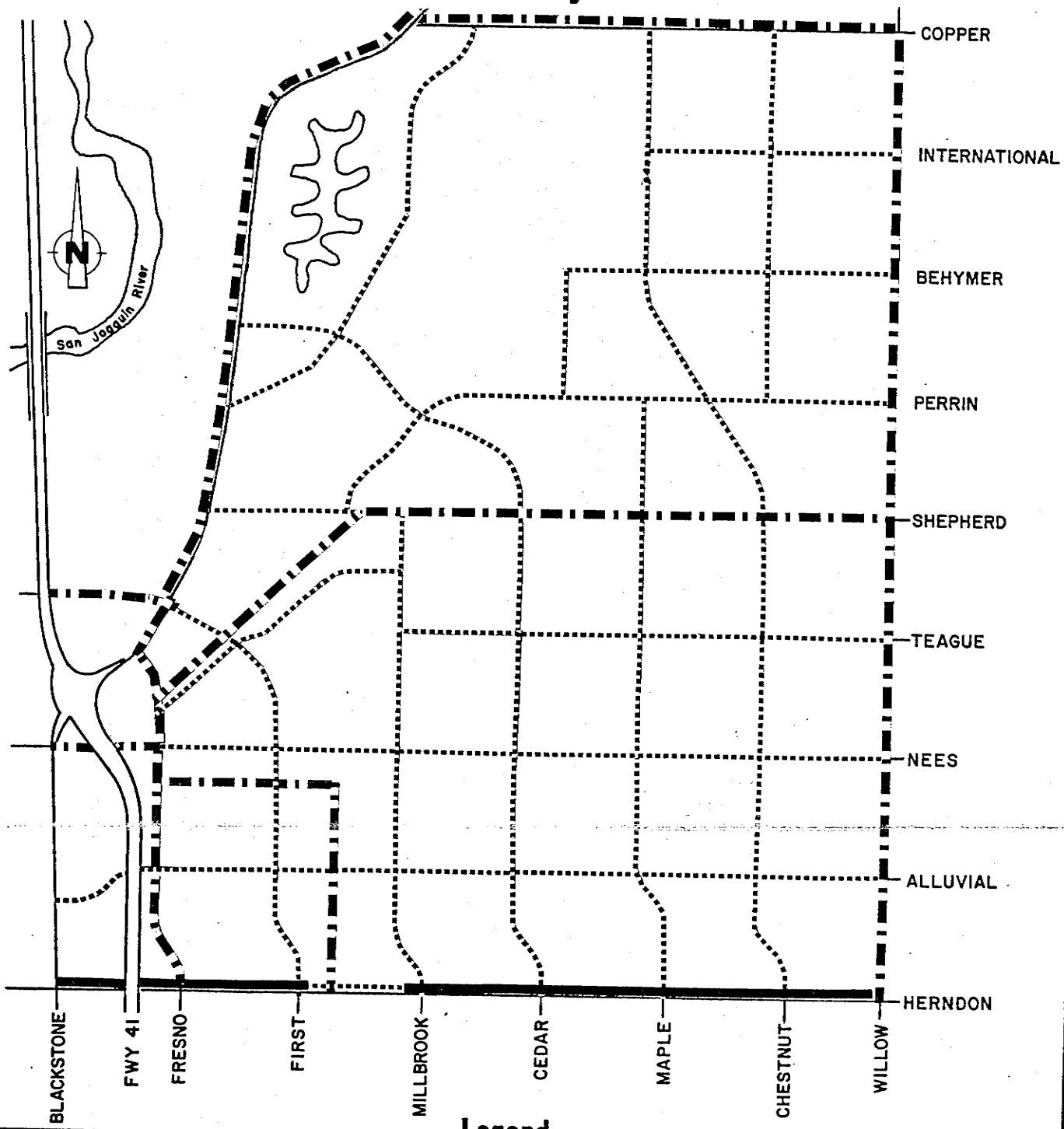
3-6.3 Require, as a condition of approval of new development adjacent to designated bikeways, that the bikeway be provided.

3-6.4 Provide not less than ten feet of street width to implement bike lanes for designated bikeways unless impractical due to previous street improvements, and provide adequate easement and improvements to implement separate bike paths where designated by the bikeways plan.

Goal:

3-7. Maintain bicycle facilities so that they are safe and secure.

FIGURE 3-6
Woodward Park Community Planning Area Bikeways



Legend

- Bike Path / Multi-Purpose Pedestrian Trail
- Bike Path
- Bike Lane

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

Policies and Implementation Measures

3-7.1 Provide sweeping and other necessary maintenance to clear bikeways of dirt, glass, gravel, and other debris.

3-7.2 Initiate a program to install safe drainage grates along designated routes.

3-7.3 Provide adequate route lighting.

3-7.4 Initiate the installation of bicycle locking racks at public buildings, public parking lots, and public recreation facilities.

3-7.5 Amend the Zoning Ordinance to include provisions for bicycle parking facilities in the off-street parking requirements.

3-7.6 Encourage the inclusion of bicycle locking facilities in large multiple-family developments.

Goal:

3-8. Facilitate linkages between cycling and other modes of transportation.

