

🌀 CLOVIS GENERAL PLAN 🌀



August 1974

PLANNING COMMISSION
CITY OF CLOVIS

RULES AND REGULATIONS

SECTION 1 - OFFICERS

The officers of the Commission shall be a Chairman, Vice-Chairman and Secretary.

SECTION 2 - DESIGNATION OF OFFICERS

A Chairman and Vice-Chairman shall be elected from the members of the Commission, excluding ex-officio members during the months of April or May annually. Such action shall not take place earlier than the last regular meeting in April nor later than the last regular meeting in May.

SECTION 3 - POWERS AND DUTIES OF OFFICERS

- A. The Chairman shall preside at all meetings of the Commission, swear witnesses in all proceedings of the Commission where sworn testimony is taken, and exercise and perform such other powers and duties as are conferred upon him by law and these regulations.
- B. The Vice-Chairman shall have and perform all the powers and duties of the Chairman in the absence of the Chairman from the City or from any meeting of the Commission or whenever the Chairman is unable for any reason to act.
- C. The Secretary of the Commission shall be designated by the Commission, but shall not be an ex-officio member of the Commission, and the Secretary shall:
 - (1) Be vested with all the powers and duties of Secretary pursuant to these regulations and the Zoning Ordinance of the City of Clovis, and
 - (2) Keep and record the minutes of all meetings of the Commission, and furnish a copy of the minutes of each meeting to each member of the Commission, and
 - (3) Keep complete files of all communications to the Commission, all pleadings and documents filed with the Commission, and all other necessary records of the Commission, and
 - (4) Act as Custodian of the minutes and of all the books, documents, papers, and records of the Commission, and
 - (5) At the request of the Commission, issue and execute and have attested by the City Clerk, in the name of the Commission, subpoenas ordering the attendance of any person as a witness or the production of evidence, at any meeting of the Commission.

SECTION 4 - MEETINGS

- A. Regular meetings of the Commission shall be held on the 2nd and 4th Monday of every month at 7:30 P.M., at the City Hall in the City of Clovis or such other place as shall be determined by the Commission at the previous regular meeting and duly announced at said meeting. Whenever a regular meeting date falls on a holiday, such regular meeting shall be held at the same hour on the next regular meeting day. The Commission may, however, on a majority vote of its members dispense with any regular meeting.
- B. Special meetings may be called at any time by the Chairman at his discretion, and the Chairman shall call a special meeting at the request of four fifths ($4/5$'s) vote of the Commission. Notice of each special meeting shall be given by delivering personally or by mail a written notice thereof to each member of the Commission and to each local newspaper of general circulation, radio or television station requesting notice in writing. Such notice must be delivered personally or by mail at least twenty-four (24) hours before the time of such meeting as specified in the notice. The call and notices shall specify the time and place of the special meeting and the business to be transacted, and no other business shall be considered at such meeting. Such written notices may be dispensed with as to any member of the Commission who at or prior to the time the meeting convenes files with the Secretary a written waiver of notice. Such waiver may be given by telegram. Such written notice may also be dispensed with as to any member who is actually present at the meeting at the time it convenes.
- C. The Commission may adjourn any regular, adjourned regular, special or adjourned special meeting to a time and place specified in the order of adjournment. Less than a quorum may so adjourn from time to time. If all members are absent from any meeting, the Secretary may declare the meeting adjourned to a stated time and place and shall cause a written notice of the adjournment to be given in the same manner as provided in B above for special meetings, unless such notice is waived as provided for special meetings. A copy of the order or notice of adjournment shall be conspicuously posted on or near the door of the place where the regular, adjourned regular, special or adjourned special meeting was held within twenty-four (24) hours after the time of the adjournment. When a regular or adjourned regular meeting is adjourned as provided in this Section, the resulting adjourned regular meeting is a regular meeting for all purposes. When an order of adjournment of any meeting fails to state the hour at which the adjourned meeting is to be held, it shall be held at the hour specified in these rules and regulations for regular meetings.

SECTION 5 - QUORUM

A majority of the members of the Commission shall constitute a quorum for the transaction of business. Except as may be otherwise provided by law and these rules and regulations, a majority of a quorum may decide all matters of business which come before the Commission.

SECTION 6 - MOTIONS AND REGULATIONS

- A. The actions and decisions of the Commission at any matter shall be expressed by motion, duly seconded and voted upon by the members, and the ayes and noes and members present and not voting shall be entered upon the minutes of the meeting.
- B. All action of the Commission, other than action involving the internal operation of the Commission, shall be in written Resolution form.

SECTION 7 - REPORTS TO THE COUNCIL

When the Commission has by Resolution made a recommendation to the City Council, this action shall be reported to the Council as soon as practicable thereafter except as otherwise provided for in the Zoning Ordinance of the City of Clovis. The action of the Commission shall be reported by the Planning Consultant, by the Chairman, or in his absence, the Vice-Chairman, or another member of the Commission appointed by the Chairman, shall be present at the City Council meetings when deemed advisable by the Commission.

SECTION 8 - ORDER OF BUSINESS

- A. At regular meetings of the Commission the following shall be the order of business:
 - (1) Roll Call
 - (2) Communications
 - (3) Unfinished (old) Business
 - (4) Continuation of Public Hearings
 - (5) New Business
 - (6) Public Hearings
 - (7) Reports of Committees
 - (8) Reading and approval of Minutes
 - (9) Adjournment
- B. The presiding officer may vary the order of business whenever in his discretion it will expedite the conduct of the meeting.
- C. Upon motion unanimously adopted by the members present, the reading of the minutes may be dispensed with.

SECTION 9 - LENGTH OF THE AGENDA

The length of the Agenda for each regular meeting shall be determined by the Chairman in consultation with the Secretary. In

general there shall be no more than fifteen (15) items on any one agenda. These may be composed of applications for rezoning, subdivision maps for approval, and such other items of business as may be before the Commission. Where it is deemed desirable to limit the number of applications for rezoning to six at any one (1) meeting, this may be done. When the work load becomes exceptionally heavy, special meetings shall be called.

SECTION 10 - APPOINTMENT OF COMMITTEES

The Chairman shall appoint such committees of Commission Members as the Commission shall from time to time authorize to investigate and report to the Commission on matters within its jurisdiction.

SECTION 11 - PUBLIC REPORTS

Once each quarter of every calendar year the Commission shall issue a public report setting forth its consensus on the general state of City Planning in the City of Clovis. After the adoption of such report by the majority of the Commission those voting in dissent may concurrently submit a minority report. This quarterly report shall reflect the views of the Commissioners and shall not be prepared in consultation with the Planning Consultant, Department Heads or the City Council.

SECTION 12 - POLICY

Policy for the guiding of the Commission, when not set forth by law may be adopted by Resolution of the City Council. In the absence of established policy the Commission may by resolution establish policy and may request confirmation of such policy by the City Council.

SECTION 13 - STAFF REPORT AND SERVICES

On all Applications for Rezoning, Requests for Approval of Subdivision Maps, Proposed Amendments to the Zoning Ordinance and other matters which may be brought before the Commission, the Planning Consultant shall furnish written reports containing an analysis and recommendation. The Commission shall look to the Planning Consultant for all information and staff services.

SECTION 14 - ETHICS

No member of the Commission shall vote on any item in which he may have a conflict of interest, i.e., no member may vote on any application affecting an area in which he rents or owns property, or which was brought before the Commission by a member of his immediate family or a business partner or corporation which he may be associated. A member may abstain from voting on any matter in which there may be any other conflict of interest, providing such conflict of interest is made known for the record.

SECTION 15 - CANDIDACY FOR OFFICE

If a member of the Commission shall decide to become a candidate

for an elective public office with the City of Clovis, such Commissioner shall submit his resignation concurrently with his official filing of such candidacy for office. The purpose of this rule is to preclude the Planning Commission from becoming a forum for persons aspiring to political office.

SECTION 16 - SPECIAL REQUESTS TO COMMISSIONERS

Commission members shall place in the record of commission meetings a report of any or all requests for special consideration received from any source either verbally or in writing. The purpose of this Section is to keep the public and the City Council informed regarding any showing of unusual or special interest by any person or group in any matter before the Commission.

SECTION 17 - AMENDMENTS TO RULES AND REGULATIONS

These Rules and Regulations may be amended by the Commission by a majority of all the members thereof at any regular or special meeting when at least ten (10) days written notice of the proposed presentation of such amendment at such meeting has been given all members of the Commission in the manner prescribed herein for special meetings, or when announcement of the proposed presentation of such amendment was recorded in the minutes of the previous regular meeting of the Commission.

SECTION 18 - DEFINITIONS

For the purpose of these rules and regulations certain words, phrases, and terms shall be construed as specified in this Section.

- (1) "Commission" shall mean the Planning Commission of the City of Clovis.
- (2) "Council" shall mean the City Council of the City of Clovis.
- (3) "by law" shall mean by the Constitution of the State of California, any law of the State of California, Ordinances of the City of Clovis.

SECTION 19 - ADOPTION

Adopted upon motion of COMMISSIONER HUGENROTH and seconded by COMMISSIONER CHAFFEE

VOTING:

AYES: Becker, Chaffee, Hillman, Huganroth, Yostmeyer
NOES: NONE
ABSENT: NONE

(Reprinted November 4, 1965)

GLOVIS PLANNING COMMISSION

NOVEMBER 8, 1965

1. Meeting called to order at _____ P. M.

2. ROLL CALL

Present

Absent

PAPENHAUSEN

POLSON

FRINDIVILLE

WAMSLEY

WEST

3. APPROVAL OF MINUTES OF OCTOBER 25, 1965.

4. COMMUNICATIONS AND REFERRALS *1185 Variance*

5. (HEARINGS)

Resolution 276 - Variance 63, Church of the Nazarene, Applicant (Continued). To permit building addition (Sunday School) without required parking, continue to utilize illegal parking and be excused from installing required curbs, gutters and sidewalks. 7:30 P. M.

6. OLD BUSINESS

Classification of mobile vending devices in progress. Report and recommendations to be made at completion of study.

7. NEW BUSINESS

8. PLANNING CONSULTANT

9. BUSINESS FROM THE FLOOR

10. PLANNING COMMISSION MEMBERS

11. COUNCIL ACTION ON PLANNING COMMISSION MATTERS, Report by Planning Consultant.

Council set for hearing Planning Commission Resolution 275 (Compton) R-1 to R-2, for November 15, 1965.

12. ADJOURNMENT AT _____ UNTIL _____ ON _____ 1965.

ENVIRONMENTAL IMPACT REPORT

for the

CLOVIS GENERAL PLAN

Clovis, California 93612

April, 1973

ENVIRONMENTAL IMPACT REPORT

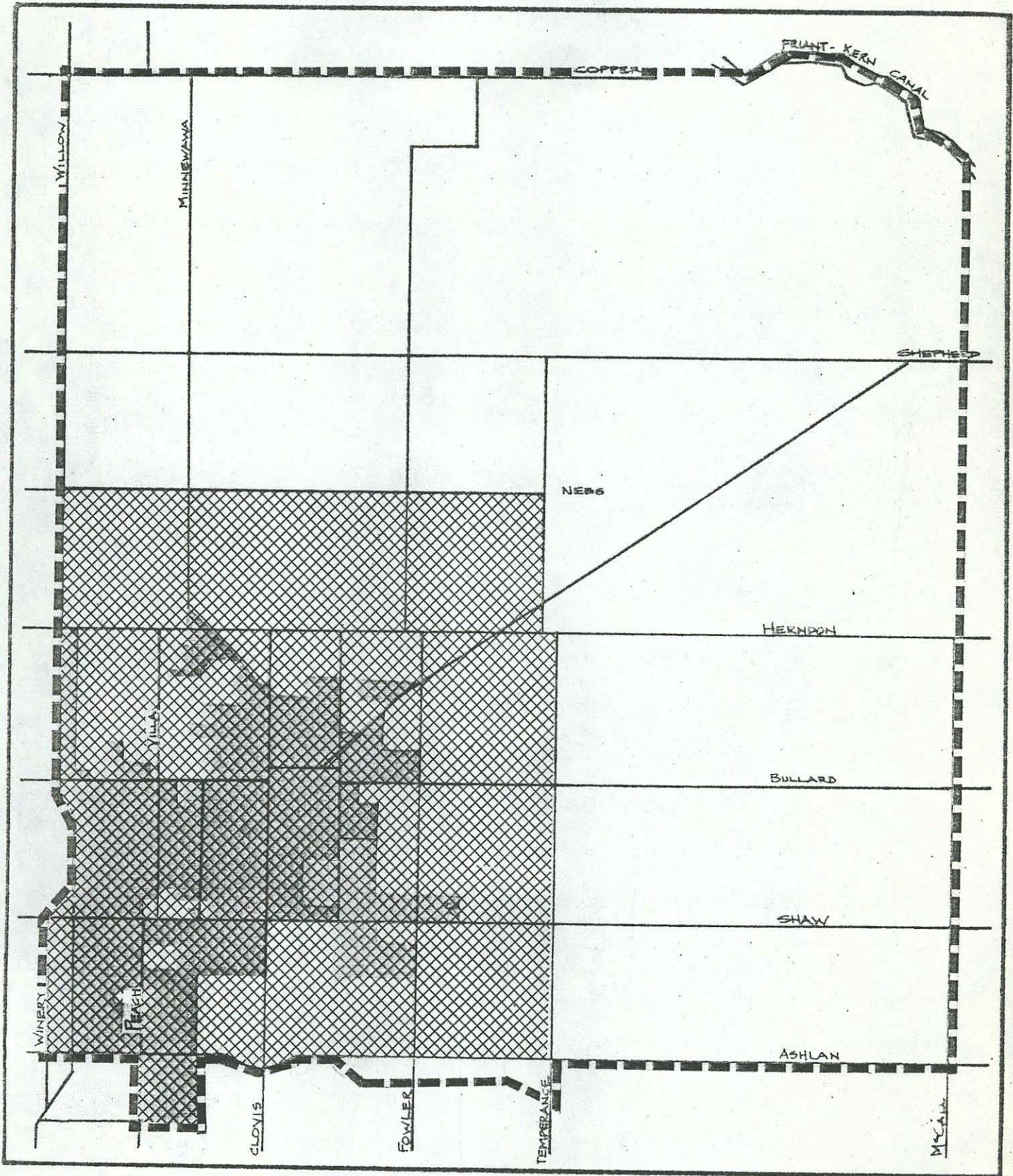
for the

CLOVIS GENERAL PLAN

April 1973

A. DESCRIPTION OF PROJECT

1. a. The boundaries of the Clovis General Plan Area are:
Cooper Avenue on the north, McCall Avenue on the east,
Ashlan Avenue and the Gould Canal on the south, and the
Winery/Willow alignment on the west.
- b. The Urbanizing Area within the General Plan Area is
bounded by Nees Avenue on the north, Temperance Avenue
on the east, Ashlan Avenue and the Gould Canal on the
south, and the Winery/Willow alignment on the west.
- c. The City of Clovis is situated generally in the south-
western part of the Urbanizing Area. The City limits are
more irregular on the north and east than on the south and
west, reflecting the dominant direction of recent urban
growth in those directions. Moreover on the western and
southern boundaries, the City limits are more stabilized
due to agreements with the City of Fresno, the north-
eastern boundaries of which the City of Clovis generally
abuts.



Clovis Planning Area



Clovis Urbanizing Area



Existing City Limits



2. The principle objective of the Clovis General Plan is to provide a maximum degree of community efficiency, attractiveness, economic growth and stability, public convenience and environmental well-being. It is long range, comprehensive, general and amendable. Eighteen months of research have gone into the making of the plan and a Citizen's Review Committee, constituting a cross-section of people of the entire area, has monitored the staff work from January 1971 to March 29, 1973. In addition, members of the Fresno County Planning staff attended all the meetings of the Citizen's Review Committee. Their input helped coordinate the efforts of the Clovis staff with county thinking and policy.

Co-chairmen of the Citizen's Review Committee officially transmitted the majority report to the Clovis Planning Commission on April 9, 1973. A minority report was tendered to the Planning Commission by one member of the committee.

The Plan envisions an optimum amount of future development and where necessary, proposes policies designed to direct and control growth in a way that will provide the maximum benefits to present and future generations.

3. The project is the Clovis Area General Plan as described and located in A-1 above. It represents an attempt to apply intelligent

forethought to the future development of land. Technical characteristics of the plan include the circulation element, the flood prone areas, the McGlasson Master Plan for Sanitary Sewer System, and the master plan by the same engineering firm for storm drainage, both of which are incorporated in the conservation/open space element of the plan.

Portions of the land use element, in particular those dealing with commercial and industrial uses, and that portion dealing with agri-business (in the agriculture land use section) are economic in nature.

The conservation/open space element deals almost entirely with the environment and adopts, by reference, the engineering studies on sewers and storm drainage referred to above. Also related to engineering is the proposal in the Scenic Highways Element that the future Freeway 168 be recessed between Shaw and Herndon Avenues on its alignment through Clovis.

B. DESCRIPTION OF ENVIRONMENTAL SETTING

The Clovis Planning Area is located in the central San Joaquin Valley northeast of the City of Fresno, and consists of approximately 49 square miles, or 31,360 acres. It is bordered on the north by

Copper Avenue and the Friant-Kern Canal, on the east by McCall Avenue, on the south by Ashlan Avenue and the Gould Canal, and on the west by the Winery/Willow Avenues right-of-way. The greater part of the land is currently in rural or agricultural uses. Within the General Plan boundaries, there is an urbanizing area, bordered by Nees Avenue on the north, Temperance Avenue on the east, Ashlan Avenue and the Gould Canal on the south, and Willow/Winery on the west. The Urbanizing Area comprises approximately 18 square miles, or 11,500 acres, and will be the primary location of urban development within the over-all Planning Area.

Within the Planning Area the topography is generally flat but immediately to the north and east, the foothills of the Sierra Nevada Mountains rise to give relief to the land. These hills and the mountains beyond form a scenic backdrop that is a distinct visual amenity.

The main water course within the Planning Area is Dry Creek, although there are several smaller creeks, canals and ditches that cross the area. While these are dry much of the year, winter storms often transform them into major streams.

To the north of Clovis is the channel of the once uncontrolled San Joaquin River. Friant Dam and Millerton Lake now contain most of the original flow, a large portion of which is now channeled south by the Friant-Kern Canal which runs to the northeast of Clovis.

The Clovis Planning Area, similar to other parts of the San Joaquin Valley, has been closely linked with agriculture and ranching from its initial settlement period. Over the years, farming around Clovis has diversified to such an extent that at the present time nearly every type of crop that is grown in the valley can be found within the Planning Area.

Although the soils around Clovis are generally conducive to farming, the patchwork pattern of soil types, rising taxes, and encroaching residential development make it increasingly difficult for agriculture in the Clovis Area to compete economically with Fresno County's west side.

Within the Clovis Planning Area, 7600 acres of land (24% of the Planning Area) are participating in the California Land Conservation Act. Despite the controversy surrounding this program, it has enabled many farms to remain in operation and thus has helped maintain the integrity of the rural areas.

C. ENVIRONMENTAL IMPACT

1. The Environmental Impact of the Proposed Action:

The environmental impact of a General Plan can only be on the positive side. The plan itself is the very basic tool by which a City can obtain that which is good and prevent or eliminate

to the greatest degree possible that which is less than desirable. If properly done, the General Plan in itself is a consummate, most all-inclusive environmental impact analysis.

It is the plan by which the good qualities, the desirable attributes of an area are protected and enhanced to provide the greatest degree of benefit to as many people as possible as a changing and growing urban environment is witnessed.

See B above.

The plan seeks to protect open space for agriculture by prohibiting urbanization of rural areas until population growth requires use of such areas for living accommodations. The plan seeks to regulate the intrusion of urban development into rural areas by:

- a. encouraging development of vacant lands in the City before outward expansion is allowed, and
- b. allowing outward expansion when required by population growth to proceed in an orderly and planned fashion.

Natural resources are dealt with extensively in the conservation/open space element and peripherally in the elements concerned with public and quasi-public uses, scenic highways, and public safety. The land use element in particular proposes careful

careful monitoring of all land uses in the public interest of all who live in or transverse the Area.

The Clovis General Plan, if conscientiously used by the public agencies involved, should protect and enhance the natural and man-made environment. It is the result of 18 months of extensive study and review in which protection of the environment was the most important consideration.

2. Any Adverse Environmental Effects Which Cannot Be Avoided if the Proposal is Implemented:

During the eighteen months during which the plan was being formulated, great stress was accorded adverse environmental effects. Orderly expansion of living accommodations into the urbanizing area of the plan, after vacant residential properties within the Clovis corporate limits are utilized, is a key proposal of the plan. If this admonition is heeded and implemented by the City of Clovis and Fresno County (in areas under its jurisdiction), the harmful by-products of leap-frog subdivisions should be eliminated. The plan proposes heavier residential densities where urban type services are available. It proposes rural land uses for areas not served by such facilities as sewer, water, garbage collection, urban type police and fire services. The plan proposes shopping facilities in relationship to public need after, rather than before, planned residential

expansion has taken place. In addition a circulation system is proposed to accomodate the traffic generated by the various land uses envisioned by the plan.

3. Mitigation Measures Proposed to Minimize the Impact:

The new Freeway is proposed as a depressed highway from Shaw Avenue to Herndon, in order to alleviate the detrimental effect of having the City of Clovis severed by a major thoroughfare at grade or elevated construction.

Better designed subdivisions are proposed to reduce the monotony of urban development. Moreover, innovative housing design techniques such as clustered housing and the resiliency of planned unit developments are suggested.

In addition, the retention of open space is strongly advised. The plan proposes the addition of an "open-space" zone in the Clovis Zoning Ordinance, to implement this feature of the General Plan. In conjunction with these open spaces, parks, recreational areas, bicycle and horse trails are recommended. Linear parks are proposed for public utility rights of way, and recreational uses are envisioned for storm drainage ponding sites in order that such facilities may serve a dual purpose.

4. Alternatives to the Proposed Action:

No alternative to the General Plan was considered. The Clovis City Council, the Clovis Planning Commission, the Clovis City Manager and Planning Director, as well as the Citizen's Review Committee, were all adamant regarding the need for a new General Plan.

It should also be noted that the State of California did not provide for a "no project" alternative. In the entire project of formulating the General Plan, the only alternative suggested (in a minority report of the Citizen's Review Committee) involved the proposed back-zoning of some commercial property in the incorporated limits of Clovis. More commercial zoning was proposed in the urbanizing area by two members of the Citizen's Review Committee, but they did not incorporate their thoughts in a minority report.

In summary, a "no project" alternative was not considered and only minor alternative recommendations were proposed. This direction was taken on the basis that not to have a General Plan is in fact a ridiculous alternative to having a General Plan.

5. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

The sponsor of this General Plan was the City of Clovis. The

City Council was desirous of having its General Plan brought up to date and felt that a new plan for orderly growth was essential now. In addition, the State of California foreclosed the possibility of post-poning action for studying further alternatives.

The essence of the Clovis General Plan is long-term. Every element as well as the implementation section stresses long-term productivity. All proposals are long-term and should enhance the environment; there are no short-term impacts which will pose threats for the future of the Clovis environment.

6. Any Irreversible Environmental Changes Which Would Be Involved in the Proposed Action Should It Be Implemented:

The Clovis General Plan constitutes a well thought out formula for avoiding irretrievable commitment of natural resources. Indeed, it is specifically designed to forestall irreversible environmental changes that could hurt future generations.

Areas for which commercial and industrial development are proposed for the future, for example, will not commit surrounding areas to similar uses.

7. The Growth-Inducing Impact of the Proposed Action:

Growth (population, commercial or industrial) is guided by the General Plan. In its making, intelligent forethought has been applied to the future development of land in the Planning Area. The plan will not induce growth in areas other than where such growth, after careful study, is proposed.

The City of Clovis hopes to channel urban growth where it will have the least adverse impact on the environment and where the greatest public safety, convenience and welfare can be accomodated.

The General Plan is not a growth-inducing document or project, but rather a program for proper control of natural growth as it occurs.

D. ORGANIZATIONS AND PERSONS CONSULTED

The Clovis General Plan was prepared by the Planning Department of that City. Said department also prepared this Environmental Impact Report Statement. The Fresno County Planning Department staff was consulted briefly regarding the requirements of an Environmental Impact Report when such was applied to a General Plan.

E. WATER QUALITY ASPECTS

Water quality, if affected, will be improved if this project is approved. The Clovis water system is certified by the California State Department of Health.

THE CLOVIS GENERAL PLAN

Clovis, California

Adopted

August 19, 1974 - City Council

August 27, 1973 - Planning Commission

Prepared

by

City of Clovis Planning Department

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Robert Estep
Stan King
Gene Papenhausen

Dennis Prindiville, Mayor

CLOVIS CITY PLANNING COMMISSION

Jim Bower
Art Cabezut
Curt Ferris
Gerald May

John Sweeney, Chairman

CITY STAFF

Allen L. Goodman, City Manager
Gerald Lafferty, Planning Director
Leon Lancaster, City Engineer and
Director of Public Works
Thomas W. Higgason, Police Chief
Kenneth E. Mosley, Fire Chief
Michael Prandini, Finance Officer

CITIZEN'S REVIEW COMMITTEE

Peggy Bos, Co-Chairman
Al Frey, Co-Chairman
Robert Ritchie
Mary McGarry
Carmel McGarry
Sara Jane Kayser
Rex Phebus
Bill McFarlane
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Preface

Work began on this revision of the Clovis General Plan in September 1971.

Most of the preliminary work was done by graduate students from the Department of Urban and Regional Planning, California State University, Fresno. A Citizen's Review Committee was formed in December of that year and met for the first of many sessions in January, 1972.

The Citizen's Committee met regularly thereafter until April, 1972, when work on the plan was suspended due to the increased involvement of the staff in the current planning program. Meetings were resumed, however, in the fall of 1972 and continued intermittently until April 1973.

The Planning Staff wishes to thank the committee members and other interested citizens of the General Plan Area for the many evenings they spent reviewing the progress of the plan, and for the many intelligent and insightful suggestions they contributed. Without their input, the General Plan could not have been the reflection of the community's interest and welfare the staff hopes it is.

INTRODUCTION

A general plan is a guide for orderly growth and change within a planning area. The information it contains will assist City officials, governmental agencies, developers, businessmen, and all citizens of the area by providing a more coordinated framework for the solution of the problems of urban development.

The general plan is comprehensive in scope and attempts to relate human activities with economic policies, physical design and environmental concerns. It is intended to reflect the desires and needs of the present population and in addition, establish policies and goals for future development.

The explicit goal of the Clovis General Plan is to provide a maximum degree of community efficiency, attractiveness, economic growth and stability, public convenience, and environmental well-being. The degree to which it is successful in this endeavor is largely dependent upon how well the plan expresses the needs and desires of the people in the planning area.

A workable general plan is:

- Long Range - Far sighted, oriented to the future,
- Comprehensive - Covers the entire community and is concerned with the needs of the citizens,
- General - Deals with broad relationships among the elements of the plan,
- Flexible - Capable of being amended to meet new situations and circumstances.

STEPS IN THE GENERAL PLAN PROCESS

The steps involved in the process may be divided into four major phases as follows:

1. General Research - including the collection, analysis, and evaluation of basic land uses; and economic, social and population data.
2. Citizen Participation - including the formation of a Citizen's Advisory Committee, the frequent study sessions about community problems and goals, the formulation of a Policy Statement, and the referral of findings to the general public at public hearing.
3. Preparation of the General Plan - including definition of goals, principles and standards, supporting proposals, and the publication of the report.
4. Implementation of the General Plan - consisting of rezoning and the placing of prudent conditions upon development by the governing body; and applying recommendations contained in the general plan by the governing body in their day-to-day decisions about policies, fiscal matters, capital improvement programs and ordinances.

ROLES OF GOVERNMENTS

For the General Plan to be effective, it must consider the relationships that Clovis shares with other governmental agencies that operate in the region. Through cooperation, Clovis is planning for more than merely the land within the City limits; it is also studying adjoining land to the north and east, the development of which is inextricably co-mingled with the future of Clovis.

The importance of regionalism and regional planning must also be recognized, as certain elements of local planning involve regional considerations. Foremost among these are transportation, solid waste management, water supply, air and water pollution prevention, and open space systems. The Clovis Plan is not an entity in itself, but rather a part of a broad yet interrelated planning function. The information contained herein represents a coordinated effort on the part of all other governmental agencies in Fresno County. This plan proposes continued diligent monitoring by Clovis of proposed changes in land uses in the areas north and east of the city. It is based upon the assumption that sincere and intelligent cooperation between Clovis and Fresno County will guide development in these areas prudently in order to protect the resources contained therein for the present and future generations.

SETTING

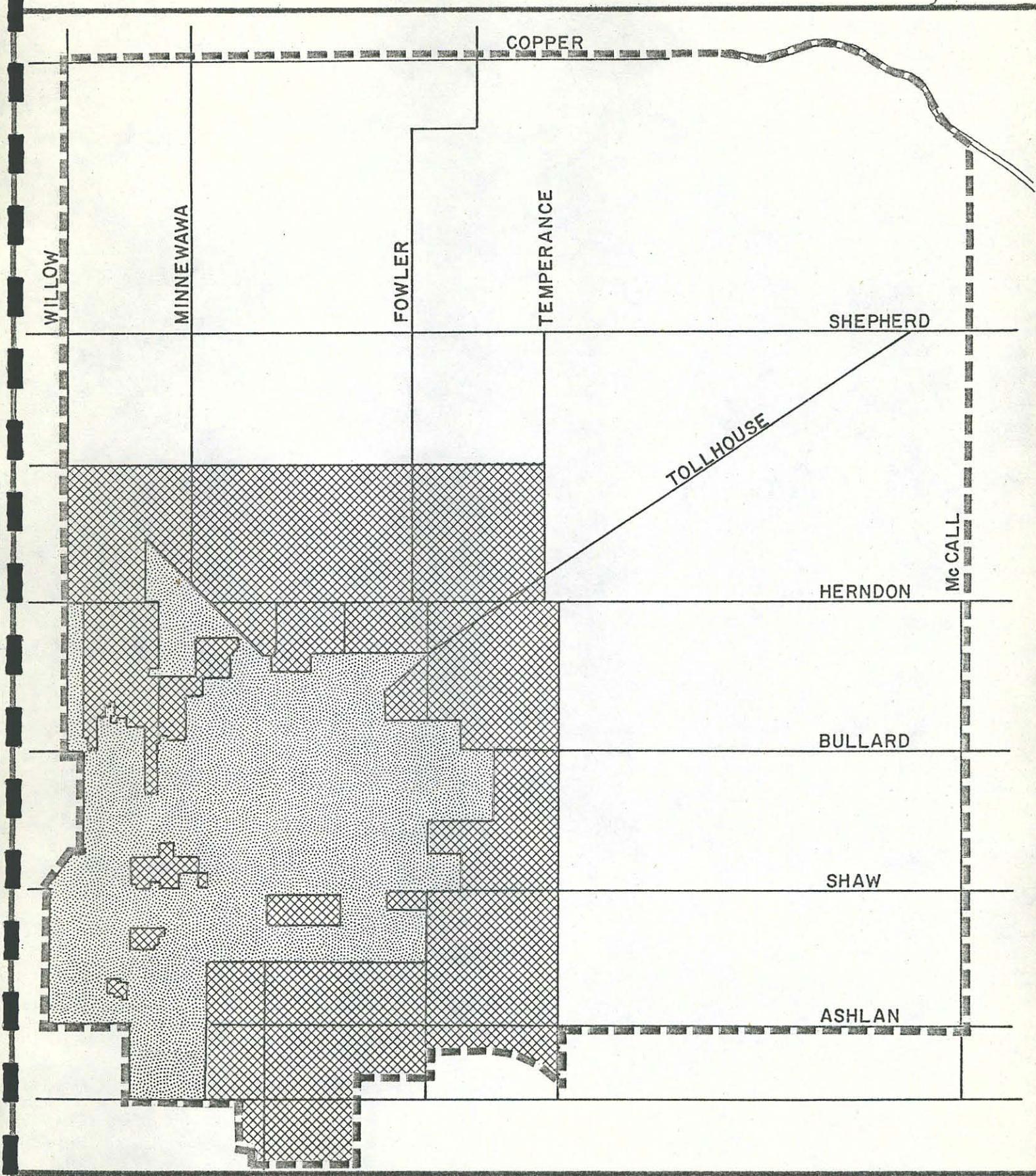
The Clovis Planning Area is located in the central San Joaquin Valley, northeast of the City of Fresno, and consists of approximately 50 square miles or 31,840 acres. It is bordered on the north by Copper Avenue and the Friant-Kern Canal, on the east by McCall Avenue, on the south by Fresno City Limits and the Gould Canal, and on the west by the Winery-Willow centerlines. The majority of the land is currently in rural or agricultural uses. Within the General Plan boundaries, there is an urbanizing area, bordered by Nees Avenue on the north, Temperance Avenue on the east, Fresno City Limits on the south, and Willow-Winery on the west. It comprises approximately 19 square miles or 11,980 acres, and will be the primary area of urban development within the Planning Area.

Within the Planning Area the topography is generally flat but immediately to the north and east, the foothills of the Sierra Nevada Mountains rise to give relief to the land. These foothills and the mountains beyond form a scenic backdrop that is a distinct visual amenity.

The main water course within the Planning Area is Dry Creek, although there are several smaller creeks, canals and ditches that cross the area. While these are dry much of the year, winter storms often transform them into major streams.

To the north of Clovis is the channel of the once uncontrolled San Joaquin River. Friant Dam now contains most of the original flow, a large portion of which is now channeled south by the Friant-Kern Canal which runs to the northeast of Clovis.

Vehicular traffic through the area is provided by numerous streets which connects Clovis with the City of Fresno and the countryside beyond. Principle among these are Shaw Avenue and Clovis Avenue, designated as State Highway 168, which carry travelers to the nearby Sierra Nevada and the popular Shaver and Huntington Lakes. The Southern Pacific Railroad runs through central Clovis and provides rail freight service in the area. Just to the south of the Planning Area is Fresno Air Terminal, the Valley's largest airport.



CLOVIS PLANNING AREA 
 CLOVIS URBANIZING AREA 
 EXISTING CITY LIMITS 

CLIMATE

Climate is also an important characteristic of the area, both in terms of its effect upon the local economy, and in its role in shaping the desirability of the area as a residential place. The semi-arid climate of the Valley floor, with cool winters and long hot summers, has done much to account for its agricultural pre-eminence. Although annual rainfall is light, abundant water for irrigation of farm lands is available from the nearby mountains. Low humidity minimizes the effect of the summer heat, and wide differences in climate available on the coast and in the mountains make the Clovis area a pleasant and interesting place to live.

VALLEY CLIMATE

TABLE 1

Average Temperature

<u>Month</u>	<u>Daily Max.</u>	<u>Daily Min.</u>	<u>Mean</u>
January	55.0	34.4	44.7
February	61.9	37.5	49.7
March	68.1	39.4	53.8
April	72.4	43.4	57.9
May	85.9	48.7	67.3
June	94.9	54.9	74.9
July	102.5	59.9	81.2
August	100.7	58.6	79.7
September	93.8	53.1	73.5
October	81.5	46.3	63.9
November	67.4	37.8	52.6
December	56.8	35.3	46.1
Annual	78.4	45.8	62.1

Average Monthly and Seasonal Precipitation (Inches)

<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Seasonal</u>
2.17	2.42	2.02	1.03	0.31	0.11	0.01	0.01	0.11	0.74	1.08	2.13	12.14

Frost Dates

The following table gives the probability of receiving temperatures of 32 degrees or lower after the given dates in spring and before the given dates in fall:

<u>Probability</u>	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>40%</u>	<u>50%</u>	<u>60%</u>	<u>70%</u>	<u>80%</u>	<u>90%</u>
<u>Spring Date</u>	4/26	4/15	4/8	3/33	3/26	3/20	3/15	3/7	2/23
<u>Fall Date</u>	10/27	11/2	11/7	11/11	11/15	11/19	11/23	11/28	12/4

Relative Humidity

Expressed as a percentage, relative humidity is the amount of moisture in the air compared to its total moisture holding capacity at a given temperature. The following table presents a frequency distribution of relative humidity at the Fresno Air Terminal: (Figures under each month represent percentage of hours for a given relative humidity.)

<u>% Rel. Hum.</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov</u>	<u>Dec.</u>
0-19	--	*	1	1	4	5	7	3	2	2	*	*
20-29	*	1	4	7	16	16	22	16	11	8	1	*
30-39	1	4	7	12	16	19	21	18	16	13	4	1
40-49	2	8	11	13	16	16	17	16	16	14	8	2
50-59	5	10	11	12	14	15	15	15	15	14	8	6
60-69	8	9	12	13	13	14	11	15	14	15	9	6
70-79	11	13	14	13	10	10	6	12	14	16	13	9
80-89	19	21	21	16	8	5	1	4	11	11	19	20
90-100	54	35	20	13	3	1	*	*	2	7	36	56

*Less than 0.5%

TABLE -1 (Con't)

Sunshine

During the summer months, the San Joaquin Valley receives an abundance of sunshine, while moderate amounts are received during the other seasons of the year. The following table summarizes the percentage of possible sunshine received during an average year:

Period	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Seasonal
%	47	40	72	90	83	91	89	92	99	82	45	31	75

Source: U. S. Weather Bureau, Fresno, California

HISTORY.

The City of Clovis and its environs have a colorful history typical of communities born in the early days of the settlement of the west. Because it is a goal of this plan to encourage and develop in the residents of the Clovis area a sense of identity with, and appreciation of, their community, the following historical sketch is provided. Additionally, an understanding of what has occurred in the past is invaluable in planning for the economic, social and cultural growth of the future.

The Clovis area first began to show signs of life early in the 1800's as missionaries, trappers and later, miners, began to roam through the State. Until then the only human life in the vicinity was that of the many Indian tribes which had settled in the foothills near the rivers.

Little happened, however, until miners, lured by the Gold Rush, began to criss-cross the Valley and foothills. As interest in mining faded, the entire area became prime grazing land for huge herds of sheep and cattle. By 1890 there were over 70,000 cattle and one million head of sheep grazing in the area.

Eventually, homesteaders and their fences brought an end to the open range and before long, thousands of acres of grain were being harvested and shipped to mills.

In 1891 a rail line passing through the settlement of Clovis and reaching Hamptonville (now Friant) was completed, paving the way for Clovis' future growth. The development of a major lumber mill and finishing plant was made possible by the construction of a flume from Shaver Lake to Clovis. This amazing flume floated huge logs the entire distance from the lumber area to the 40-acre plant site in Clovis. Located in the area now occupied by the Clovis Rodeo Grounds and the Clark School, this plant supplied work for early residents and dominated political and social life in the community for many years.

The location of Clovis proved very providential once the railroad was completed. It was the center of the grain and cattle industries and was the halfway point between the mountains and Fresno. Fresno became the county seat in 1874 after the Central Pacific Railroad had established terminal and depot facilities there in 1872.

The community of Clovis was laid out by Inyroot Teilamn, a licensed surveyor. Original owners of most of the land were Clovis M. Cole, Clarence Pallas and George Owen. The Shepherd-Teague Company controlled the land south and west of the settlement and lots were sold as early as 1893.

Swamps existed in the area west of the railroad, now bounded by Seventh and Ninth Streets. There were few trees and the country was virtually barren. As people began to settle, however, small businesses sprang up along Front Street (now Clovis Avenue). Home wells furnished water, streets were unpaved and often quagmires, and the sidewalks were boards. A hotel was constructed near the railroad station and a number of general stores, a drayage, livery stable, butcher shop and blacksmith shop opened for business.

There was no organized government in the area for the first 21 years of its existence. The County provided a constable and justice of the peace and a jail was built near the railroad station.

The first church in Clovis was the Methodist Church, established in 1893 at what is now Fifth and Woodworth. In 1902, the Baptist Church was built at Fourth and Woodworth.

The first high school was established in 1890, and the three grades met in the upstairs rooms of the grammar school. The first high school building was built in 1902.

Also, in the early history of Clovis, a myriad of agricultural products began to appear. Fruit packing became big business and such names as Pioneer, Stewart, E. Y. Folley, P. H. McGarry, W. C. Cook, Garcia, and the Clovis Fruit Company became well known. Agricultural products such as grapes, peaches, raisins and figs were packed and shipped throughout the United States.

The City was incorporated in 1912. The first election developed into a battle over liquor and the "dry" candidates emerged victorious.

Among the earliest accomplishments of the new council was construction of water and sewer lines. The projects were hampered by a water table that was at times within four feet of the surface. The combined projects cost nearly \$50,000 and some of the lines are still in use.

In the years following incorporation, lumber and agriculture continued to be the community's top industries. The area grew at a leisurely pace until the mid-1950's when the Fresno-Metropolitan Area began to increase rapidly in population. Clovis surpassed Sanger as the second largest city in the County around 1968. In recent years, expansion in a southwesterly direction towards Fresno has all but obscured the division between the two cities.*

*The preceding historical sketch, edited slightly and brought up-to-date, has been excerpted directly from "This is Clovis," with the permission of its author, Tom Wright. The City of Clovis wishes to thank Mr. Wright for the use of this material.

More recently, the City of Clovis has connected to the Fresno Sewer System, which has eliminated the Clovis Treatment Plant near Peach and Ashlan Avenues. Also, in 1971 the City converted from a Mayor-Council form of government to a Council-Manager system.

POPULATION CHARACTERISTICS

The study of population is an integral part of every effective general plan. Forecasting population growth and characteristics is indispensable in planning for housing, transportation, public facilities, recreation and land use.

Past Growth

Until after World War II, Clovis' population remained very small, numbering under 2,000. The sharp upward trend that continues today began in this post-war period. For example, the 1940 census showed only 1,626 people, while ten years later this figure had risen to 2,766.

The growth that has occurred since 1950 must be viewed as part of the tremendous growth of the entire Fresno-Clovis Metropolitan area, the San Joaquin Valley and California as a whole. For a variety of reasons, the north portion of the Fresno-Clovis Metropolitan Area has received the greatest share of the post-war expansion, and the population of Clovis clearly reflects this.

In 1960, the City had 5,546 residents, more than double its population of 1950. Large scale development of housing in the southwest part of Clovis between Shaw and Ashlan Avenues has accounted for a major portion of the growth that began in the late 1950's and gained momentum through the 1960's. The 1970 census put the City's population at 13,856, officially making it the second largest City in Fresno County. The State of California Finance Department set the population of Clovis at 17,150 on February 1, 1972, and 18,100 on November 1, 1972.

In addition to the population within the City of Clovis, a large number of people live outside the City but within the planning area. Based on 1970 census data they account for approximately 7,150 persons, bringing the total planning area population to 21,000. The total for this area in 1960 was approximately 11,483.

Tables 2 and 3, with their accompanying graphs, illustrate the tremendous growth of Clovis and its planning area, relative to other cities within Fresno County and compared to other regions. While all the others are experiencing declining growth rates, Clovis alone continues to accelerate.

Table 4 illustrates that, although many racial and ethnic groups are represented within the planning area, Caucasians are by far the most numerous. Mexican-Americans are the next largest group, comprising a little more than 14% of total population. There are nearly equal numbers of American Indians, Negroes and Orientals.

Table 5 depicts the current (1970) census breakdown of age and sex groups. The graph is useful in showing at a glance the relative proportion of each different group to the entire population. The distribution parallels state and national trends reflecting a declining birth rate as evidenced by the comparatively small number of children in the 0-5 years age group. Also notable is the relatively small number of people 60 years of age and older.

Population Forecast

Predictions of future population are dependent upon a wide set of variables. They are based on certain assumptions about the future which are related to demand for, and the availability of, residential land and local policies directing and influencing future development. In order to develop reasonable population predictions we must evaluate each of these variables.

The projected population growth for Clovis is based on the following assumptions.

1. The economics of the nation, of California, the San Joaquin Valley, and the planning area, although they may undergo moderate fluctuations will maintain a healthy growth over the long run.
2. Agriculture will continue to dominate the economy of the Clovis-Fresno Metropolitan Area for the next four years with retail sales, professional services, industry and governmental agencies gradually increasing in scope.
3. Future development of the Clovis-Fresno Metropolitan Area will continue to be greatest in a northeasterly direction and Clovis will receive strong pressures to accommodate such growth.
4. The continued trends toward urbanization, technology and massive transportation development will affect the character of Clovis.
5. The area will be spared from cataclysmic events, either natural or man-made.
6. Social, cultural and political ideals will remain relatively constant.

Considering the availability of residential land as a determinant of population growth, the Clovis Planning Area should be viewed in three separate parts. The first segment lies within the City of Clovis itself, and therein, existing undeveloped, residentially zoned parcels represent enough land to more than double its current population without raising existing densities.

The second segment of the Planning Area is the Clovis Urbanizing Area, within this area exclusive of the City limits, Clovis anticipates urbanization with its accompanying increase in population. There is abundant land available here for future residential subdivisions, with single family homes on large lots. The growth of this area, until recently, has been dormant due to the lack of City services.

The remainder of the General Plan area to the north and east of the urbanizing area should remain for rural agricultural uses on large parcels of land. While total holding capacity will never be great at current development standards, this area will continue to accommodate people in a semi-rural setting for many years.

Land availability, therefore, exceeds both probable and desirable growth within the foreseeable future and cannot be considered a factor restricting population increase.

As stated in the foregoing set of assumptions, many of the factors creating residential demand both on the regional and the local level, will remain constant and future growth will be similar to what has occurred in the past. Table 6 confirms this assumption and summarizes the best existing predictions

TABLE 2 Regional and Area Wide Growth - Numerical Increase in Population by Ten Year Periods

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
California	6,907,387	10,586,223	15,717,204	19,700,000
Fresno County	178,565	276,515	365,945	413,700
Fresno - Clovis Metropolitan Area	---	175,000	238,222	286,494
Clovis Planning Area	---	---	11,483	21,000

Population Growth Above as a Percentage Rate of Increase from One Period to the Next

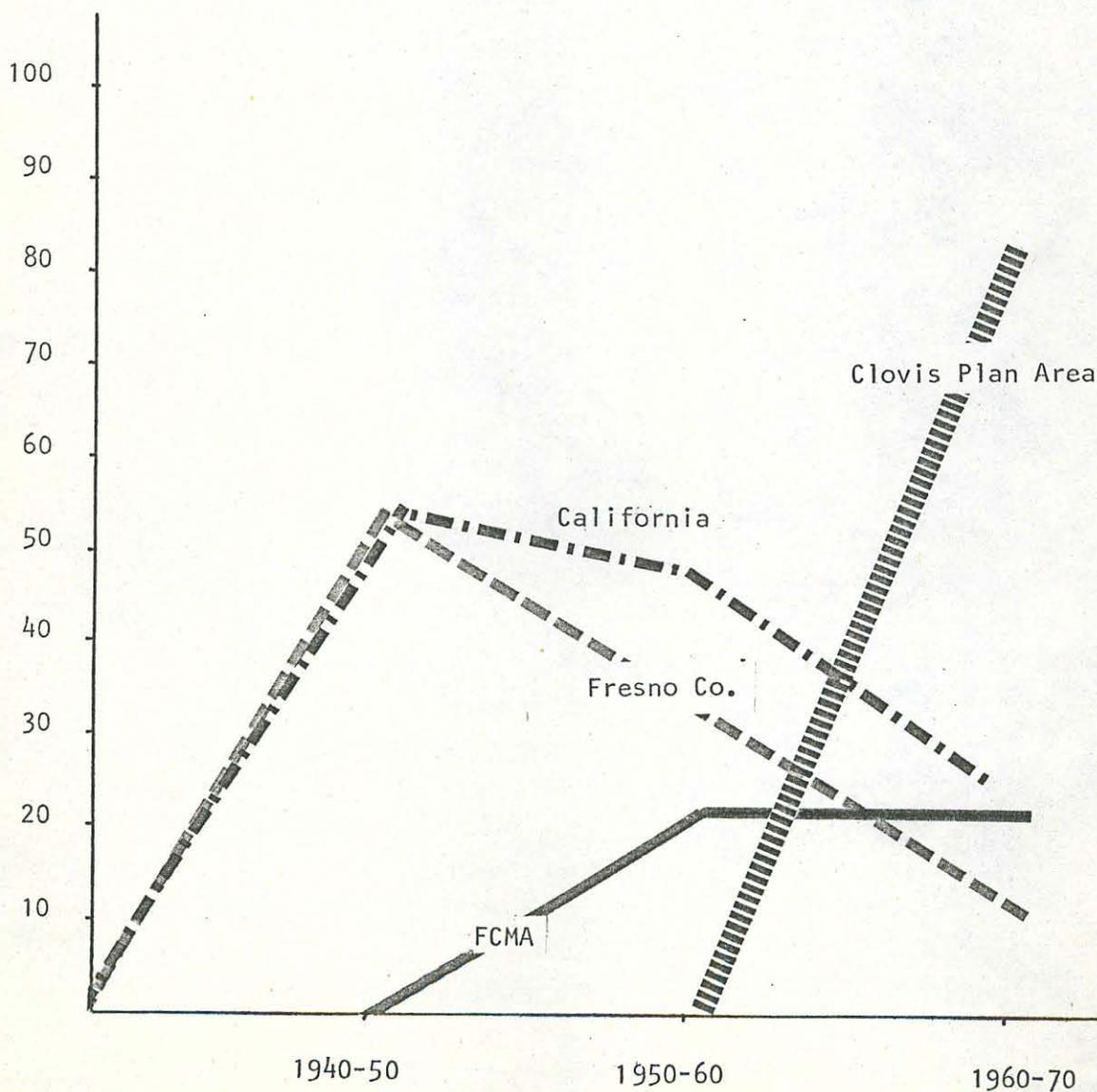


TABLE 3 Growth of Key Cities of Fresno County - Numerical Increase in Population by Ten Year Periods

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
Clovis	1,626	2,766	5,446	13,297
Coalinga	5,026	5,539	5,965	6,047
Sanger	4,017	6,400	8,072	10,055
Selma	3,667	5,964	6,934	7,350
Kingsburg	1,504	2,310	3,093	3,809
Fresno	60,685	90,669	133,929	165,972

Population Growth Above as a Percentage Rate of Increase from One Period to the Next

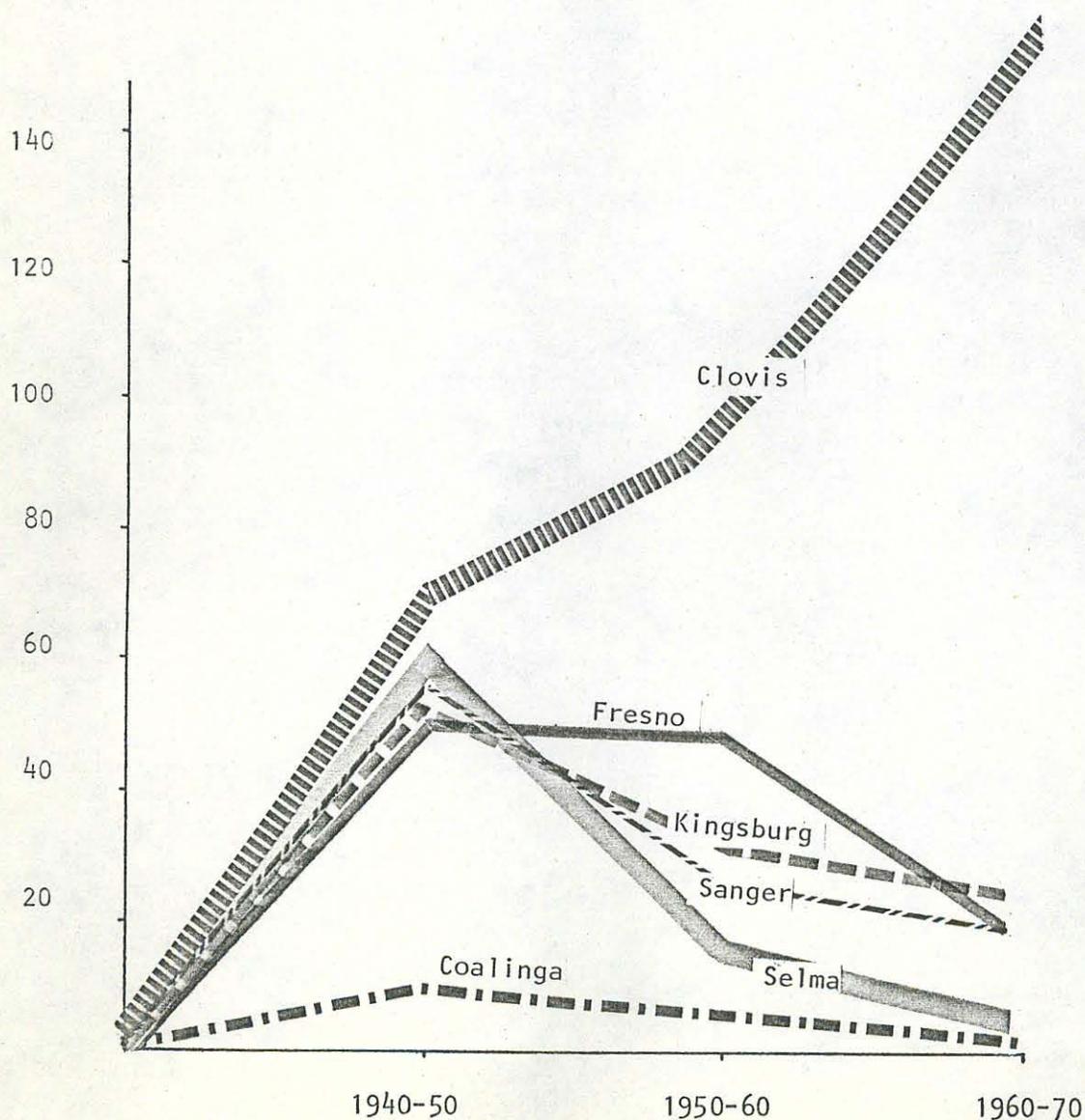
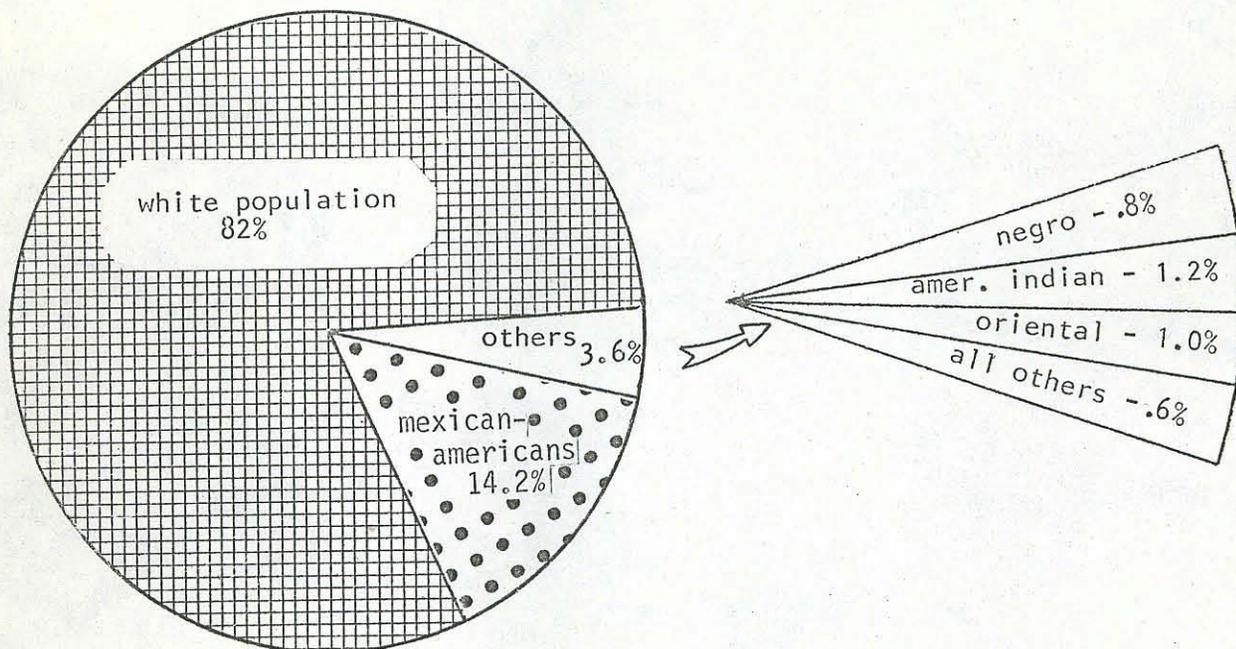


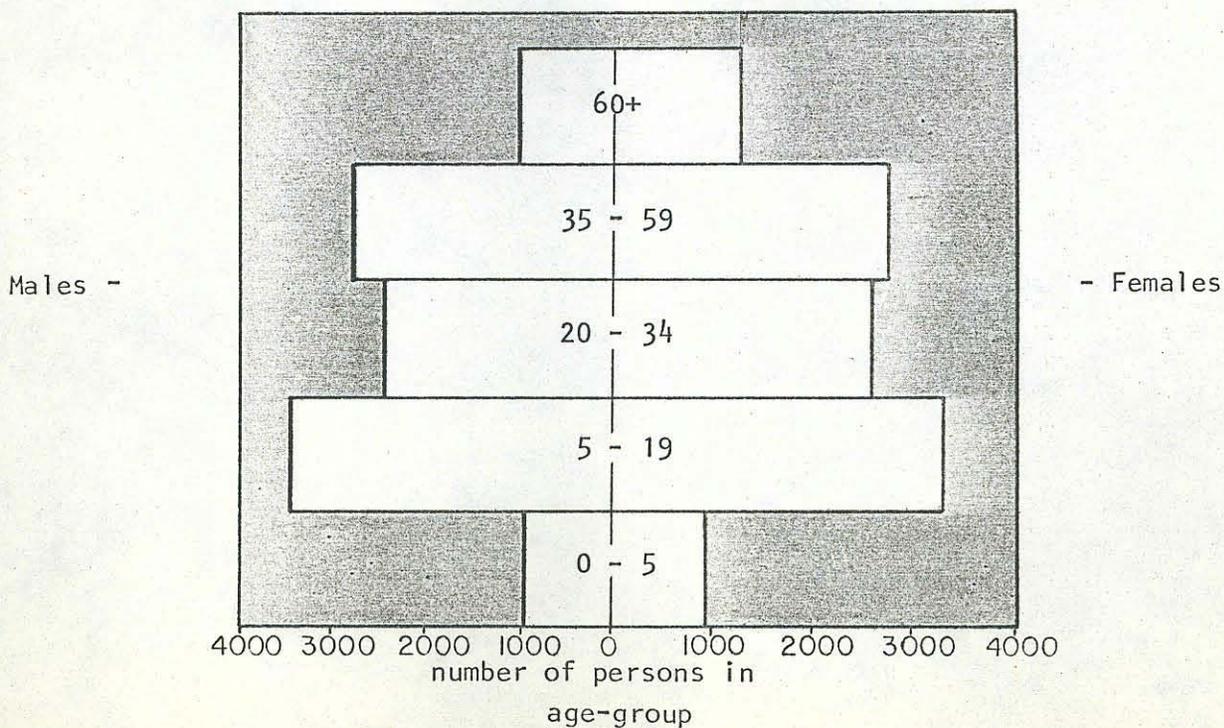
TABLE 4 Racial - Ethnic Composition of Residents of the Clovis Planning Area



source - U.S. Census, 1970

TABLE 5

Age - Sex Chart for Clovis Planning Area



source - U.S. Census, 1970

TABLE 6

FUTURE GROWTH

Source of Information	Area	1970	1975	1980	1985	1990	1995
Calif. Chamber of Commerce	California	19,703	21,217	23,249	25,595	27,888	30,051
State of California, Dept. of Finance	Fresno Co.	413	432	453	480	-	-
Calif. Chamber of Commerce	Fresno Co.	413	432	453	480	503	525
Boyle, Tokmakian	Fresno-Clovis Metro. Area	289	310	330	349	370	390
Consultive Planners	Fresno-Clovis Metro. Area	289	-	-	360	-	-
Consultive Planners	* Clovis Planning Area	22.4	27.5	-	38.5	-	54.5

* The Clovis Planning Area studied by Consultive Planners is not the same as our present planning area, but is quite similar and has been shown here to give a further indication of growth potential.

(thousands)

about California, Fresno County, the Fresno-Clovis Metropolitan Area and the old Clovis Planning Area. Based on extensive study of local conditions and supported by the trends predicted by other analysts, the following projections seem reasonable. Table 7, Includes both high and low figures representing maximum and minimum development. It is anticipated that actual growth will occur somewhere within this range. A word of caution is required here; at best the figures given are only predictions about what will occur. A wide variety of events, although presently unforeseen, could certainly alter the forecasts. But even with these reservations, the forecasts serve as the best available guide for future decisions.

The final variable, a most critical one, is the effect that development policy will have on population increase. The forecasts given reflect no policy of population limitation but instead represent a continuation of growth regulated by factors of the economy.

THIS PLAN ENVISIONS AN OPTIMUM AMOUNT OF FUTURE DEVELOPMENT AND WHERE NECESSARY PROPOSES POLICIES DESIGNED TO DIRECT AND CONTROL GROWTH IN A WAY THAT WILL PROVIDE THE MAXIMUM BENEFITS TO PRESENT AND FUTURE GENERATIONS.

TABLE 7

Population Projection No. 1

Year	City of Clovis	Clovis Urbanizing Area	Planning Area
1970	13,856	19,100	21,000
1972	17,150	22,500	24,500
1975	--	25,700	28,000
1980	--	31,200	33,900
1985	--	36,700	39,800
1990	--	42,200	45,700
1995	--	47,700	51,600

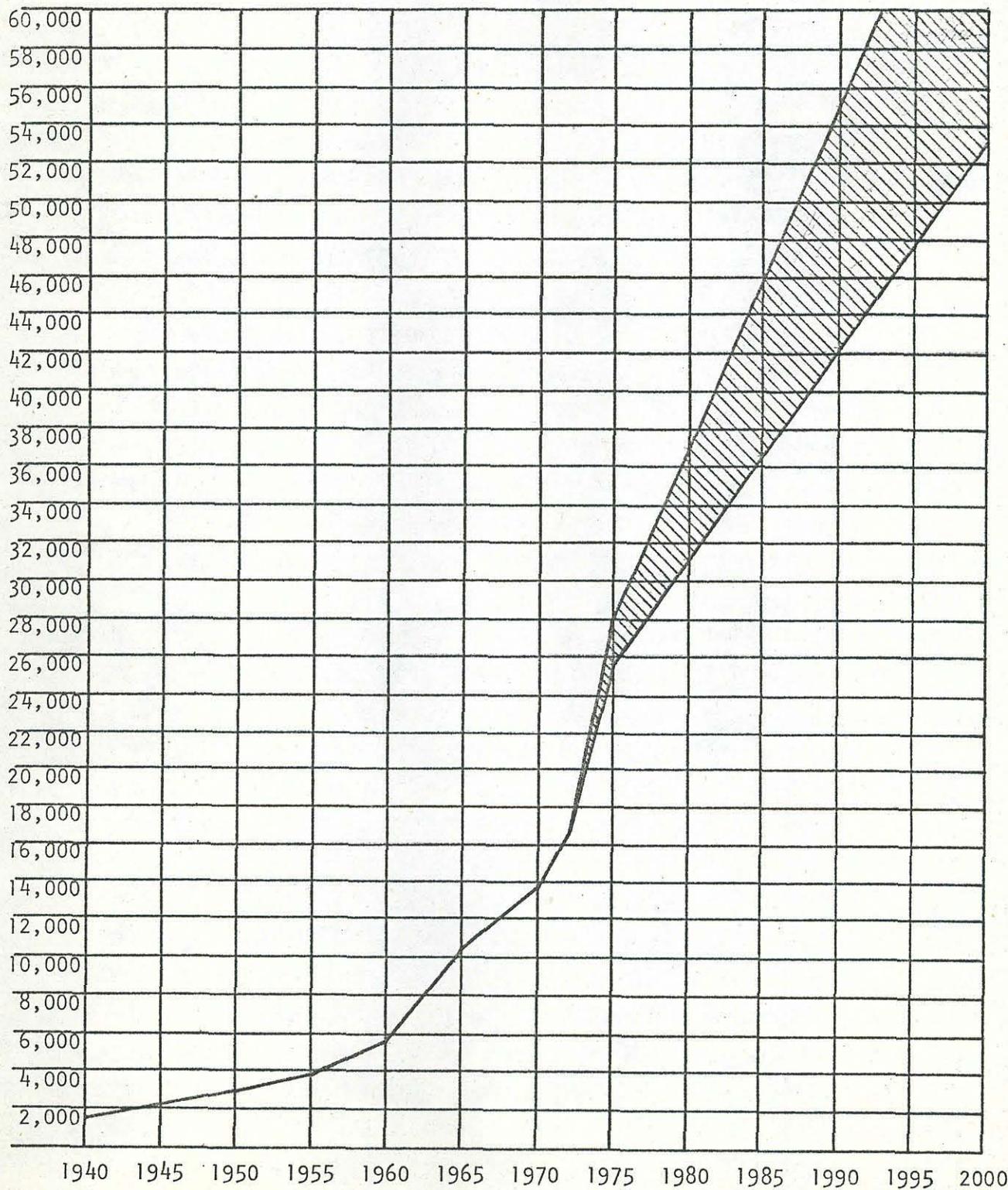
* This projection portrays what is considered a reasonable minimum growth rate. Should the economy grow more slowly than is anticipated or should other factors direct population increase to areas other than the Clovis Planning Area, we might expect the retarded growth rate shown above.

Population Projection No. 2

Year	City of Clovis	Clovis Urbanizing Area	Planning Area
1970	13,856	19,100	21,000
1972 (Feb. 1)	17,150	22,500	24,500
1973 (Jan. 1)	18,100	23,500	26,000
1975	--	28,000	30,500
1980	--	37,000	40,100
1985	--	46,000	49,700
1990	--	55,000	59,300
1995	--	64,000	68,900

* This projection reflects maximum growth throughout the entire planning area. This condition can come about if the recent acceleration in residential building activity and the economic factors responsible for it, continue for an extended period of time.

CLOVIS URBANIZING AREA POPULATION PROJECTION



LAND USE ELEMENT

Introduction

The land use element deals with the special requirements for different types of land uses and the availability of land in general. This element is intended to help answer three main questions about the use of land: (1) how much land; (2) for what use, and (3) where should the various uses be located?

Five basic land uses are proposed in this plan: (1) agriculture, (2) residential, (3) commercial, (4) industrial, and (5) public and quasi-public facilities. All land uses within the Planning Area will fall into one of these general categories.

The following is a set of overall goals for the future land use of the Clovis Planning Area. These goals will serve as the basis for the more specific policies proposed for each land use.

1. To promote a more coordinated and integrated physical development of the planning area and to achieve a balanced distribution of uses and services in order to accommodate projected growth.
2. To establish an urbanizing area within which controlled orderly development will be fostered and beyond which premature urban expansion will be discouraged.
3. To achieve consistency with county, state, federal and other local land use policies.
4. To promote both economic and environmental stability through the control of urban development.
5. To develop a coordinated program of implementation to carry into effect the new land use plan.

AGRICULTURE

Policies

1. Preserve lands outside the Urbanizing Area exclusively for Agricultural uses.
2. Encourage "AE", agricultural exclusive, zoning outside the urbanizing area.
3. Adjust the Urbanizing Area line as a result of periodic review in order to accommodate continuing growth trends.

4. Preserve existing commercial agricultural production and develop methods for increasing agribusiness involvement in the area.
5. Discourage urban development of prime agricultural lands located outside the Urbanizing Area but within the Planning Area, and encourage these lands to utilize the California Land Conservation Act in order to retard premature urbanization.
6. Encourage land within the Urbanizing Area, intensively involved in agriculture, to utilize the California Land Conservation Act "under protest" from the City of Clovis, to better facilitate orderly development of the Clovis area.

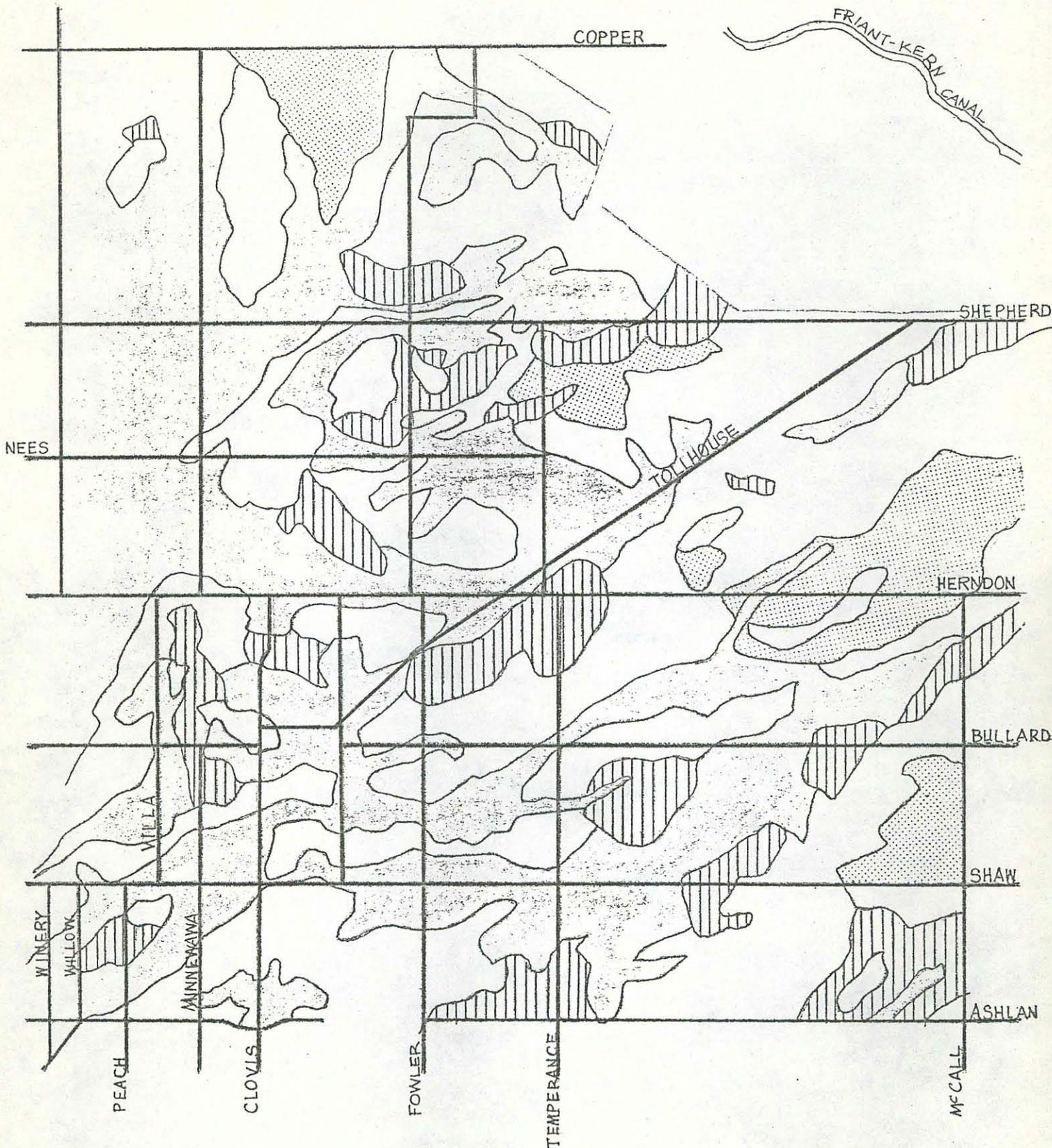
The Clovis Planning Area, similar to other parts of the San Joaquin Valley, has been closely linked with agriculture and ranching from its initial settlement period. Over the years, farming around Clovis has diversified to such an extent that at the present time nearly every type of crop that is grown in the valley can be found within the Planning Area.

Although the soils around Clovis are generally conducive to farming, as shown on page 19, the patchwork pattern of soil types, rising taxes, and encroaching residential development make it increasingly difficult for agriculture in the Clovis Area to compete economically with Fresno's west side.

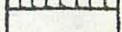
Within the Clovis Planning Area, 7600 acres of land (24% of the Planning Area) are participating in the California Land Conservation Act. Despite the controversy surrounding this program, it has enabled many farms to remain in operation and thus has helped maintain the integrity of the rural areas.

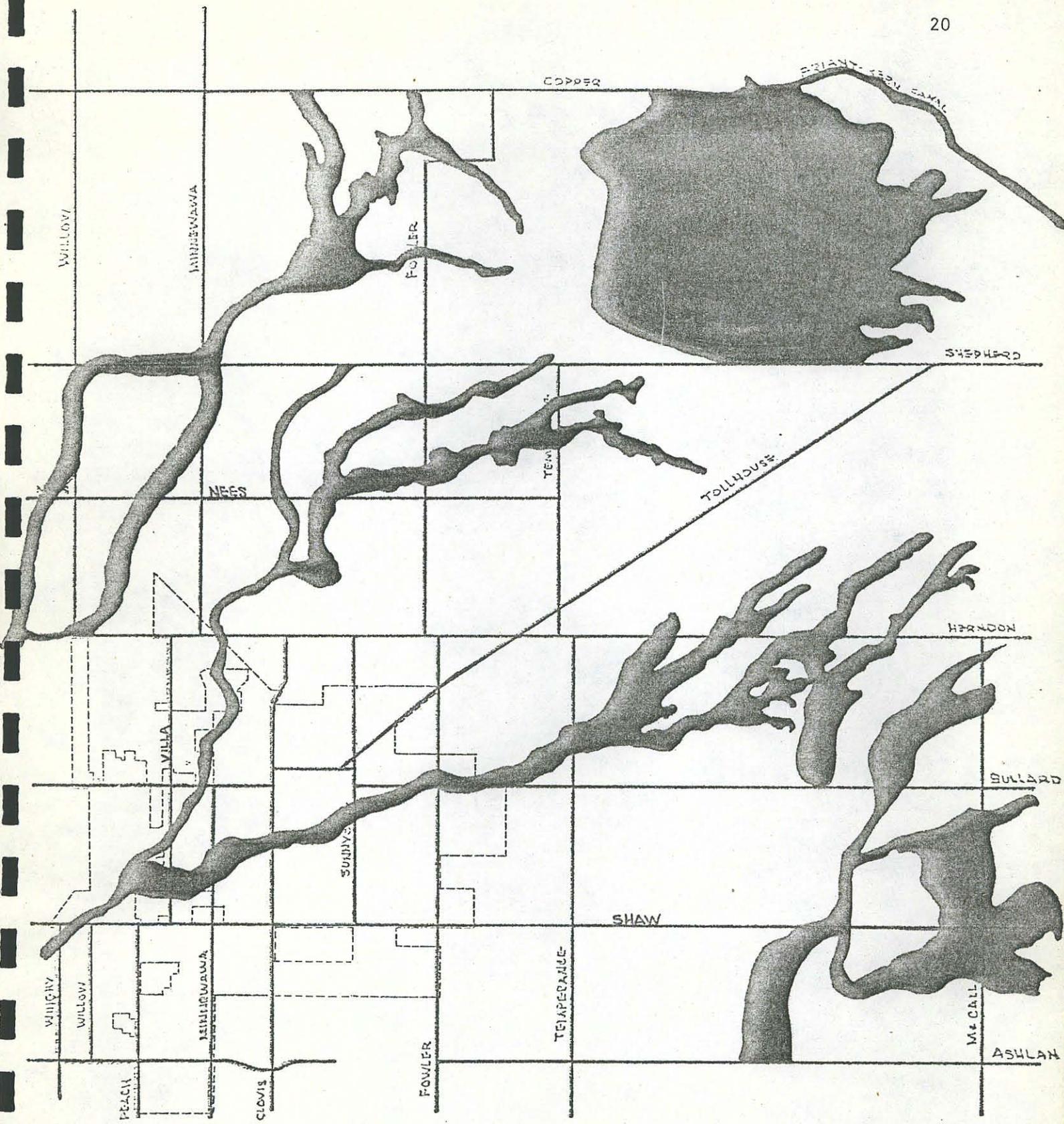
By encouraging additional ranchers and growers, within the Planning Area, to utilize the California Land Conservation Act under protest by the City of Clovis, the City area can anticipate large scale, well-planned and orderly developments. Under this procedure, if a tract of land within one mile of the City limits enters this program, under protest from the local municipality, it can remain in agricultural use until annexation. Such property may then be taken out of the program, without penalty to the participant for early withdrawal, and be developed, with urban uses and to urban standards.

The majority of the land within the Clovis Planning Area has been zoned A-1 (General Agriculture) in the County, which allows almost any type of development on a 100,000 square foot lot. Thus, what was once farm land is changing slowly into an area of mixed uses, including developments of a suburban or rural nature. This type of development will eventually present severe problems to Clovis, as it will become increasingly difficult to provide these areas with adequate circulation, public facilities and services.

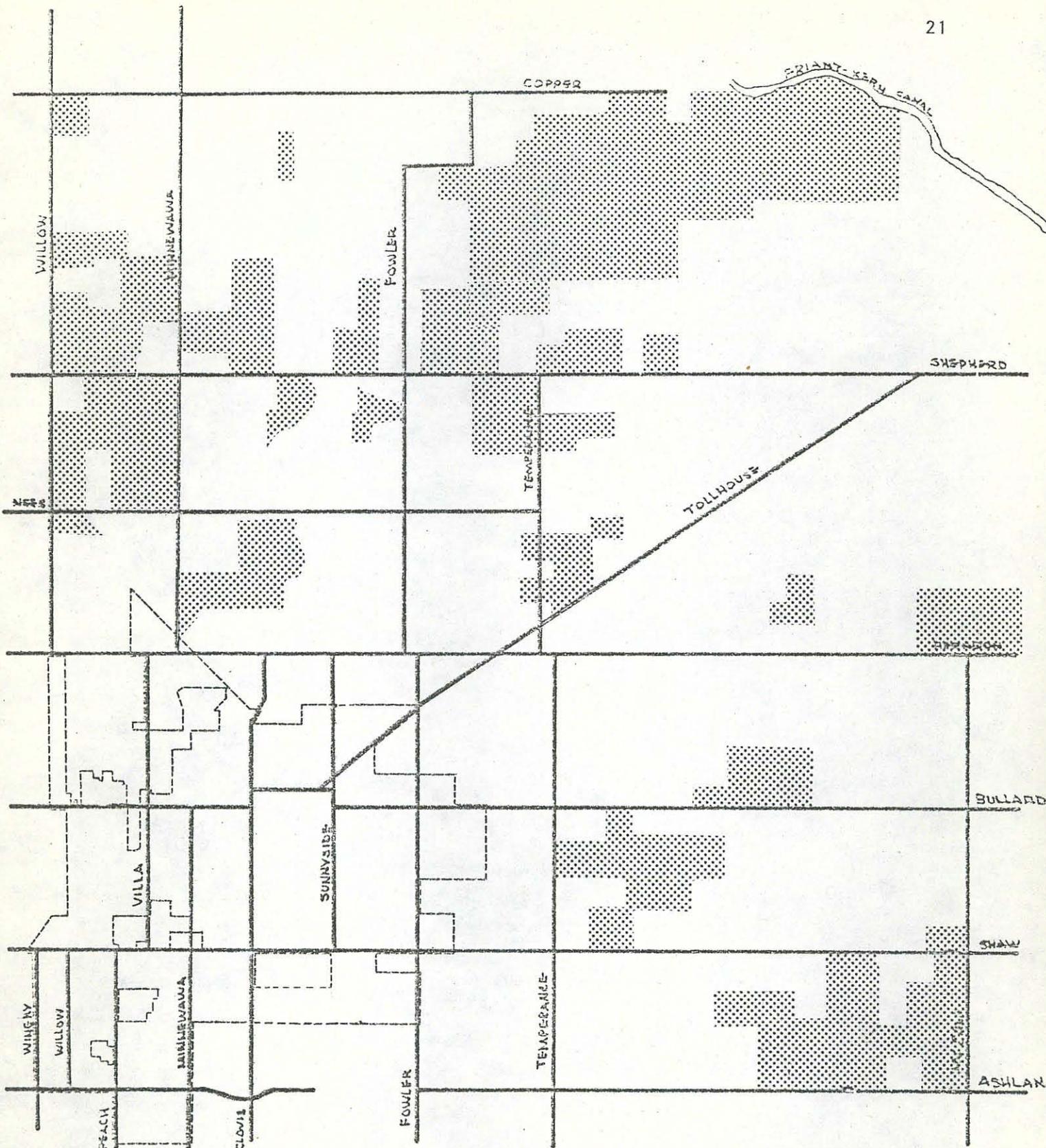


SOIL CAPABILITY

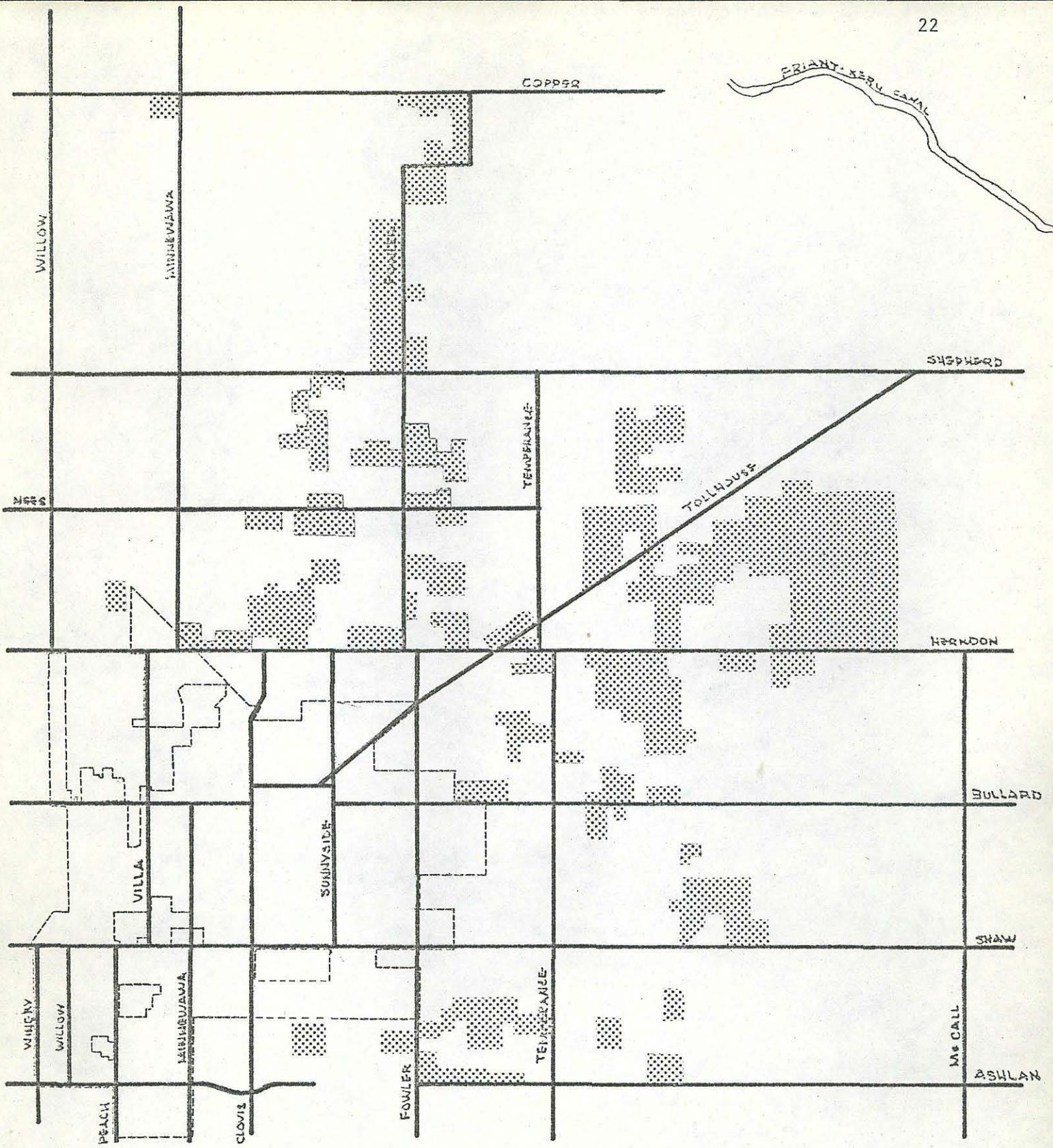
- Class I 
- Class II 
- Class III 
- Class IV 



FLOOD PRONE AREAS



AGRICULTURAL AGREEMENTS OR EASEMENTS



LANDS ALREADY DIVIDED FOR RURAL SUBURBAN LOTS

Presently, the county area around Clovis is experiencing moderate but steady growth. Attracted by the amenities of country life, many able to afford the costs are building quality homes on generous lots outside the City limits.