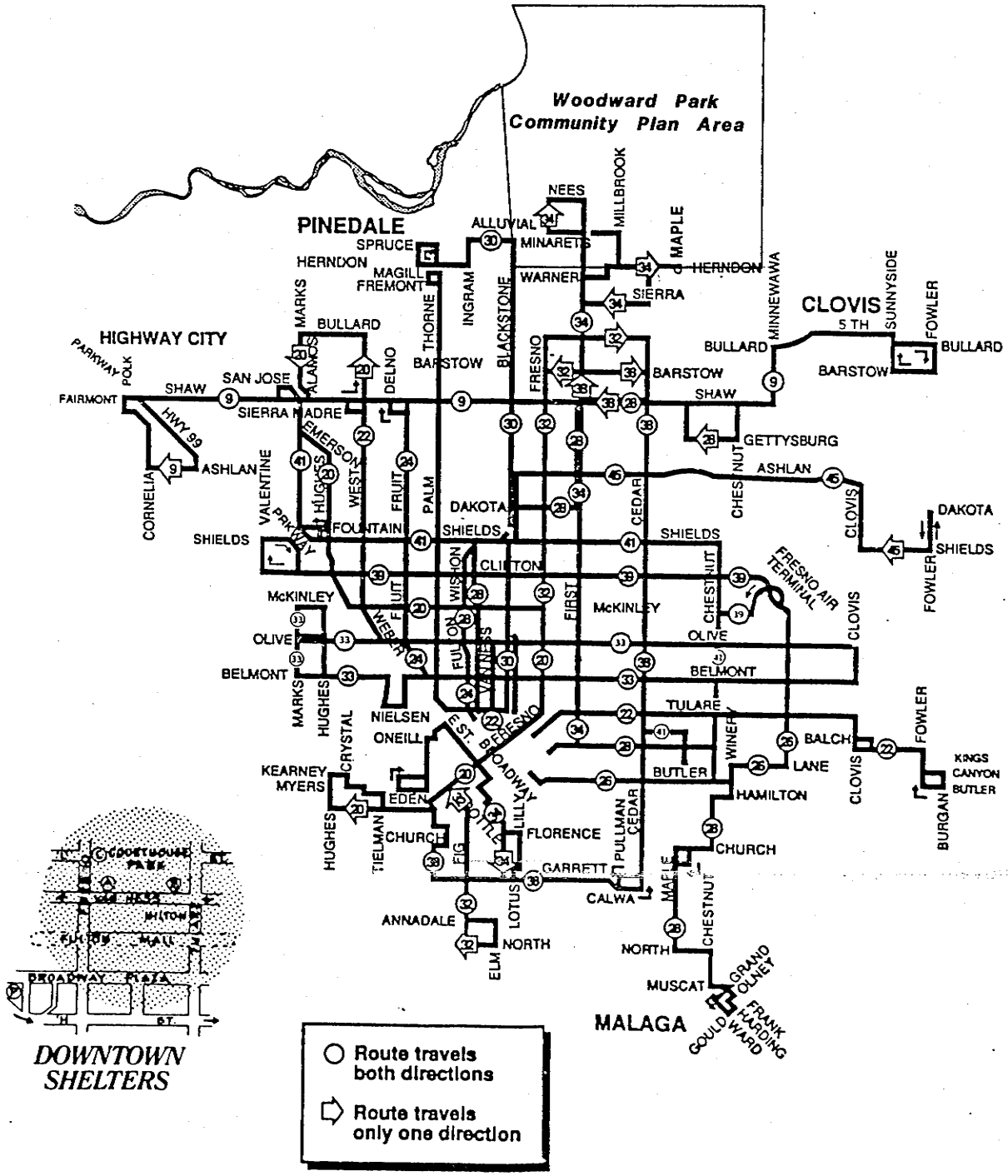
Policy and Implementation Measures

3-8.1 Incorporate bicycle locking racks at transportation facilities such as transit transfer stations or park-and-ride lots.

TRANSIT

Because of the relatively low density of development within the Woodward Park community, the automobile remains the primary vehicle of transportation. However, in order to reduce the use of and reliance on the automobile, and to lessen the potential for air pollution, the City's Fresno Area Express (FAX) provides bus service to the community via a grid system utilizing the City's major streets. Furthering these efforts, the City will augment its present and future transit efforts in the Woodward Park area by: (1) pursuing land use patterns compatible with public transportation; (2) creating a transit transfer station in the immediate vicinity of Freeway 41 and Nees Avenue; and (3) providing for the development of a mass transit system within the Freeway 41 corridor.

FIGURE 4-1
Woodward Park Community Planning Area
FAX Bus Routes



Goal:

4-1. Develop a street system and land use policies that support public transportation, thereby reducing traffic congestion and improving air quality.

Policies and Implementation Measures

4-1.1 Provide bus turnouts along expressways, arterials, and collectors, where appropriate.

4-1.2 Require new development to install indented curbs for bus pullouts, bus shelters, and other transit-related public improvements, where appropriate.

4-1.3 Develop park-and-ride lots at appropriate locations to support public transit and car-pooling.

4-1.4 Provide for the future development of a mass transit system within the Freeway 41 corridor.

4-1.5 Provide for the development of a transit transfer station in the immediate vicinity of Freeway 41 and Nees Avenue to serve as a focal point for the Woodward Park area's transit system and to connect the community with transit services to other portions of the City.

HOUSING

The Woodward Park community, unlike many new developing areas throughout the state of California, provides a wide range of housing types (single-family homes, planned developments, apartments, and estate lots) interspaced with a mixture of commercial and institutional land uses. While a majority of the community is developed predominantly with detached single-family homes, apartments, condominiums, and planned unit developments comprise a substantial portion of the area's housing stock.

Apartments will constitute approximately 35 percent of the community's planned housing with concentrations located not only near the planning area's major activity center, but also strategically throughout the community along major streets and within Woodward Park's two major planned communities. It is important to realize the area's diversity in housing densities ensures a wide range of economic accessibility to housing for all income groups. It also substantially mitigates against the development of monotonous neighborhoods unrelieved by housing diversity.

It is the intent of this plan to continue to promote this diversity in housing stock by providing for a range of densities, thereby ensuring the future accessibility to housing for the widest range of economic lifestyles. It is also the intent of this plan to continue to protect the single-family character of the area and to ensure that future residential uses develop in a manner consistent with adopted plans.

Goal:

5-1. Provide an adequate supply of sound, affordable housing to meet the housing needs of the area.

Policies and Implementation Measures

5-1.1 Foster the production of housing to serve the entry level housing market for the first-time home buyer through mortgage revenue bonds and other low and moderate-income housing programs.

5-1.2 Facilitate the development of new elderly housing projects that are accessible to public transportation and services. Elderly housing projects shall not be converted to nonelderly housing.

5-1.3 Encourage the development of child care facilities coincident with new housing development and a noncommercial, nonresidential zone district to accommodate them.

5-1.4 Monitor and control the conversion of rental housing projects to condominium projects to prevent an imbalance in the rental-ownership supply from becoming acute (less than five percent rental vacancy).

5-1.5 Encourage the development of a balanced housing stock in the planning area, including a variety of housing types, ownership configurations, and prices based on the following guidelines:

a. Location of medium-high density housing shall be encouraged ~~primarily near the major activity center~~, as designated on the land use map and near the intersections of arterial/arterial and arterial/expressway designated streets.

b. Encourage the development of mixed use housing ~~through the use of the density transfer provisions of the land use section of this plan~~.

c. Allow secondary (Granny) housing units on qualifying parcels.

5-1.6 Comply with the policies and recommendations of the City's Housing Element.

PHYSICAL GROWTH AND CHANGE

The Woodward Park Community Plan concept is one of managed growth wherein major capital investments for new physical infrastructure are limited, and the capacities of existing service delivery systems, such as sewer and water, are maximized. Under this concept, new growth would only be allowed where it can be clearly demonstrated that public services are readily available. This concept would designate areas lacking such services as being appropriate for urban reserve.

Urbanization within the urban reserve area could not be considered prior to updating the General Plan, which is scheduled for completion in 1994. The General Plan update will determine future growth directions for the City and, based on a number of issues including those related to balanced urban growth and public service delivery system constraints, will examine the appropriateness of development within or beyond the urban reserve area.

With the completion of the General Plan update, growth into areas designated for urban reserve would be governed by a number of factors including: (1) ongoing monitoring of the City's sewer system; (2) the results of the City's pending north metropolitan area water study; and (3) compatibility with the policies and land use patterns of the Woodward Park Community Plan.

For plan amendments that represent an intensification of an approved urban land use, a finding must be made that sewer capacity is available over and above that reserved for planned development elsewhere in the Woodward Park community and that portion of the Bullard community served by the Herndon Trunk Sewer. In addition, a finding by the Public Works Department that sufficient potable water exists to serve the amendment proposal must accompany each amendment request.