Agriculture has played a major role in shaping the physical arrangement of the City and its suburbs. If agriculture is continued as the primary land use in the region surrounding the City, urban sprawl will be retarded, thus providing a more orderly and economical growth of the community. Conversely, if agriculture gives way to sporadic development, annexation will be more difficult, and attractive city form will become increasingly hard to maintain.

The future of agriculture in the Clovis area is very important in preserving the western character of the community. In order to achieve this, it is necessary to maintain agriculture as the prime land use outside the urbanizing area. This means a halt to urban encroachment into substantially agricultural areas, until such time future research indicates that agriculture should be replaced by other uses, and only in specific areas so that agriculture may remain a viable part of the overall scheme.

RESIDENTIAL

Policies

1. Encourage higher mixed densities within the Shaw Avenue, Clovis Avenue and Freeway 168 triangle.
2. To the extent allowable under the general plan land-use guidelines, encourage the development of vacant land in the central parts of the City.
3. Encourage lower densities both north of Sierra and east of Sunnyside Avenues.
4. Encourage higher residential densities as buffers for commercial and industrial developments.
5. Encourage greater diversity in the cost and types of residential dwelling units in the urbanizing area, in order to provide a wider range of living accommodations.
6. Encourage more variety in subdivisions, especially in reference to the design of streets, the location of parks and recreation areas, and the placement of homes on lots.
7. Encourage easements for bicycle and bridle paths, especially in the low density areas. Make maximum use of state legislation giving local agencies authority to require dedication of land for above uses as well as land for school site.

8. Require more extensive and mature landscaping for all multi-residential developments.
9. Adapt and apply architectural controls for all low and medium density multiple family residential construction.
10. Retain the integrity and viability of existing residential neighborhoods by protecting them from the decay usually caused by indiscriminately granting incompatible zoning, i.e., zoning to allow uses which by their nature will produce violent fluctuations of property values and thus impair the homogeneity and stability of such neighborhoods.
11. Encourage code enforcement in dilapidated areas.

INTRODUCTION

Residential land, in the Clovis General Plan, is divided into four general types, namely: low and medium density single family residential and low and medium density multiple family residential.

RESIDENTIAL LAND, PAST AND PRESENT

Consumption of land in Clovis for residential purposes proceeded at a very slow pace prior to the 1950's. Until 1950, most of the residential areas were located around the present central business district. Since then, residential development in Clovis has reflected a demand for housing created by the population growth of the entire Clovis-Fresno Metropolitan Area, and, as pointed out, Clovis is becoming increasingly attractive for residential development. A variety of factors are converging to make residential land in and around Clovis especially alluring to developers.

DENSITY

Density types are based upon the zoning ordinance which relates lot sizes to number of dwelling units, lot coverage and other factors. The following categories represent the four residential densities of the General Plan and are based on the amount of land required for each dwelling unit. They are:

Low Density Single Family Residential	24,000 sq. ft. to 7,500 sq. ft. average per dwelling unit
Medium Density Single Family Residential	6,000 sq. ft. per dwelling unit
Low Density Multiple Family Residential	2,700 sq. ft. to 2,400 sq. ft. per dwelling unit
Medium Density Multiple Family Residential	1,500 sq. ft. per dwelling unit

LOW DENSITY SINGLE FAMILY RESIDENTIAL

Low density Single Family Residential uses within Clovis' urbanizing area consist of zone districts R-A, R-1-A, R-1-B, R-1-C, and R-1-B (P.U.D.) The density range is from 7,500 sq. ft. of land per dwelling unit to 24,000 sq. ft. of land per dwelling unit, and produces a population density of between 2 and 6 families per acre.

Low density Single Family Residential areas in the Clovis City limits are very limited. Of the total 170 acres of low density land, 122 acres are already developed in residences and 48 remain vacant. These 48 acres could accommodate 575 additional people under low density residential development standards. Areas zoned low density within the urbanizing area but outside the City limits, comprise about 1,450 acres of which only about 20% is developed.

Generally, low density Single Family Residential areas in Clovis, as in most other cities, have developed on the periphery of the City, where taxes are lower and where more open space is available. However, as the City has spread outward, the older pockets of vacant low density residential land have become surrounded by newer development and thus have become proportionately closer to the core of the City. The inevitable result is a steady rise in property taxes that impels owners to rezone their property to accommodate greater residential densities, or even commercial uses. To a great extent, this explains why some lower zoned parcels in the central part of the City remain vacant and will likely remain so until they are rezoned.

MEDIUM DENSITY SINGLE FAMILY RESIDENTIAL

The zone districts included in medium density Single Family Residential within the Clovis Urbanizing Area are R-1, R-1 (P.U.D.), and R-1-C (P.U.D.). The density is 6,000 sq ft. of land per dwelling unit, and with an average of one family per dwelling unit, this density will generate 7 families per acre.

Although about 240 acres of vacant R-1 land exists within the City limits, prime land suitable for subdivision (i.e., available in large tracts) is almost completely non-existent. Because of this, many developers are looking to the large tracts of undeveloped land outside the central City but within the urbanizing area. Most residential subdivisions in Clovis have been developed to medium density Single Family Residential standards.

LOW DENSITY MULTIPLE FAMILY RESIDENTIAL

The zones constituting the low density Multiple Family Residential category are R-2 (R-2-A), T-P and R-P. These zones allow development in a range from 2,700 sq. ft. to 2,400 sq. ft. of land per dwelling unit, and with an average of one family per dwelling unit, this density may generate a range of 16 to 18 families per acre.

A major portion of the development in this density type in Clovis is the T-P (trailer park) zone. Currently there are about 648 mobile home spaces in the City and approximately 768 within the urbanizing area, providing shelter for

about 1,500 people. In addition, there is currently about 45 acres of vacant land zoned T-P within the City limits, which, with some 40 vacant T-P acres in the urbanizing area, would generate an additional 1,450 people in the urbanizing area, if developed at present standards.

The remaining development in low density Multiple Family Residential is found in the R-2 and R-2-A zones. In the last five years there have been about 200 dwelling units constructed within this zone category. Currently there are about 60 acres of vacant R-2 (R-2-A) land in the City of Clovis. Under present standards this could generate an additional 2,400 people. At present, there is no development at R-P (residential-professional) standard in the City.

Low density Multiple Family Residential development in Clovis has occurred primarily in large vacant areas. For example, the T-P type development requires development in large tracts and much of the R-2 (R-2-A) development has occurred in fairly generous parcels of land.

MEDIUM DENSITY MULTIPLE FAMILY RESIDENTIAL

The zones that are included in Medium density Multiple Family are R-3-A, R-3, C-P, and R-4. C-P (administrative and professional office district) is considered medium density because it provides for residential development at R-3 standards. Medium density Multiple Family Residential development density is 1,500 sq. ft. of land per dwelling unit, which produces 29 families per acre. Some medium density dwelling units located near the university, which houses students, population density may reach as high as 172 persons per acre.

The majority of medium density Multiple Family Residential zoning is located within the area surrounded by Bullard, Clovis, and Santa Ana Avenues and the proposed Highway 168.

Although there are two large tracts of medium density Multiple Family development, much of the Medium density Multiple Family developments in the City of Clovis has been linear or occasional.

CONCEPTS OF RESIDENTIAL LAND USE AS THEY RELATE TO CLOVIS

In addition to analyzing existing residential development in Clovis, a need exists for an overview of residential requirements and for an understanding of how current planning and architectural concepts may serve these needs.

It should be kept in mind that the principle function of all urban design is to promote stability in neighborhoods. One noted architect, writing about dwelling areas, refers to the word "livability" as being the key to measuring our success - or lack of it - in providing for residential areas. Livability might be defined as the ability of the environment to offer a complete variety of experiences to its people. This will range from the stimulating and exciting to the relaxing and restful.

Another function of a residential district is its part in the total fabric of the City or area. Each type of residential land use has a role in shaping the appearance, character, style, and image of the City. Therefore, an important criteria should be that dwelling areas, as they develop, compliment and blend with the overall design and layout of the planning area.

In this context, it is necessary to anticipate possible benefits and shortcomings of mixing housing types. They must give character to different neighborhoods and these neighborhoods in turn, must relate to the planning area as a whole.

THE NEIGHBORHOOD - A PHYSICAL AND SOCIAL PLACE

The neighborhood, in the hierarchy of scale, is normally considered to be the smallest homogeneous unit that still fulfills, within its boundaries, the several basic human needs. The boundaries that define the physical neighborhood may come about in a number of ways. A neighborhood may be defined by natural features or by various other physical factors such as an isolated residential subdivision or housing area, set off from others by open space corridors, streams, wood lots, steep hillsides, vacant fields, or a major transportation artery. More often, however, they are defined by the service radius of certain public facilities, primarily an elementary school, parks, and shopping areas.*

Popular application of this concept forms a neighborhood area, the radius of which is the maximum walking distance of an elementary school child, i.e., one-half mile. This is also considered a reasonable distance to neighborhood parks and small retail operations. This service area would be composed of between 5,000 to 10,000 people. In addition, major streets would not pass through the neighborhood, with the scale of movement oriented toward pedestrian and bicycle routes, and local streets to provide residents with direct access to their houses. The Clovis General Plan proposes this concept, as shown on page 28

DESIGN

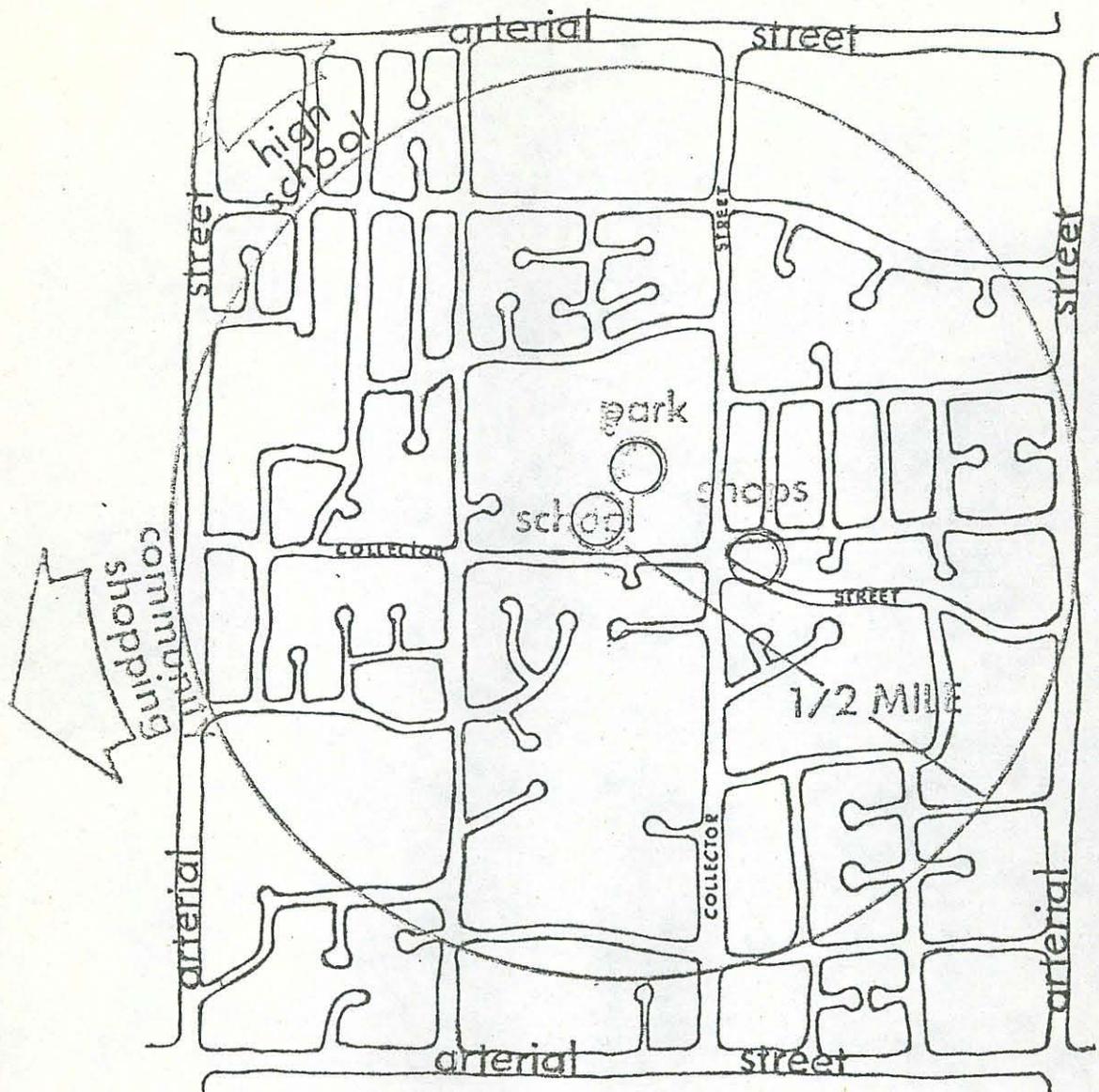
Designers yesterday, working within given parameters and towards certain objectives could develop only a limited variety of physical forms. However, today, with increased flexibility in zoning, building and engineering codes, designers are able to consider more of the social and environmental factors of residential life. They can and do provide for the harmonious co-existence of seemingly incompatible personal needs and in the process create beautiful environments that upgrade the quality of our lives. The Clovis General Plan proposes that hereafter these qualities of residential development be embodied in all new proposals, and that these design features include:

1. A GREATER VARIETY OF LOT SIZES AND SHAPES. It is suggested that the monotony of subdivisions embodying lots of the same size be avoided. A variety of lot sizes produces interesting neighborhoods that better serve the differing requirements of potential residents. To the extent possible, the Unit Planned Development procedures of the Clovis Zoning Ordinance ought to be encouraged in this endeavor.

The conventional lot shape should be denied its sanctified status in future subdivisions. There is nothing in holy planning writ that requires a rectangular lot of greater depth than width in all residential developments.

* Clarence Stein, a leading proponent of the neighborhood concept, defines the size of the neighborhood in terms of the number of households which will support an efficient elementary school.

THE NEIGHBORHOOD CONCEPT



A sound living area with:

1. Adequate school and parks within a half mile walk
2. Major streets around rather than through the neighborhood
3. Separate residential and non-residential districts
4. Population large enough to support an elementary school, usually 5,000 to 10,000 people
5. Some neighborhood stores and services

The elementary school is the center of the unit and within a one-half mile radius of all residents in the neighborhood. A small shopping center for daily needs is located near the school. Most residential streets are suggested as cul-de-sac or "dead-end" roads to eliminate through traffic, and park space flows through the neighborhood in a manner that makes it easily available to all.

The grouping of three neighborhood units, served by a high school and one or two major commercial centers, the radius for walking distance to these facilities being one mile.

Instead, it is recommended that wider and shallower lots be interspersed in subdivisions. Homes on quiet neighborhood streets do not need a deep rear yard to provide outdoor living sheltered from street noises. Moreover, a wider lot will afford ingress and egress to the storage potential of rear and side yards for the increasingly popular vacation vehicles of all kinds including boats, boat trailer, campers and trailers.

2. THE PLACEMENT OF HOMES AND LOTS. The unvarying front yard ought to be abandoned. Its place should be taken by an undulating line in order to give the street a wavy appearance. This would mean that houses in an R-1 subdivision would be built from 18' to 22' back of the front property line and that these individual lot setbacks be staggered so as to provide a variation in the front yard setbacks. Although this recommendation is most important in relationship to the R-1 development, as a principle for achieving variety rather than monotony, it should be applied to all residential subdivisions. Side yards should also be reviewed so as to provide the possibility of vehicular access to the rear portion of the lot whenever possible.
3. CURVILINEAR AND CUL-DE-SAC STREETS. On the assumption that there tends to be more appeal to a curved line than to a straight one, and that a curvilinear street pattern tends to retard vehicular speed more than a grid street arrangement does, it is recommended that Clovis encourage the curvilinear street pattern in new subdivisions. For similar reasons the use of shallow cul-de-sacs should be fostered as a means of producing variety in neighborhood circulation systems. The grid pattern for neighborhood streets ought to be avoided whenever possible.
4. FUTURE PARK SITES. In the preliminary design phases of large subdivisions, strict attention ought to be paid to the location of future parks. A tentative map must be analyzed as part of a larger area, the future recreation needs of which must be considered in advance. This suggestion implies that proposed subdivisions should not be planned on an ad hoc basis but rather that the entire sector of which it is a part be studied carefully in advance. Only in this manner can the future recreation needs of neighborhoods and entire communities be accommodated.

In addition to diversity in residential development, good design can make neighborhoods more compatible with other land uses in an area. The best design will be forthcoming when an overall community plan has been approved in which future neighborhoods and communities are clearly defined and located. This requires identification of the community's boundaries, and location of other land uses within the area. Residential policy proposal No. 10 embodies this goal.

The citizens of Clovis and their government must set the framework within which the private sector works. Quality design that conforms to public objectives and policies should be insisted upon even when economic considerations make this initially more difficult for the developer.

DENSITY

Density represents another major element in the organization and arrangement of a residential area. It is a key factor in determining physical form and the availability of amenities. Generally it refers to the number of inhabitants or dwelling units per acre.

Extremely low-density residential developments mean comparatively large investments for city services. If the traditional neighborhood concept is adhered to (it holds that a walking distance of from $\frac{1}{4}$ to $\frac{1}{2}$ mile in any direction should define the size of a neighborhood) low-density developments often do not contain families sufficient to support elementary schools, shopping areas, and public transportation. The accents and focal points that can give a sense of community identity are often missing. Social interaction is frustrated and the desire to have contact with nature that many people value in place of more urban surroundings is marginal if not illusory. There is too loose a relationship between building forms and open spaces. Very low-density development has the real possibility, as one noted conservationist stated, of placing enough houses on our hilltops, in our woodlands and fields that there may soon be no natural areas left within reasonable reach of the city. Hence, the popular version of low-density "country living" can deny desirable urban relationships and at the same time destroy unspoiled natural surroundings.

On the other hand, high density development, especially high rise structures, may not be in keeping with Clovis' small town, rural image. Current thinking suggests that a "mix" of densities and intensities offers the best compromise. The development of rowhouses, condominiums, apartments, and planned unit developments, interspersed among single family homes has many advantages. Public transportation could be more feasible; many people could live closer to work; community interaction can be more lively; and as driving distances are shortened, the ill effects of automobiles may be reduced. Finally, evidence has shown that mixed residential areas with a diversity of building types are less susceptible to obsolescence because they can more readily change to meet new conditions.

ANALYSIS OF PROBLEMS

The rapid development of residential areas in Clovis in recent years will undoubtedly continue into the foreseeable future. While such growth may be considered good by most people, it carries with it the seeds of problems yet to be faced in their fullest impact. Clovis needs to evaluate the impact of continued outward expansion on its ability to provide public services at a reasonable cost.

A point exists beyond which services (police, fire, sewer, water, etc.) will be stretched "too thin" and costs for improvement exceed what residents will be able to pay.

Closely associated with rapid outward growth and its drain on city energy, is a lack of commitment to maintaining and improving older residential areas. Many of Clovis' traditional residential areas, near the core of the City (some of these are superior in variety and landscaping to the newer tracts) are showing obvious signs of blight. Without efforts to "replan" old Clovis, it will surely continue to deteriorate. There is need now for an in-depth evaluation of land costs and property tax structures around the core area in order to determine what types of residential uses will be feasible.

FUTURE RESIDENTIAL DEVELOPMENT

If all the vacant land in the City limits were developed at its existing zoning and the remaining land in the urbanizing area were developed at medium density standards, over 100,000 people would live in the Clovis urbanizing area.

Obviously there are some physical and man-made constraints that may prevent this population projection from occurring. Two physical constraints are flood prone areas and large blocks of high class soils which may be set aside for agricultural uses. However, there are some very significant man-made constraints. In the first place, the sewer capacity for the Clovis area will only accommodate a maximum of 80,000 people. Secondly, there are large tracts in the urbanized area already chopped up in 2½ and 5 acre parcels which will retard subdivision activity. And finally, there are areas where large amounts of Public Utilities rights-of-way exist. These areas should be utilized for recreational purposes, where they are consistent with the recreational master plan of the City.

COMMERCIAL

GOAL: To foster commercial development in the Clovis General Plan Area to the degree and with the design necessary to meet the economic needs of both the citizen and his community.

POLICIES:

1. Define and strengthen the boundaries of the CBD.
2. Encourage the development of a civic center complex in the downtown area.
3. Establish cooperative off-street parking areas in order to keep pace with downtown growth and development.
4. Improve the appearance of the CBD; this would include westernization, development of parks and parking areas.
5. Encourage diverse commercial uses in the Shaw Avenue, Clovis Avenue, Highway 168 triangle; this would include both retail and office uses and would include both sides of Shaw Avenue.
6. Discourage additional community shopping centers outside the Shaw Avenue, Clovis Avenue, Highway 168 triangle, until population has occurred to warrant such additional development elsewhere.
7. Commercial development outside the urban triangle shall be only neighborhood or convenience in scale, and shall be developed on the neighborhood concept set forth in the plan.
8. Enforce design control on all commercial development including stronger control of signs and outdoor advertising.
9. Consider carefully heavy commercial uses to insure protection from unsightly development, storage areas and out-of-scale advertising.
10. Amend Zoning Ordinance to provide a floating BLVD (overlay) zone in order to insure quality development on Shaw Avenue and similar streets that may occur in the future.

INTRODUCTION

The rapid expansion of Fresno, which began in the mid-50's, also caused economic growth in Clovis. By the early 1960's, Clovis expanded its shopping facilities to include the Peacock Shopping Center (1960-1961), and the Bonanza Shopping Center (1963), to better accommodate its increasing and future population growth. Between 1958 and 1967, the south side of Shaw Avenue was rezoned to provide for additional projected commercial establishments. Time has proven that this might have been an error as some of this area has never developed and is presently being back-zoned. According to most planning criteria, Clovis has enough commercially zoned property to serve a population of over 200,000 - a population figure that in the foreseeable future the City may never attain or even desire to attain.

PHYSICAL AND ECONOMIC CONDITIONS AND TRENDS

Amount of Land Devoted to Commercial - Past and Present

According to the 1963 Zoning Map, there was a total of 259 acres zoned commercial within the Clovis City limits. This included the following districts: C-1, C-2, C-3, and C-P, and of this, only 64 acres, representing 24.7%, were developed.

At present, the official Zoning Map indicates 337 acres zoned commercial within the City limits. This is an increase of 78 acres, or 30% over the 1963 figure. Presently developed commercial land utilizes 103 acres, a 62% increase over commercially developed land in 1963. However, 31% (a slightly higher proportion of commercial utilization than existed in 1963) is developed or currently developing.

TABLE 8

TOTAL COMMERCIAL ZONING AND LAND USE - 1963 & 1972

		Total Sq. Feet	Total Acres	Percent Increase	Percent Developed
<u>Existing Zoning</u>	1963	11,345,000	259		
	1972	14,725,600	337	30%	
<u>Land Use</u>	1963	2,784,000	64		24%
	1972	4,510,000	103	62%	31%

Employment Characteristics--Past and Present

The labor force (see Table 9, page 35), like the population figure, has increased considerably over the past ten years. As of 1970, the former stood at around 4,850 people for the City of Clovis. This figure is based upon Fresno County estimates that approximately 35% of the population (county-wide) is considered the working force. It does not take into consideration the rate of unemployment, which in 1970 stood at 6.5%, thereby reducing this figure by some 315 persons.

Of the total 1970 Clovis work force, roughly 20% - 25% (1,700 - 1,900 people) were employed within the City limits. This figure includes those people living outside the City limits but still considered part of the Clovis work force. Based on the United States Census figures that 25% of the work force is employed in retail trade, we have about 400-500 of such people in Clovis.

Although 25 retail outlets employ more than four people, the remainder of the 125 retail establishments within the City are family operated organizations generally employing less than four people.

Over the ten-year period, the number of people employed in Clovis has more than tripled. However, the number of retail outlets has increased by only 35.

Retail Sales

Commercial activity in Clovis has recently achieved record gains. Taxable transactions for the year 1964 was \$11,960,000 for 207 total outlets, of which \$10,716,000 was for 121 retail stores. The third quarter report distributed by the State of California Board of Equalization for 1971 depicts a figure of \$23,903,000 for 258 total outlets of which \$19,903,000 was for 125 retail stores. Total outlets are those retail and wholesale establishments that must charge sales tax.

Table 10, page 36, illustrates the total taxable transactions for retail outlets in Clovis for 1964 and 1970, and the 1970 percentages of increase or decrease.

TABLE 9

EMPLOYMENT CHARACTERISTICS

	Population		%	Labor Forces		%	Percent of Fresno County Work Force		Retail Outlets		Number Employed in City of Clovis		Number Employed in Retail Outlets	
	1960	1970		1960	1970		1960	1970	1960	1970	1960	1970	1960	1970
Fresno County	365,945 ¹	413,053 ¹	Inc.	148,300	184,200	24%	---	---	---	---	---	---	---	---
Clovis	5,546	13,856	150%	1950 ²	4850 ²	150%	1.3%	2.1%	90 ⁴	125	400-5 500	1700-6 1900	100- 336	400-7 500

1. 1970 United States Census figure
2. Based on County estimate - 35% of population is working force, City limits only.
3. Figures are identical because labor force is based on 35% of population.
4. 1960 figure not available. This is a 1961 figure.
5. Rough estimate based on figure (20%-25% of City's work force employed in City) received from Chamber of Commerce.
6. Adjusted to include residents outside City limits.
7. Roughly 100 outlets employ two to four employees. Remaining retail outlets employ four or more employees. Adjusted to include residents outside City limits.

TABLE 10
 TOTAL TAXABLE TRANSACTIONS FOR CLOVIS
 ANNUAL COMPARISONS

RETAIL STORES	No.	Taxable Transactions		Percent Increase (Decrease)
		1964	No. 1970	
Apparel Stores	10	\$ 444,000	9 \$ 737,000	66
General Merchandise	4	701,000	6 1,037,000	48
Drug Stores	12	1,476,000	3 N/A	N/A
Food Stores	4	306,000	13 2,507,000	719
Packaged Liquor Stores	28	834,000	4 459,000	75
Home Furnishings & Appliances	4	630,000	7 639,000	01
Eating & Drinking Places	8	726,000	27 1,535,000	111
Bldg. Materials & Farm Implements	7	503,000	7 1,049,000	108
Auto Dealers & Auto Supplies	7	3,771,000	7 10,672,000	183
Service Stations	20	256,000	21 388,000	51
Other Retail Stores	17	1,069,000	19 2,331,000	118
RETAIL STORES TOTAL	121	\$10,716,000	123 \$21,354,000	99
ALL OTHER OUTLETS	86	\$ 1,244,000	134 \$ 3,658,000	194
TOTAL ALL OUTLETS	207	\$11,960,000	257 \$25,012,000	109

(Source: State of California)

Viewing the overall picture, taxable transactions have increased 109% and it appears that this trend will continue into the future. Basing future predictions on historical trends, present development, increasing population, rising incomes, and other factors, a leveling-off period does not seem likely to occur for at least another five years.

Vacancy Rate

The word "vacant" is practically unheard of within the commercial areas of Clovis. The Central Business District, or downtown Clovis, is almost completely occupied. The same can be said of other commercial areas around town. The vacancy rate overall is minimal.

From the standpoint of commercial building activity, one can see that Clovis has had a rewarding past. Tables 11 and 12 (pages 38 and 39) show: 1) the annual issuance of new commercial permits and the number of permits for additions or alterations to existing commercial buildings, some of which have adapted the western theme, and 2) the assessed value of the buildings; this averages around \$340,875.00 per year. New construction has averaged \$283,354.00 annually, and additions or alterations have averaged \$58,998.50. For the first quarter of 1972 there have been nine commercial permits issued for a total assessed building value of \$34,780.00.

It appears that this rate will continue until the saturation point has been reached. This usually occurs after maximum (or optimum) population is achieved for a city and/or its urbanizing area. The McGlasson Master Plan for Sanitary Sewers gives an indication of what this optimum population may be.

FUTURE DETERMINANTS OF COMMERCIAL DEVELOPMENT

Zoning

There is an excessive amount of undeveloped commercially zoned land within Clovis. A common "rule of thumb" is that 50 feet of commercial street frontage should be allotted for each 100 people to be served. By this criteria, the Clovis trade area of about 30,000 people could be accommodated by 15,000 feet of frontage. We now have nearly 48,000 feet of commercial street frontage zoned.

FUTURE GROWTH IN CLOVIS

There are certain major factors affecting future commercial growth within the City of Clovis. They are:

1. Sewer System
2. Northeast expansion
3. Designation of Major Circulation Routes
4. Increased Buying Power

Sewer System

Before commercial development can occur, there must be sufficient public utility availability. One such utility is the sewer system. The City of Fresno will terminate its sewer lines at Herndon and Willow Avenues and at Ashlan and Fowler Avenues. Extension beyond these two locations is the responsibility of the City of Clovis.

TABLE 11
COMMERCIAL BUILDING PERMITS

Third Quarter

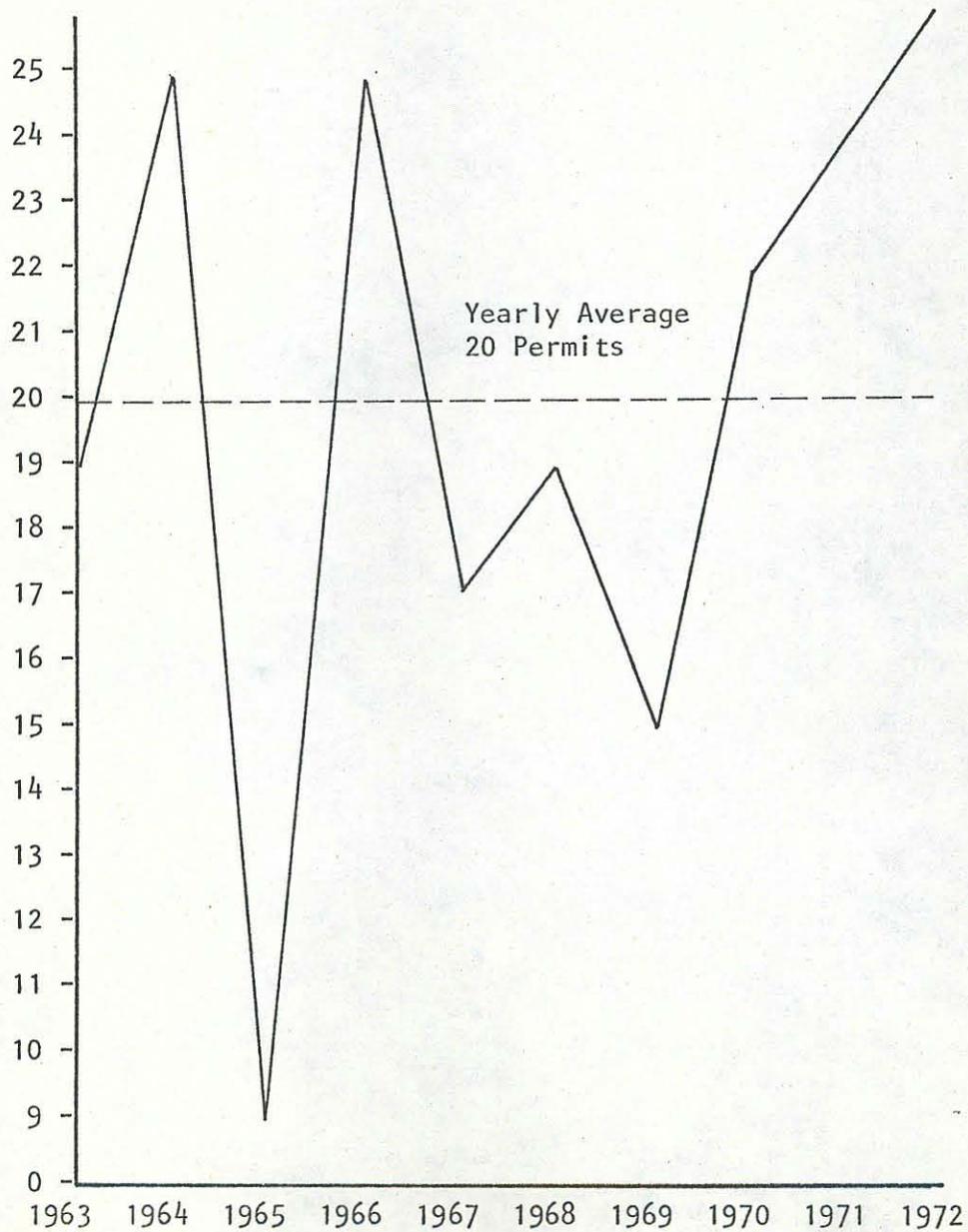
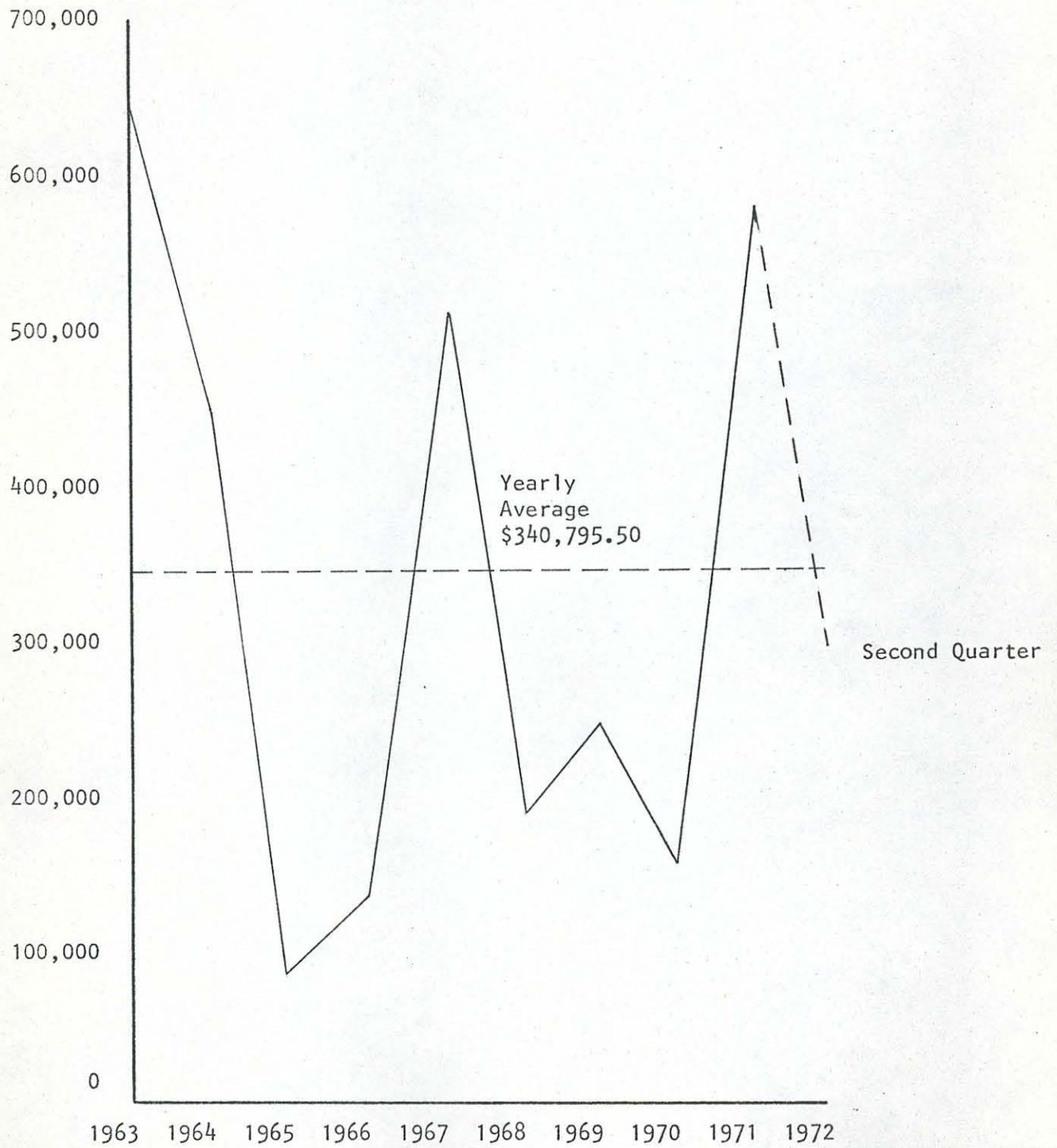


TABLE 12
ASSESSED VALUE
OF COMMERCIAL DEVELOPMENT



Northeast Expansion

The rapid urban expansion to the north and east is a major contributor to future commercial growth, and population growth inevitably brings in its wake the need (real or imagined) for more shopping facilities. The holding capacity of the urbanizing area will determine the quantity of land to be allotted to commerce.

Circulation Routes

The proposed route of Highway 168 will have a marked effect on the commercial service area of Clovis. The three major interchanges - Shaw Avenue, Bullard Avenue, and Herndon Avenue - will undoubtedly generate requests for commercial zoning. While Shaw Avenue is already heavily zoned commercially, Bullard and Herndon Avenues are not. Both streets lead to the central business district, the integrity of which should be enhanced rather than weakened. Shopping centers located on the interchanges of 168 in west Clovis would certainly not help the Central Business District.

Improved streets and convenient parking facilities result in ease of accessibility to and from stores. Therefore, the need for neighborhood shopping centers, excluding the small convenience goods store, will not be as dominant as it was in the past. Also, this will minimize the need for more C-2 (Community Commercial) zoning, too much of which already exists. An example of this over-zoning is the intersection of Gettysburg and Willow Avenues, of which all four corners have remained vacant since they were zoned commercial (C-2) in 1966.

Buying Power

Presently, Clovis has a very high rate of taxable retail sales per person per year - \$2,200 (see Table 12, page 14). It is \$600 higher than the county-wide average which is declining while that of Clovis is still increasing.

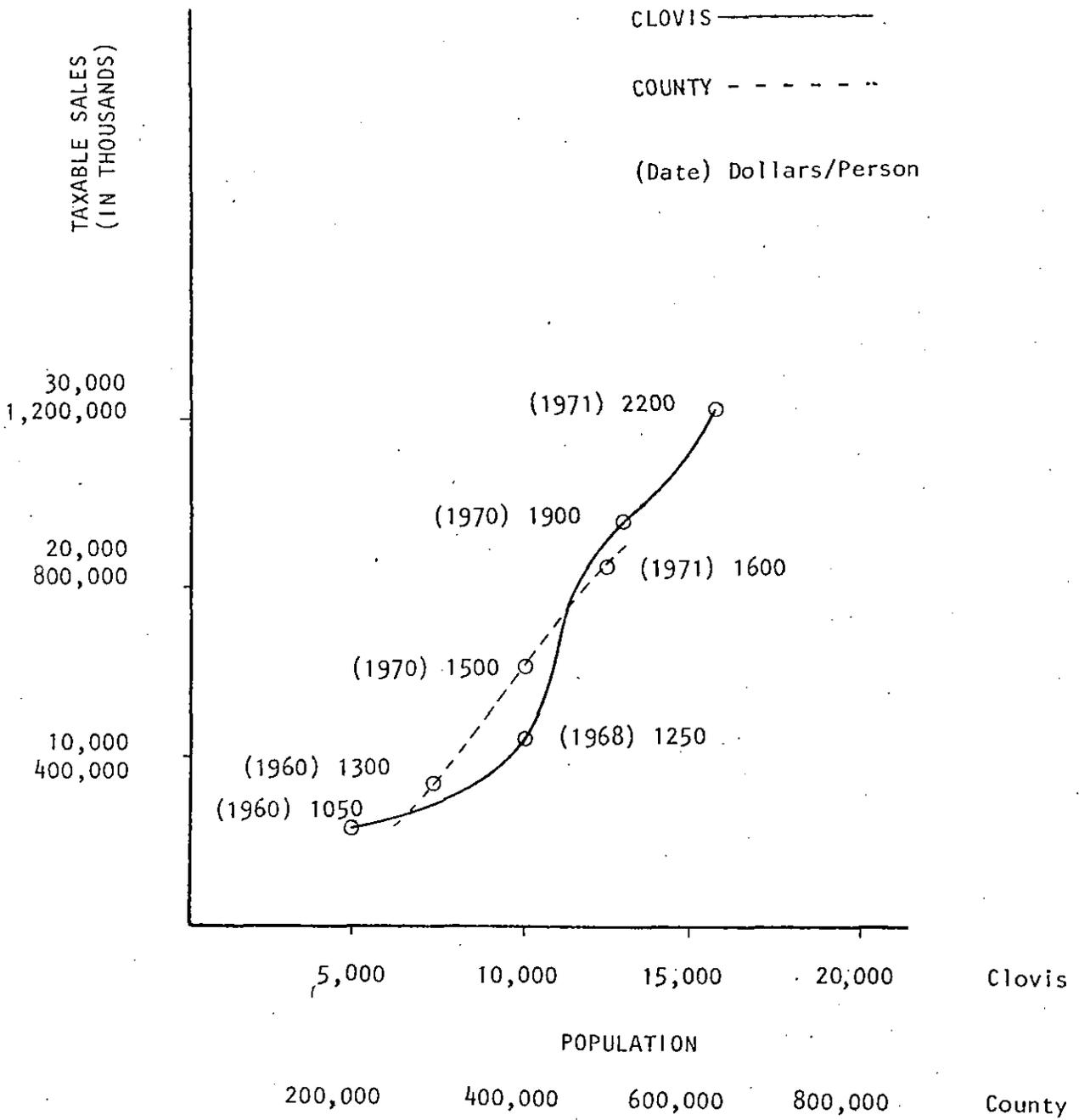
ANALYSIS OF SHOPPING AREAS

Clovis, until the early 1960's, had only one major shopping area. Now it has three - Shaw Avenue, Bonanza Center, and downtown. Each one of these areas should be considered separately.