Since sewer capacity has the most definable limitation (though water service is the most important), specific unit equivalents for the Herndon sewer service area should be established by the City's Public Works Department. The unit equivalents represent the maximum available unit development to be permitted in the Herndon sewer service area, and are to be based on the assumption that each person served will generate 105 gallons of sewage per day and each

unit contains 2.79 persons. Specific densities for residential use are cited in Policy 1-3.7 of this plan. Commercial flows will be calculated at 1,750 gallons per acre per day, with a peaking factor of 1.5 to be factored into each service area to achieve maximum allowable flows.

A copy of the sewer study is contained in the Appendix. Figure 6-1 shows the boundaries of each service area.

In order to guide and provide public input into the 1994 General Plan process, the Woodward Park Advisory Committee has developed a land use plan that projects and establishes the future character of urbanization out to the planning area's northern and eastern limits (see Appendix).

It is the Committee's intent, provided public resources are available and environmental factors permit, that this advisory plan be utilized to convey and perpetuate an overall character for the area should additional growth into areas designated for urban reserve be deemed appropriate.

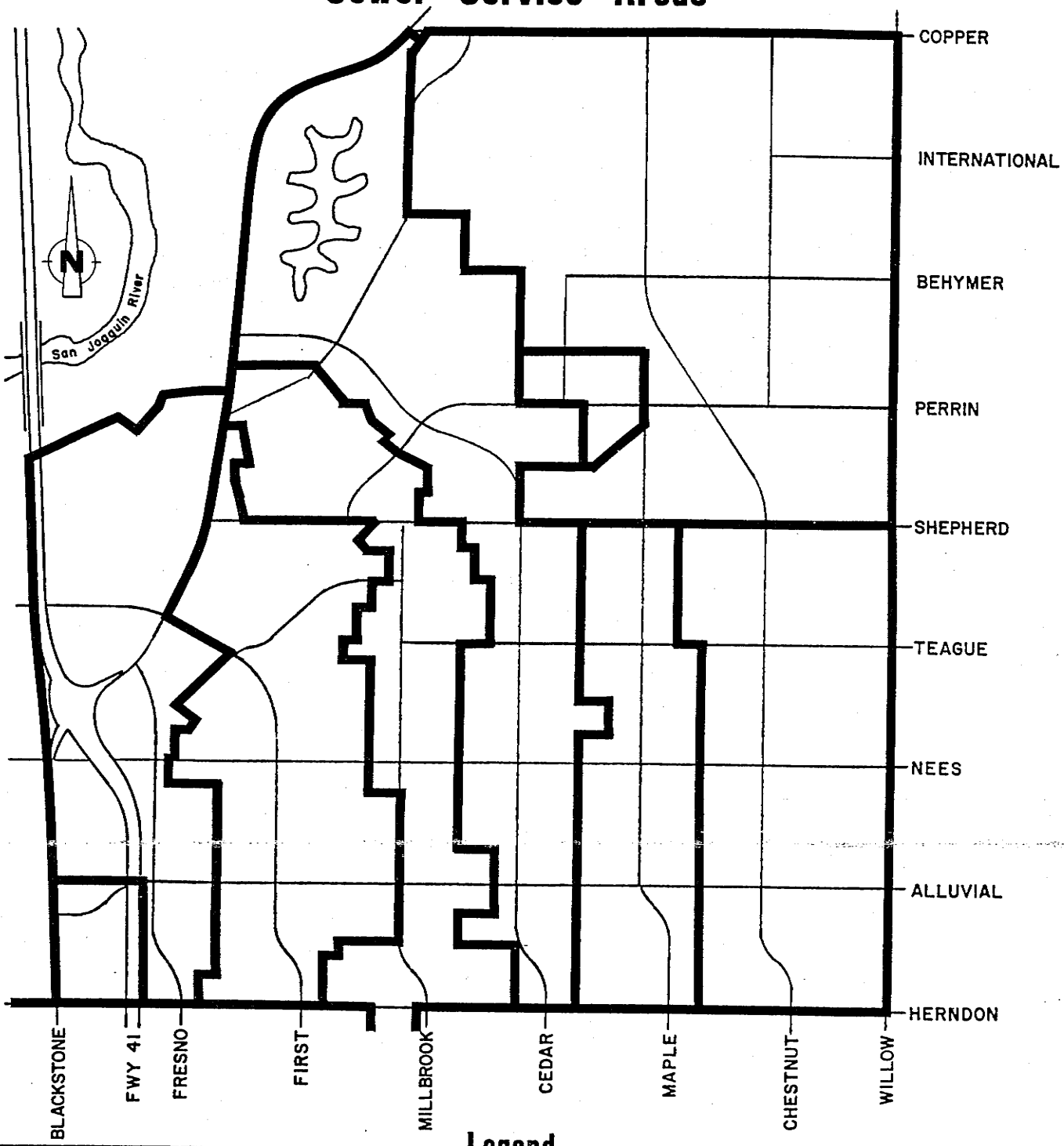
Goal:

6-1. Manage fringe urban development and the provision of public facilities with increasing precision in order to implement the planned urban growth and form, assure that the needs of the community are met in a timely manner, and maximize service delivery efficiency.

<u>Policies and Implementation Measures</u>

~~6-1.1 Urban development shall be prohibited within all areas designated for urban reserve, pending the completion of the 1994 General Plan update.~~

FIGURE 6-1
Woodward Park Community Planning Area
Sewer Service Areas

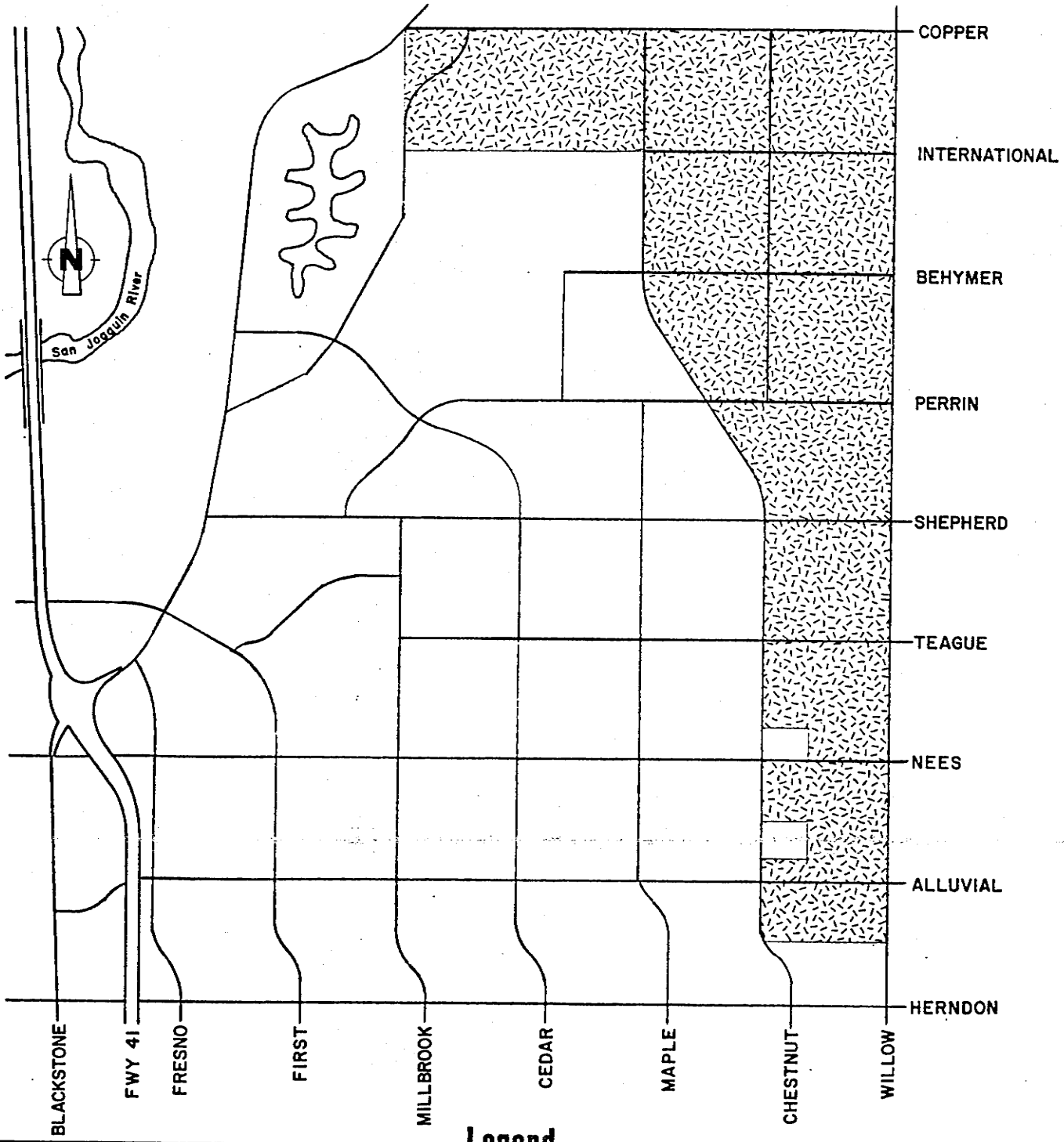


Legend

Sewer Service Area Boundaries

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

FIGURE 6-1.1
Woodward Park Community Planning Area
Staff Urban Reserve Area



Legend

Staff Proposed Urban Reserve Area*

*Not Recommended by Citizen Advisory Committee.

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

6-1.2 Development within the Herndon sewer service area shall not exceed the maximum limit equivalent established for that area by the Public ~~Works~~ Utilities Department.

6-1.3 Implement a computerized development and public facility monitoring system in order to coordinate urban development with infrastructure capacity.

6-1.4 The Director of the Public ~~Works~~ Utilities Department must certify, prior to the filing of any plan amendment, that potable water exists to serve development at the intensity proposed.

Goal:

6-2. Conduct cooperative research, planning, and policy formulation efforts with affected local governments and other public agencies which may be used to establish mutually acceptable population growth and development policies for the northeastern portion of the Fresno metropolitan area as well as the surrounding rural areas.

Policies and Implementation Measures

6-2.1 Establish a cooperative research and planning program with the County of Fresno, City of Clovis, and other public agencies to provide a more thorough understanding of the following resources and public facilities that will be significantly affected by continued northeastward population growth and development.

a. Ground and surface water quantity, quality, and availability.

b. Wastewater collection and treatment methods and capacity.

c. Major street circulation system distribution and capacity.

d. Conservation of agricultural, open space, natural habitat, and scenic resources.

6-2.2 Oppose lot splits within the plan boundaries and lot splits and urbanization outside of the plan boundaries that: (1) make it difficult or unfeasible to implement the plan; (2) contribute to the premature conversion of agricultural, grazing, and open space lands; or (3) are detrimental to the management of resources and facilities important to the metropolitan area such as air quality, water quantity and quality, traffic circulation, and riverbottom preservation.

PUBLIC FACILITIES

Concern for the effect of growth and development on the levels of municipal services is a fundamental element of the City's land use planning philosophy.

In general, development in outlying areas is more costly to serve than the same amount of development in infill locations. Commercial and office land uses typically generate more revenue than service demands cost, while the opposite is usually true for residential land uses.

The services and facilities most directly related to growth and development are circulation, sewage treatment, the extension of a water system, sanitary sewers, storm drainage, police and fire protection, and schools. The City is directly or indirectly involved in the provision of these services, with several local, regional, and state agencies sharing in the responsibility and authority as well. It is the intent of this section to examine each of these services and to clearly establish policies applicable to each, with the exception of circulation which is discussed in Section 3.

Furthermore, this section will reflect the City's overall strategy of maximizing existing facilities currently serving the planning area due to the extraordinary costs of constructing a new trunk sewer and importing potable water to the planning area. The City is proposing to expand the area's current sewering capabilities by the utilization of flow metering, water conservation, and other technologies wherein every effort will be made to monitor and efficiently direct sewer flows to maximize the capacities of existing sewer system. The City will continue to utilize its system of wells to provide drinking water, but would expand the system to include groundwater recharge where possible, conservation measures as identified, and frequent monitoring to protect groundwater quality. The importation of water from outside the planning area would primarily be limited to a role of groundwater recharge, unless the results of ongoing water studies, the level of groundwater contamination or the pump production rates of on-line wells dictate that water treatment for drinking purposes is necessary.

Services such as storm drainage, police and fire protection, and the development of schools, as needed, would continue to be met by the expansion of existing systems and services without significant change.

Sewage Treatment

Sewage treatment will continue to be provided by the City's existing wastewater treatment plant. The development of new package wastewater treatment plants to serve new development in the planning area and vicinity would be opposed in view of its very great potential to pollute local groundwater aquifers.

Sewage Treatment

Goal:

7-1. Provide sewage treatment for all new development within the Woodward Park area by the City's existing wastewater treatment plant.

Policies and Implementation Measures

7-1.1 Provide sewer facilities for all new development within the Woodward Park community ~~in the Herndon Trunk Sewer line~~.

~~7-1.2 Oppose the development of new sewer treatment facilities either within the planning area or in groundwater recharge areas located to the north and east of the Woodward Park community.~~

~~7-1.3 Advocate any new sewer treatment facilities to be compatible with adjacent land use patterns and free from noxious odors.~~

Sanitary Sewers

Wastewater collection in the planning area is provided via the Herndon/Cornelia Trunk Sewer. This line also provides some sewer capacity to the Bullard community and to the City of Clovis. No new trunk sewer is proposed as part of this interim plan update. Instead, every effort will be made to maximize the sewage capacity of the existing line through such techniques as water conservation, peak flow reducing measures, and better management and exploitation of existing downstream facilities.

Goal:

7-2. Provide adequate sewer capacity for all urbanized and planned neighborhoods.

Policies and Implementation Measures

7-2.1 Undertake periodic review of overall wastewater collection systems and disposal needs of the Herndon Cornelia Trunk Sewer system ~~with the results to be summarized and reported on semiannually by City staff to the City Council.~~

7-2.2 Monitor sewage flows on a semiannual basis and manage growth so that the cumulative sewage flows in the Herndon/Cornelia Trunk Sewer do not exceed that line's capacity.