The downtown (Central Business District, hereafter referred to as CBD) merchants feel a close attachment to the Clovis life-style. They have been in business in Clovis an average of 15 years, and the majority of them favor westernization and believe that specialty shops and beautification are a must in lending character and vitality to the CBD.

In arriving at policies for each location, the following should be considered:

TABLE 13



TAXABLE RETAIL SALES PER PERSON PER YEAR

CBD - To encourage and retain the vitality of a downtown shopping district as part of the Shaw, Clovis CBD commercial complex notwithstanding outside pressures for new and expanding commercial facilities elsewhere, and by capitalizing on the Clovis life-style that has been characteristic of the area for so many years.

Bonanza Center Area - To maintain the area as a viable part of a commercial complex essential in serving customers in the vicinity and to generate consumer interest in Clovis generally.

Shaw Avenue - To encourage controlled commercial growth so as to expand its function as part of a shopping complex with regional appeal.

CONCEPTUALIZATION OF SHOPPING CENTERS

1. Central Business District (CBD)

The Central Business District of Clovis reflects the characteristics of its people. The variety of shops offering specialty goods with western appeal is quite extensive. However, the boundaries of the CBD should be delineated. Over the years the area has expanded, but new development has only recently contributed to the CBD. Therefore, boundaries should be set that would insure a compact viable core area, and commercial development encouraged to that end.

Generally, the CBD serves the entire city as opposed to a neighborhood or community shopping area that serves only a portion of a city. Depending on the nature of the goods and services offered, the service area could expand beyond the city limits and achieve a regional appeal. Clovis' CBD already has some regional attraction due to the western life-style that is popular throughout the Clovis-Fresno Metropolitan Area, and especially areas north and east of Clovis.

2. Convenience Store

Convenience stores, consisting usually of a single building, may constitute a re-emergence, in new wraps, of the old "Mom & Pop" stores. They should generally be located away from other shopping centers, as they cannot or should not compete with them. Their raison d'ete is to serve the individual needing only a quart of milk, a loaf of bread, a package of cigarettes or such items in common demand. Convenience stores should locate near residential developments and only in rare cases in downtown areas. Depending on their location and their competition, they generally serve a trading area population of between 1,000 to 2,000 persons on a regular basis.

The City of Clovis has a number of convenience stores located throughout its limits. These stores carry the names of "Stop-n-Go," "Seven/Eleven" or the names of their owners. It is essential that these storetypes be placed in proper locations in order to eliminate duplications of goods and services that would result in vacant stores and loss of tax revenues to the City. Market analyses should be undertaken before locations are approved.

3. Neighborhood Center

The neighborhood shopping center while similar to the convenience store, is larger and more diverse. The neighborhood center provides for the sale of convenience goods and personal services--(groceries, drugs, hardware, laundry, dry cleaning, etc.)--for the day-by-day living needs of adjacent neighborhoods. Generally, the shopping center is built around a foodstore, its principle tenant. Ideally, it should serve the needs of a neighborhood only.

In Clovis, the neighborhood center will range from one to five acres and will serve a trade area population of at least 5,000 people. Actually, they serve around 5,000 to 6,000 people and average two acres in area. The Peacock Shopping Center and the Shop-n-Bag Market (Shaw Avenue at Sylmar) are the only two such neighborhood shopping centers presently in Clovis.

The City of Clovis would be wise in questioning the validity of any additional neighborhood centers within City limits or its close proximity at the present time. As growth continues, however, strategically placed centers of this type could be of significant value both to the consumer and to the shopping center as well.

4. Community Center

Community centers provide the same goods and services as a neighborhood center, but on a larger scale. In addition, they sell soft lines (wearing apparel) and hard lines (hardware and appliances). There is more of a choice of merchandise to choose from than the neighborhood center. They will serve a trade area population upwards of 40,000 people and vary in size between 5 and 25 acres. In addition to a supermarket, this type of center may include a department store, furniture store, and a restaurant. Clovis presently has one community shopping center - Bonanza. It is roughly six acres in size and serves far less than 40,000 people.

Within the next two years Clovis may have three more community shopping centers totaling almost 30 acres. Quite obviously these centers are not dependent on Clovis alone for support. Their drawing power extends well beyond the City's boundaries and into northeast Fresno mostly because of their strategic location on Shaw Avenue.

Competition among the three will be brisk considering their location within a one-mile area. If such development continues in the same vicinity, the consequences are inevitable--a regional type shopping center, elongated rather than compact in form, consisting of several community centers developed along the south side of Shaw Avenue. Some of the land on the south side of Shaw Avenue remaining vacant after these three centers are complete should be considered for other uses, such as office and professional, of which there is a need in Clovis.

With most of the residential growth taking place to the north and east, consideration should be given to the amount and type of commercial

development in this area. In order to prevent a re-occurrence of the overzoning of the south side of Shaw Avenue between Clovis and Winery Avenues, and to protect the integrity of the CBD, such centers ought to be discouraged until near maximum population for the area has been reached.

5. Regional Center

Downtown Clovis, together with the Shaw-Clovis shopping complex discussed earlier, is a regional shopping center in every respect except that of compact form. It is the only one in the Clovis General Plan Area. Shaw Avenue, when fully developed with commercial and professional uses, may become the major regional center for the entire northeast section of the Clovis-Fresno Metropolitan Area.

CENTRAL BUSINESS DISTRICT

Future of Downtown

The Central Business Area of Clovis is still a very viable shopping area and should be encouraged to expand and grow. As an integral part of the CBD/Shaw/Clovis commercial complex, its future is bright if steps are taken now to facilitate its development and insure its integrity.

There are four major aspects of the downtown that require attention:

1. Expansion
2. Westernization
3. Civic Center
4. Parking

Expansion

Internally, there are vacant areas on Clovis and Pollasky Avenues south of the CBD in which commercial development might be feasible and this should be encouraged. In addition, the area on both sides of Bullard from west of Pollasky Avenue to Cherry Lane (extended) is presently zoned to accommodate this expansion. The type and nature of development of these areas should be given careful consideration. Specialty shops, general merchandise stores, financial establishments, and offices, or a combination thereof, would help retain the viability of the area and should be fostered. A "T" shaped CBD (i.e., Clovis, and Pollasky intercepting Bullard from Pollasky to Cherry Lane extended) would augment the much discussed Clovis western theme.

Westernization

The westernization of downtown Clovis, many examples of which already exist, has been under-capitalized. It is, however, a very valuable and disappearing life-style and should be promoted. The City should continue to work with the Clovis Western Improvement Association in this endeavor.

The development of a western theme may well result in more than preserving a life-style, it could indeed, by making Downtown Clovis attractive and unique, help insure the CBD merchants from business losses due to new and expanding shopping centers.

Civic Center

As Clovis expands, so does the need for more governmental office space in which to conduct the City's business. In order for government to function efficiently, it must have adequate facilities. With Clovis being one of the fastest growing cities in California, the need for a civic center is obvious.

Government offices should be easily accessible to the public, and for convenience they are generally located near major business activity. Locating in such an area makes it easier to consult and coordinate with other businesses and offices that are in constant need of public documents.

With the construction of a new City Hall in or near the CBD, it would be both possible and advisable to incorporate a western theme in its design. It is most essential that public buildings represent the people and life-style they serve.

Work is underway on a specific plan for the Central Business District. It will offer various alternatives to circulation, civic center, central shopping, parking and park sites.

Parking

It is essential, if the proposals of this plan for the expansion of the CBD are adopted, to expand the public parking facilities in the downtown area. Although the Zoning Ordinance does require on site off-street parking for the convenience of their customers; many of the older businesses do not have parking however, and as a result, the on-street parking spaces are insufficient for employees and customers. If business increases, as this plan anticipates it will, more conveniently located parking facilities must be installed. Methods for accomplishment of this will be discussed in the section on Plan Implementation.

CONCLUSION

The major elements of this section deal with past economic and commercial trends; present economic and commercial conditions; future commercial growth and zoning and commercial development criteria; various commercial concepts and analysis of existing shopping areas; recapitulation of commercial alternatives, and the destiny of the downtown central shopping area.

Clovis is a unique place in many ways. It is an old town attempting to hold on to its past while becoming deeply involved in modern-day problems. With the incorporation of the policies proposed in this plan, Clovis can expect the best of both worlds.

INDUSTRIAL

GOAL: To foster industrial growth to the degree and with the design necessary to broaden the economic base of the Clovis General Plan Area to meet the needs of both the citizens and the community.

POLICIES:

1. Broaden the economic base of Clovis through the development of more industry.
2. Encourage the continuation and expansion of agri-business as an important part of Clovis industry.
3. Encourage industrial growth in Clovis that improves the visual appearance of the City and that will be environmentally and ecologically desirable.
4. Insure the future industrial sites will be protected from conflicts with other land uses and guard against unplanned development through the use of legal controls and land use buffers.
5. Encourage and facilitate, by any means available to the City, an adequate street and circulation system in the industrial areas.
6. Provide a program designed to improve the appearance of existing industrial areas, especially the areas along the east side of Clovis Avenue between Jefferson and Sierra Avenues.
7. Provide, in advance of need, additional adequate and desirable industrial sites.
8. Encourage industrial parks or a major portion of future industrial areas.
9. Adopt and enforce criteria relating to the physical appearance of buildings and grounds of all industrial uses.
10. Amend the zoning ordinance to provide more restrictions on the height, shape, size, and content of signs in the industrial zones.

INDUSTRY IN CLOVIS

The story of Clovis' heyday as a lumber-mill town and later as an important agricultural center is well known to older residents of the area. Recent industrial development in Clovis has been more diversified with no type of industry enjoying pre-eminence. Nevertheless, those related to agriculture play a very active role. For years packing and shipping of peaches, figs, grapes, raisins, and other fruit have been important in local agri-business.

More recently, oranges and almonds have been providing a significant input to

the local economy. For example, the Wawona Plants on the northern fringes of the City process both local and imported fruit into jams, fruit pastes, and frozen products. Adjacent to this plant is a large Sunkist Plant for processing citrus crops. Other food-related industries are prospering in Clovis, including meat packing, poultry, and a "Mi Rancho Tortilla" plant.

Moreover, construction business is constantly expanding as well as businesses serving the contractors. Five local air conditioning businesses, four cabinet shops, two concrete companies, two concrete pipe companies, twelve building material and hardware shops, an automatic door service, numerous electrical contractors, masonry contractors and private manufacturers of tools, machinery, fiber-glass and paint, five paving companies, two roofing services and two welding shops are presently active in Clovis.

In addition, the recently developed Herndon Industrial Park provides sites for such businesses as aluminum window and siding, trailer manufacturing, air conditioning, boat manufacturing, refrigerator repair, lumber company, metal contracting and pre-fabricated homes which are shipped to Hawaii. Indeed, industry is alive and doing well in Clovis.

Labor Force

Within the Herndon Industrial Park, 75 to 100 people are employed, and in the Clovis area, approximately 400 to 500 persons are at work in either industry/manufacturing or related activities. Approximately 17% of these people live outside the Clovis urbanizing area and commute to their jobs. The employment ratio fluctuates according to seasons, since a number of people are dependent on agricultural employment. The labor force is a positive factor in Clovis' efforts to attract new industry. Not only does the City have a young and educated population, but it draws on a larger number of skilled workers available in Fresno and its environs.

Current Industrial Land Use

The Table on page 48 summarizes the amount of land both in Clovis and within the Urbanizing Area that is zoned industrial. It indicates how much of this land is vacant and how much is occupied.

Based on a city population of 18,000 and 140 acres of industrial land currently developed, an industrial land consumption ratio of 8.6 acres per thousand population results. 43 acres of unused industrial land remains in Clovis, which, at the same ratio, is sufficient to meet the industrial land needs of another 5,000 people.

In the planning area as a whole, including industrially zoned land in the county presently vacant, roughly 117 acres are available. With the industrial land consumption rate for the entire planning area figured at 9.2 acres per thousand people, there is currently enough industrially zoned land for about 12,700 additional people. Population predictions suggest this growth will be achieved before 1980.

TABLE 14

INDUSTRIAL LAND USE INFORMATION

	<u>TOTAL ACRES ZONED</u>			<u>TOTAL ACRES OCCUPIED</u>			
	<u>City</u>	<u>County</u>	<u>Total</u>	<u>City</u>	<u>County</u>	<u>Total</u>	
M-1	135	97	232	M-1	90	57	147
M-2	34	11	45	M-2	30	11	41
C-M	29	5	34	C-M	20	5	25

	<u>TOTAL ACRES VACANT</u>			<u>% VACANT</u>		
	<u>City</u>	<u>County</u>	<u>Total</u>	<u>City</u>	<u>County</u>	<u>Total</u>
	45	40	85	33%	41%	35%
	4	--	4	11%	00	08%
	4	--	4	13%	00	11%

Admittedly, the calculations above are approximate and do not consider all factors. But while industrial growth occurs somewhat spasmodically, the implication is clear--that over the long haul, industry will consume a certain portion of total and available, and if the City wishes to maintain the present level of industrialization or even to increase that level, then land must be set aside for industry in accordance with the overall growth in population.

Character of Current Development

Much of the vacant industrial area currently available for development is surrounded by or is adjacent to businesses and industries that are less than attractive facilities. The blighted appearance of certain portions of Clovis' industrial area is largely the result of the type of industries that have located here. Being small operations, they have not had money to invest in handsome, well-arranged buildings and grounds.

Industry In the Future

Clovis, as part of a large metropolitan region, benefits from the resources of the entire area. Of importance to prospective companies are a variety of internal characteristics of the City. These are factors over which Clovis has a great degree of control, and may be listed as follows:

- Choice and variety of sites available to the industry
- The degree to which the City will provide incentive to the prospective industry as enticements to locate locally
- The reputation and future of the City as a growing, vital area, with a bright future
- The type of business "neighbors" that are already operating and the overall amenity of industrial development in the City.

The reputation of Clovis as a rapidly growing city and as an important part of the CFMA is gaining wide recognition throughout the valley. Clovis has also demonstrated its capacity to deliver quality municipal services to present industrial clients and can be expected to do so in the future.

One method of projecting future space requirements is to establish a ratio of industrial land use per population. Earlier in this section it was indicated that current development runs between 8.6 and 9.2 acres per 1,000 residents. A common rule of thumb is that 10 acres per 1,000 population represents a good economic balance. Therefore, we can project industrial space needs as a function of population, as follows:

TABLE 15

PROJECTED INDUSTRIAL SPACE NEEDS

Year	Projected additions to present population for entire planning area. (Thousands)	Equivalent industrial site acreage at 10 acres per 1,000 population
1975	10.0 - 12.5	100 - 125
1980	15.9 - 22.1	159 - 221
1985	21.8 - 31.7	218 - 317
1990	27.7 - 41.3	277 - 413
1995	33.6 - 50.9	336 - 509

By subtracting the approximate 117 acres currently zoned but undeveloped, this plan projects the need of between 219 and 382 additional acres of industrial land by 1995. The average of these two figures is 300 acres -- just short of half a square mile.

Areas of current industrial development will continue to offer the best opportunities for expansion. Aside from the scattered industries along Clovis Avenue, most of the present companies are located in one of the three general areas as indicated on the Land Use Map.

From the City's viewpoint, the most significant factors to consider in evaluating the future of these areas are their relationship to other land uses; especially residential; their access to good transportation, the availability of public services, and the degree to which they lend themselves to well-planned development with a major emphasis on aesthetic values.

In this respect, the area around Clovis and Shaw Avenue offers the greatest opportunity for the development of a planned industrial district or park. The 1964 Clovis General Plan wisely recommended that land be held in industrial reserve on the south side of Shaw. This land, together with other adjacent industrial land that remains undeveloped, will provide a major portion of future space requirements.

Because of the large blocks of available land and the desire by all to improve Clovis' competitive situation in attracting new industry, industrial park development will provide the greatest benefit to Clovis.

"Just as entire residential communities or shopping centers are now planned and built as integrated developments, modern-day industrial areas are increasingly being developed as planned industrial districts. Usually an enterprise under one management for marketing, industrial sites on a sale or long-term lease arrangement, these developments are laid out in acreage lots of varying size especially designed for modern industrial operations. Employee parking and loading areas are required; water, waste, power, and fire protection facilities adequate for contemporary types of industrial operations are provided;

and special attention is given to railroad and trucking facilities and, in some cases, to water and air transportation. Some of the more enterprising developments are conceived as 'industrial parks', reserving areas for special common facilities such as lunch rooms, exhibition space, and recreation and park areas, and providing for control over landscaping and architectural design of structures." *

Industrial zoning around Herndon and Minnewawa Avenues will permit some continued development, but on a much smaller scale than the Clovis-Shaw Area. Restrictions should be placed on how far industry will encroach into agricultural lands which provide open space of scenic value on the north side of town. This area might best be oriented towards agri-business. Because it is situated to windward of Clovis residential and commercial areas, particular caution must be taken to insure control over the nuisances of odor, dust noise and traffic that might adversely affect other land uses.

The third existing industrial area, situated along Tollhouse Road near Sierra Avenue, must be carefully evaluated in order to avoid conflicts with residential land use. Its proximity to Highway 168 and Herndon Avenue, an expressway, gives it excellent highway transportation advantages. It is proposed as a light manufacturing and distribution center.

CONCLUSION

Clovis is at a crucial stage where the future of industrial growth can be greatly improved through decisions made during and after the adoption of the General Plan. The opportunity to provide well planned industrial sites that will attract desirable companies to our area exists. The danger lurks, however, that through inaction, the best locations for industry will be lost by the encroachment of incompatible land uses and by shoddy, piecemeal industrial growth.

*Urban Land Use Planning, Stuart Chaplin, Jr., 1965

PUBLIC AND QUASI-PUBLIC FACILITIESPOLICIES

1. Promote the development of an optimum amount of neighborhood and community parks, based on the standards indicated and defined in the Open Space, Conservation Element, and in the Recreation Element of the General Plan, in order to serve adequately the present and future City population growth.
2. Encourage diversity and integration in park development.
3. Take advantage of all areas offering natural beauty and the potential of park space and pathways for park development.
4. Coordination efforts with the City of Fresno, Fresno County, and Clovis Unified School District in providing park and recreation facilities, thereby eliminating duplication and needless expenses.
5. Require the dedication of land in lieu of the current fee for locations of park development where such a site fits into the overall park plan.
6. Encourage and support the orderly development of schools and their expansion in keeping with present and future population growth within the Clovis Planning Area.
7. Encourage and support the acquisition of school lands in anticipation of future residential growth.
8. Seek to accommodate all present and future governmental offices (City, County, State, and Federal) in one integrated civic center complex.
9. Encourage the development of park sites next to elementary schools.
10. Strive to achieve architectural harmony in the development and redevelopment of present and future governmental offices.
11. Encourage the development of health care delivery facilities based on community and on area-wide needs.
12. Seek coordination with other health care delivery facilities in an effort to avoid duplication of services.
13. Strive to attract the college community through the development of cultural and entertainment facilities such as museums or a community theater.
14. Develop and expand present and future flooding basins into park and recreation facilities.

INTRODUCTION

Section 65302 (a) Article 5, Authority for and Scope of General Plans of the Planning and Zoning Law of the State of California states that a plan shall include the following element: A land use element which designates the proposed general distribution and general location and extent of the uses of the land for . . . uses of land.

A. USES

Recreation Facilities

Since this aspect of the General Plan is treated in detail in the Recreation Element, its consideration here as a public facility is omitted.

Education Facilities

Clovis started elementary education instructions on September 19, 1895, in what was then a Southern Pacific warehouse. In 1899, the first high school district was organized and a high school building constructed in 1902. In 1904, it graduated its first class of five students.

Prior to 1960, there were several elementary school districts and one high school district. In that year, they unified and became the Clovis Unified School District (CUSD).

Its boundaries are Pinedale and the San Joaquin River to the west, Birkhead Avenue to the north, Watts Valley Road and Wildcat Mountain to the east, and Kings Canyon Road to the south. The boundaries are different from those of the Clovis Planning Area; the Clovis Unified School District being much larger. A small part of Clovis, however, is located in the Fresno Unified School District, namely the Shaw, Peach, Ashlan and Winery area. This lends support to the belief that residents living there tend to identify with the City of Fresno.

Within the CUSD at present are ten elementary schools, one intermediate school, one high school, and one continuation/adult school. However, of the ten elementary schools only six are within the Clovis Planning Area Boundaries. The following schools are located within the Planning Area:

Elementary Schools:

Cole	-	615 W. Stuart Avenue
Dry Creek	-	8098 N. Armstrong Avenue
Jefferson	-	5013 N. Fowler Avenue
Tarpey	-	4655 N. Minnewawa Avenue
Sierra Vista	-	510 Barstow
Weldon	-	150 DeWitt Avenue

Intermediate School

Clark - 901 Fifth Street

High School

Clovis - 5550 N. Fowler Avenue

The remaining four schools are located outside the Planning Area:

Elementary Schools:

Fort Washington-Lincoln

Nelson

Pinedale

Temperance-Kutner

Every elementary school has a playground that provides recreation for its pupils. The amount of playground area is generally half the total school site.

Present enrollment in all schools is around 8,934 students (See Table 16 below). This is an overall increase of around 53% from 1961 and around 150% from 1953.

TABLE 16
SCHOOL ENROLLMENT

School	1953	1961	% Increase	1972	% Increase
Elementary K-8	1,932	3,595	86%	4,966	38%
Intermediate 7-8	533	868	63%	1,418	63%
High School 9-12	1,153	1,390	20%	2,451	76%
Continuation	---	---	---	100	---
TOTAL	3,618	5,853	61%	8,934	53%

High student enrollment is a result of the increased population in the Clovis area. The CUSD has had an average increase of 350 pupils per year, with the high school growth showing a faster rate than that of the elementary schools.

Concept of School Locations

School site location is dependent upon population growth and land use. Such considerations as zoning, highway access, pupil safety, drainage, and centers of pupil population must also be given attention.

Although schools in the CUSD meet lot size requirements, they are now operating at optimum capacity. With the rapid growth presently taking place, more schools will have to be constructed. The district is undertaking a pupil projection study to determine future needs. The method used does not allow the authorities to consider the numerous subdivisions that will be constructed in the near future. However, the present projection method indicates that high school enrollment will increase faster than that of elementary schools.

B. ADMINISTRATIVE FACILITIES AND PUBLIC SERVICES

City Services

The Clovis City Hall and adjacent buildings house most of the municipal offices. Within the City Hall are the Finance Department (6 full-time personnel) and City Manager's Office (2 full-time personnel). Located in a temporary mobile office unit behind the City Hall are the Engineering Department (4 full-time employees), Planning Department (2 full-time employees and 1 part-time employee), Building Department (2 full-time employees), and Public Works (29 full-time employees, most of whom work in the corporation yard located at 906 Villa Avenue). Located on both sides of the City Hall are the Fire and Police Departments. Such a grouping of municipal services provides a nucleus of government facilities.

Police

The Clovis Police Department is located in the City Hall Building at Bullard and Pollasky Avenues. The Department consists of 23 sworn patrolmen and 25 reserve officers. It has at its disposal eight patrol cars and five dispatchers.

TABLE 17

<u>Year</u>	<u>Incident Reports</u>	<u>Population</u>	<u>Reports/Person</u>
1968	7,485	11,750	.637
1969	8,397	12,000	.699
1970	8,381	13,850	.604
1971	9,646	15,000	.643
1972	11,760	17,150	.685

Fire

The Clovis Fire Department was established in 1912, the year that Clovis was incorporated. Until 1966 the Department was serving the City on a volunteer staff basis. In 1970 it moved to its present location (Pollasky Avenue between Sixth and Seventh Streets) from its previous headquarters adjacent to the City Hall.

It employs 11 full-time personnel and has 15 volunteers. Its equipment consists of five trucks -- three pumpers, one tanker, and one ladder and pumper. Since 1962, the department has had a mutual aid agreement with the Mid-Valley Fire District. The Clovis Fire Department averages between 190 and 220 fire calls and around 40 resuscitator calls per year.

County Services

The County maintains a Justice Court in Clovis, as well as a branch library. The branch, maintaining over 12,000 volumes, is one of ten libraries that the County operates.

Federal Services

The Federal Government operates a Post Office on the Corner of Bullard and Woodworth Avenues. It services 12 city routes, three rural routes, and two star routes which serve the foothill areas.

C. OTHER FACILITIES

Hospitals, Homes, Clinics, Emergency

Clovis is served by one General Hospital - Clovis Memorial Hospital. It opened in 1966 and expanded in 1968 to include a convalescent hospital wing. The hospital has 99 beds and employs generally 50 full-time and part-time personnel. It offers Inhalation Therapy; Intensive Care--E.E.G. and diagnostic and monitoring E.K.G.; and Physical and Hydro-Therapy rehabilitation.

There are six convalescent hospitals and rest homes and one well-child clinic, which is operated by the Fresno County Health Department. One emergency service is available -- the Clovis Ambulance Service, and it has three radio-dispatched, oxygen-equipped ambulances.

Churches

The first church constructed in Clovis was of the Methodist denomination, built in the year 1893; a Presbyterian Church in 1898; and a Baptist Church in 1903. Now there are over 20 churches in Clovis of various denominations.

Cemetery

One cemetery serves Clovis. Located on the southeast corner of Herndon and Villa Avenues, it is administered by the Clovis Cemetery District.

Flooding Basins and Sewerage Treatment

There are two flooding or ponding basins in Clovis of around six acres each. One is located on Ashlan and Peach Avenues and the other in the vicinity of Barstow and Villa Avenues, west of Letterman Memorial Park. Additional sites have been proposed by a recently completed study which analyzed the sewer and flood control capacities of Clovis.

Flooding basins are potential areas of open space and recreation. They may serve the dual purpose of flood control and neighborhood park facility, thereby eliminating the need of purchasing additional land for park space.

HOUSING ELEMENT

GOAL: To provide safe, sanitary and decent housing of sufficient quantity to meet the needs of all citizens in the Clovis Planning Area, and to provide quality residential environments for all who choose to live in our community.

POLICIES:

1. Solutions to housing problems found in the Planning Area should reflect the needs of, and be designed with the cooperation of the citizens of the area irrespective of whether aid is sought from outside agencies.
2. A wide variety of housing facilities reflecting the choices of all social and economic groups in the area should be made available. This variety includes residential types, sizes, locations and prices of units for sale, lease, or rent.
3. Underprivileged and racial minority groups must not be, against their will, concentrated in any given residential area. A conscious effort must be made to expand the housing choices available to them if they wish to change neighborhoods.
4. Existing quality residential neighborhoods should be protected from the germs of blight and deterioration commonly spread by the rezoning of adjacent or nearby areas to permit development inconsistent or incompatible to enduring residential communities. With the adoption of this plan by Fresno County, this admonition will become incumbent upon the Board of Supervisors for the areas of this plan under its jurisdiction.
5. Neighborhood environmental factors such as traffic flow, school locations, parks, and open spaces and other public uses shall be considered important in stabilizing and upgrading neighborhoods and dwellings.
6. Proposed residential construction must be coordinated with other land use developments and public services and facilities.
7. Nonconforming housing in commercial and industrial areas should be removed as soon as possible in order to make land in such areas available for those uses for which the land is zoned.
8. The City should be receptive to innovative housing proposals including, but not limited to, planned unit developments.

9. Existing housing and zoning standards should not be lowered and building codes must not be changed, however, when changes in building technology warrant such changes.
10. The City should consider condemnation procedures when blight and deterioration have affected housing units to the extent that their substandard condition cannot be remedied by repair or remodeling.
11. A Citizen's Housing Committee should be considered to study housing problems.

INTRODUCTION

Since July 1, 1969, a housing element has been a mandatory part of every General Plan adopted in California. An element that endeavors to meet the housing needs for all economic segments of the community consists of plans and standards for improving existing housing and suggesting areas where future residential development of various types should occur. It also identifies areas of existing housing in which blight and deterioration have set in and distinguishes these from the forces that, if not checked, will certainly cause deterioration.

Specifically, the housing element includes:

1. Identification of housing problems and outlining housing goals with a sincere pledge on the part of the public and the City.
2. The proposing of workable solutions to the housing problems determined to exist in the community.
3. A detailed plan embodying the workable solutions proposed to achieve the desires and needs of the community.
4. Cooperation with other public agencies in the area when the solving of housing problems is beyond the ability of local government.

A housing element in a general plan also serves as a basis for any state and federal aid to housing that may be needed in the future. These governments want to make certain that any financial support extended to a locality is based on a rational plan indicating present housing conditions and future population expectations.

Population Projections

In a guide for providing safe, decent and sanitary housing for those living in the Clovis General Plan Area, population trends will play an important role. In the introduction to the General Plan, this subject was discussed in essay and chart form. Briefly, our projections made after taking into account the effect of the increasing use of birth control techniques and the availability of legal therapeutic abortion, indicate a steady population growth reaching a minimum figure of about 42,200 in the Urbanized Area by 1990.

Housing Supply and Trends

Some idea of the housing problem in the Clovis General Plan Area may be gleaned by considering the relationship between population and housing in the City of Clovis. This approach is reasonable because the City contains the preponderance of population of the total area and the availability of data from both the 1970 Census reports and from the City Building Department. To determine the population-housing ratio for the outlying areas as well, would require extensive research incommensurate with the value received therefrom. It can be assumed therefore, that a generic analysis of the housing situation in the entire area can be adduced by using the City statistics alluded to above.

The 1970 Census revealed that Clovis, with a population of 13,856, had 4,347 year-round housing units. The average occupancy of each dwelling unit was approximately 3.2 persons. To determine the housing needs by 1990 with a minimum population of about 42,200, three direct factors must be considered in the computation stages. These factors are:

1. Shrinking family size,
2. Vacancy rate, and
3. Housing loss due to natural causes.

In 1970, the family size in Clovis was 3.2 persons per dwelling unit, compared to a total county average of 3.2 persons per occupied unit and a CFMA figure of 3.08. The July 1972 estimates of the State Department of Finance figures show the persons per occupied unit to be 3.13 and the 1980 projection by COG for the whole county is 2.9 persons. In 1980, Clovis should have a projected family size of 3.0 persons per dwelling unit and in 1990, the projected family size will be 2.8 persons. Based on the assumption that Clovis will remain slightly above the CFMA and total county average, the figure of 3.0 would not be out of proportion for 1980. The 1990 projections for the county have not been determined but it would be safe to assume that the family size rate of decline to be much lower between 1980-1990 than between 1970-1980. Thus, the minimum projected housing units for 1980 will be 10,400 units and for 1990, 15,071 units. But this is not a true representation of the total housing demands for 1980 and 1990. These figures are only based on the projected populations and shrinking family sizes for

those periods of time $[31,200 \text{ (population)}/3.0 \text{ (family size)} = 10,400 \text{ units}$ and $42,200/2.8 = 15,071 \text{ units}]$. To determine the total housing demands for 1980 and 1990, a 4% vacancy rate and a 1% a year natural loss rate will have to be added to the above projections. (See Table 18.)

To obtain the 4% vacancy rate in 1980, the projected figure of 10,400 units $(31,200/3.0)$ is divided by 96% which is the required units after the 4% vacancy rate has been subtracted $(10,400/.96 = 10,833 \text{ units})$. The 1% a year natural loss has to be derived from the existing units in that period (1970) and then added to the net increase. To accomplish this the existing or actual housing units of 1970 (4,347 units - from 1970 census) will have to be subtracted from the projected figure of 10,833 units for 1980. The remaining 6,486 units are the net increase for that period of ten years. The 1% a year natural loss is then determined by taking 10% of the actual housing units in 1970 $(4,347 \times .10 = 435 \text{ units})$. The resulting product (435 units) is then added to the net increase (6,486 units) which shows the "actual demand" for housing units in 1980. This figure (actual demand) added to the existing housing units (4,347) in 1970 will produce the total housing units projected for the year 1980 $(6,921 + 4,347 = 11,268 \text{ total units in 1980})$. The number of total units required for 1990, can be determined by the same process of computation.

With the projected housing figures in mind for 1980 (11,268) and 1990 (16,825 units), Clovis will require 692 new units a year for the next 7 years to satisfy the projections for 1980. From 1980 to 1990, the City will experience a reduction in the required number of new units built per year, the number of new units will be 556 units. This figure is based on a theoretical assumption that Clovis will experience an increase in both population and housing demand within the figures projected for the year 1990.

In the years 1970 to 1972, Clovis did not experience the construction growth of 692 dwelling units a year needed to fulfill the projected figure of 11,268 units in 1980. Figures from the City Building Department indicates that for each of the last three years, an average of about 600 homes or apartment units were built in the City of Clovis. This shows a difference of 92 units needed to attain the required total of 692 units a year. But in 1973, Clovis experienced a "Boom" in housing construction resulting in an increase of 1,004 units. This is an increase of 101 units over the past average, which means presently that Clovis is exceeding its number of required units needed to reach the 1980 projections. But if the annual figure of 1,004 units in 1973 were to be consistent for the next two years and the totals of the five year span (1970 to 1975) were to be averaged, it would show an average of 801.8 units per year, which is still under the 1980 projected maximum demand figure of 893 units. This last figure may be discounted somewhat by considering that building permits are not processed for mobile home installation and 241 such units have been added to the housing inventory since 1970 and additional mobile home parks are contemplated.

By January 1, 1973, the City has 5,699 homes, of which 2,081 or 36%, were built in the past four years. The increased rate of dwelling unit construction in the past two years, however, accounted for a total of 1,187 dwelling units, or 20%, or the entire stock of year-round units in Clovis.

TABLE 18

HOUSING PROJECTIONS FOR THE YEARS 1980 TO 1990

	LOW	HIGH
1980		
Shrinking Family Size 3.0	31,200 (projected population) 3.0 (shrinking family size) = 10,400 units	37,000 (projected population) 3.0 (shrinking family size) = 12,333 units
4% Vacancy Rate	10,400 (projected units) .96 (vacancy rate) = 10,833 units	12,333 (projected units) .96 (vacancy rate) = 12,846 units
1% Yearly Loss 1970 to 1980	10,833 (projected units, 1980) - 4,347 (existing units, 1970) 6,486 (net increase) + 435 (10% natural loss) 6,921 (actual demand, 1980) + 4,347 (existing units, 1970) 11,268 TOTAL UNITS, 1980	12,846 (projected units, 1980) - 4,347 (existing units, 1970) 8,499 (net increase) + 435 (10% natural loss) 8,934 (actual demand, 1980) + 4,347 (existing units, 1970) 13,281 TOTAL UNITS, 1980
1990		
Shrinking Family Size 2.8	42,200 (projected population) 2.8 (shrinking family size) = 15,071 units	55,000 (projected population) 2.8 (shrinking family size) = 19,642 units
4% Vacancy Rate	15,071 (projected units) .96 (vacancy rate)	19,642 (projected units) .96 (vacancy rate)
1% Yearly Loss 1980 to 1990	15,698 (projected units, 1990) - 11,268 (projected units, 1980) 4,430 (net increase) + 1,127 (10% natural loss) 5,557 (actual demand, 1990) + 11,268 (projected units, 1980) 16,825 TOTAL UNITS, 1990	20,460 (projected units, 1990) - 13,281 (projected units, 1980) 7,179 (net increase) + 1,328 (10% natural loss) 9,507 (actual demand, 1990) + 13,281 (projected units, 1980) 22,788 TOTAL UNITS, 1990

**Information based on the Clovis Building Department Records

To the extent that lack of plumbing facilities is a measure of deterioration and/or of old or dilapidated housing, the percentage of such dwellings is low. This is due to condemnation and demolition of older run-down units and the rapid pace of new home construction. Thus, on April 1, 1970, according to the Clovis Building Department, 48, or 1.1% of homes in Clovis could be classified as *blighted* or *deteriorating*. In proportion to the total housing stock as well as in terms of absolute numbers, the picture is by no means discouraging.

While figures are not available for the number of septic tanks in Clovis in 1970, there were, according to the Building Department, only fifty, or less than .01% of such private sewage systems in existence prior to the recent annexation in the Fowler-Shaw area. Since most septic tanks are found in older homes in the older section of town, it is fair to assume that their numbers will continue to disappear from the scene.

The vacancy rate in Clovis is approximately 4%; this is a percentage based upon the estimates of the State Department of Housing and Community Development which feels a vacancy factor of 4% is needed to assure a turnover in the housing market in a city. A community without vacancies cannot serve the housing needs of its residents. The lack of vacancies will create great difficulties for people looking for housing, and this in turn, will force them to go to neighboring communities to obtain housing.

Except where new home construction is discussed, the terms "living units" or "dwelling units" as used in this element include homes in mobile home parks. On January 1, 1974, there were 619 mobile home spaces in developed parks in the City, of which 578 were occupied. This is an increase of 241 occupied units, or 41% more than existed in April, 1970. The figures indicate, therefore, that mobile home residency is not growing significantly faster than conventional home or apartment house construction, which increased by 40% during the same period.

TOTAL HOUSING STOCK GROWTH TABLE 19

	<u>DWELLING UNITS</u> <u>April, 1970</u>	<u>DWELLING UNITS</u> <u>January 1, 1974</u>	<u>INCREASE</u>	<u>% OF</u> <u>INCREASE</u>
TOTAL	4,347	7,281	2,934	40
CONVENTIONAL UNITS	4,010	6,703	2,693	40
MOBILE HOME UNITS	337	578	241	41

To summarize, total growth of housing stock as well as of conventional units amounted to 40% while there was 41% increase in mobile home living. As of January 1, 1974, 91.6% of all dwelling units in Clovis were of the standard variety and 8.4% were mobile homes situated in trailer parks. It is interesting to note that during 1972, new home construction increased by 12.3% in the State of California and by 31.6% in the Central Valley.*

*Monthly Summary of Business Conditions in the Central Valley of California--December 1972. Security Pacific National Bank, Research Department. Box 1691, Fresno, California, 93717.

The greater numbers of mobile homes and multiple living units should not evoke alarm. Nationally, retired senior citizens whose numbers are steadily increasing, are finding mobile home parks more to their liking. Their families grown and married, these "senior citizens" are finding their larger conventional homes superfluous if not burdensome, and are thus moving into smaller accommodations of various sorts.

The retired person who is presently living on unemployment compensation, was a busy individual in the fifties. The result of his overtime then is a large number of young people between the ages of 21 and 27 who, just getting started in life, are generally not able to buy a permanent home. They find apartment living to their liking and moreover, because of planned parenthood, they will probably spend more of their young married lives in apartments before moving into single family units. In 1970, 37% of the Clovis population was under 18 years of age. On the basis of this figure alone, Clovis should not expect a dramatic decrease in numbers of those for whom apartment house living has appeal.

There have been to date, a rapid increase in the amount of multiple family units being built in Clovis. In 1970, Clovis experienced a "boom" in multiple family unit construction which resulted in an annual figure of 385 units. 292 units more than the previous year of 8% of the total housing market. In 1971, there was a recession in construction, only 274 units or 5% were built and in 1972, there was only a slight increase of 310 units. The construction of multiple family units in 1973 "exploded" with an annual figure of 734 units which is 10% of the total housing market. This is an increase of 100% over the previous year and 4% more than the average of the past three years. The average percentage of multiple units in the past four years is 7%.

TABLE 20
NEW AND EXISTING HOUSING INVENTORY

	1969	1970	1971	1972	1973
Single Family	189	227	321	282	270
Multiple Family	93	385	274	310	734
New Units Total	282	612	595	592	1,004
Existing Units	3,618	3,900	4,512	5,107	5,699
Units Total (Yearly)	3,900	4,512	5,107	5,699	6,703
% of Multiple Units	2%	8%	5%	5%	10%

Average of the 5 years is 6%

*Information based on Clovis Building Department records.

Housing Site Inventory

There is no dearth of land available for residential construction in the Clovis General Plan area. The land use map suggests heavier densities in the Central Clovis Triangle defined by Shaw, Clovis and the proposed freeway route. Since land prices are higher in this area, it is reasonable to expect more units per acre to make this land available for development. In this area, innovative residential developments should be encouraged in order to accommodate apartment units, unit planned developments, and other types of housing within the means of lower income families.

North and east of the present City limits, land is available for an orderly expansion of single family development on increasingly larger lot sizes. This residential neighborhoods. It is reasonable to conclude from a brief catalogue of available housing sites, that Clovis can accommodate a wide variety of shelter facilities for all wishing to make their domicile in the Clovis area.

It will be necessary for the public agencies and private concerns engaged in the production of housing to gauge their building activities to the population housing demand projections, both of which will be needed to keep pace with the anticipated population growth. Periodic updating of this element will be essential if population increase and available housing are to be kept in balance.

CIRCULATION ELEMENT

GOAL:

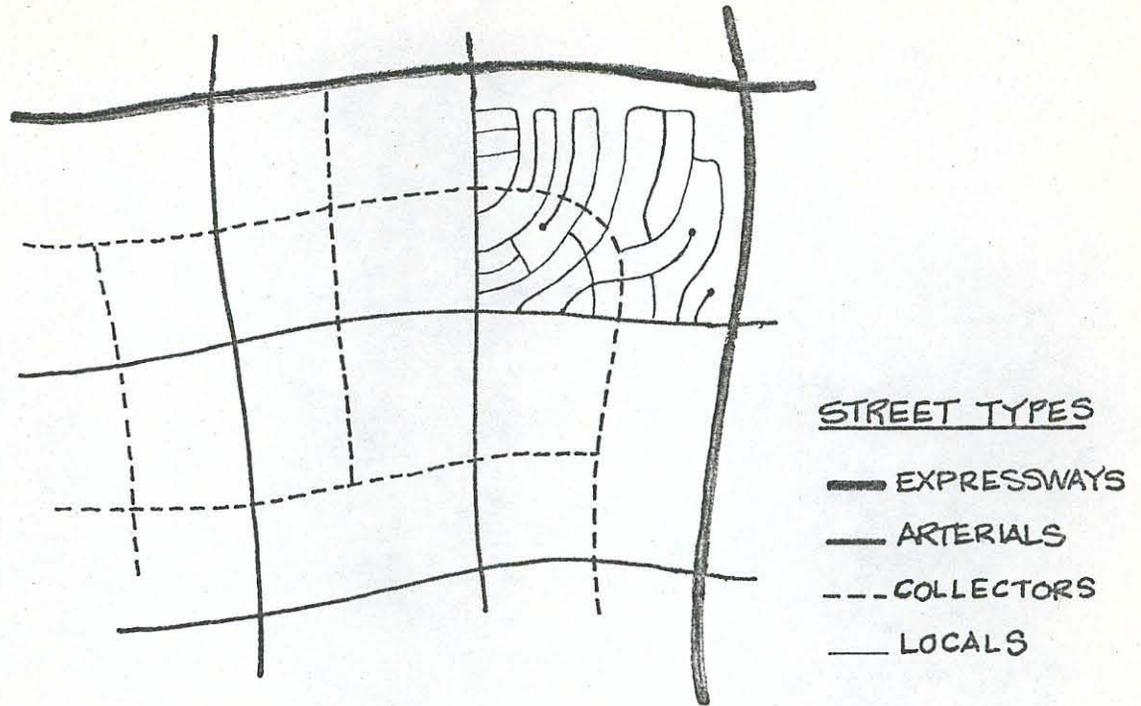
In order to better serve the needs of the citizens, a system of freeways, expressways, highways and public transit is proposed in a pattern conducive to the safe, efficient and economical movement of people and goods in the Clovis Planning Area and beyond.