7-2.3 Require that a finding be made by the Public ~~Works~~ Utilities Department that adequate sewer services can be pro-

vided to serve each proposed development prior to the approval of any development entitlement.

7-2.4 Require that approval of any entitlement located within the planning area be consistent with Policy 6-1.2 of the Physical Growth and Change section.

7-2.5 Prohibit the extension of any sewer main through areas not planned for urbanization.

~~7-2.6 Oppose the development of new septic tanks within the planning area's boundary.~~

7-2.7 Encourage water conservation programs, which result in reduced wastewater flows.

7-2.8 Explore all feasible alternatives, including flow monitoring, computerization, in-line storage, holding tanks, etc., necessary to increase or enhance the capacity of the Herndon/Cornelia Trunk Sewer.

Public Water Supply

Water resources within the Woodward Park community are limited and subject to contamination. It is the intent of this plan to provide for the maximization of these resources through water conservation, recharge, and the implementation of a stringent monitoring system. This plan does not envision the utilization of surface water resources for drinking purposes or the construction of any surface water treatment facilities.

However, it should be noted that should the results of ongoing water studies show a need (i.e., the level of groundwater contamination increases or the production rates of online wells decline), surface water treatment for drinking purposes may become necessary.

Goal:

7-3. Ensure the provision of adequate potable water to all developed and developing portions of the planned urban area.

Policies and Implementation Measures

7-3.1 Require that a finding be made that adequate services can be provided to serve any proposed development prior to approval of a development entitlement.

7-3.2 Encourage water conservation programs that will result in decreased water demand.

7-3.3 Protect areas of good groundwater recharge capability and expand programs that artificially recharge the underground water supply.

7-3.4 Develop a system of groundwater recharge basins at suitable locations along the planning area's east side and landscape that portion of each facility that is generally visible from any adjacent street frontage.

7-3.5 Coordinate with the Fresno Metropolitan Flood Control District and the City Water Division in determining the optimum location of water recharge basins for maximum water recharge capability.

7-3.6 Explore, if necessary, the use of air stripping, carbon filtration or other technologies for wells known to be experiencing contamination problems.

7-3.7 Require the proper construction and monitoring of facilities storing hazardous materials in order to prevent contamination of the groundwaters and underlying aquifers.

Public Water Supply

7-3.8 Utilize surface and groundwater resources in a manner that ensures the long-term supply of potable water. Efforts to conserve water supplies, both local and imported, shall be encouraged.

7-3.9 Initiate a City of Clovis/County of Fresno/City of Fresno joint water study aimed at developing a regional water management program that would maximize water resources and minimize the potential for groundwater contamination.

7-3.10 Implement regular monitoring of all wells in accordance with state regulations.

Storm Drainage

Storm drainage facilities within the Woodward Park area will continue to be provided by the Fresno Metropolitan Flood Control District (FMFCD). The FMFCD has developed or proposes to develop a total of six ponding basins in the area. Storm water flows to each basin will be accommodated by a system of surface drainage and storm drains, as planned by FMFCD. Fees and project requirements will be set by FMFCD.

Goal:

7-4. Ensure the provision of adequate storm drainage facilities to protect area residents from flooding caused by storm water runoff.

Policies and Mitigation Measures

7-4.1 Coordinate with the Fresno Metropolitan Flood Control District to determine the optimum location for siting ponding basins.

7-4.2 Prohibit runoff from commercial or industrial uses from draining directly into the San Joaquin River.

7-4.3 Utilize, where possible, all Fresno Metropolitan Flood Control facilities for groundwater recharge.

~~7-4.4 Develop each permanent ponding facility to maximize its potential for recreational use.~~

tion operations and water service system. This rating results in a low fire insurance rate for City residents.

In order to ensure the continuance and preservation of this rating, the City has established guidelines setting the permanent service area of fire stations at a two-mile "running" distance. Moreover, to reflect the effects of congestion on local streets, it is the City's intent to provide a five-minute average response time for structure fires.

Goal:

7-5. Provide a sufficient level of fire protection to maintain the City's Class 2 fire insurance rating.

Policies and Implementation Measures

7-5.1 Provide for an average five-minute response time for all emergency requests for service within the planning area.

7-5.2 Require that adequate water supplies and appliances are available for fire suppression in all areas of construction or new development.

7-5.3 Work with the various fire protection districts bordering the City to establish coordination in communications and fire suppression.

7-5.4 Review all development proposals with the Fire Department in order to ensure the inclusion of adequate on-site fire protection provisions.

7-5.5 Promote greater use of fire sprinkler systems for commercial uses.

7-5.6 Adopt and enforce building and fire codes that restrict the level of risk to life and property from fire commensurate with the fire suppression capabilities available to the City.

7-5.7 Site and maintain a well-trained, equipped fire suppression force commensurate with the level of response times necessary to protect life and property from fire in the planning area.

7-5.8 Prior to the approval of any development entitlement north of Behymer or east of the Cedar Avenue alignment prolonged, a specific site for Fire Station No. 21 shall be designated on adopted plan maps.

Police Protection

The Fresno Police Department currently provides a full range of police services to all incorporated areas within the Woodward Park community. Among the field services provided are the uniformed patrol response to calls for service, crime prevention, tactical crime enforcement, and traffic enforcement/accident prevention. The provision of these services is supplemented by the Operations Support Division, which investigates criminal cases, provides juvenile crime enforcement and prevention, and is actively involved in vice/narcotics control and enforcement.

In addition to these enforcement-related services, the Police Department also provides extensive crime prevention assistance to the community, including residence and business security inspections, neighborhood and business watch group formation, and public presentations. A police dressing station is located at Wrenwood Avenue and Fresno Street.

Goal:

7-6. Provide the highest level of police service to protect City residents and businesses.

Policies and Implementation Measures

7-6.1 Continue Police Department participation in the review of subdivision proposals and in assisting the Public Works Department with traffic matters.

7-6.2 Maintain communication with residents and businesses in order to learn about crime problems and to educate people on crime prevention measures and programs.

Schools

The City's role in school planning involves reserving school sites in developing areas and coordinating and cooperating with school districts in helping to provide school facilities. The City also coordinates the joint use of park facilities located immediately adjacent to existing and planned school sites.

The process of reserving school sites within the City usually takes place with approval of new community plans and during subdivision review of individual development projects.

The City Planning Division and school districts coordinate efforts in developing locational criteria for school sites in newly developing areas. Presently, the Clovis Unified School District is using the following criteria:

Schools

Grade	Attendance Radius	Minimum Site Size
K - 6	1 mile	15 acres
7 - 8	2 miles	40 acres
9 -12	3 miles	60 acres

The City also requires schools to be located in areas that are safely and conveniently accessible, and free from heavy traffic, excessive noise, and incompatible land uses.

Goal:

7-7. To provide a consistently high level of education opportunities to the community.

Policies and Implementation Measures

7-7.1 Involve the Clovis Unified School District in the early stages of the land use planning process.

7-7.2 Continue to assist in reserving school sites ~~based on the locational criteria as follows~~:

a. Locate elementary schools on sites that are safely and conveniently accessible, and free from heavy traffic, excessive noise, and incompatible land uses.

b. Locate schools, beyond the elementary level, adjacent to major streets.

c. Locate all school sites centrally with respect to their planned attendance areas.

d. Locate school sites, where possible, away from multiple-family or commercial developments.

7-7.3 Designate school sites on the land use element of this plan to accommodate school district needs.

7-7.4 Pursuant to the Clovis Unified School District (CUSD) report, North of Shepherd Avenue Elementary School Site Study (June 27, 1989), upon determination of an exact location for each site, the CUSD shall process a plan amendment. (A copy of the study is located in the Final EIR.)

7-7.5 Explore ways to utilize existing school facilities for nonschool-related and child care activities.

Solid Waste Disposal

The solid waste goals and policies address both the land use implications of present day technologies and practices with respect to disposal in sanitary landfill sites as well as the recognition that alternative methods and technologies should be pursued.

Goal:

7-8. Provide adequate solid waste disposal facilities and services for the collection, storage, and reuse of refuse.

Policies and Implementation Measures

7-8.1 Continue the City's neighborhood cleanup program and develop and implement additional programs when necessary.

7-8.2 Explore programs and new techniques of solid waste disposal to reduce the need for additional landfill sites.

7-8.3 Encourage recycling and composting efforts to the maximum extent feasible in order to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.

~~7-8.4 Prohibit private and public waste disposal facilities and transfer stations.~~

ENVIRONMENTAL CONCERNS

The urbanization proposed by the Woodward Park Community Plan may result in the generation of significant impacts on the local environment. Because of the area's location on the City's urban fringe, and given its basic geological setting, development may adversely impact the planning area's groundwater system and overall air quality, result in increased noise levels, and contribute to encroachment onto designated flood plains.

The Woodward Park community is located near the Sierra foothills on a broad alluvial plain, characterized by shallow aquifers with lower than normal water-carrying capacities that are susceptible to groundwater contamination. The planning area is bordered along its northern boundary by the San Joaquin River flood plain, and is located approximately seven miles downstream from Friant Dam and Millerton Lake. Because of its location on the urban fringe, vehicle trips tend to be longer resulting in higher than normal fuel consumption and air pollution.

The area's main road system also serves to facilitate regional circulation needs which results in significant traffic congestion and, therefore, further increases in air pollution.

Finally, as a direct result of the area's significant growth and regional road system, area noise levels have continued to climb over the last several years. In order to address these environmental concerns, it is the intent of this section to establish specific goals and policies to provide for the protection of the area's groundwater and air quality to mitigate against further noise increases, unnecessary energy consumption, and to prevent unnecessary encroachment onto designated flood plains.

Water Quantity and Quality

The Woodward Park community derives all of its domestic water through groundwater pumping. The planning area has tapped existing groundwater resources to the maximum extent possible to make available a good supply of high-quality water. However, groundwater availability may not meet all future needs and must be carefully managed to prevent overpumping and/or contamination.

Historically, groundwater for the Woodward Park area is recharged by four means: (1) groundwater percolation originating from rainfall and stream runoff in the areas located north and east of the planning area; (2) percolation from agricultural irrigation occurring both in Woodward Park and areas to the east; (3) percolation from the San Joaquin River; and (4) percolation from local canals, creeks, and intermittent streams passing through the study area.

This recharged water flows under the Woodward Park area through a series of interconnected shallow aquifers comprised of a mixture of boulders, cobbles, gravels, sands, and clays. Where clays are present in large quantities, groundwater production declines. The Woodward Park area is characterized by such a large clay concentration in the form of a clay ridge, running underground from Copper and Willow Avenues to Herndon and Blackstone Avenues. This portion of the planning area has experienced reduced groundwater production levels. Paralleling Friant Road is an area of cobbles, possibly an older bed of the San Joaquin River, that has yielded good production levels at high quality. The City has moved to take advantage of these latter aquifers while continuing to seek high production facilities near the noted clay ridge.

If managed wisely, available groundwater should be sufficient to accommodate planned development in the area. Unfortunately, other communities, including the City of Clovis, the County of Fresno, and Madera County, draw upon the same aquifers and compete for the same areas of groundwater recharge.

Water Quantity and Quality

Furthermore, due to cementation in the San Joaquin River channel and groundwater contamination by dibromochloropropane (DBCP) and nitrates, some local aquifers may be contaminated and irreplaceable wells lost.

The City is, therefore, moving to initiate a program of metropolitan-wide groundwater management, monitoring, and cooperation.

Goal:

8-1. Conserve and augment the water resources of the planning area to ensure that adequate groundwater resources remain available to accommodate planned development.

Policies and Implementation Measures

8-1.1 Develop and maintain facilities for groundwater recharge in the planning area.

8-1.2 Utilize all available surface water entitlements ~~for recharge purposes.~~

8-1.3 Work toward resolving the problem of groundwater resource deficiencies in the eastern portions of the planning area.

8-1.4 Protect planning area groundwater resources from further quality degradation.

8-1.5 Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation.

8-1.6 Achieve a continuing balance between competing demands for water resource usage.

8-1.7 Consider each proposal for water resource usage within the context of total planning area needs and priorities (i.e., the need to transport water, groundwater recharge, flood control, recreational needs, and riparian habitat preservation).

8-1.8 Maintain effective cooperative planning programs for water resource conservation and utilization in the planning area.

~~8-1.9 Prohibit urban development in areas not served by a sanitary sewer system.~~

Air Quality

The Woodward Park area is located along the east side of the San Joaquin Valley, a great valley boxed in on three sides by mountain ranges rising from 4,500 to 14,000 feet in height. This "basin" situation, when coupled with the valley's climate, temperature inversions, and lack of air movement, contributes to serious air quality problems. Because of these characteristics and the use of the automobile as the prime mode of transportation, Fresno County was not expected to comply with the national ambient air quality standards for ozone, carbon monoxide, and particulates by the mandated deadline of 1985. Fresno County has, therefore, been designated a nonattainment area for photochemical oxidants (ozone), particulate matter, and carbon monoxide (CO).

In response to this situation, the Fresno County Air Pollution Control District (APCD) prepared an Air Quality Maintenance Plan (AQMP) and Nonattainment Area Plan (NAP) in 1979. The AQMP/NAP was updated in 1982, and is referred to as the Fresno Clean Air Plan. The 1985 deadline was subsequently extended by the Environmental Protection Agency (EPA) to December 31, 1987.

Based upon the air quality monitoring required by the APCD, it has been determined that Fresno County will not achieve compliance with the national ambient air quality standards for ozone, carbon monoxide, and particulates as required. On June 29, 1987, the EPA announced a sanction on 14 regions. Six of these are in California, of which Fresno County is one. This action prohibits the construction of new uses that would have the potential of emitting 100 or more tons annually of volatile organic compounds (key elements in the formation of ozone) or carbon monoxide. Although it is unlikely that this sanction on large stationary sources, such as industrial plants, will adversely affect the Fresno metropolitan area, further sanctions are possible. These sanctions might include the discontinuance of federal funds for highway and sewer improvements.