POLICIES:

1. Utilize existing and proposed circulation networks in order to facilitate controlled and orderly expansion.
2. Encourage a recessed design for Freeway 168 from Shaw Avenue to the Herndon Expressway.
3. Encourage the construction of Freeway 168 north of Herndon Avenue only after a definite need has been established.
4. Propose circulation routes into the undeveloped areas so as to facilitate their development in an orderly manner.
5. Develop and maintain a balanced system of arterial and collector highways capable of accommodating future vehicular volumes including public transit and proposed land uses.
6. Adopt and institute a plan line program that will ensure adequate right-of-way for future route expansion.
7. Develop a circulation system in a manner that will enhance and not destroy the surrounding environment and land use.

As stated in the Government Code, as amended, a circulation element shall consist of "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan."

Because Clovis is basically an auto-oriented community, the major emphasis of this element will be on the street system, which includes freeways, expressways, arterial highways and collector highways. Refer to street types and cross-sections on pages 67 and 68.



Freeways function as a regional and metropolitan link with limited access and no grade crossings or traffic stops. The average right-of-way width is from 150 to 200 feet and will carry approximately 23,000 vehicles per day (5% trucks).

Expressways provide metropolitan and city continuity, with access limited to $\frac{1}{2}$ -mile intersections, signals at major intersections, and no parking lane. Minimum right-of-way width is 100 feet and a minimum carrying capacity of 6,000 vehicles per day.

Arterials provide unity throughout the contiguous urban area. These roads generally form neighborhood boundaries. Minor access control is incorporated along with channelized intersections. Minimum right-of-way width is 80 feet and a minimum carrying capacity of 4,000 vehicles per day.

Collectors are the main residential feeder streets with stop signs on side streets and form smaller neighborhood boundaries. Minimum right-of-way width is sixty feet and a minimum carrying capacity of 3,000 vehicles per day.

Local and industrial streets are not included or required in this element because they are usually established at the current planning stage via subdivisions or site plan review.

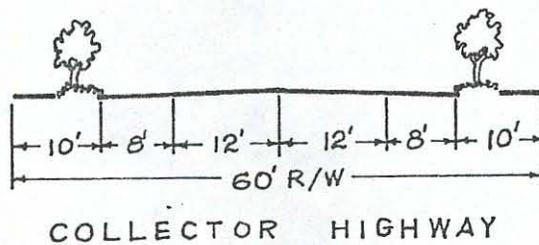
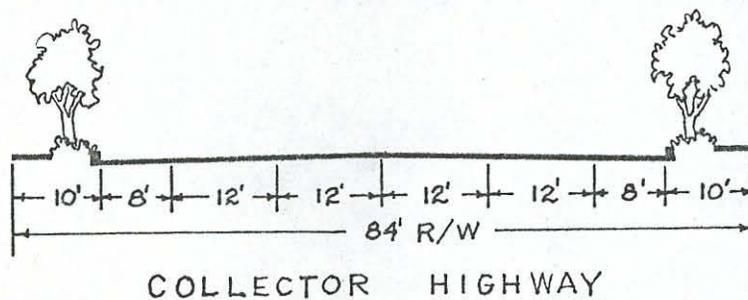
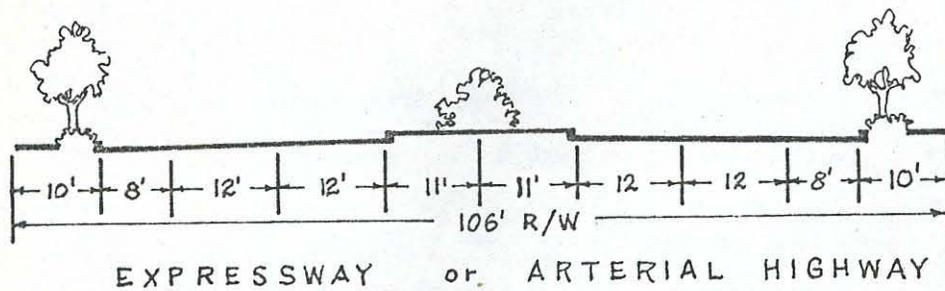


PLATE 8

TYPICAL HIGHWAY CROSS SECTIONS

Freeway 168

With the completion of Freeway 168, Clovis will be on a major segment of our state's highway network. This will create many changes in the community.

1. Recreational tourist-oriented services will expand locally as the volume of vehicular traffic to the foothills and Sierras increases.
2. Clovis will expand residentially because of its proximity and accessibility to recreational attractions and employment opportunities.
3. This improved highway link will attract new industrial development as the value of land becomes more attractive than nearby industrial centers.

Existing Transportation Facilities

The following transportation facilities exist or are in proximity to the City of Clovis:

1. The Fresno Air Terminal, within four miles of downtown, offers a variety of air travel opportunities from major commercial airlines to private aircraft. Three major airlines link this facility to major cities in the United States and the world.
2. One branch line the Clovis Branch, of the Southern Pacific, which is basically freight oriented. This line connects the Fresno Southern Pacific Yard with Pinedale with a minimum of one run per day during the winter and two runs per day during the summer. The railroad will remain a local freight and produce facility with additional spur lines encouraged for the industrial areas.
3. One expressway, Herndon Avenue, running east-west, which is currently one of the quickest routes of travel from Highway 99 to Clovis.
4. Three partially completed arterial highways, consisting of:
 - Shaw Avenue (Winery to Clovis Avenue)
 - Clovis Avenue (Ashlan to Sierra Avenue), and
 - Willow Avenue (Ashlan to Shaw Avenue).
5. One completed Collector Highway, Third Avenue between Clovis Avenue and Tollhouse Road.
6. One partially completed Collector Highway, Gettysburg, between Willow and Minnewawa Avenues.

Plan Recommendations

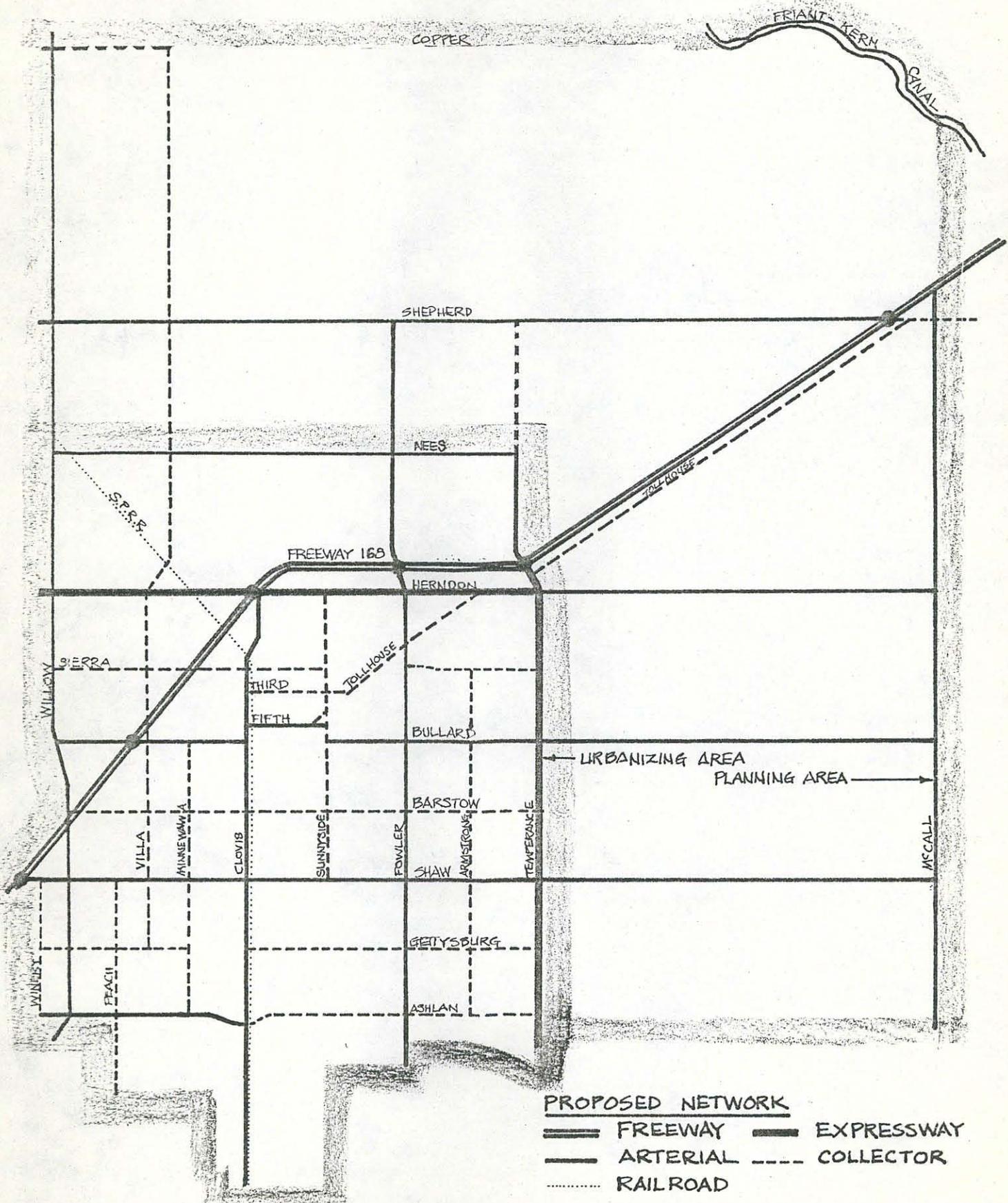
In conjunction with the State Division of Highways, City of Fresno, and Fresno County, the following network is proposed for the Planning Area.

PROPOSED CIRCULATION NETWORK

<u>FREEWAYS</u>	<u>Right-of-Way Width</u>	<u>Vehicles Per Day</u>	<u>Count Parameters</u>
Freeway 168 (Winery to McCall)	200' to 300'	N.A.	
<u>EXPRESSWAYS</u>			
NORTH-SOUTH			
Temperance (Ashlan-Freeway 168)	106' (Ave)	N.A.	
EAST-WEST			
Herndon (Willow-Temperance)	106'	N.A.	N.A.
<u>ARTERIAL HIGHWAYS</u>			
NORTH-SOUTH			
Willow (Ashlan-Copper)	106'	9,241	(Ashlan-Shaw)
Clovis (Ashlan-Herndon)	106'	11,688	(Shaw-Herndon)
Fowler (Ashlan-Shepherd)	106'	2,403	(at Bullard)
Temperance (Freeway 168-Nees)	106'	N.A.	
McCall (Ashlan-Freeway 168)	106'	N.A.	
EAST-WEST			
Shepherd (Willow-Freeway 168)	106'		
Nees (Willow-Freeway 168)	84'		
Herndon (Temperance-McCall)	106'	4,755	(Minnewawa-Sunnyside)
Bullard (Willow-McCall)	106'	3,042	(Villa-Fowler)
Shaw (Willow-McCall)	106'	13,239	(Willow-Sunnyside)
Ashlan (Winery-Minnewawa)	106'	4,733	(Willow-Minnewawa)
Ashlan (Minnewawa-Clovis)	84'		
<u>COLLECTOR HIGHWAYS</u>			
NORTH-SOUTH			
Winery (Ashlan-Shaw)	60'	N.A.	
Peach (Dakota-Shaw)	84'	4,684	(Ashlan-Shaw)
Villa (Gettysburg-Santa Ana)	60'	2,086	
Villa (Santa Ana-Copper)	84'	2,687	(Shaw-Herndon)
Minnewawa (Ashlan-Santa Ana)	60'	3,914	(Ashlan-Gettysburg)
Minnewawa (Santa Ana-Bullard)	84'	1,721	(at Shaw)
Sunnyside (Shaw-Herndon)	80'	N.A.	(Shaw-Herndon)
Armstrong (Ashlan-Sierra)	84'	N.A.	

	<u>Right-of Way Width</u>	<u>Vehicles Per Day</u>	<u>Count Parameters</u>
Temperance (Nees-Shepherd)	84'	N.A.	
EAST-WEST			
Sierra (Willow-Clovis)	80'	1,253	(Villa-Clovis)
Sierra (Clovis-Sunnyside)	60'	N.A.	
Sierra (Fowler-Temperance)	84'	N.A.	
Third (Clovis-Tollhouse)	80'	4,124	(Clovis-Sunnyside)
Barstow (Willow-Temperance)	84'	2,436	(Villa-Clovis)
Gettysburg (Winery-Minnewawa)	84'	2,482	(Willow-Minnewawa)
Gettysburg (Clovis-Temperance)	84'	N.A.	
Ashlan (Clovis-Temperance)	84'	N.A.	
Tollhouse (Fifth-Sunnyside)	80'	N.A.	
Tollhouse (Third-Herndon)	80'	N.A.	
Tollhouse (Temperance-Shepherd)	84'	N.A.	

Unless existing structures create a problem, the above listed right-of-way widths are correct as stated. Traffic volumes are current to January, 1973.



PROPOSED NETWORK
 == FREEWAY ——— EXPRESSWAY
 ——— ARTERIAL - - - COLLECTOR
 RAILROAD

Major Emphasis

Because of the subdivision activity east of the City of Clovis, Bullard, Barstow, Sunnyside and Fowler Avenues should receive primary attention. These streets should be developed in order to keep abreast of growth and minimize any future circulation problems. Every new subdivision adds to the number of vehicles which in turn, multiplies the need for better streets throughout the City.

Also of major importance are the undeveloped areas within the Shaw-Clovis and Freeway 168 triangle. Energies should be exerted to provide all the infrastructure (Streets, sewer, water, etc.) needed to induce private development. Two collector highways, Villa and Minnewawa Avenues, will certainly attract private development when completed.

Plan Line Program

One of the tools used to insure proper building setbacks for future streets is the Plan Line Program. A plan line is drawn depicting future right-of-way of a street. This establishes a benchmark for setback of all new development along that proposed street. Such lines are formally adopted by the local governmental jurisdictions as a precise guide for coordinating street planning. Thus, streets can be widened to a width adequate to handle increased traffic volumes.

Existing Plan Lined System

As a member of the Fresno County Council of Government's Technical Coordinating Committee, Clovis has approved and adopted the following plan-lined avenues:

EAST-WEST

1. Herndon Avenue, from Clovis to Temperance Avenues.
2. Shaw Avenue, from Winery to Temperance Avenues.
3. Ashlan Avenue, from Winery to Minnewawa Avenues.

NORTH-SOUTH

4. Willow Avenue from Ashlan to Shepherd Avenues.
5. Villa-Minnewawa Diagonal.
6. Clovis Avenue, Ashlan to Shaw Avenues.
7. Temperance Avenue from Ashlan Avenue to Highway 168.

NOISE ELEMENT

GOAL: Reduce existing and future excessive noise to a level that eliminates annoyance and hazards to the people.

POLICIES:

1. Discourage construction of new dwelling units on sites with unacceptable noise exposures for extended periods of time.
2. Encourage only land uses compatible with existing transportation facilities that are highly impounded by noise. (i.e., Fresno Air Terminal).
3. For new and existing structures, encourage the use of abatement devices where there exists high and enduring noise levels.
4. Encourage the reduction of future freeway noise by heavy landscaping and depressed alignment design.
5. Adopt and enforce a noise control ordinance.

Introduction

Sound is our oldest and most basic method of communication. This phenomenon occurs when there is a rapid variation in atmospheric pressure. There exists an enormous range of sound pressures of which only a portion is audible to the human ear. Therefore, we use a weighting scale to narrow this range down to one comparable to our hearing ability.

One unit of measurement is the decibel (dB), which is utilized rather than absolute pressure units. Decibels cover the pressure levels of all the sounds we are likely to hear on a scale of 0 to 140, rather than real units of pressure that range from 1 to 10,000,000 bars. Because of its logarithmic nature, adding 50 dBA to 50 dBA does not give 100 dBA, rather it sums to 53 dBA. Doubling the sound power always causes the decibels to increase by 3.

TABLE 22
COMMON NOISE LEVELS

Sound pressure in bar and N/m ²	Sound level in dB	Environmental conditions		
1 mbar	100 N/m ²	134	140	Threshold of pain
			130	Pneumatic chipper
100 μbar	10 N/m ²	114	120	Loud automobile horn (dist. 1 m)
			110	
10 μbar	1 N/m ²	94	100	Inside subway train
			90	Inside motor bus
1 μbar	0.1 N/m ²	74	80	Average traffic on street corner
			70	Conversational speech
0.1 μbar	0.01 N/m ²	54	60	Typical business office
			50	Living room, suburban area
0.01 μbar	0.001 N/m ²	34	40	Library
			30	Bedroom at night
0.001 μbar	0.0001 N/m ²	14	20	Broadcasting studio
			10	
0.0002 μbar	0.00002 N/m ²		0	Threshold of hearing

Our ultimate concern is human reaction to noise, rather than just the physical phenomenon. Sound pressure levels must also be viewed in terms of frequency or pitch of the sound which is a major factor of loudness. Therefore, the writers of the acoustical standards have established three weighting networks: A, B, and C. Of these three, network "A" responds to noise most like the human ear.

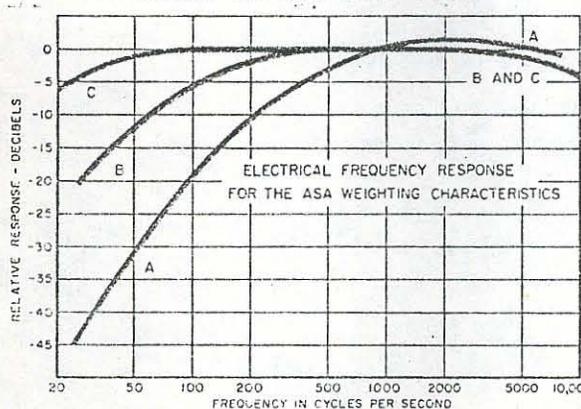
Lower frequencies are severely discriminated by network "A", moderately by B, and very little discrimination by C. Therefore, the measured noise level is depicted as a higher frequency on the C network than on the A network.

The most annoying noises are those with the same frequencies as speech, thus the "A" network provides the best indication of this interference.

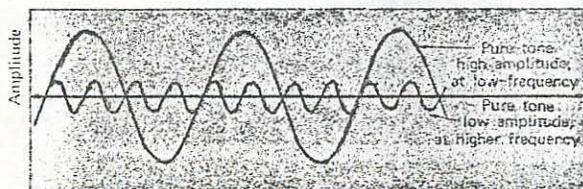
Thus, a person wanting to talk in a normal voice (50 dBA) and be fully understood 12 feet away, would require an environmental noise level of less than 50 decibels on the "A" network. As can be seen, with a 90 dBA environmental noise level, shouting would not help at 2 feet. The extent to which a sound exceeds the environmental noise level is a measure of its intrusiveness. This environmental noise is also called "ambient" noise. This ambient noise varies with location and with time of day.

TABLE 23

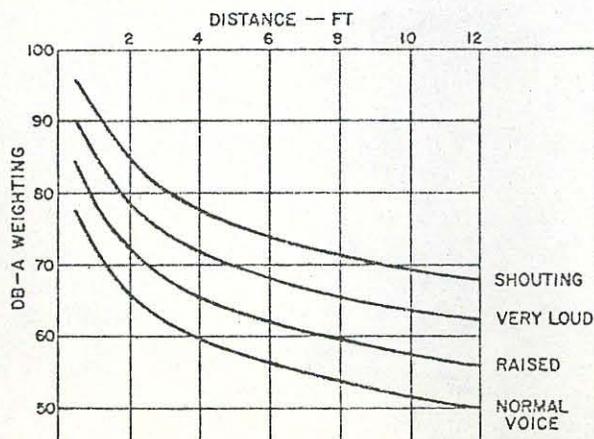
NOISE CHARACTERISTICS



Curves showing how the A, B, and C weighting networks discriminate against sounds at different frequencies.



Two pure tones of different amplitude and frequency.



Curves showing how noise interferes with spoken or shouted conversation.

Sound gets quieter as the source gets farther away. But the relationship is somewhat strange. Every time the distance from the source is doubled, the sound level goes down 6 dB. Thus, a noise level of 80 dBA at a distance of ten feet will reduce to 74 dBA at a distance of twenty feet.

Basically, there are three reasons for the elimination of noise pollution. They are:

1. Noise interferes with speech,
2. Noise is hazard to hearing senses, and
3. Noise is just plain annoying.

Hearing ability goes downhill when the age of twenty is surpassed. This loss of sensitivity is called presbycusis. Other possible causes of hearing loss are disease, accidents, and exposure to excessive noise. A couple of other factors to consider are kinds of noise and exposure time. A 90 dBA should be considered unsafe for daily exposure over a period of months and warrants noise reduction methodology.

EXISTING CONDITIONS

At present, Clovis is affected by three major transportation facilities that justify concern and sound level tabulation. The three are the State Highway 168, the Herndon Expressway, and the Fresno Air Terminal.

State Highway 168 (Shaw Avenue) from Winery Avenue to Clovis Avenue produces four decreasing levels of noise. Beginning at the edge of pavement and measuring outward, the following levels exist:

80 decibels at 30'

75 decibels at 84'

70 decibels at 165'

65 decibels at 204'

These depicted levels represent a 10 decibel variation due to the lower noise generation of cars and higher generation of trucks. As an example, for the 65 dBA level, the noise level of cars is 60 dBA and the level of trucks is 70 dBA. Another point of clarification is the fact that noise contours tend to bubble out at intersections due to acceleration and deceleration of vehicular traffic. Refer to Plates 10, 11, and 12.

At the intersection of Shaw and Clovis Avenues, Highway 168 proceeds northward along Clovis Avenue to Third Street. The following levels and distances exemplify this phenomenon:

80 decibels at 12'

75 decibels at 54'

70 decibels at 111'

65 decibels at 153'

Refer to Plates 12, 13, and 14.

The Highway proceeds easterly from Clovis Avenue along Third Street. The following decibel levels exist at these distances from the edge of pavement:

80 decibels at 15'

75 decibels at 30'

70 decibels at 75'

65 decibels at 132'

Refer to Plate 15.

From Third Street, the State Highway continues on Tollhouse Road, out of the Planning Area and into the Sierra Nevadas. The following noise levels prevail along Tollhouse Road:

80 decibels at 12'

75 decibels at 48'

70 decibels at 75'

65 decibels at 93'

Refer to Plates 16, 17, and 18.

These levels tend to decrease as the speed limits increase outside the City limits.

The Herndon Expressway, which enters the Planning Area just west of Willow Avenue and continues past Temperance Avenue, is also a heavy noise generator. The following peak levels occur on this route:

80 decibels at 30'

75 decibels at 51'

70 decibels at 96'

65 decibels at 162;

Refer to Plates 19, 20, and 21.

The Fresno Air Terminal, located in the City of Fresno, creates a noise level spill-over into the Planning Area. Noise levels have been identified down to 100 decibels, which prevail in the southwestern residential areas. At present, there are no levels computed lower than 100 decibels, which prevail in the southwestern residential areas. At present, there are no levels computed lower than 100 decibels, but a level of 65 decibels is projected up to the Central Business District. New noise contours are being computed for the Terminal and will supercede this section.

Refer to Plate 22.

FUTURE CONDITIONS

Future transportation facilities include proposed Freeway 168 and the expanded Fresno Air Terminal.

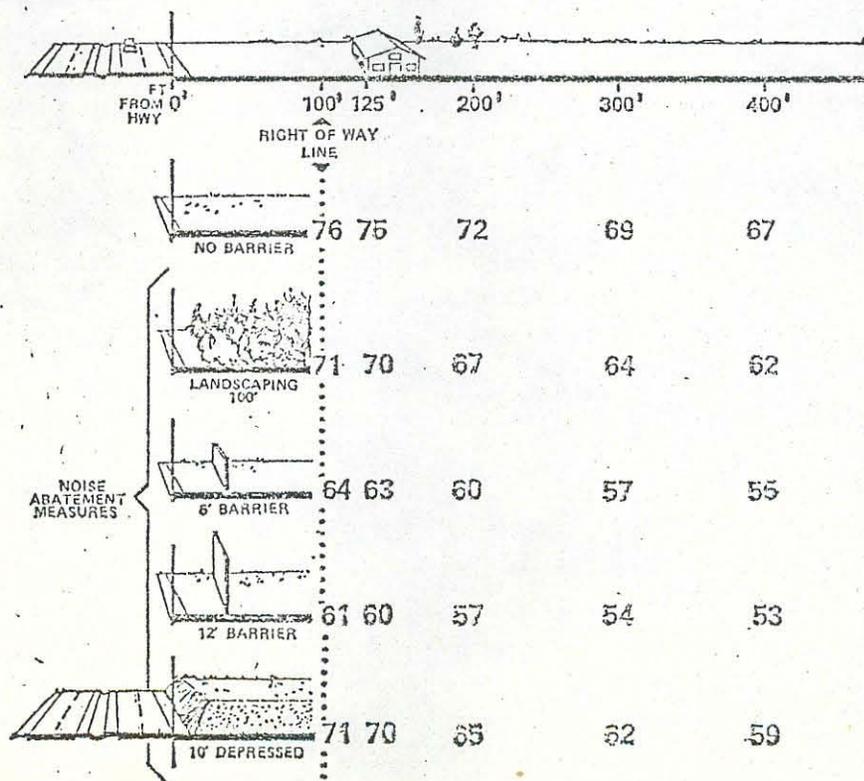
Freeway 168 enters the Planning Area just west of Winery and south of Shaw Avenue and continues into the Sierras. The following levels are projected for a 20 foot depressed freeway:

85 decibels at 56'
 80 decibels at 68'
 75 decibels at 80'
 70 decibels at 100'
 65 decibels at 150'

Refer to Plates 23, 24, 25, and 26. Because of its high volume and therefore relatively constant level of noise, the Department of Transportation, Federal Highway Administration, has investigated and studied the various noise abatement designs for freeways. The Table below exemplifies the results.

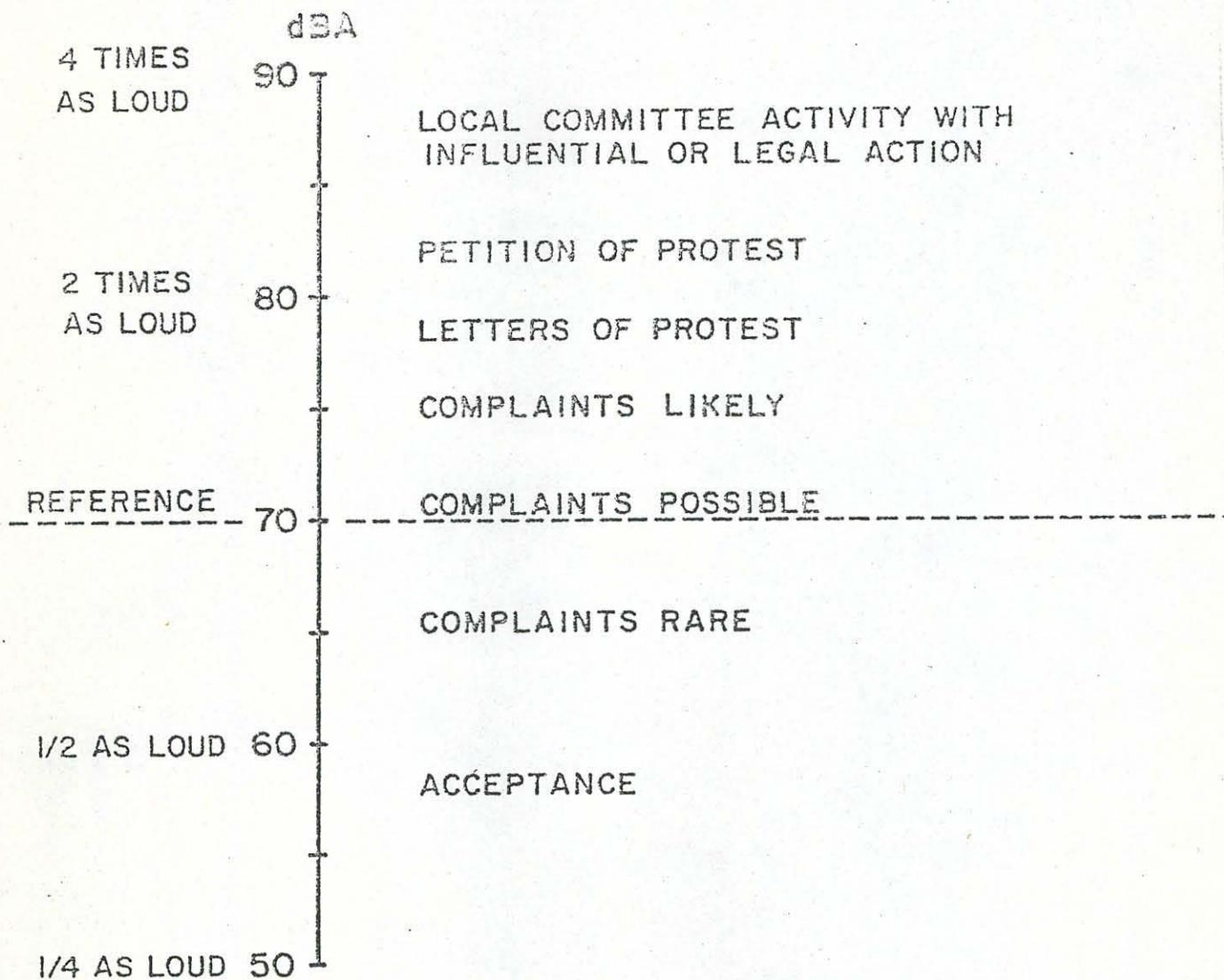
TABLE 24

HIGHWAY NOISE ABATEMENT
 HIGHWAY NOISE (dBA, L₁₀) AT VARIOUS
 DISTANCES FROM EDGE OF 4-LANE HIGHWAY
 TRAFFIC: 5,000 VEHICLES PER HOUR, 5% TRUCKS, 53 MPH



In terms of public reaction, the Administration has also studied this area and has produced an accepted standard. The following Table provides a scale of public noise level acceptance.

TABLE 25



TREND OF PUBLIC REACTION TO PEAK NOISE NEAR RESIDENCES

The Fresno Air Terminal, with future expansion, will produce higher noise contours, because of the attraction of more and larger commercial aircraft. For future projections (Refer to Plate 22), the Composite Noise Rating (CNR) is utilized.

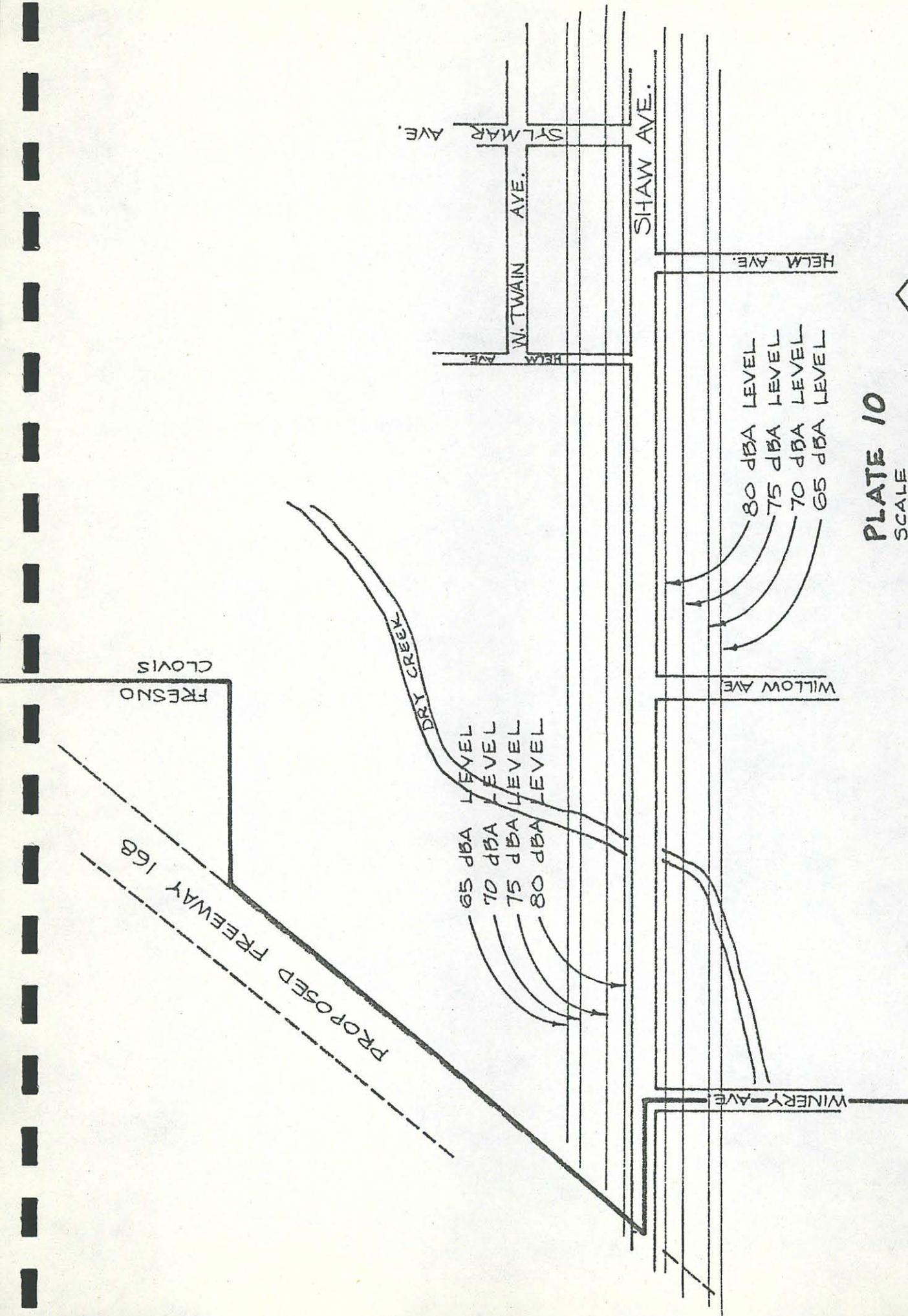


PLATE 10

SCALE



 EXISTING NOISE LEVELS
 PROJECTED NOISE LEVELS

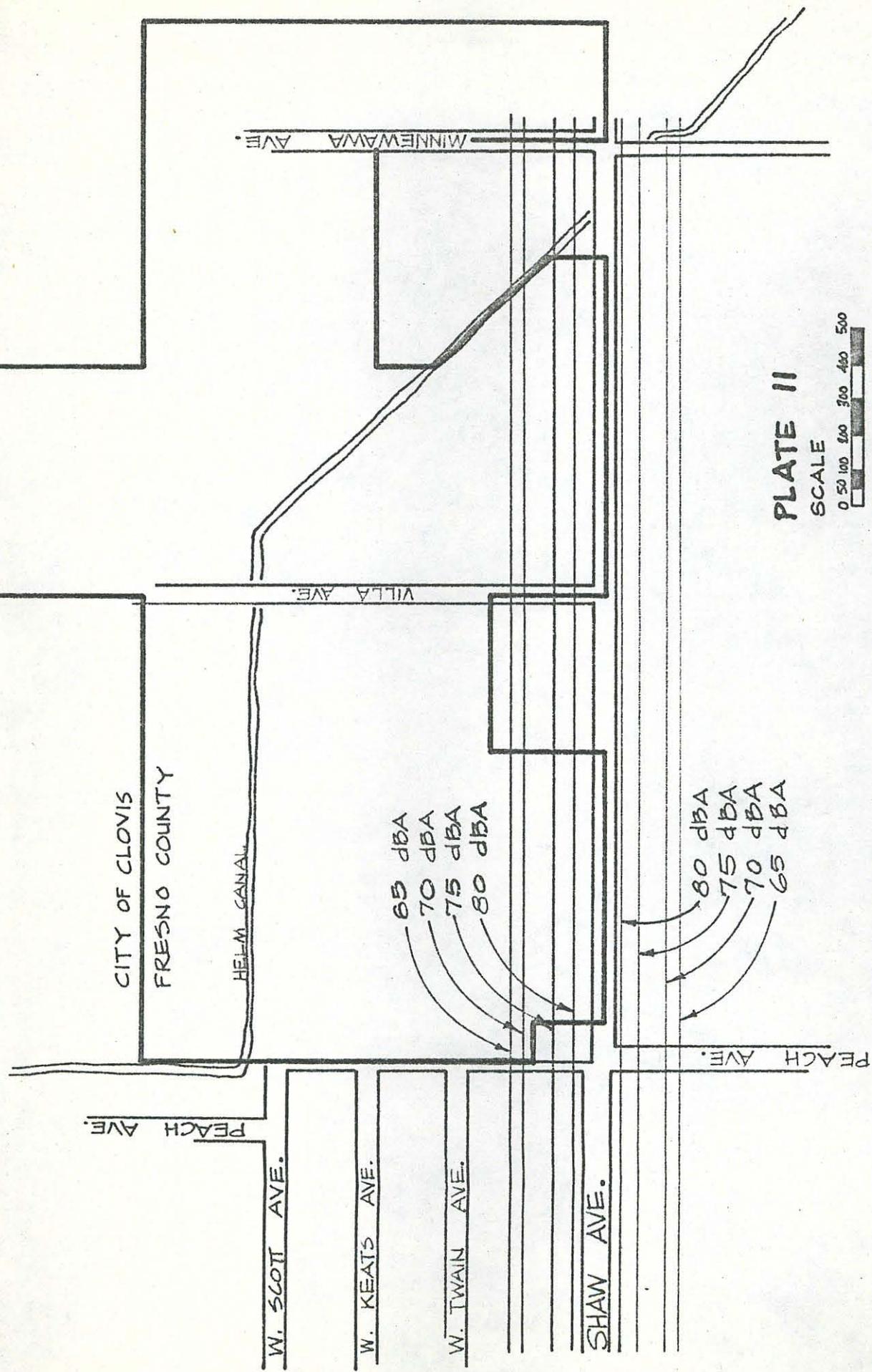


PLATE II

SCALE



65 dBA
 70 dBA
 75 dBA
 80 dBA

80 dBA
 75 dBA
 70 dBA
 65 dBA

CITY OF CLOVIS
 FRESNO COUNTY

HELM CANAL

PEACH AVE.

W. SCOTT AVE.

W. KEATS AVE.

W. TWAIN AVE.

SHAW AVE.

VILLA AVE.

MINNEWAWA AVE.

PEACH AVE.