Within the Woodward Park area, because of the importance of the automobile as a convenient method of travel, the relatively low density of residential areas, the long length of each vehicle trip made by area residents, and high level of congestion on roads in north Fresno, air quality will continue to decline. Development in the Woodward Park area will continue to have significant cumulative impacts on the metropolitan area's air quality. The City has adopted a revised General Plan Air Quality Element that reaffirms the City of Fresno's commitment to participate in the continuing effort to improve air quality. Therefore, it is the intent of this plan to concentrate the more intensive land uses along the Freeway 41 corridor and Herndon Avenue to support the City's General Plan Air Quality Element.

Goal:

8-2. Attain and maintain state and federal air quality standards in cooperation with other agencies.

Policies and Implementation Measures

8-2.1 Support and encourage regional, state, and federal programs and actions for the improvement of air quality.

8-2.2 Support and encourage the unification of existing air pollution control districts in the San Joaquin Valley Air Basin in order to achieve maximum use of existing laws and available technology for air quality maintenance.

8-2.3 Develop and incorporate air quality maintenance considerations in the review of land use and development proposals.

8-2.4 Modify land use regulations and related processes to provide for the integration of compatible land uses.

8-2.5 Integrate compatible land uses and concentrate development along major streets and near major employment areas to reduce vehicle miles traveled.

8-2.6 Develop the means to obtain or use land for on-site bus turning and parking areas with attendant employee and passenger facilities.

8-2.7 Support and encourage the priority construction and improvement of highway projects in the Fresno area as set forth in the Fresno County Transportation Improvement Act.

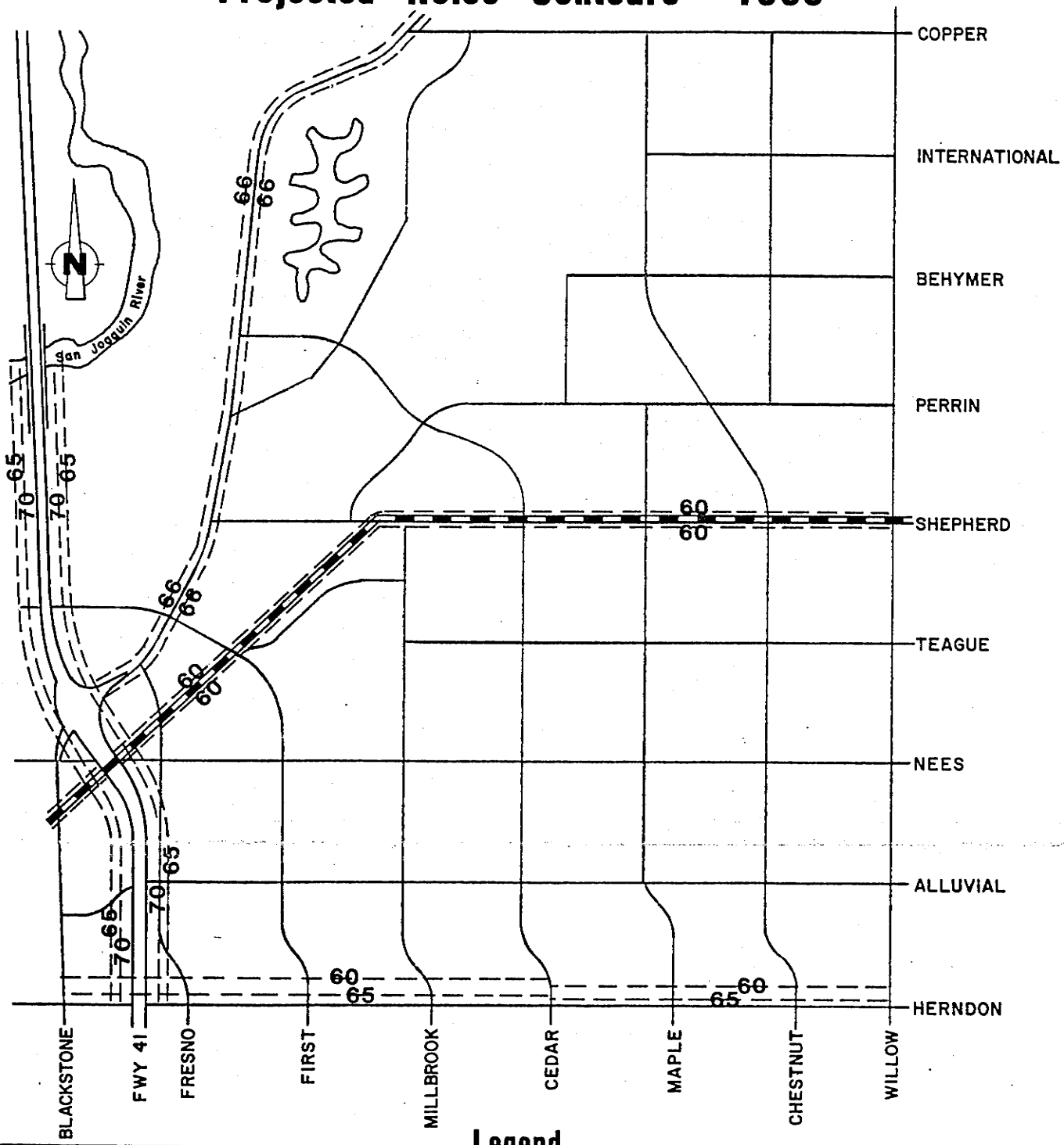
8-2.8 Support and encourage the implementation of staggered work hours for all businesses with more than 100 employees.

Noise

Noise is a significant form of environmental pollution that, if left unmanaged, can result in severe health risks. Most identified noise sources in the urban area are man-made.

Noise is defined in the context of this analysis as unwanted sound;

FIGURE 8-3
Woodward Park Community Planning Area
Projected Noise Contours - 1995



Legend

— 60 — Community Noise Equivalent Levels

Sources : Noise Study Report, CALTRANS, 1983
Brown - Buntin Associates Study, 1982

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

a subjective reaction to a physical phenomenon. Its effects on people can range from pleasure to annoyance, and include an inhibition of a sense of well-being, sleep disturbance, interference with speech and activities, and even physical damage resulting in hearing impairment.

There are two composite noise descriptors in common use today, the Ldn and CNEL. The Ldn is an average day and night sound level based upon an average hourly sound level over a 24-hour day, with a +10 dB weighting applied to nighttime (2200 hours - 0700 hours) sound level. Community Noise Equivalent Level (CNEL) is also based on an average hourly sound level over a 24-hour day, with an additional +5 dB penalty applied to evening (1900 hours - 2200 hours) hourly sound levels. The CNEL scale was developed for the California Airport Noise Regulations. For planning purposes, the CNEL and Ldn descriptions are similar enough to be interchangeable.

Different land uses have varying degrees of sensitivity to noise, and the time and type of noise can alter the impact of noise on land uses. The most sensitive land uses include residential dwellings, schools, hospitals, and churches. Moderately sensitive land uses include motels, commercial, and office uses. Agriculture, parking facilities, warehouses, and industrial uses are considered to be land uses that are largely insensitive to noise.