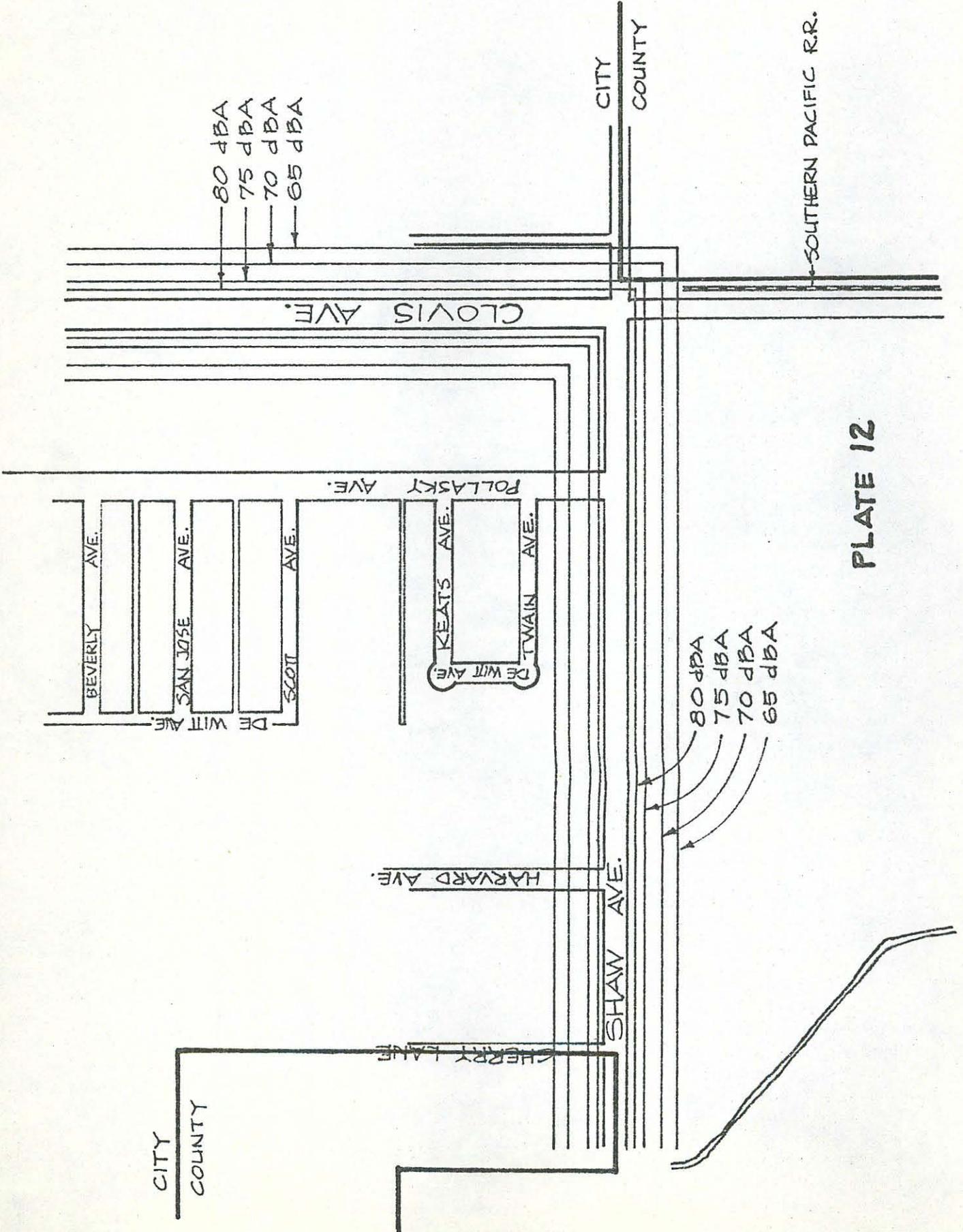


PLATE 12

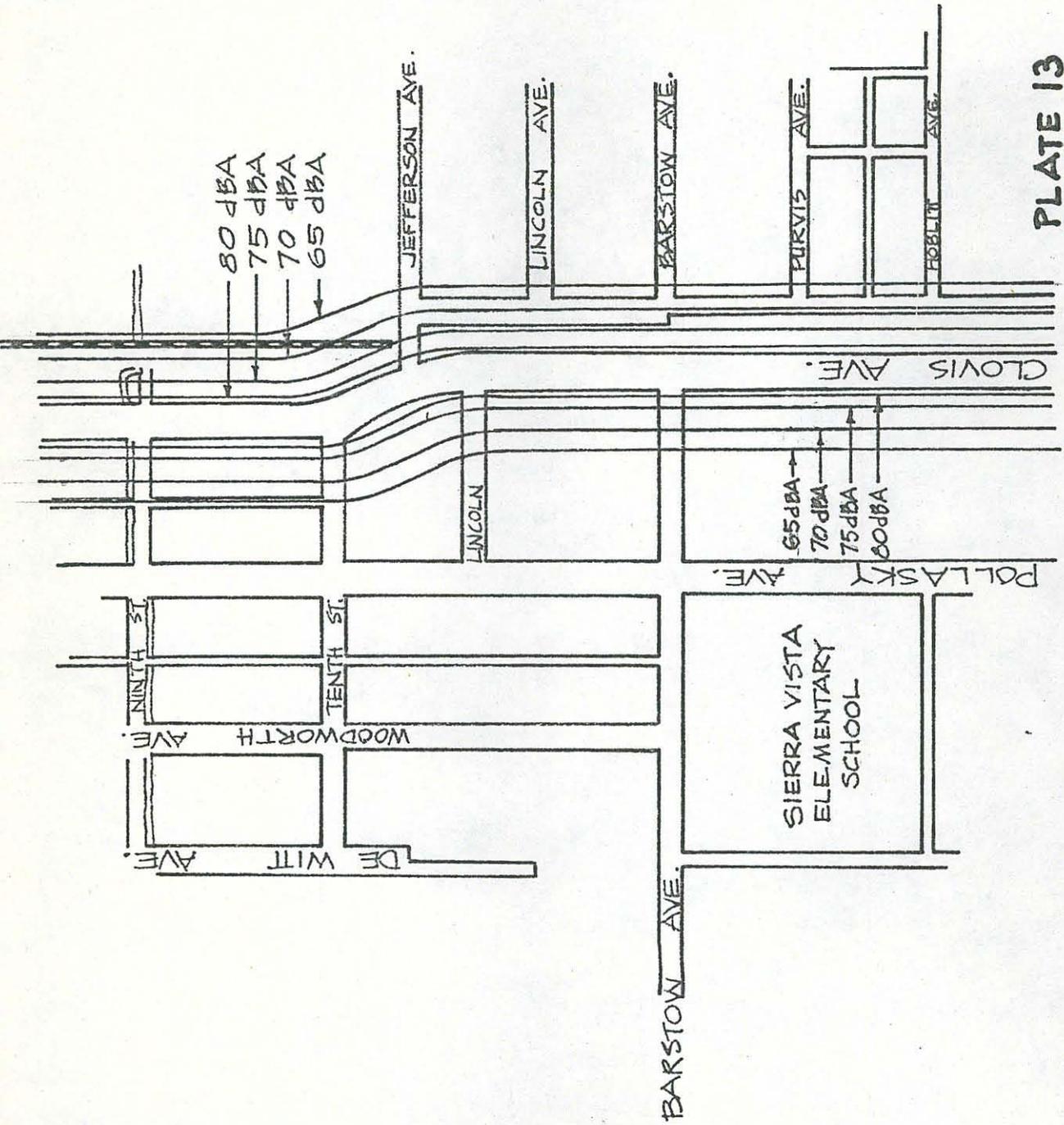


PLATE 13

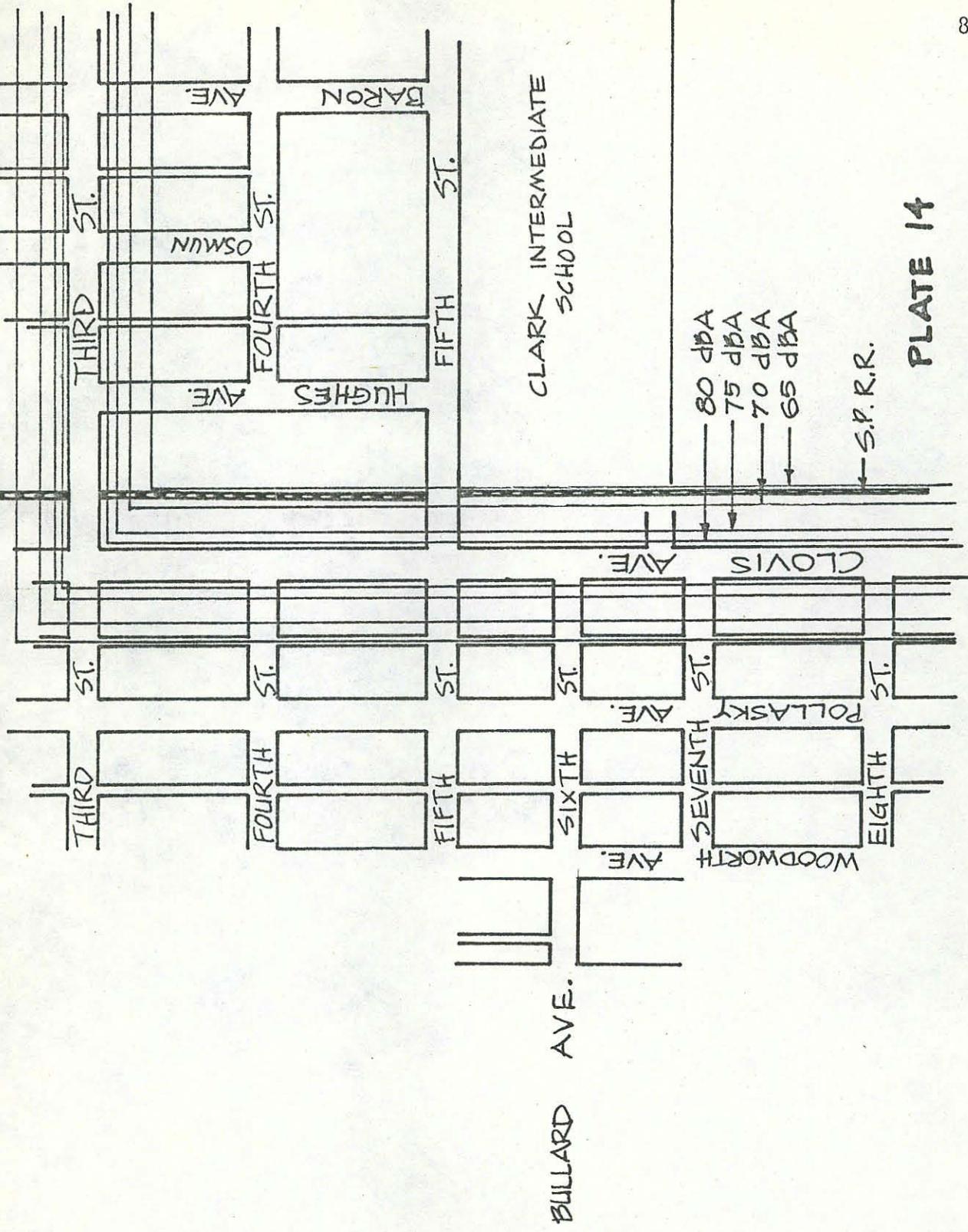
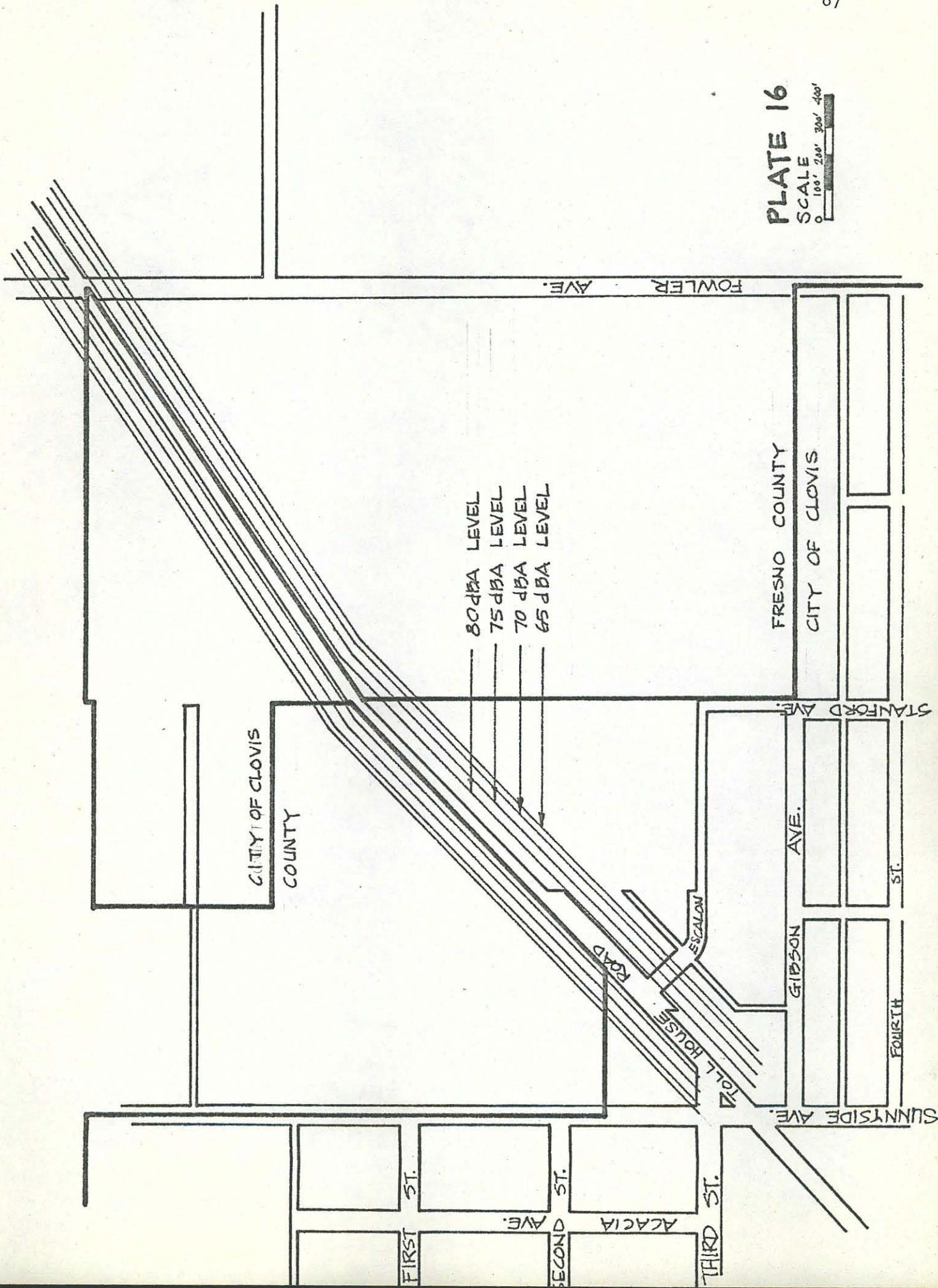


PLATE 14

PLATE 16

SCALE
0 100' 200' 300' 400'



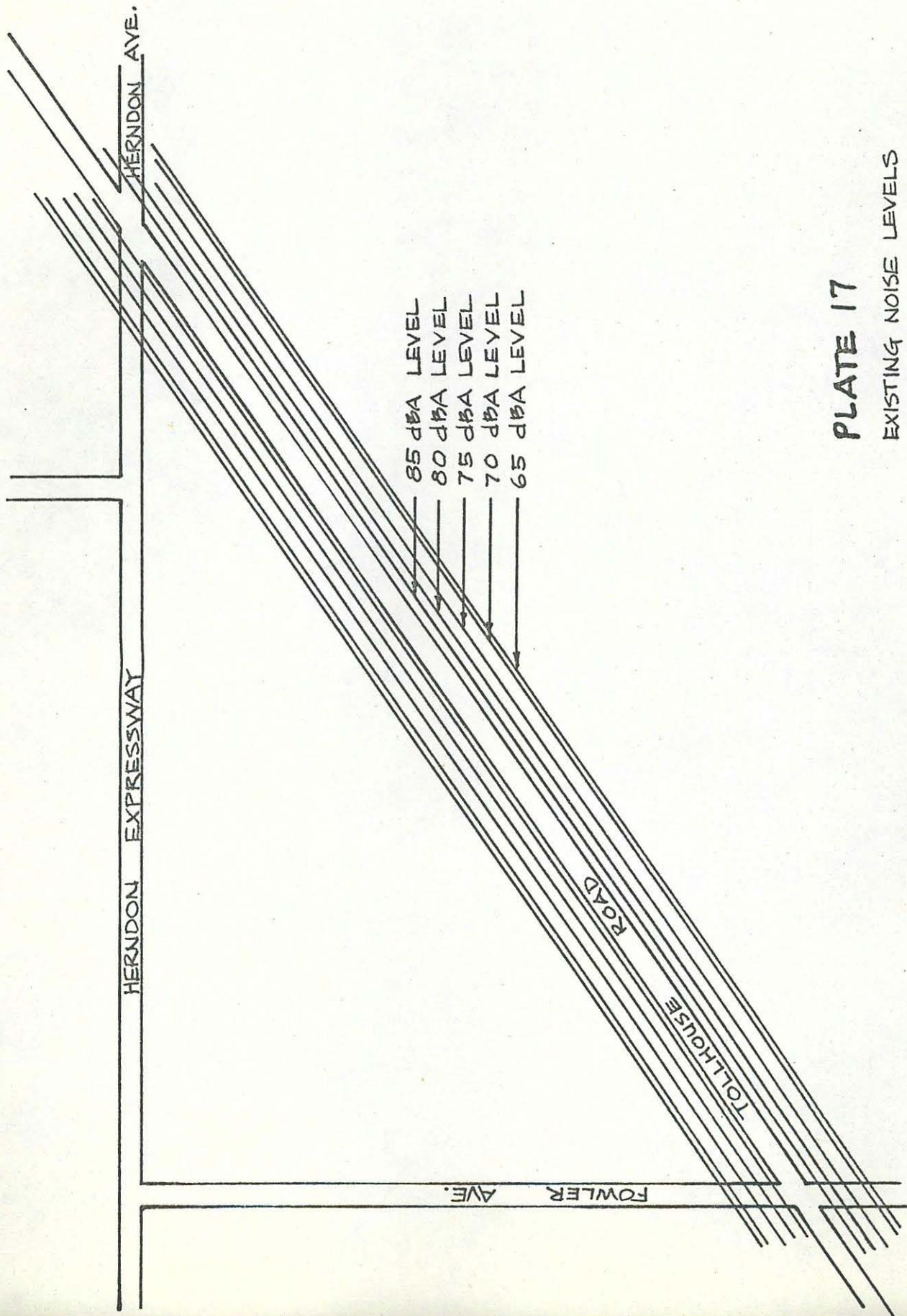


PLATE 17

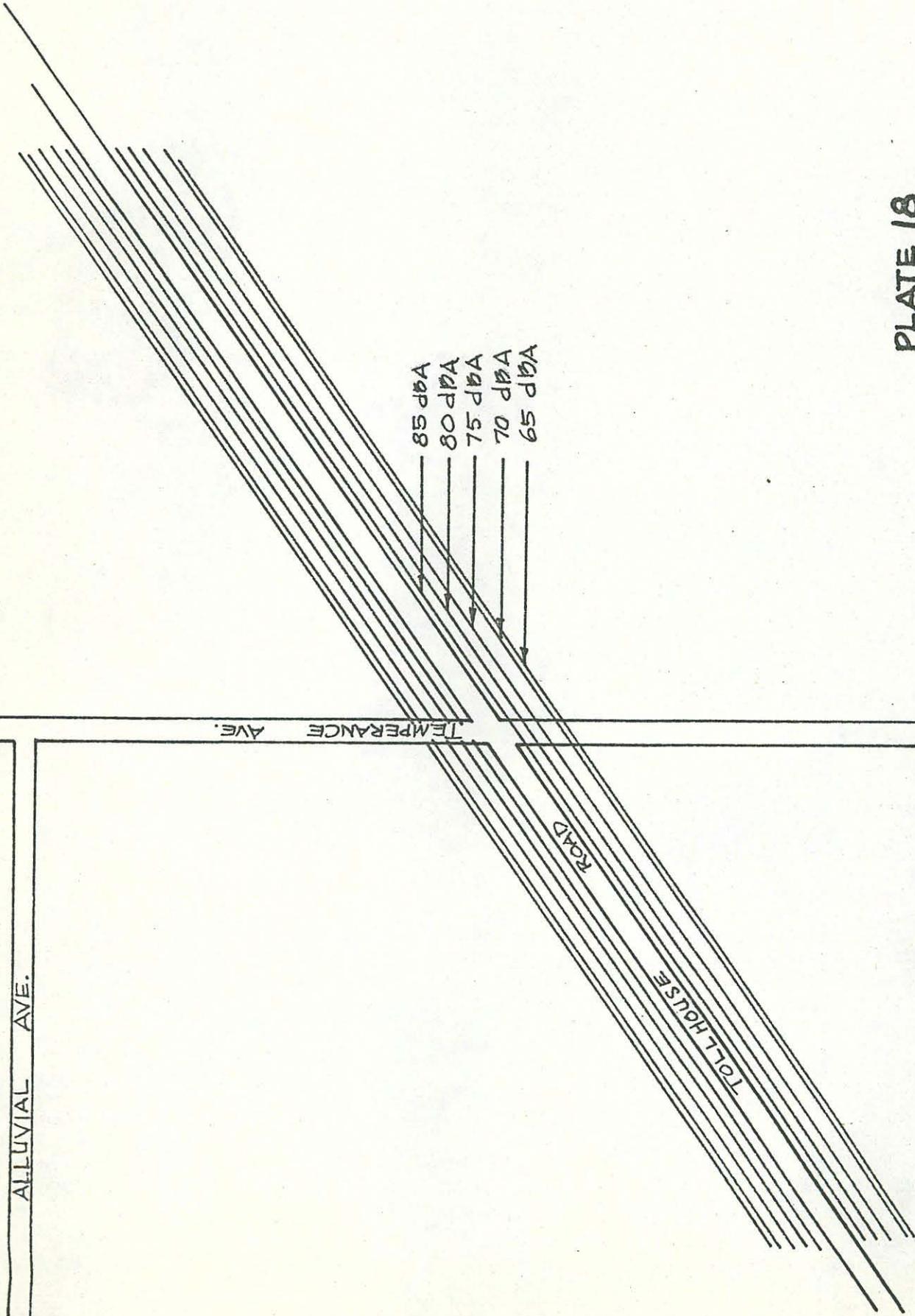
EXISTING NOISE LEVELS

PLATE 18

SCALE

0 100' 200' 300' 400'

EXISTING NOISE LEVELS



TEMP AVE.

HERNDON AVE.

MC KEELY

ALLUVIAL AVE.

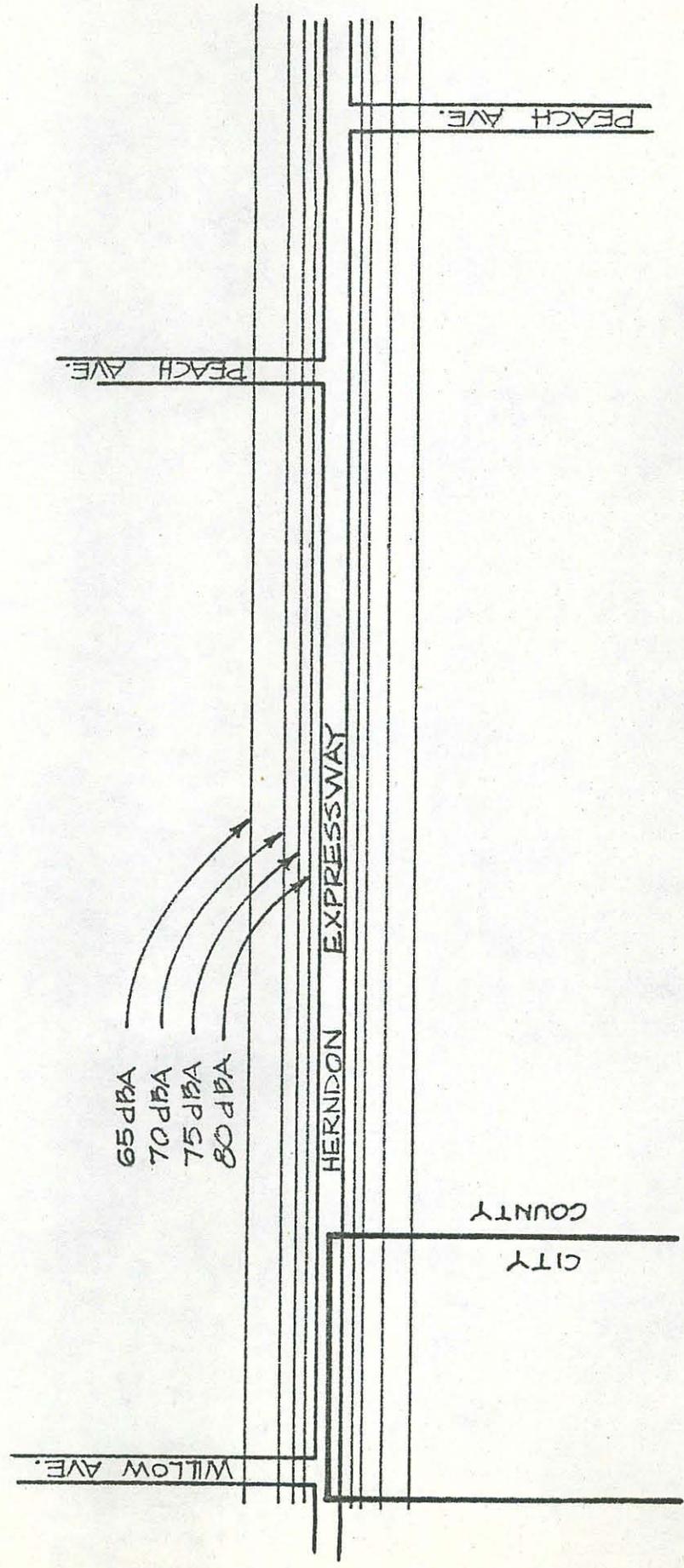
ROAD

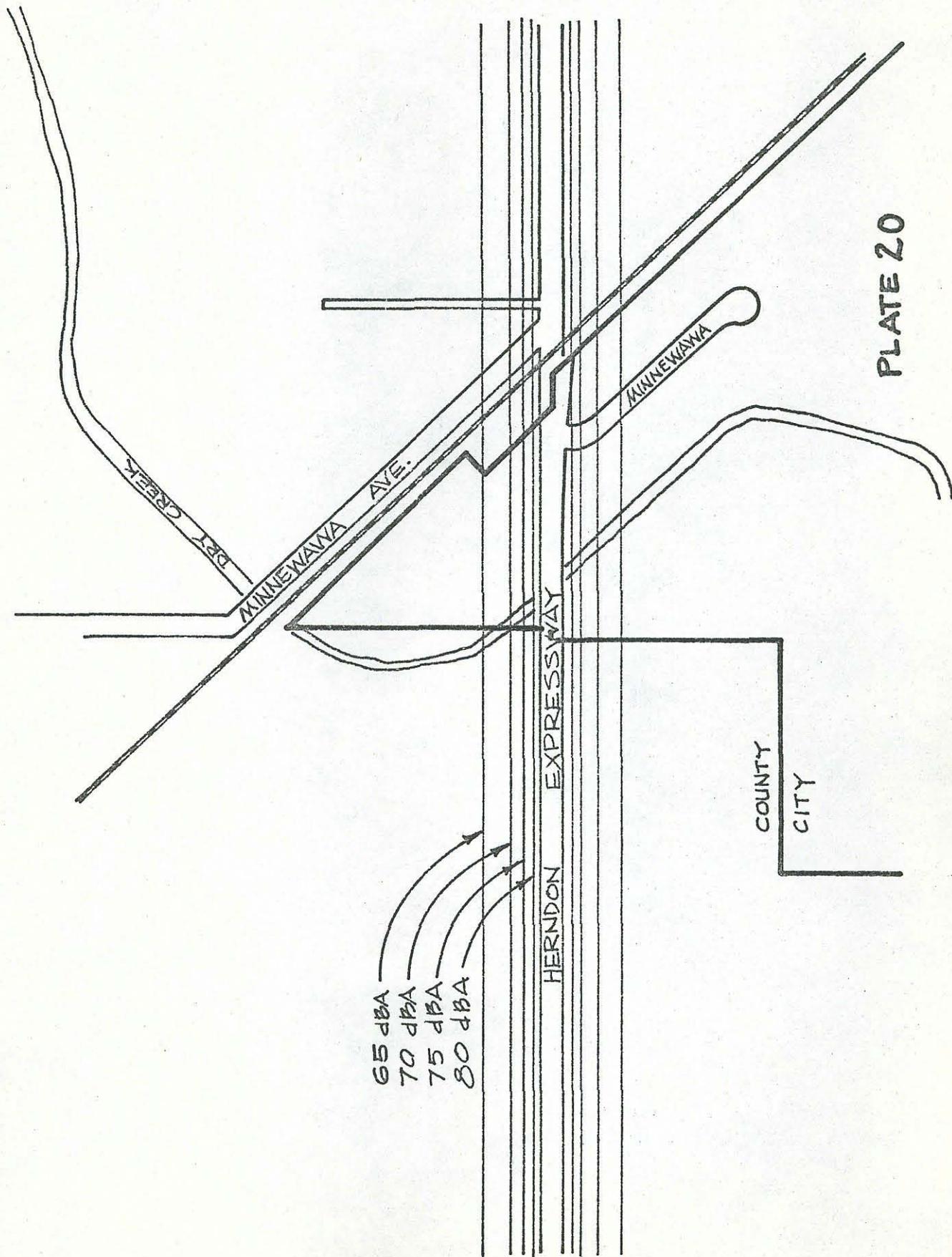
TOLL HOUSE

TEMPERANCE AVE.

85 dBA
 80 dBA
 75 dBA
 70 dBA
 65 dBA

PLATE 19





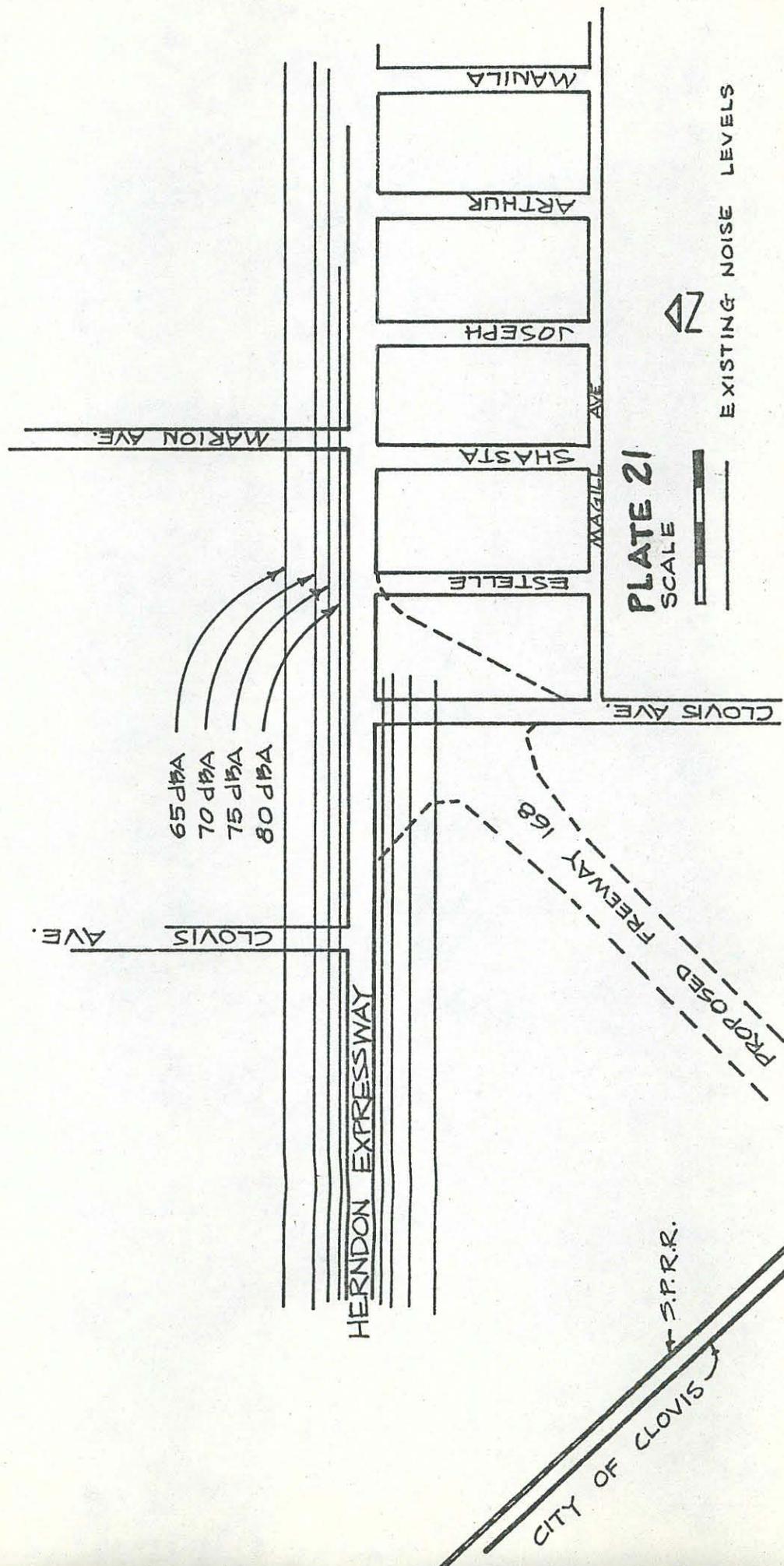


PLATE 21
SCALE

EXISTING NOISE LEVELS

- 85d1A
- 80d1A
- 75d1A
- 70d1A
- 65d1A

HERNDON EXPRESSWAY

CITY OF CLOVIS
S.F.R.R.

PROPOSED FREEMWAY 168

CLOVIS AVE.

ESTELLE

SHASTA

JOSEPH

ARTHUR

MANILA

CLOVIS AVE.

MARION AVE.

**FRESNO AIR TERMINAL
LAND USE CONTROL AND
1970 DECIBEL CONTOURS
1972-NEF**

**GENERALIZED ZONE MAP
CALIFORNIA
CITY OF FRESNO**

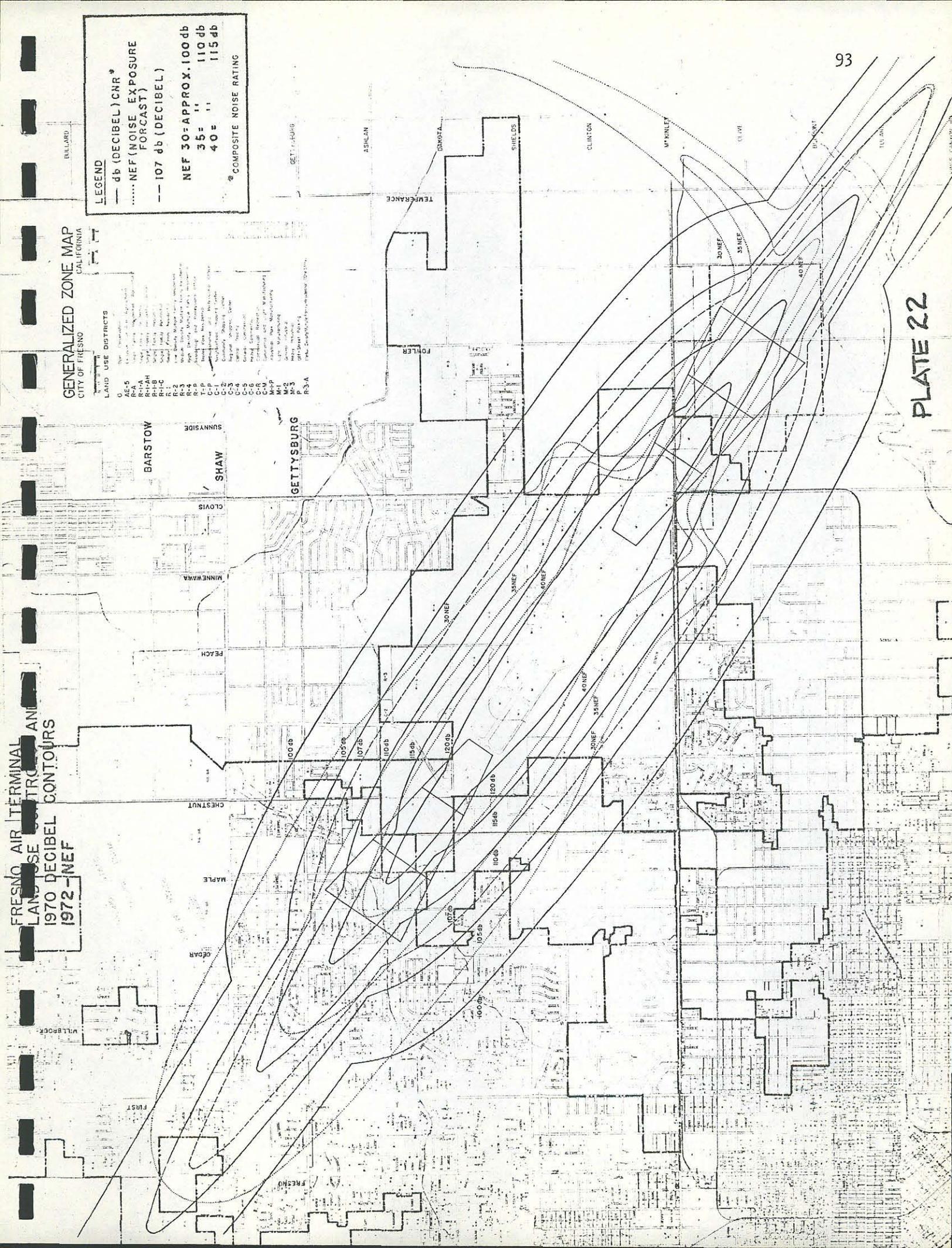
LEGEND

- db (DECIBEL) CNR *
- NEF (NOISE EXPOSURE FORCAST)
- 107 db (DECIBEL)

NEF 30 = APPROX. 100db
 35 = " 110db
 40 = " 115db

* COMPOSITE NOISE RATING

- LAND USE DISTRICTS**
- G - Open Space
 - AE-5 - Airports
 - R-A - Single-Family Detached
 - R-1A - Single-Family Detached (Medium Density)
 - R-1B - Single-Family Detached (Medium Density)
 - R-1C - Single-Family Detached (Medium Density)
 - R-2 - Single-Family Detached (Medium Density)
 - R-3 - Medium Density Multiple-Family (Medium Density)
 - R-4 - High Density Multiple-Family (Medium Density)
 - T-1 - Townhomes
 - T-2 - Townhomes
 - T-3 - Townhomes
 - T-4 - Townhomes
 - T-5 - Townhomes
 - T-6 - Townhomes
 - T-7 - Townhomes
 - T-8 - Townhomes
 - T-9 - Townhomes
 - T-10 - Townhomes
 - T-11 - Townhomes
 - T-12 - Townhomes
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 - T-93 - Townhomes
 - T-94 - Townhomes
 - T-95 - Townhomes
 - T-96 - Townhomes
 - T-97 - Townhomes
 - T-98 - Townhomes
 - T-99 - Townhomes
 - T-100 - Townhomes
 - M-1 - Medium Density Multiple-Family (Medium Density)
 - M-2 - Medium Density Multiple-Family (Medium Density)
 - M-3 - Medium Density Multiple-Family (Medium Density)
 - R-3-A - Medium Density Multiple-Family (Medium Density)



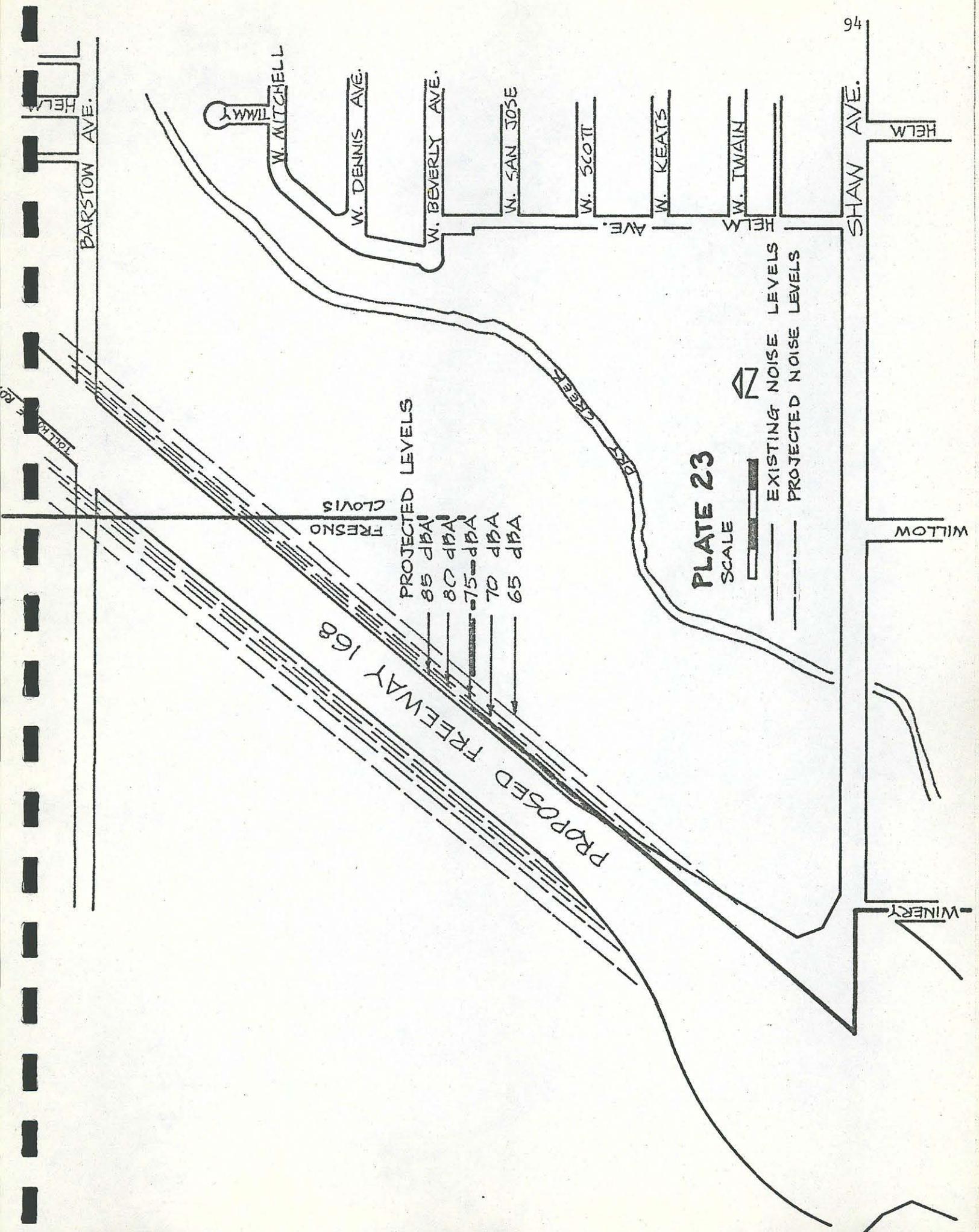


PLATE 23

SCALE



EXISTING NOISE LEVELS
 PROJECTED NOISE LEVELS

TRESNO
CLOVIS

PROPOSED FREEWAY 168

CREEK

SHAW AVE.

BARSTOW AVE.

W. MITCHELL

W. DENNIS AVE.

W. BEVERLY AVE.

W. SAN JOSE

W. SCOTT

W. KEATS

W. TWAIN

WILLOW

WINERY

HELM

HELM AVE.

HELM

TOLSON RD

CITY
COUNTY

PLATE 24

BARSTOW

PROJECTED LEVELS

- 85 DBA
- 80 DBA
- 75 DBA
- 70 DBA
- 65 DBA

PROPOSED
FREWAY 168

BULLARD AVE.

FEACH

KAREN

STLMAR AVE.

N LINCOLN AVE.

HELM AVE.

ALMOND DR.

ADLER DR.

PIERCE DR.