The major noise sources in the Woodward Park community are roadways such as Freeway 41, Herndon Avenue, and Friant Road (south of Audubon Drive), and commercial and industrial development such as shopping centers, and sand and gravel extraction. As growth and development occurs in the Woodward Park area, noise levels will continue to increase. The noise contours analysis in the General Plan Noise Element takes this into account and makes predictions for roadway and rail contours based upon a year 2000 prediction.

Goal:

8-3. Minimize the impact of noise on people through the implementation of noise reduction and suppression techniques, and appropriate land use policies.

<u>Policies and Implementation Measures</u>

8-3.1 Designate areas of the community exposed to existing or projected exterior noise levels exceeding Ldn/CNEL 60 dB as noise-impacted areas.

8-3.2 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.

8-3.3 Incorporate effective mitigation measures to minimize adverse noise impacts on surrounding noise-sensitive land uses through design techniques such as:

a. Use of Barriers. 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 reflections.

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 increasing 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.

8-3.4 Include noise attenuation techniques in the design of all new arterial streets.

8-3.5 Discourage the use of outdoor appliances, air conditioners, and other consumer products that generate noise levels in excess of the City's exterior noise level standards.

~~8-3.6 Allow commercial drive-through uses only when consistency with the City's exterior noise level standards and compatibility with adjacent land uses can be demonstrated.~~

Flooding

Flooding represents a potential hazard to the population and buildings of a community and, as such, is a concern that must be incorporated into land use planning. The potential for flooding within the planning area originates from the San Joaquin River, which is located along the planning area's northern boundary.

The San Joaquin River basin is the second largest river in California, with a total length of about 350 miles.

The natural watershed of the San Joaquin River study area encompasses 1,638 square miles, varies in elevation from 350 feet to 13,000 feet, and experiences a diverse pattern of rainfall. The average annual rainfall for the Woodward Park area is slightly greater than ten inches. Rainfall is 20.52 inches immediately above Millerton Lake, and over 60 inches at the crest of the watershed. Annual runoff volumes range from 37,600 acre feet to 4,367,800 acre feet, averaging 1,790,300 acre feet. Heavy flow periods are normally divided into two seasons: (1) flows from rainstorms predominate from November through March; and (2) snow melt flows dominate from April through July.

Flooding on a river system like the San Joaquin can be caused by, or aggravated by, five factors. Those factors are climatic events (a major rainstorm or snow melt), dam failure, lack of river channel maintenance, reservoirs sedimentation, and local/urban runoff.

In 1939, the natural drainage pattern dramatically changed with the initiation of construction of the Friant Dam. This facility was designed for irrigation purposes, and was partially completed in 1942 and made fully operational in 1949.

It is operated in coordination with approximately 21 upstream reservoirs, forebays and pumping facilities, and can control an estimated 50-year rain flood or a 25-year snow melt flood. Flows of these magnitudes require daily average releases at Friant Dam of 8,000 cubic feet per second (c.f.s.), with recent peak release

reaching 14,300 c.f.s. The reservoir was designed with a net storage capacity of 520,500 acre feet. Of this total, 170,000 acre feet is reserved for rainfall runoff, with the snow melt runoff being variable depending on the year's snow melt projections. The maximum peak inflow to Millerton Lake was estimated at about 97,000 c.f.s. on December 23, 1985. The reservoir is designed to accommodate a maximum of 385,000 acre feet during snow melt.

It should be noted that the dam was designed as an irrigation facility and not as a flood control structure. The flood operation criteria was developed by the Corps of Engineers after the project was completed.

In 1951, the river channel was rated to have a safe capacity of 8,000 c.f.s. for flood releases. Now the channel has difficulty in various locations of passing a flow of 3,000 to 3,500 c.f.s. The higher releases cause destruction and erosion of lands, crops, etc. The eroded material is transported downstream and is deposited in the lower river areas, creating problems that include additional flooding, levee breaks, and seepage. This situation has been developing over the years and is mainly attributed to the intrusion of shrubs, trees, bamboo, etc., into the river channel which is restricting water flow and raising the level of the river for a given flow. This was demonstrated during an observed and measured period from 1953 to 1967 when the water surface elevation in the river, at a flow of 8,000 c.f.s., increased two and one-half feet. Additional points which may be indications of this problem are as follows:

1. The designated floodway maps adopted by the Department of Water Resources in June, 1976 show the Wildwood area, east of Highway 41 in Madera County, as being above the floodway line at a maximum river flow of 20,000 c.f.s. When releases reached 14,300± c.f.s. (peak) on February 19, 1986, the Wildwood Mobile Home Park was nearly flooded.

2. During the dates of February 18, 19, and 20, 1986, maximum releases (mean daily) from the dam were 13,028, 14,117 and 12,325 c.f.s., respectively. On those same dates, the recorded flows at Gravelly Ford (located downstream, seven miles west of State Highway 145) were 9,284, 12,900 and 14,400 c.f.s., respectively. A day later, on February 21, when dam releases were reduced to 7,712 c.f.s., and two days after the maximum release of 14,117 c.f.s. on February 19, the recorded flow at Gravelly Ford was still at 13,500 c.f.s. This is an indication of flow restrictions in the channel between the release point (Friant Dam) and the Gravelly Ford gauging station. In addition, an unofficial record mark placed by a property owner (E. L. Oslund) upstream from the Gravelly Ford station and about

two miles west of Highway 145, places the river water level during these recent 14,000+ c.f.s. (peak flow) flows within two and one-half to three feet of the level of the maximum recorded river flow of approximately 77,200 c.f.s. in December, 1937 prior to the construction of Friant Dam.

Given this information, and the lack of any ongoing channel maintenance program, it is apparent that development in the riverbottom will be exposed to an existing flood risk.

This potential is real. Climatic events, though unpredictable, remain a constant threat in the riverbottom. The possibility of dam failure, while unlikely, cannot be ignored. The lack of a channel maintenance program will be a significant source of potential flooding until a comprehensive maintenance program is established for the area.

Goal:

8-4. Protect future residents of the Woodward Park community from flood-related hazards.

Policies and Implementation Measures

8-4.1 Prohibit the development of new residential ~~uses~~ subdivisions in the San Joaquin Riverbottom.

8-4.2 Design new development to provide protection from potential impacts of flooding during the "one percent" or "100-year" flood.

Energy

Although Woodward Park area residents are affected by all energy usage, they have little direct control over decisions affecting its distribution. However, the City can influence the amount and type of energy sources its residents consume. The City's General Plan includes policies to impact energy consumption through the mix of land uses and the design of a transportation system which provides the most efficient movement of people and goods.

Fresno can also affect energy supplies and consumption by reducing the energy consumed for City operations, by using renewable energy sources where feasible, and by supporting the development of appropriate renewable energy sources.

Goal:

8-5. Foster development that, by its location and design, reduces the need for nonrenewable energy resources.

Policies and Implementation Measures

8-5.1 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.

8-5.2 Public facilities should be encouraged to locate in areas easily served by public transportation.

8-5.3 The energy efficiency of new development 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.

8-5.4 Encourage owners and residents of existing developments to implement programs to use energy more efficiently and to explore alternative energy source.

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326+/ENVWPP