CITY OF FRESNO
CITY OF CLOVIS

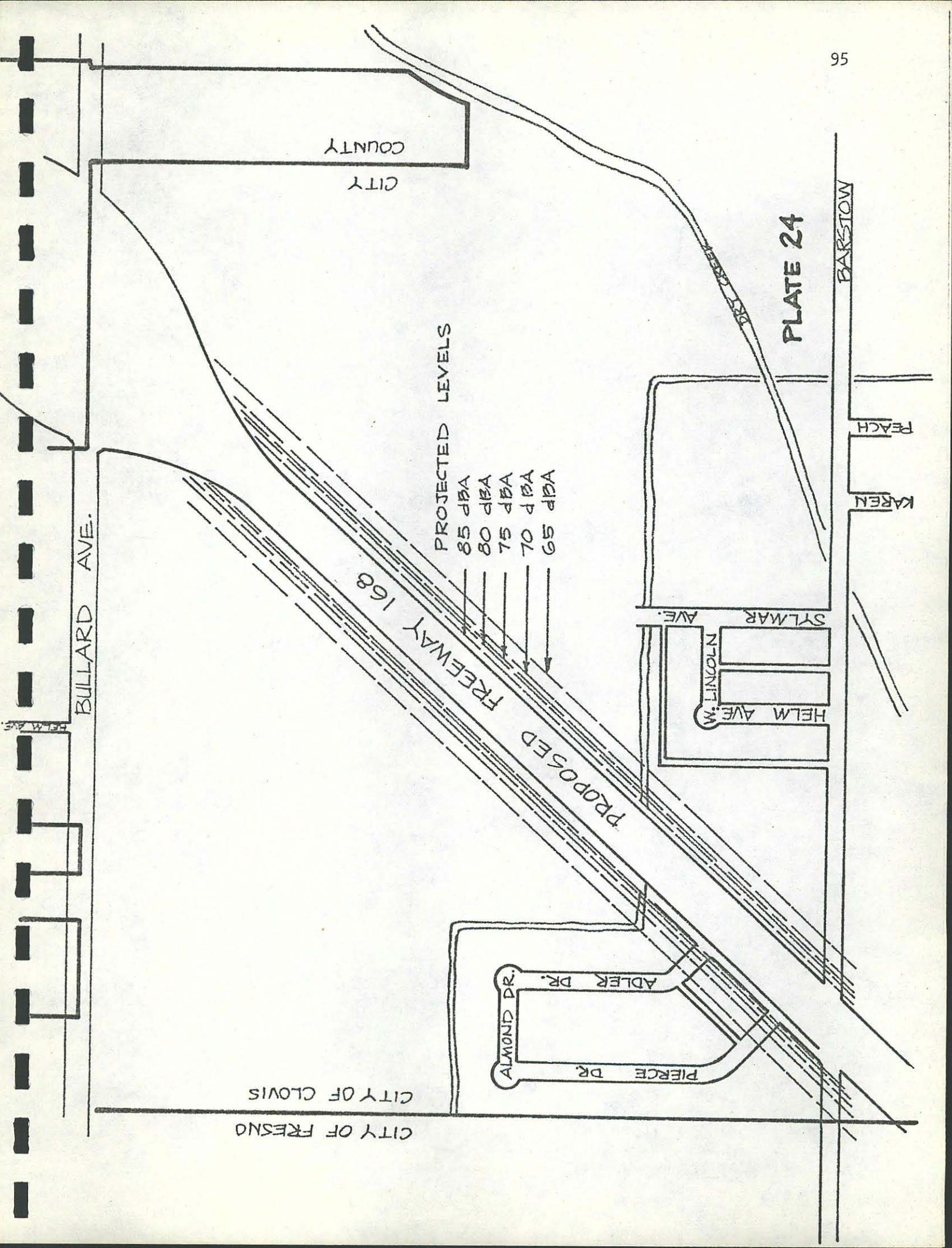
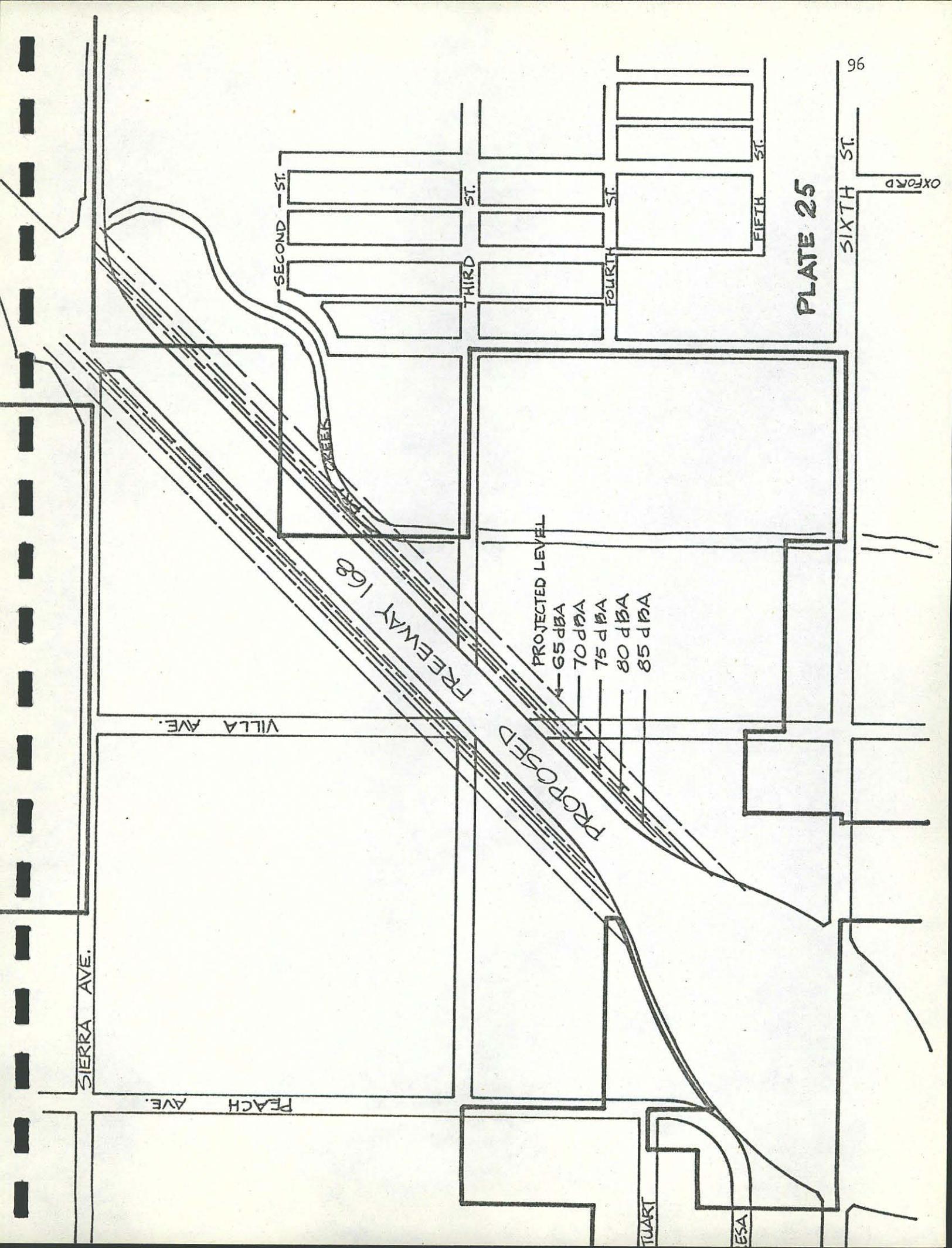


PLATE 25



PROJECTED LEVEL
 65 dBA
 70 dBA
 75 dBA
 80 dBA
 85 dBA

SIERRA AVE.

PEACH AVE.

VILLA AVE.

SECOND ST.

THIRD ST.

FOURTH ST.

FIFTH ST.

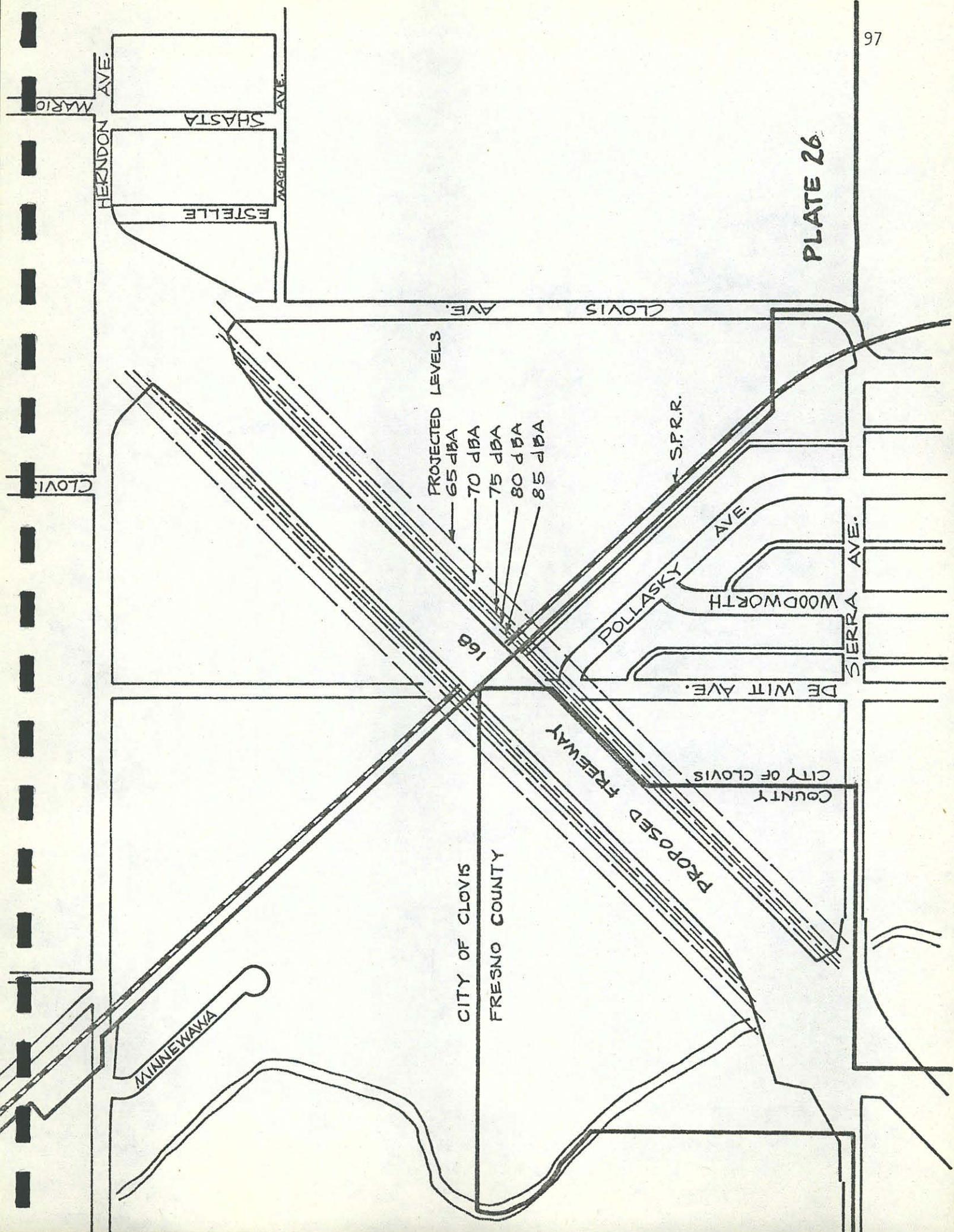
SIXTH ST.

OXFORD

TUART

ESA

PLATE 26



OPEN SPACE, CONSERVATION ELEMENT

Introduction

Planning for the preservation of open space and for the conservation of dwindling natural resources offers one of the greatest challenges -- and opportunities -- that a community and its leadership face today. It is an often misunderstood and under-rated segment of the general plan, yet it serves as a major force in shaping the future of a city. A great part of the challenge in planning for open space is that a long range perspective is required -- one that is not familiar to the average citizen. If wisdom is used, open space planning can provide the key to preserving an irreplaceable resource of many uses.

Purpose

Open space has become a subject of major public concern throughout the country, and has recently become a required element of every general plan in California. The provision of a good system of open space requires an approach in which all parts of the general plan are integrated. Of special relationship to the open space element are considerations relating to conservation and recreation. The Open Space Conservation Plan for Clovis will help insure maximum future benefit from the abundant open space and natural resources available today.

General Goals

The following very broad goals are proposed for the Open Space and Conservation Element of the General Plan:

- a. To create Open Space designed to meet local needs, as required and which is in harmony with area-wide open space conservation goals.
- b. To create an Open Space Conservation Plan that will play an important role in:
 - 1) Defining Clovis' desire to develop in accordance with sound environmental and ecological principles.
 - 2) Conserving, preserving and enhancing all natural resources - from the air, from the water, and from the earth.
 - 3) Providing a desirable living environment in terms of human sociological and psychological needs.
 - 4) Guiding the future growth of the City and its environs.
- c. To design an Open Space Conservation Plan that is far-sighted, yet practical and economically obtainable.
- d. To establish open space as a land use, not simply as a non-use.

The Open Space and Conservation Element in the General Plan Relation to Other General Plan Elements

The Open Space Element of the plan is closely related to functional aspects of the conservation and recreation elements, and in some cases the seismic safety and scenic highway elements. For example, river bottom land designated in the Conservation Element as a non-building zone because of its role as a water recharge area or because of danger of flooding, is also included in the Open Space Element as an area of important scenic value. Similarly, a region identified by the Seismic Safety Element as unsuitable for development because of potential earthquake damage might be best maintained in agriculture, or alternatively, used as a recreational site.

The problem of coordinating these various elements and avoiding confusion and redundancy can be significant for planning a large area where volumes of information are present and resources of every description are involved. But for a small city like Clovis, problems of assimilation and evaluation of data are not nearly so great. It must be understood, however, that the real impact of open space proposals cannot be measured except in the context of all land uses, particularly those of conservation and recreation.

For these reasons, open space and conservation are presented as a single unified element in the General Plan.

Open Space - Its Basis in Law

As with other parts of the General Plan, the Federal and State Governments have taken the initiative in insisting that local governments comply with the new open space laws, and are imposing sanctions against those jurisdictions that do not meet the requirements.

The most concise description of the Open Space Element is given by the State of California. About open space, the State Legislature says:

- a. That the preservation of open-space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources.
- b. That discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns which unnecessarily increase the costs of community services to community residents.

- c. That the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods.
- d. That in order to assure that the interest of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development by the state, regional agencies, counties and cities, including charter cities, of state-wide coordinated plans for the conservation and preservation of open-space lands.
- e. That for these reasons this article is necessary for the promotion of the general welfare and for the protection of the public interest in open-space land.

In reference to the Conservation portion of the General Plan, the State has issued the following directives:

A conservation element for the conservation, development and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any county-wide water agency and with all district and city agencies which have been developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The conservation element may also cover:

1. The reclamation of land and waters.
2. Flood control.
3. Prevention and control of the pollution of streams and other water.
4. Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
5. Prevention, control, and correction of the erosion of soils, beaches, and shores.
6. Protection of watersheds.
7. The location, quantity and quality of the rock, sand and gravel resources.
8. An open-space element as provided in Article 10 (commencing with Section 65360) of this chapter.

Coordination with Other Agencies

Clovis' association with other jurisdictions and governmental agencies should increase in the future as the need for greater coordination in planning grows. The most important of these agencies are the City of Fresno and Fresno County. In addition, COG (Council of Fresno County Governments) and LAFCO (Local Agency Formation Commission) are directly involved in the local planning process.

Agencies like the Fresno Irrigation District and the Army Corps of Engineers can also affect the designs of the City - especially in the area of natural resource planning.

Cooperation with these other jurisdictions should not be viewed negatively, but rather as an opportunity from which much positive benefit can be derived for all citizens.

With the possible exception of circulation, no single general plan element benefits so greatly from inter-governmental coordination as does the Open Space Conservation Element. This fact is clearly recognized by both the state and federal governments, both of which are imposing sanctions against those cities and counties not coordinating their individual plans with the other appropriate agencies.

Obstacles to Open Space and Conservation Planning

The provision for and protection of open spaces and natural resources are frequently difficult tasks even when they become recognized features of the General Plan. This section outlines some of the major problems that Clovis may face in this respect.

A general lack of awareness on the part of the public about the need for open space and its essential role in the overall plan for the City is the chief obstacle. The problem can be acute in a semi-rural city like Clovis where there has traditionally been a great abundance of open space. That open areas are being eroded and may someday disappear seems beyond the comprehension of many people. Additionally, the negative connotation associated with any open space other than a park is, by constituting a non-use, or a use not economically justifiable, partly responsible for the widespread reluctance to provide more open space.

The costs of acquiring open space is also a major obstacle, and one that will require a great deal of effort to overcome. Except in the rare instances where open space may be the result of a gift from some benefactor, or where the City can take advantage of an attractive offer, there are no cheap ways of obtaining land. Whether the open space is acquired outright by the City or whether only limited rights are purchased, such as access, prices will rise as the sellers realize that their property is in demand. For these reasons and because taxpayers are already overburdened, there is need for the City to acquire, in advance of need, purchase options or rights to the use of open spaces that it anticipates for the future.

Moreover, competing land uses, especially that of residential development, often precipitates a conflict situation in which open space is portrayed by a developer as a second rate use which should not stand in the way of city growth. This problem can only be overcome by a continued commitment to a general plan in which open spaces have a clearly definable value as such, and in which adequate area is designated for future residential growth.

A final difficulty is that of citizen apathy. Even though the public may be aware of a specific issue involving open space, attendance at community meetings, planning commission or city council sessions generally tends to be limited to those who have an immediate economic interest in the outcome. This is unfortunate for community leaders anxious to receive citizen input on important matters, for their decisions are often affected by such communication. Many valuable opportunities are lost through lack of public interest.

THE OPEN SPACE AND CONSERVATION PLAN

The Open Space and Conservation Plan is a "policies plan." The recommended policies stated within are based upon studies of current resources and future demands of Clovis' important remaining open space resources.

In order to retain as much objectivity as possible in the open space planning process, and in order to achieve some continuity from the variety of land uses that fall within the category of open space, a system of classification may be of value. Fresno County has designed its open space plan around a set of five functional categories including: 1) managed resource production, 2) resource preservation, 3) health, welfare and well-being, 4) public safety, and 5) multi-functional open space. It is proposed that the same five categories for open space be followed in the Clovis General Plan. The definitions of each are also derived from those found in the Regional Open Space Plan of Fresno County and are as follows:

I. Managed Resource Production

Managed resource production lands are those producing commodities which are used either directly by people or in the production of other goods. Agriculture, animal production, and water supply lands are in this functional category.

II. Resource Preservation

Lands of this type include water areas for fish and wildlife and historic and cultural sites.

III. Health, Welfare and Well-Being

Health, welfare and well-being relates to land performing functions that protect health and improve the environment. These lands include areas for water and air quality protection, recreation, visual and auditory amenity, and the shaping of the urban development.

IV. Public Safety

Public safety lands are those that may adversely affect the public's safety if inappropriately developed. Lands of this type include flood control reservoirs, flood plains, and drainage channels.

V. Multi-Functional Open Space

Multi-functional lands are those which are not covered in any of the above divisions. Lands of this type include corridors of intra-regional communications and service and to open space reserves.

I. Managed Resource Production

A. Agricultural Lands

Findings

1. Class I and II soils are most dominant in the Clovis Planning Area. They cover one half of the Clovis Planning Area with large portions found in the northwest regions.
2. Class III soils appear to be dominant outside the Clovis Urbanizing Area. However, these soils can also be considered as good agricultural land. With the addition of fertilizers and irrigation waters and planting intermediate crops, some Class III soils can yield over \$200/acre, thereby qualifying as prime agricultural land.
3. Class III and IV soils are mostly found within flood prone areas such as Big Creek Flood Diversion Dam and Dry Creek where water has eroded the top soil.
4. Within the Clovis Planning Area, a wide variety of crops are cultivated, consisting of orchards, vineyards and field crops.
5. Prime agricultural soils are being converted to urban uses for which location, and not soil quality, is the prime requisite. This process is practically irreversible.
6. It is important to this region, the state, and the nation that prime agricultural lands remain free of urban development so as to meet future resource demands. The Clovis area plays an important role in agriculture in Fresno County. Conservation of these prime agricultural soils and lands must be given important consideration in planning for open space.

AGRICULTURE LANDS

GOAL:

Conserve and manage, where possible, agricultural areas with emphasis on those which are agriculturally productive.

POLICIES:

1. Reservation of prime lands exclusively for agriculture.

2. Encourage ag contracts for prime lands.
3. Encourage large lot zoning (20 acres minimum) outside the Clovis Urbanizing Area.
4. Utilize prime agricultural land within the Clovis Urbanizing Area for greenbelts and buffers between developments or incompatible urban uses.
5. Discourage the premature conversion of agriculture land to urban uses.
6. Continue agricultural production as an important economic activity.
7. Reserve land for food production as essential and consistent with the broad public welfare and as a responsible concern of city and county governments.

B. Animal Production Land:

Findings

1. Grazing is not a major agricultural land use in the Clovis Planning Area. Much of what takes place is found in and along flood control and flood prone areas. Allowing livestock, as opposed to crop growth, in such areas would greatly reduce crop damage during floods and curb development.
2. Further encroachment upon cultivated and grazing agricultural lands is not needed to accommodate anticipated urban growth, since ample land, much of which is already supplied with some urban services, now exists close to the periphery of the City of Clovis and within the City's boundaries.
3. Government should encourage by any means at its disposal, urban development within the City limits in order to minimize the need of builders, developers, and subdividers for expanding into the surrounding rural environment.

ANIMAL PRODUCTION LAND

GOAL:

1. Conserve and manage lands for animal production, especially in areas where related uses such as feed lots, etc., would be incompatible with urban uses.

Policies

1. Grazing lands should be included in ag preserves and protected from overgrazing through suitable range management programs.
2. Grazing should be encouraged in flood prone non-urbanized areas.

C. Water Supply Lands

Findings

1. Since the mid-1950's the Clovis-Fresno Metropolitan Area has been growing significantly. This growth has caused much over-drafting of the water supply. Although Clovis consumes less water per capita than most other cities in Fresno County, it nonetheless is affected by water shortage because all cities within the county pump from the same groundwater basin.
2. Development of ponding basins for water replenishment is essential to meet future demands. An additional purpose would be served by utilizing these sites for recreation and/or open space.
3. Dry Creek is conducive to water recharge because of its sandy bed. Preserving it in its natural state with some areas developed for recreation would meet some of the people's needs for scenic, recreational, and other open space purposes.
4. The irrigation canals located throughout the Clovis Planning Area are additional sources of water recharge. Engineers claim that they contribute from 80-90% of all water recharge within the area.
5. Development and utilization of waterways for water recharge will have to be approved by the Stream Group which includes representatives from the Cities of Clovis and Fresno, the County of Fresno, the Fresno Irrigation District, and the Fresno Metropolitan Flood Control District. The Conservation Element mandates coordination and cooperation among agencies concerned with water and its development.
6. Reservoirs are key elements in the local water resources management system for water conservation and flood control.

WATER SUPPLY LANDS

GOAL:

1. Conserve and manage lands needed for water supply.

Policies

1. Protect areas of natural groundwater and recharge from urban encroachment, by prior purchase or other arrangements.
2. Continue and expand programs to artificially recharge the groundwater supply to enhance quality and quantity.
3. Agencies concerned with water management should give prime consideration to ecological, recreational, and open space values of water-related areas in carrying out the utilitarian functions of water supply and flood control.

4. Encourage the location of man-made recharge basins in areas where soils are conducive to such a use or where they can be effectively used as buffers, or as part of a recreational area.
5. Incorporate the Master Plan on Storm Drainage and Sanitary Sewer in the Clovis General Plan. It is the policy of the City of Clovis to implement these master plans of drainage and sewer construction as the City grows and develops in order to control flooding and to prevent underground water pollution by utilizing urban sewer systems rather than relying upon individual sewage disposal facilities.
6. Streams and canals should be protected from urban encroachment by the establishment of "official plan lines" along streams and canals, flood plain zoning, public acquisition of streamsides, and all other appropriate devices which will help preserve them in their natural and present state.
7. Plans for paths and trails should take advantage of opportunities to use stream-sides and canal banks as connectors between park and open space areas.
8. The City of Clovis shall and all other agencies should consider the potential impacts on water resources of their projects and activities as well as those which they allow others to undertake.
9. Encourage subdivision dedications for permanent water recharge and open space areas within our spheres of influence.
10. Discourage the formation of special districts where such districts are proposed to serve subdivisions or other urban uses.

11. Open Space for Natural and Human Resource Production

A. Wildlife Habitat

Findings

1. The preservation of wildlife habitat is essential to the ecological balance within the region. Man's intrusion upon wildlife habitats has threatened this balance and created problems for both man and animal.
2. Open space areas are important to wildlife in providing them with food, resting and nesting areas needed for their survival.

GOAL:

1. Conserve and manage areas needed for fish and wildlife.

POLICIES:

1. Provide open space land habitats for fish and wildlife species close to urban population.
2. Encourage privately owned wildlife management areas.

3. Environmental impact statements should give careful consideration to the impact of development proposals on wildlife and their life cycle needs.

B. Historic and Cultural Sites

Findings:

1. Historic and cultural sites and places may be lost if they are not protected from urban development.

GOAL:

1. Preserve historical and cultural sites of significant value.

Policies:

1. Preserve and rehabilitate areas of historic interest as a design theme in urban areas.
2. Both public and private efforts should be directed toward preserving historical landmarks.

III. Open Space for Health, Welfare, and Well-Being

A. Air and Water Quality

Findings:

1. The rapid growth within the Fresno-Clovis Metropolitan Area since the mid-1950's has created an air and water pollution problem.
2. Urban wastes have increased the amount of total dissolved solids and nitrates within the water supply. Agriculture wastes are in the form of salts, nitrates, and pesticides.

GOALS:

1. Conserve open space for air and water quality.
2. Provide ample land and water area for recreation.
3. Conserve and manage area for visual and auditory amenities.

Policy:

1. Both public and private efforts should be directed toward improvement of air and water quality

B. Auditory and Visual Amenity

Findings:

1. The slopes and ridges of the Sierra Nevada Mountain Range which are now only occasionally visible from Clovis are especially valuable as a scenic resource.
2. Greenbelting along roads and highways serves as a buffer to noise and helps filter the fumes and dust caused by automotive traffic.
3. Uncontrolled private signs and outdoor advertising can detract from the appeal of areas through which highways are built.

GOAL:

1. Conserve and manage areas for visual and auditory amenities.

Policies:

1. Development that detracts from Clovis' scenic backdrop should be discouraged.
2. Caltrans should be urged to include greenbelt areas along future freeways where they conflict with urban areas.
3. Private signs and outdoor advertising should be rigorously controlled or prohibited on highways in the Clovis General Plan Area.
4. Clovis should encourage the landscaping of all street types to create a visual amenity attractive to the motorist.

C. Shape Urban Development

Finding:

1. Open Space can be used to distinguish one neighborhood from another or one city from another. Open space within a city or neighborhood lends character and makes both esthetically pleasing.

GOALS:

1. Provide open land in and around Clovis for neighborhood and city identity.
2. Foster the retention of open space in order to protect the rural environment beyond the Clovis Urbanizing boundaries (Nees and Temperance Avenues).

Policies:

1. Form the urban pattern through the rational provision of open space areas.
2. Cluster residential developments while preserving significant community open space.
3. Preserve the open space resources by prohibiting urban development north of Nees and east of Temperance.
4. Cooperate with county government in its effort to prohibit the urbanization in open space areas.

IV. Open Space for Public SafetyA. Flood Control SystemsFindings:

1. Certain areas of the Clovis Planning Area are subject to flood hazards which could endanger human life and property if development were to occur in these areas.
2. The Sacramento District of the Army Corps of Engineers is currently studying the threat of flooding from Redbank and Fancher Creek to the people and property of the Clovis-Fresno Metropolitan Area and the surrounding agricultural area. The outcome of this study may disclose liabilities regarding the future development of these flood prone areas.
3. Retaining hazardous areas in open space uses reduces the potential loss of life and damage to property which could result if development were to occur in these areas before the results of the study are compiled.

GOAL:

1. Preserve in open space those lands upon which building for human occupancy is hazardous.

Policies:

1. Limit urban development in areas subject to flooding, utilizing such as recreation and agriculture.
2. Zoning and other land use regulations should be used to limit and/or prohibit development in flood prone areas.
3. An adequate policing and maintenance program should be employed to insure that flood plains are not abused or become a nuisance to the public or adjoining property owners.

4. The policies of the Safety Element, as they refer to flooding, should be considered carefully in the application and administration of this element.

V. Multi-Functional Open Space

A. Open Space Corridors

Findings:

1. Power transmission lines offer an opportunity for trails, greenways, or parks.
2. The development of parks along the canals can partially alleviate the potential liability created by their attraction to youth.

GOALS:

1. Conserve and manage corridors and service areas for open space.
2. Reserve open space to shape and guide the future growth of Clovis and environs.

Policies:

1. Clovis should take advantage of the open space opportunities afforded by utility rights-of-way, using them as trails, landscaped greenways, parks, or agriculture purposes.
2. Clovis should take advantage of canals and streams as trailways and/or lineal parks.

B. Open Space Reserves

Finding:

1. Land should be evaluated by the function it is best able to serve and at the time it will be best able to serve it regardless of its present use. This will prevent leap-frogging and premature subdivision development.

GOAL:

1. Reserve open space to shape and guide the future growth of Clovis and its environs.

Policies:

1. Insure available space for various land uses through the provision of urban growth reserves.

2. Maximize efficiency and minimize premature urban development through the maintenance of urban growth reserves.
3. Program the development of the Clovis Planning Area to achieve maximum public benefit by retaining areas as open spaces until they can rationally be developed.
4. Annexation of open space land for urban development should be prohibited beyond the urbanizing area until the land therein has been exhausted. Thereafter, a studied, logical, and economically efficient development should be provided to the extent that such urban expansion is necessary.

IMPLEMENTATION PROGRAM

This element, combining as it does the open space and the conservation elements, is important enough to warrant an action program of its own. The purpose of such a program is twofold:

1. To review the various tools available with which implementation of the Open Space and Conservation Plan can be accomplished, and
2. To develop a method of plan review and update so that it may be utilized effectively in preserving open space. The first involves the review of various acquisition and preservation or control techniques while the latter entails establishing a continuous work program.

Acquisition Techniques

The best guarantee against the loss of open space is acquisition of land. There are three methods of acquisition (explanations of each are based upon definitions written by Mr. Jack Reagan, a Planner for the City of Fresno):

1. Purchase

Fee simple interest - When feasible or desirable, the full-fee interest in property may be acquired in full payment or through installments.

Less than fee simple interest - When appropriate or desirable, limited property rights may be acquired in the form of both permissive and restrictive easements. Permissive easements shall allow the use of Resource Lands for public benefit. Restrictive easements shall forbid certain uses of Resource Lands to meet the purpose of the plan (restrictive covenants).

Controls after purchase - Public agencies may purchase Resource Lands for other than public use when such use is consistent with the purpose of the Open Space Plan. These may include:

--Purchase and Leaseback to the former owner or other use. The lease shall stipulate controls and restrictions necessary to meet the purposes of the plan.

-- Purchase and Resale with Restrictions to meet the purposes of the plan.

2. Condemnation

Eminent Domain may be used as deemed necessary and appropriate by public bodies if and when negotiations for full or less-than-fee interests in property fail.

3. Donation

Gift: Public agencies may encourage prospective donors to give Resource Lands to meet the purposes of the plan. Prospective donors should be advised of the income tax benefits of such gifts under the provisions of the Internal Revenue Code (Section 501 (c) (3)). In addition, public agencies may grant life tenancy to the owner or his children who may be willing to give land which would further the goals of the plan.

Dedication: All applicants for a Conditional Use Permit on properties adjacent to any existing or proposed water body may dedicate an easement permitting public access or payment in lieu of dedication as required by either the City of Clovis or Fresno County.

Preservation/Control Techniques

Preservation techniques differ from acquisition techniques in that they are controls or prevention measures and generally require no public expenditures.

Three control measures are commonly used to keep land open:

1) Zoning, 2) Taxation, and 3) Other.

1. Zoning

Through large lot zoning, open space, although private, is preserved. Encouraging large lots in residential areas preserves the open character of the area. It is the policy of this element to encourage such large lot zoning, especially in the outer fringes of the urbanizing area and beyond.

Cluster development not only provides private recreation open space but also recreation for the neighborhood as well. The construction of cluster (PUD) development in and around Clovis is encouraged for neighborhood and city identity.

Flood plain zoning is recommended for limiting development in areas prone to flooding. Through restrictive land use controls in flood plain areas, the public interest will be protected.

Agricultural zoning, although proven less effective against development pressures, will help to preserve open space. Large parcel A-E zoning will even more effectively preserve large areas for open space. It is the policy of the Clovis General Plan to encourage such zoning. Compensatory zoning will allow a

property owner to be compensated at time of sale for any legally proven loss in property value due to agriculture zoning proposed to preserve agricultural open space as enunciated by the plan.

2. Taxation

The California Land Conservation Act offers preferential assessment by taxing agriculture lands or their capacity to produce a return from agricultural operations. Expansion of the program should be encouraged.

3. Other

Historic and cultural sites should be identified and preserved for future generations.

Inter-governmental cooperation is proposed for programs involving more than one agency so that compatible programs may be developed.

Identification of state and federal revenue sources for open space acquisition projects is recommended.

Continuing Program

Consistent with the planning process is the need for periodic evaluation and re-evaluation of plans. If the plans are to be useful and effective they must be continually maintained and kept up-to-date. This is especially true of the Open Space Element. The Element should be reviewed each year to keep abreast of any changes in open space values or conservation needs.

RECREATION ELEMENT

Purpose

The purpose of the Recreation Plan is to provide a comprehensive long-term plan to guide growth and development of recreation facilities in the Clovis Planning Area.

GOALS AND POLICIES

The goal of this Plan is to provide a guide for governmental and private agencies and for private developers, to enhance the recreational facilities of the Clovis Planning Area by adhering to the following policies:

1. Improve existing and promote new recreational resources and to insure their highest and best use.
2. Obtain the greatest degree of recreational usage by financing development at proper levels and by optimum use of public lands at various levels of government.
3. Preserve, develop and maintain those areas which have historic interest and scenic value.
4. Cooperate with all governmental agencies in the acquisition, development, and administration of recreational facilities and resources for joint use and mutual advantage.
5. Cooperate with private individuals and organizations in the preservation, acquisition and administration of recreation resources and facilities.
6. Encourage maximum development of private and commercial facilities which support and supplement public recreation.

SCOPE

The Clovis Planning Area Recreation Plan includes the following:

1. A review of the factors affecting recreation needs in the foreseeable future.
2. An analysis of the responsibilities of various levels of government and organizations with respect to recreation resources and facilities.
3. An inventory of the existing facilities, areas, and opportunities available for recreation within the Planning Area.
4. An inventory and classification of areas, facilities, and resources, that have recreation potential.
5. An estimate of the minimum need for recreation opportunities in the foreseeable future in relation to the facilities and resources potentially available, and community growth.

6. General recommendations for provision of indoor and community facilities to provide for estimated future needs for all age groups of our population.
7. A review of the various levels of recreation, from regional down to neighborhood, and how they relate to Clovis.

INTRODUCTION

The following is a summary of existing parks in the Clovis Planning Area, excluding school playgrounds. In addition to these two parks, the City has purchased a three acre park site east of the church on the corner of Willow and San Gabriel Avenues and another five and one half acre park site by Jefferson Elementary School.

TABLE 26
EXISTING PARKS PER POPULATION

<u>Park</u>	<u>Acres Developed</u>	<u>Acres Developed Per 1,000 Pop.</u>	<u>Acres Req.* Per 1,000 Pop.</u>	<u>Total Acres Required* For Clovis (Population 18,150)</u>
Treasure- Ingmire	1.9	.104		
Letterman	6.7	.369	2.5	45.3
Total	8.6	.473		

The Table indicates the lack of public park and recreation facilities in Clovis. Although the two parks noted above are in the City, no other such parks are found in the entire planning area. Clovis now has approximately 1/2 acre of parks for each 1,000 population, while according to the standard referred to in the Table, we should have 2-1/2 acres for each 1,000 population. More graphically, while Clovis now has 8.6 acres of developed parks, it should, according to the same standard, have 45.3 acres of such recreation facilities. The City itself is 36.7 acres short of sufficiency in this respect.

The future is not altogether gloomy, however. In 1971, the Clovis City Council, in addition to allocating certain funds for park acquisition purposes, enacted legislation assessing fees on residential development to help off-set the cost of park and park equipment acquisition. The schedule of fees is:

1. Single Family Home	\$50.00
2. Apartment Unit	35.00
3. Trailer Space	25.00

As of February 28, 1973, \$56,716.00 is available to help Clovis increase its inventory of park and recreational facilities.

*National Park Recreation and Open Space Standards, p. 26. Published by National Recreation and Park Association, 1700 Pennsylvania Avenue, N.W. Washington, D.C., 20006.

CONCEPT

This Plan has been prepared to serve as a guide for all levels of government, private organizations, and private citizens; as an indication of the need for recreation facilities in the Clovis Planning Area.

The Plan envisions a long-range program of future park development.

The Plan fixes the responsibility of public park development to appropriate levels of government and agencies.

The Plan estimates the minimum demands for public recreational facilities and relates minimum development to keep pace with those needs.

The Plan foresees the development of amenities and conveniences sought by residents and future residents of the Planning Area.

The Plan attempts to encourage maximum capital investments where recreational development is profitable to the investor and where it embellishes the resources.

The Plan seeks to coordinate the development of recreational areas with existing or proposed conservation and/or open space areas.

Inventory of Existing Recreation Facilities

Before recommending proposals for satisfying future park and recreation needs in the Clovis General Plan Area, existing facilities should be noted and analyzed. Presently Clovis owns and maintains two parks. They are:

Treasure Ingmire Park, 1.9 acres at the southwest corner of Clovis and Sierra Avenues, shaded by many mature trees, is equipped with picnic and playground facilities which are heavily used.

Letterman Park, 6.7 acres on the west side of Villa north of Barstow. A larger area with less mature vegetation, but soon to have more extensive playground equipment, this park, being more centrally located, should serve a larger number of people than Treasure Ingmire.

Although these two are the only city parks presently maintained by Clovis, other facilities exist. The following elementary schools in the General Plan Area, administered by the Clovis Unified School District, for example, have playgrounds as part of their plants.

Tarpey
Cole

Jefferson
Sierra Vista

Weldon
Dry Creek

In addition, Clark Junior High School and Clovis High School have play areas as part of their campuses.

It will be one of the recommendations of the Recreation Element that the elementary school sites be utilized as part of future park development where surrounding vacant unused land permits it. Presently, this is being done in connection with Jefferson Elementary School, on the northwest corner of Shaw and Sunnyside Avenues. There, a five and one half acre park site has been acquired and will be developed in conjunction with the existing playground facilities of the school. It is recommended that similar parks be created to incorporate the playground facilities of Weldon School, on the northwest corner of DeWitt and Third Streets; Cole School, north side of Mesa, west of Peach; and Sierra Vista School, southwest corner of Barstow and Pollasky Avenues.

In the area of Clark Junior High School, the City owns land and buildings which, in connection with the recreation facilities of the junior high school, offer a potential for recreation development. They should be utilized to the greatest degree consistent with the operation of the school program.

The Clovis Memorial District owns and operates facilities on the northeast corner of Fifth and Hughes. Including gymnasium, game room, and banquet facilities, the Clovis Memorial District has provided for the indoor recreation needs for the people of the Clovis General Plan Area since 1949. The building was constructed in 1951.

The City of Clovis is unique in having in a central location a rodeo grounds, and, in connection therewith, a speedway for car racing. The diversion and entertainment provided herein, although mostly of a "commercial-recreation" type, should nevertheless be included in any catalogue of such facilities in the Clovis General Plan Area. The Rodeo Grounds represents the Clovis life-style with yearly events that attract cowboys from near and far.

Also of a commercial recreation nature are the many horse riding academies and stables offering instruction and practice in the equestrian arts. The growth of these private riding facilities attests to the popularity of this diversion in the Clovis-Fresno area in general and in the Clovis Planning Area in particular. Clovis is in an enviable position in respect to this form of recreation, and, in view of the growing enthusiasm of the rodeo activities taking place at the Rodeo Grounds, should capitalize on this activity as much as possible. Urban residents who are riding enthusiasts are urging the City to provide bridle paths in order that they, as well as their rural cousins, may safely enjoy the pastime of riding. The City should accommodate this desire on the part of those living in the area.

Closely related to bridle paths, and, incidentally, the growing popularity of cycling, is the use of public utility rights-of-way for these activities. Increasingly, public agencies are entering into agreements with public utilities in order to utilize this otherwise dead space. "Linear parks," the result of these arrangements, are admirably suited for these types of recreation and the opportunity for such a park east of Fowler Avenue on the north side of Bullard Avenue (P. G. & E. easement) should be investigated and incorporated into the City's park system.

The final item in the inventory of existing or potentially existing recreation facilities in the Clovis General Plan Area is the 160 acres of land between Peach and Minnewawa Avenues, south of Ashlan Avenue, and the 27 plus acres north of Ashlan Avenue between Peach and Minnewawa Avenues, the latter currently in use

as a flood control ponding site. The 80 acres south of Ashlan held in trust by the City of Clovis and limited to public uses when title passes to Clovis in 4 years, should at least in part be devoted to park and recreation uses. In all probability dual purposes will be served by providing also for water percolation sites. The unlimited possibilities available to the City for the development of this area should include public park and recreation facilities.

Future Needs for Recreation

As noted in the introduction to this element, Clovis has informally adopted the standards of the National Recreation and Park Association as guide for the acquisition of park sites for the City. These standards were used by the council as a basis for determining the park fees for all residential development in Clovis when that ordinance was enacted in 1971. These standards are:

TABLE 27
PARK STANDARDS

Park Type	Acres Per 1000 Population	Minimum Size (acres)	Service Area Radius (miles)
Neighborhood	2.5	5	1
District	2.5	20	1-3

On this basis, Clovis, with a population of 18,150, should have 45 acres of Parks. As part of the study and research that took place prior to the enactment of the park fee ordinance, many other criteria for park and recreation facilities were considered and analyzed. Many called for a greater allotment of space per 1,000 population than the one noted above, but because this standard has been widely adopted by American cities as a "rule of thumb," and because Clovis has in its interior and on its periphery, a plethora of vacant open land, it was generally felt that it offered an adequate goal toward which Clovis should aim.

It was generally agreed that neighborhood parks of from 4 to 7 acres in convenient neighborhood locations would serve the needs of Clovis better than fewer but larger parks.

Neighborhood parks in the Clovis urbanizing area should, where possible, adjoin elementary schools. The four elementary schools considered on page 117 as having abutting vacant land for combination park/playground development should be considered for such inter-related uses at once before such available open land is opted for other uses. The combined school-park sites should have perimeter landscaping installed at once in order to provide a greater measure of safety and to shield neighboring residential areas from night lighting. Such lighting is strongly recommended to extend the use of the facilities and to reduce the incidence of vandalism during the evening hours.

With mature verdure producing shade, recreation facilities for adults should be provided. These should include picnic tables and fire grates, horseshoe and shuffleboard courts as well as areas for sitting and relaxing. Desirable also

are tables for chess, checkers and cards, for the older citizens who yearn for this type of leisure activity. Since the General Plan does not recommend the establishment of separate mini-parks or tot lots for the "small fry," playground equipment for small children should be installed in the parks in locations away from streets and alleys, and with provision for parental supervision and surveillance.

While the locations of the parks recommended in this element must be determined by the agencies responsible for such planning; the General Plan emphasizes strongly the acquisition of land abutting the elementary schools specified on page 117 as soon as possible. Delay may be fatal to the establishment of parks in these ideal locations. This is particularly important with reference to Cole School, due to the fact that the proposed 168 Freeway, separating as it does the northwest triangle of the City from the major portion thereof, will somewhat isolate that part of Clovis in an area of its own. It will be difficult for residents of that growing community to commute to the parks in central Clovis when the freeway is constructed. A site adjacent to and developed in connection with the playgrounds of Cole School is obviously a high priority item in the recreation element.

Role of Governmental Agencies in the Recreation Program

The bulk of recreational facilities and areas is provided by various public agencies. Jurisdictional responsibility is an important factor in the development of the various forms of recreational activity. There should exist an important, greater degree of interdependence and coordination between governmental agencies so that maximum and efficient development can result. Moreover, government at all levels should coordinate and encourage the investment of private capital to supplement public recreation. It is the primary responsibility of the government to provide recreation resources, facilities and services at minimum cost to the taxpayer. It is also the responsibility of private enterprise to assist in the recreation facilities, supplies, and resources in an acceptable quantity and quality, commensurate with their development.

In addition, membership associations serve an important purpose in the recreation fields. These associations supply facilities and services that are desired by the organizations they represent, and include sporting organizations, conservation groups and youth groups. Membership associations should be encouraged by government and regulated only to the extent that health, safety and welfare requirements are met.

FEDERAL GOVERNMENT

The Federal Government, represented by a number of agencies responsible for or interested in recreational development, is charge with the preservation and development of areas that have nationwide, natural or historical values, regardless of location. All federal agencies associated with recreational development should establish general land use plans in cooperation with State and local Governments to determine future long-range recreational uses and needs before disposals or irrevocable withdrawals of public lands are made. Land holding agencies such as the National Forest Service, National Park Service, Bureau of Reclamation, and the Bureau of Land Management have key roles to play in the picture and should integrate their plans with State and local recreation

developments. Assisting agencies like the Corps of Engineers, Bureau of Public Roads, Bureau of Reclamation, and the Department of Housing and Urban Development are now required to coordinate their activities with local agencies. However, even in these branches of Federal Government, improved coordination and communication would result in greater benefits.

STATE OF CALIFORNIA

The State recreational responsibility assumes much the same role as the Federal Government except on a Statewide basis. The State development plan encompasses all land and water resources, and a program of land acquisition, planning and development on an orderly basis to meet current and future needs.

The State's concern has been primarily in the areas of comprehensive camping facilities at major resource centers and the provision of on-route facilities between metropolitan and resource centers. The recreation and vacation facilities in the Sierras east of Clovis are, for example, under State control. Clovis has long been thought of as a gateway to these areas.

Enhancement of recreation travel through scenic highway systems and roadside facilities also is being embodied in the State program. Lands which possess significant outdoor recreational potential should be acquired as soon as practicable and developed on a priority basis. Areas of natural, scenic, scientific, educational or historical value below national caliber and above local interest should be preserved in State ownership. Preservation, restoration and interpretation of these areas should proceed according to this previously mentioned Statewide Plan.

Maximum coordination between levels of government should become standing policy with the State of California; all County and City projects affecting State programs as well as all State projects affecting County and City programs should be fully reviewed, discussed, and favorably recommended before they are started.

COUNTY GOVERNMENT

Fresno County should be the primary supplier of regional day use recreational facilities. At some specialized recreation areas, the County may be responsible for overnight facilities. In general, picnicking, swimming, riding, hiking and day camping are some of the more common areas of responsibility. When facilities are used extensively by local residents, the County is also responsible for sharing planning, financial and other responsibilities with State and Federal land management agencies. This is particularly true in the areas of reservoir planning, an example of which is the Millerton Lake above Friant Dam, under State control, and the Lost Lake Recreation Area below the dam.

It is in the area of regional parks and County-wide scenic and historical preservation where the County's primary responsibility lies. Within a radius of 40 miles from the urban center, regional park facilities may be advantageously located. Cooperation with City governments in these areas is advisory.

In some areas, Inter-County relationships are desired, such as the development of a major recreational resource near or divided by County boundaries. In this instance, State Law provides for the establishment of Inter-County Advisory Committees for the proper handling and coordination of these developments.

CITY GOVERNMENT

Incorporated cities have the primary responsibility of supplying recreation space and services to its neighborhoods and communities at acceptable standards. In some areas of recreation development, City and County forces working together should provide solutions to these major facilities. The City of Clovis must, in addition, cooperate with school officials in working out cooperative recreation areas wherever possible. Maximum utilization of public recreational areas where cooperation between agencies exist would provide maximum benefit and savings to the public.

DISTRICTS

The responsibility of various districts in the recreation picture has already been mentioned. School Districts, Special Assessment Districts, and Special Operating Districts are important tools in the provision of recreational facilities and have previously been discussed.

Future recreation requirements should be evaluated upon the basis of whether they serve City-wide, area-wide, or County-wide function. Once determination is made, budgeting for recreational use should be formulated in such a manner as to provide for proper apportionment of expenditures. Districts primarily created to render other services, such as Flood Control, Reclamation, Soil and Water Conservation and Public Utilities should be encouraged to plan for the provision of recreation services as a secondary function.

Action Needed Now!

The population of Clovis has been increasing at an average annual rate of 8.6% since 1960. Whereas the population of the City on January 1, 1973 was 18,150, it is expected that in 1995, there will be roughly three times as many residents as live here now. These projections have been made as realistically and objectively as possible and do consider the declining birth rate (per 1000 population) due to the effect of "the Pill" and more liberal abortion procedures.

But even in light of these developments the actual population of the United States and California is not expected to stop increasing until the year 2000. This growth of population will be manifest in the Great Central Valley of California and indeed in the Clovis General Plan Area. Moreover, people are living longer and retiring earlier. There is a trend toward a shorter working week and working day. All of which means that leisure time for people of all ages will be more abundant. People in and around Clovis like to ride horses, and young and old alike are increasingly utilizing the bicycle for work and pleasure. This element of the Clovis General Plan strongly recommends, therefore, that 36 more acres of parks should be provided for the rapidly expanding and growing urbanizing area of Clovis. It proposes that means be found to provide bridle paths in and around the City by requiring dedications in subdivisions, and that the same be acquired for bicycle paths.

With vacant land being consumed at such an ever-increasing rate, it is of vital importance that the objectives and goals of this element be implemented at once. Only the concentrated and concerted efforts by government, organizations and individuals can make our goals a reality.

SAFETY ELEMENT

GOAL:

To protect the communities in the General Plan Area from damage caused by disastrous fires and other hazards by anticipating them and providing emergency services adequate to forestall panic and minimize loss to life and property.

POLICIES:

1. Monitor constantly the water supply of the City, both for peak load and unforeseen emergency use.
2. Maintain emergency procedures involved in effective cooperation with other public agencies in the area.
3. Scrutinize carefully all proposed subdivisions to determine if sufficient fire hydrants are indicated.
4. Insist upon adequate turning radii in all new developments for the efficient operation of emergency vehicles. If defective corners and inadequate cul-de-sacs are found to exist, measures should be taken to alleviate these potential hardships.
5. Determine that all water channels in the area are kept free of litter, rubbish and plant growth to reduce the danger of flooding.
6. The need for more and better evacuation routes and make every effort to incorporate these needs into the street construction and improvement programs of the City and other public agencies involved in the General Plan area.
7. Insure the coordination of City evacuation routes with Fresno County's emergency evacuation route system.

Introduction

This element of the General Plan was made mandatory by an amendment to Section 65302.1 of the Government Code in 1971. Its purpose is to recite what has been done and what, in addition, should be done by government to protect the community from fires and natural hazards. The protection contemplated includes evacuation routes, peak load water supply, minimum road widths and clearances around structures, and mapping of areas of known geologic hazards. As a hedge against panic and consternation in the event of a conflagration or natural disaster caused by wind, water, or earthquake, this part of the plan should aid public agencies in responding immediately to such natural or man-made holocausts. It should be the embodiment of the forethought required when disaster strikes and denies the public and its government time for rational planning.

More than any other segment of the General Plan, the Safety Element requires the active participation of many municipal departments. In particular, public works and engineering expertise is necessary for determining the sufficiency of water supply and adequacy of road width; the Fire Department regarding adequacy of fire hydrants and fire fighting equipment; and finally, the Police Department is involved with the designation of evacuation routes and directing traffic hereon if an emergency made such necessary.

Peak Load Water Supply Requirements

1. Normal Use

The Clovis Public Works Department indicates that the City has adequate water supply for normal use at the present time. In anticipation of additional demands for water because of the subdivision activity on the eastern periphery of the City, another well and electric pump will be installed this spring in the general area of Fowler and Shaw Avenues. This installation will enable the City to provide water for normal use and for peak load periods in the foreseeable future.

An important aspect of the subdivision review and approval process is the provision for adequate water supply for the areas undergoing development. Normally, water requirements on an areal basis are established and sites are procured for water facilities in advance of need.

2. Emergency Use

It is difficult to predict the dimensions of future conflagrations and therefore not easy to anticipate the water resources necessary to combat them. The purpose of this element, however, is to foresee emergencies and to estimate the capabilities of public agencies in these situations.

Clovis has sufficient water for normal and even emergency use except under certain extreme conditions. Generally, the City has over 500,000 gallons of water in reserve in two storage tanks. In the event of a public power failure, each tank has an auxiliary internal combustion engine (one using gasoline, the other using natural gas with a butane supply in case of a failure of natural gas), the latter going into operation automatically in case of an electric power failure. Hence, regardless of the size of a fire anywhere in the urban area, sufficient water is available for fighting it. In the event of a public power failure, the two auxiliary motors can pump a minimum of 2000 gallons a minute, which is ample if the 500,000 reserve gallons are unavailable. If an earthquake ruptured the water mains and rendered the reserve gallonage useless, Clovis is still not without fire fighting capability. For the City's fire fighting units carry a total of 3,000 gallons of water with them. In addition, Clovis has a mutual aid agreement with Mid-Valley Fire Department which places 9 fire fighting units with an additional 3,000 gallons of water at the City's immediate disposal. In case of a lapse in the telephone system, these units can be summoned by radio. Moreover, the Clovis units have equipment to utilize, in emergencies, the water in the estimated 18 swimming pools in and around the Central Business District. In the event of breaks in the water mains, Water Department crews have facilities and procedures for immediate repair and are always available for this work if called upon. If demand for water were great in any part of the City, crews are trained to cut down or completely close the

Water supply to other parts of the City until the crisis in the affected area was met.

The supply and locations of fire hydrants are adequate in Clovis and care is exercised to retain this adequacy in the newer developing areas. In the residential sections, a hydrant is placed at intervals of 500 feet while in the commercial and industrial areas, hydrants are located no further than 300 feet apart.

In addition to the new well and pump referred to above, and scheduled to be installed this spring, the Public Works Department proposed a third auxiliary internal combustion pump be placed in service as an emergency facility, in the northeast section of the City as additional growth occurs in that area.

SUMMARY - Peak Load Water Supply Requirements

During both normal and emergency conditions, Clovis appears to have an adequate peak load water supply. Unusual conditions stemming from disaster have been anticipated and provisions made therefor. Water supply as well as emergency fire fighting eventualities have been oriented to the growth of the City.

This element suggests constant monitoring of facilities by the City, however, as additional growth takes place. To keep pace with this growth, an additional auxiliary internal combustion pump (referred to above) is recommended sometime in the future. When the departments involved with the supply and emergency use of water believe its acquisition is necessary, it should be installed forthwith.

Geologic Hazard Areas

1. Flooding

Flooding in parts of the Clovis area has been a problem since the community was settled. Of particular concern are: Behymer Lake, located in the vicinity of Copper Avenue, Enterprise Canal and Dry Creek Reservoir; the Alluvial Drain, with a watershed area beginning south of Wepherd Avenue and west of Tollhouse Road; and Pup Creek, originating east of Clovis and flowing westerly through the City. The map in the Agriculture Land Use section indicates the location of these flood-prone places. Stormdrainage basins which will help alleviate this problem are being recommended by a report prepared for the City of Clovis by a consultant engineering firm. The tentative locations of these basins are shown on the Generalized Land Use Map. As orderly development takes place in the urbanizing areas north and east of Clovis, additional flood control basins must be provided in suitable location in order to accommodate the "run-off" produced by such new development. This includes development of the area to the north and east of the Clovis General Plan Area. For run-off generated by construction in these locations will vitally affect the water holding capacity planned for the Urbanizing Area. The government of Fresno County must cooperate with Clovis in this endeavor, lest the efforts of the City shall have been in vain.

In the element concerned with open space and recreation needs, the recommendation was made that these basins be constructed in such a manner as to afford dual purpose use thereof. For at little extra cost, these flood control facilities can be designed to accommodate baseball diamonds, model airplane flying and similar pastime recreation activities in the dry seasons. The General Plan proposes that this feature be incorporated in the flood control basins wherever feasible.

To further alleviate flooding in the Clovis General Plan Area, it is recommended that natural streams, irrigation ditches, and drainage canals be kept free of litter, rubbish, and plant growth in order to facilitate water flow. In particular, Pup Creek should be regularly dredged to insure maximum flow conditions. The City should cooperate with the County Stream Group, the Fresno Irrigation District, and other public agencies in this regard. With the construction of adequate ponding facilities and the regular cleansing of the ditches and streams that transverse the area, the hazard of flooding can be controlled, if not eliminated entirely.

2. Geologic Hazard Mapping

Although the Seismic Safety Element of this General Plan addresses the probability of earthquakes and related earth movements, research does not disclose features in the area requiring the mapping thereof as required by state law in the Safety Element. (Refer to Seismic Safety Element.)

Roads, Road Widths and Evacuation Routes

The Circulation Element analyzes the adequacy of various types of streets and highways in the General Plan Area from the standpoint of the movement of traffic. In the Safety Element, streets are studied to determine if they are sufficiently wide for safe public use and if, on corners, they are unencumbered by buildings and structures that would deny clearance to vehicles, especially those responding to emergency calls.

Research indicates no difficulty in this respect in normal use. The Director of Public Works noted, however, that a problem does exist where a public street has not been constructed at all because of lack of development of the abutting properties. Certain parts of Sunnyside Avenue are examples. The City should hasten the installation of these street segments by encouraging owners to cooperate with the City and by utilizing such programs as exist for correcting this shortcoming.

Emergency Evacuation Routes

Whether a catastrophe befell Clovis or the entire Clovis-Fresno Metropolitan Area, public agencies appear well equipped to deal with any evacuation that may be required by the situation. Since 1955, Clovis has been part of a Civil Defense arrangement in which the State Highway Patrol, the County Sheriff's Department, and the Fresno and Clovis Police Departments play a constantly rehearsed role. The Sheriff is coordinator of all cooperative activities set in motion by any emergency arising from natural, civil, or military occurrences. A master plan for dealing with such emergencies including evacuations is always ready for immediate implementation and is revised and up-dated every two or three years.

Locally, these plans are in sufficient detail to cover the assignment of officers to important intersections of the City for emergency direction of traffic. The personnel of local agencies including Clovis are also trained in the care and transportation of victims of any disaster. Moreover, these plans are accorded unannounced trials or "dry-runs" twice a year with the speed and effectiveness thereof being noted and possible improvements discussed.

In case of a failure of public power, the Police, as well as the Fire Department, has standby equipment ready for instant use. At the Clovis City Hall, a portable internal combustion engine power unit can be manually activated if public power fails. In the event of the destruction of the Communication nerve center in the Police Station, a police car or Public Works vehicle in any location could serve as a mobile headquarters until the central facility were repaired.

Certain streets have been designated as evacuation routes for Clovis as well as the entire area. These are:

Route 168, northeast

Shaw Avenue, east

Shaw Avenue, west (if Clovis alone were affected)

Minnewawa & DeWitt, north

Clovis Avenue, north to Herndon, thence east or west

Clovis Avenue, south (if Clovis alone were affected)

Police officers acting as traffic directors would be positioned at strategic intersections at once and would, if ordered, institute one-way traffic to facilitate rapid evacuation.

If a calamity were areawide, emergency personnel are mindful of the task of evacuating the 18,000 Clovis residents first in order to make the routes available to inhabitants of northeast Fresno. The Clovis police are confident, however, that with the standby emergency plans referred to above, a great majority of Clovis people could be removed before the great bulk of Fresnoans approached from the south and west.

Notwithstanding, the Clovis Police Department maintains that the quantity and quality of evacuation routes still fall short of being sufficient to handle emergency needs. The Department recommends:

1. More of such routes.
 - A. The construction of Willow Avenue north from its present terminus at Shaw Avenue to Herndon or beyond. This would help remove those from the Central and Southern parts of Clovis as well as the thousands living in northeast Fresno.
 - B. The construction of State Route 168 (Freeway) at the earliest moment. Such a highway would serve as a major artery of evacuation for a much larger portion of the northeast Fresno-Clovis area.
2. Improvement of existing routes.
 - A. Clovis personnel point out that existing routes could serve more adequately if they were widened to their ultimate widths. Even with one-way traffic in effect, a narrow street will cause traffic accidents and attendant delays that could be serious if not fatal.

- B. Immediate attention should be given to the conditions of streets designated as evacuation routes. For even adequate width will not permit rapid vehicular flow if the street is rough, beset with holes and soft spots, and bordered with soft shoulders. The smoother the street, the faster the traffic; say the Police, and the City should set a high priority on the repair and maintenance of streets destined to affect emergency evacuation.

Aside from additional and improved evacuation routes, the General Plan staff finds that the City has anticipated and made plans for the removal and emergency care of people, should an unexpected disaster, natural, civil, or military, devastate the City or the entire area.

SEISMIC SAFETY ELEMENT

GOAL:

To analyze the General Plan Area from the standpoint of seismic hazards of all kinds, to acquaint residents with the characteristics of earthquakes and to inform them of precautions that may be taken in case such a natural disaster strikes the area.

POLICIES

1. Incorporate in the building, plumbing and electrical codes the latest research and suggestions for making buildings less likely to suffer earthquake damage.
2. Insure the proper structural engineering for large or tall buildings to ascertain earthquake resistance.
3. Rehearse periodically all emergency cooperative arrangements made with other public agencies for the protection of life and property.
4. Inform residents concerning life saving techniques to be remembered before, during and after an earthquake strikes.

Introduction

The map (Plate 27) on page 130, shows the location of this so-called "Ring of Fire".*

*California Geology, November 1971, p. 205.

"RING OF FIRE" SEISMIC BELT

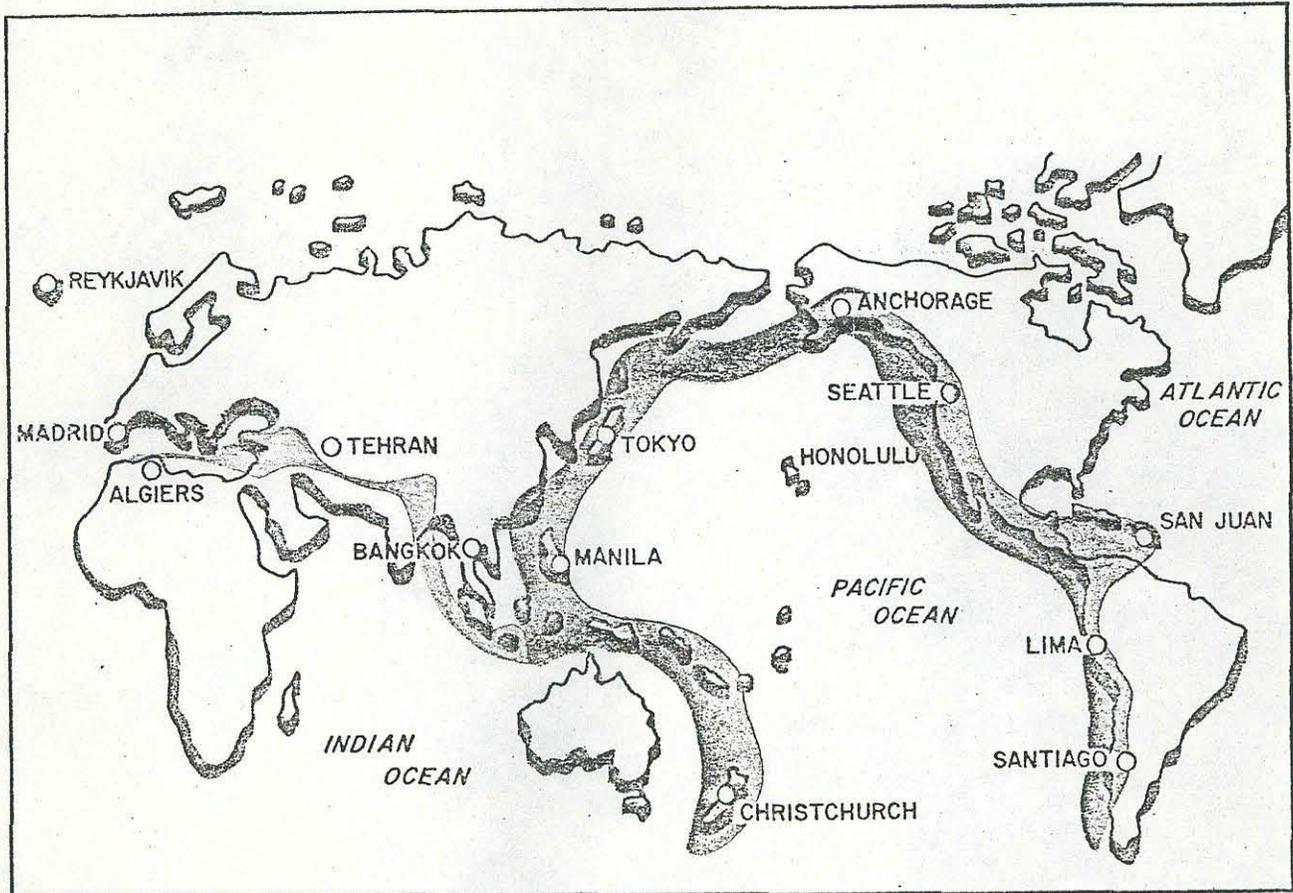


PLATE 27

The circum-Pacific seismic belt follows the edge of the Pacific Ocean basin. It is along this belt that 80 percent of the world's earthquakes take place. The Alpine belt extends from Java to Sumatra, through the Himalayas, the Mediterranean, and out into the Atlantic. Seventeen percent of the world's earthquakes strike along this belt. The remaining 3 percent of the world's earthquakes strike along the mid-Atlantic Ridge and elsewhere throughout the world.*

*This element is based upon material provided by Dr. Bruce A. Blackerby, Chairman, Department of Geology, California State University, Fresno.

But although California is earthquake country, all areas of the state are not similarly prone to this hazard. Plate 28 (see following page), a seismic risk map, indicates the two zones of earthquake damage expectation in the state.* It will be seen that the Clovis Area is located at the edge of a finger of California in which only moderate seismic damage is likely.

Information from the Division of Mines and Geology, State of California, indicates that the Clovis-Fresno area is in a zone where earthquake intensities of VI, VII, or VIII, on the modified Mercalli scale have taken place from 6 to 10 times in the past 160 years. This zone is B in a scale from A (1-5 times) to F (26-30 times) in that period of time. Table 28, is the modified Mercalli scale upon which the above occurrence data was based (intensities VI - VIII). Although intensities of IX to XII are not included in the intensity chart, it is not implied that they have never occurred. In the less populated areas of the State, including the Central Valley, the data is less accurate than it is for heavily populated areas. No periodicity is implied in this intensity study. Table 29, lists prominent earthquakes in California from 1769 through September 1971. The modified Mercalli intensity scale of each quake is found in the right hand column.*

The Division of Mines and Geology is currently working on a project slated for completion in mid-1973, which will more accurately show the ultimate historical intensity any area in the State has experienced. The City should purchase this research as soon as it available and update this element in light of the new information.

Plate 29 is a map of California faults with reported surface rupture during historic times; since 1769, as well as faults which appear to displace Quaternary (recent, in terms of geologic time) rocks or deposits.* Although the great San Andreas fault is seen as running along the western boundary of Fresno County, no fault of either type has thus far been reported in our county. It will be noted also that along the eastern boundary of the county, both types of faults are also found. In fact, the Sierra Nevada fault zone, sometimes called the Owens Valley Fault Zone, was the fault involved in the 1872 Owens Valley Earthquake, reported to rank among the top three in intensity in the history of the state.

Fresno County has had several earthquake epicenters located on its western and eastern boundaries, including one about 40 miles due east of the Clovis-Fresno Metropolitan Area. An epicenter is defined as a point on the earth's surface directly above the focus of an earthquake. Plate 30, is from a map showing epicenters for earthquakes of magnitude 4 or greater, occurring in California between the years 1934-1971. This map is of a preliminary nature and the California Division of Mines and Geology, which prepared the map, suggests it be used only in a general way, and with other indices of seismic activity. The agency points out, however, that where earthquakes have occurred, they are more likely to occur in the future.

*California Geology, November, 1971

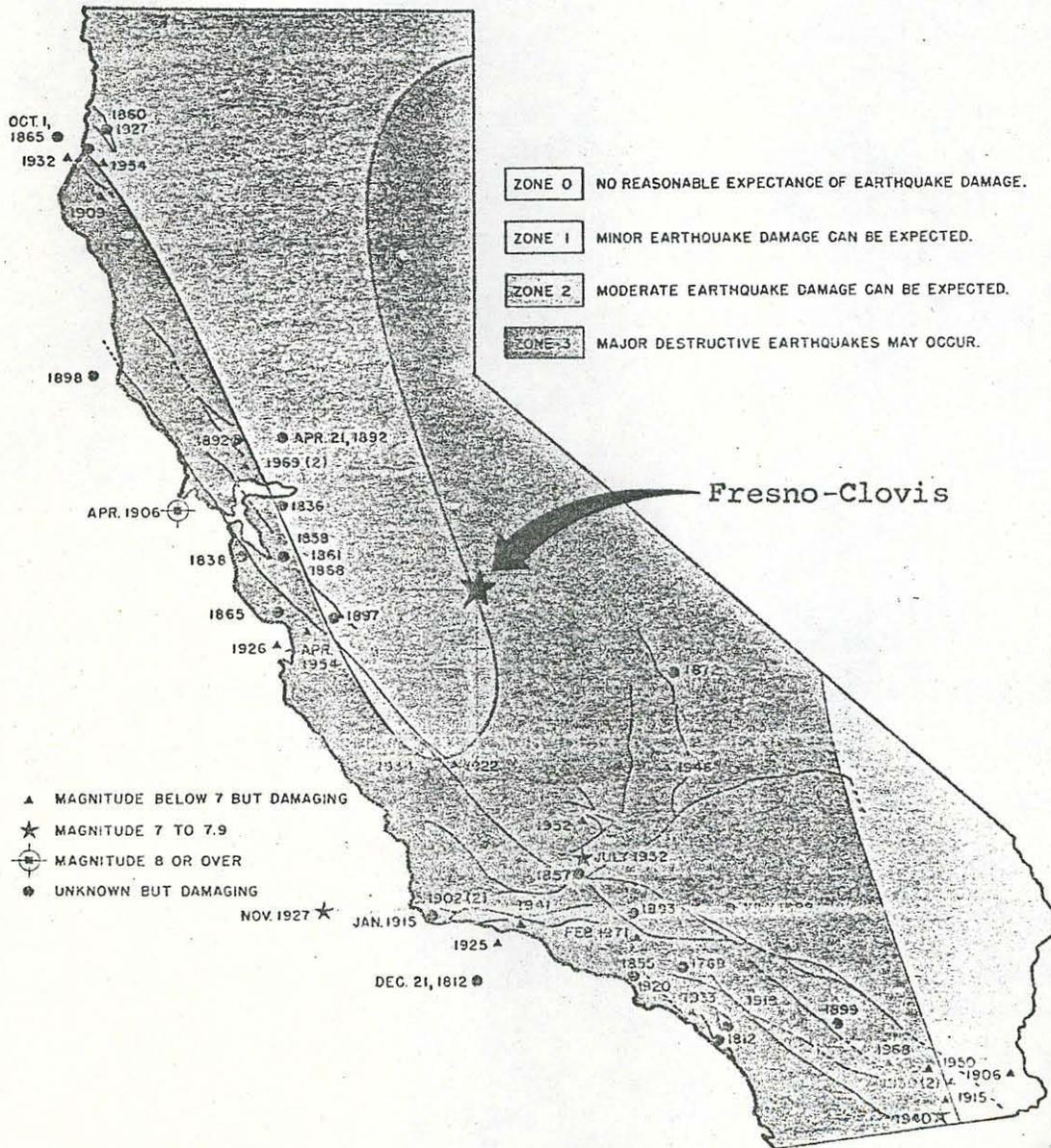
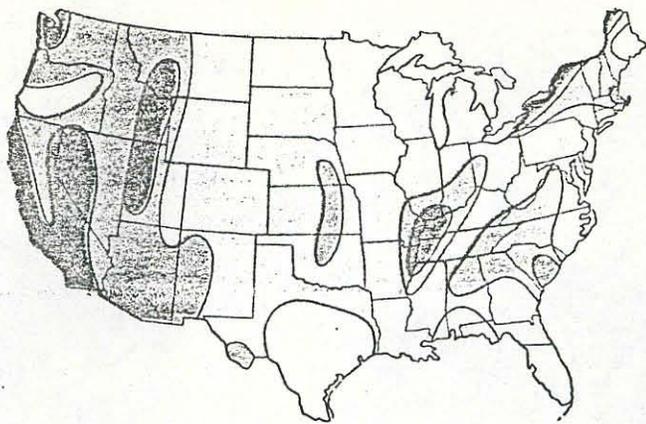


PLATE 28

Seismic risk map for conterminous United States. The inset of California shows seismic risk zones, epicenters of the prominent earthquakes since 1769 as listed in the table, their magnitude when known, and the major faults of California. *From Earthquake Information Bulletin, March-April and May-June 1971.*

TABLE 28

MODIFIED MERCALLI SCALE OF EARTHQUAKE INTENSITIES

THE MERCALLI INTENSITY SCALE
(As modified by Charles F. Richter in 1956 and rearranged)

<i>If most of these effects are observed</i>	<i>then the intensity is:</i>	<i>If most of these effects are observed</i>	<i>then the intensity is:</i>
<p>Earthquake shaking not felt. But people may observe marginal effects of large distance earthquakes without identifying these effects as earthquake-caused. Among them: trees, structures, liquids, bodies of water sway slowly, or doors swing slowly -----</p> <p><i>Effect on people:</i> Shaking felt by those at rest, especially if they are indoors, and by those on upper floors -----</p> <p><i>Effect on people:</i> Felt by most people indoors. Some can estimate duration of shaking. But many may not recognize shaking of building as caused by an earthquake; the shaking is like that caused by the passing of light trucks -----</p> <p><i>Other effects:</i> Hanging objects swing. <i>Structural effects:</i> Windows or doors rattle. Wooden walls and frames creak -----</p> <p><i>Effect on people:</i> Felt by everyone indoors. Many estimate duration of shaking. But they still may not recognize it as caused by an earthquake. The shaking is like that caused by the passing of heavy trucks, though sometimes, instead, people may feel the sensation of a jolt, as if a heavy ball had struck the walls. <i>Other effects:</i> Hanging objects swing. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. <i>Structural effects:</i> Doors close, open or swing. Windows rattle -----</p> <p><i>Effect on people:</i> Felt by everyone indoors and by most people outdoors. Many now estimate not only the duration of shaking but also its direction and have no doubt as to its cause. Sleepers awakened. <i>Other effects:</i> Hanging objects swing. Shutters or pictures move. Pendulum clocks stop, start or change rate. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. Liquids disturbed, some spilled. Small unstable objects displaced or upset. <i>Structural effects:</i> Weak plaster and Masonry D* crack. Windows break. Doors close, open or swing -----</p> <p><i>Effect on people:</i> Felt by everyone. Many are frightened and run outdoors. People walk unsteadily. <i>Other effects:</i> Small church or school bells ring. Pictures thrown off walls, knickknacks and books off shelves. Dishes or glasses broken. Furniture moved or overturned. Trees, bushes shaken visibly, or heard to rustle. <i>Structural effects:</i> Masonry D* damaged; some cracks in Masonry C*. Weak chimneys break at roof line. Plaster, loose bricks, stones, tiles, cornices, unbraced parapets and architectural ornaments fall. Concrete irrigation ditches damaged -----</p> <p><i>Effect on people:</i> Difficult to stand. Shaking noticed by auto drivers.</p>	I II III IV V VI VII	<p><i>Other effects:</i> Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large cells ring. Furniture broken. Hanging objects quiver. <i>Structural effects:</i> Masonry D* heavily damaged; Masonry C* damaged, partially collapses in some cases; some damage to Masonry B*; none to Masonry A*. Stucco and some masonry walls fall. Chimneys, factory stacks, monuments, towers, elevated tanks twist or fall. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off -----</p> <p><i>Effect on people:</i> General fright. People thrown to ground. <i>Other effects:</i> Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes. Steering of autos affected. Branches broken from trees. <i>Structural effects:</i> Masonry D* destroyed; Masonry C* heavily damaged, sometimes with complete collapse; Masonry B* is seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Reservoirs seriously damaged. Underground pipes broken -----</p> <p><i>Effect on people:</i> General Panic. <i>Other effects:</i> Conspicuous cracks in ground. In areas of soft ground, sand is ejected through holes and piles up into a small crater, and, in muddy areas, water fountains are formed. <i>Structural effects:</i> Most masonry and frame structures destroyed along with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes and embankments. Railroads bent slightly -----</p> <p><i>Effect on people:</i> General panic. <i>Other effects:</i> Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. <i>Structural effects:</i> General destruction of buildings. Underground pipelines completely out of service. Railroads bent greatly -----</p> <p><i>Effect on people:</i> General panic. <i>Other effects:</i> Same as for Intensity X. <i>Structural effects:</i> Damage nearly total, the ultimate catastrophe -----</p> <p><i>Other effects:</i> Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air. *Masonry A: Good workmanship and mortar, reinforced, designed to resist lateral forces, Masonry B: Good workmanship and mortar, reinforced, Masonry C: Good workmanship and mortar, unreinforced, Masonry D: Poor workmanship and mortar and weak materials, like adobe.</p>	VIII IX X XI XII

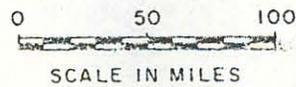
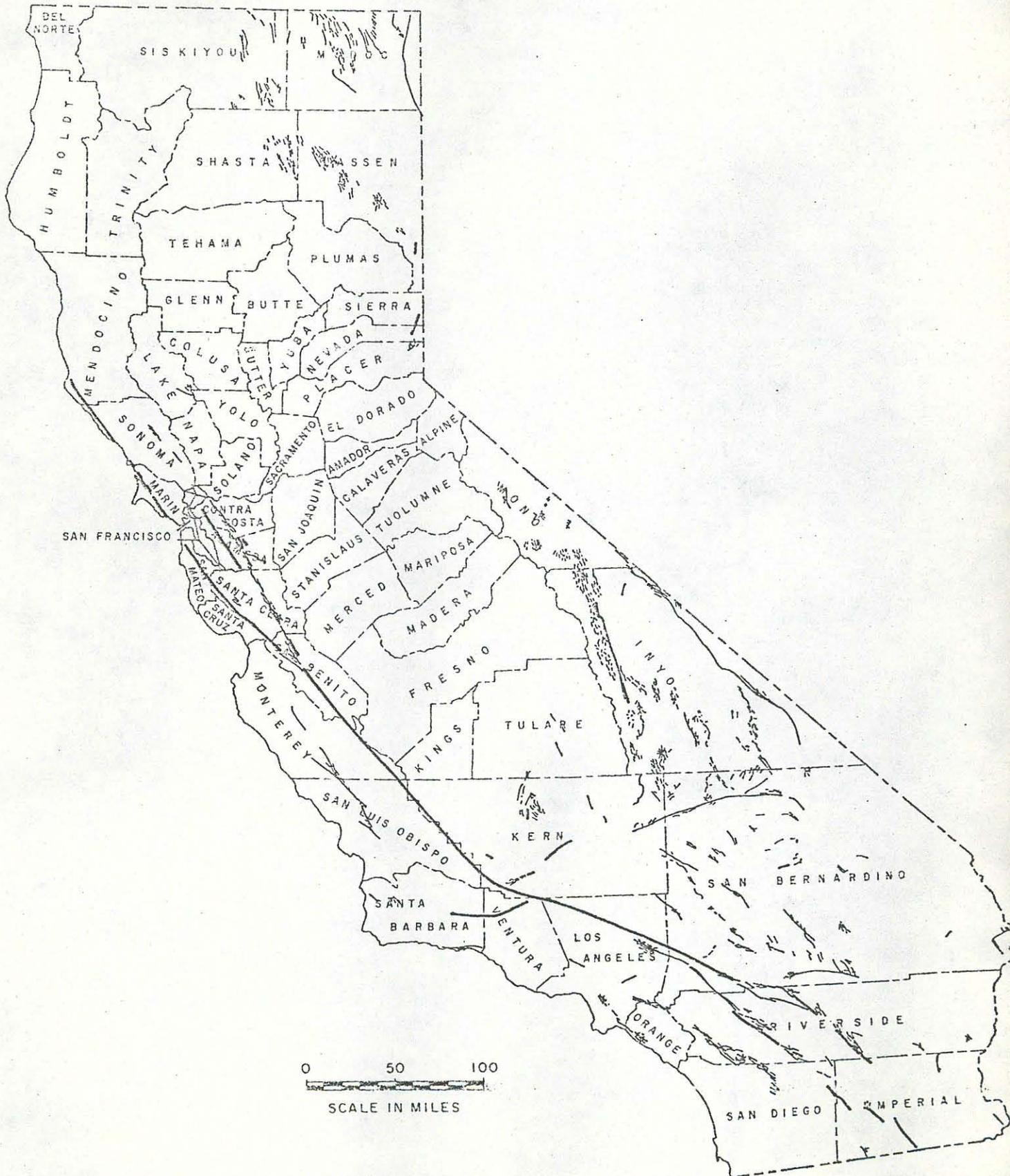
TABLE 29

PROMINENT EARTHQUAKES IN CALIFORNIA, 1796-1971
(Intensity VIII and above)

	Date	Region	Richter Magnitude	Modified Mercalli Intensity
			*	
28	Jul 1769	Los Angeles region		VIII-IX
8	Dec 1812	Southern California		X
21	Dec	Off coast of southern California		IX-X
10	Jun 1836	San Francisco Bay		X
	Jun 1838	San Francisco region		
10 or				
11	Jul 1855	Los Angeles County		VIII
9	Jan 1857	Near Fort Tejon	Possibly 8	X-XI
26	Nov 1858	San Jose		VIII
12	Nov 1860	Humboldt Bay		VIII
3	Jul 1861	Near Livermore		VIII
1	Oct 1865	Fort Humboldt-Eureka area		VIII-IX
8	Oct	Santa Cruz Mountains		VIII-IX
21	Oct 1868	Hayward		IX-X
26	Mar 1872	Near Lone Pine	Possibly 8	X-XI
19	Apr 1892	Vacaville		IX
21	Apr	Winters		IX
4	Apr 1893	Northwest of Los Angeles		VIII-IX
20	Jun 1897	Near Hollister		VIII
14	Apr 1898	Mendocino area		VIII-IX
22	Jul 1899	San Bernardino County		VIII
25	Dec	San Jacinto-Hemet area		IX
27 &				
31	Jul 1902	Santa Barbara County		VIII
18	Apr 1906	San Francisco region	8.3	XI
18	Apr	Brawley, Imperial Valley	6 to 6.9	VIII
28	Oct 1909	Humboldt County	6+	VIII
11	Jan 1915	Los Alamos		VIII
22	Jun	El Centro-Calexico-Mexicali area	6.25	VIII
21	Apr 1918	San Jacinto-Hemet area	6.8	IX
21	Jun 1920	Inglewood		VIII
10	Mar 1922	Cholame Valley	6.5	IX
29	Jun 1925	Santa Barbara area	6.3	VIII-IX
22	Oct 1926	Monterey Bay	6 to 6.9	VIII
20	Aug 1927	Humboldt Bay		VIII
4	Nov	West of Point Arguello	7.5	IX-X
25	Feb 1930	Westmorland	5.0	VIII
1	Mar	Brawley	4.5	VIII
6	Jun 1932	Humboldt County	6.4	VIII
10	Mar 1933	Near Long Beach	6.3	IX
7	Jun 1934	Parkfield	6.0	VIII
18	May 1940	Imperial Valley	7.1	X
30	Jun 1941	Santa Barbara-Carpinteria area	5.9	VIII
15	Mar 1946	North of Walker Pass	6.25	VIII
29	Jul 1950	Imperial Valley	5.5	VIII
21	Jul 1952	Kern County	7.7	XI
22	Aug	Bakersfield	5.8	VIII
25	Apr 1954	East of Watsonville	5.25	VIII
21	Dec	Eureka	6.6	VII
8	Apr 1968	Northeast San Diego County	6.5	VII
1	Oct 1969	Santa Rosa	5.7	VII-VIII
9	Feb 1971	San Fernando	6.6	VIII-XI

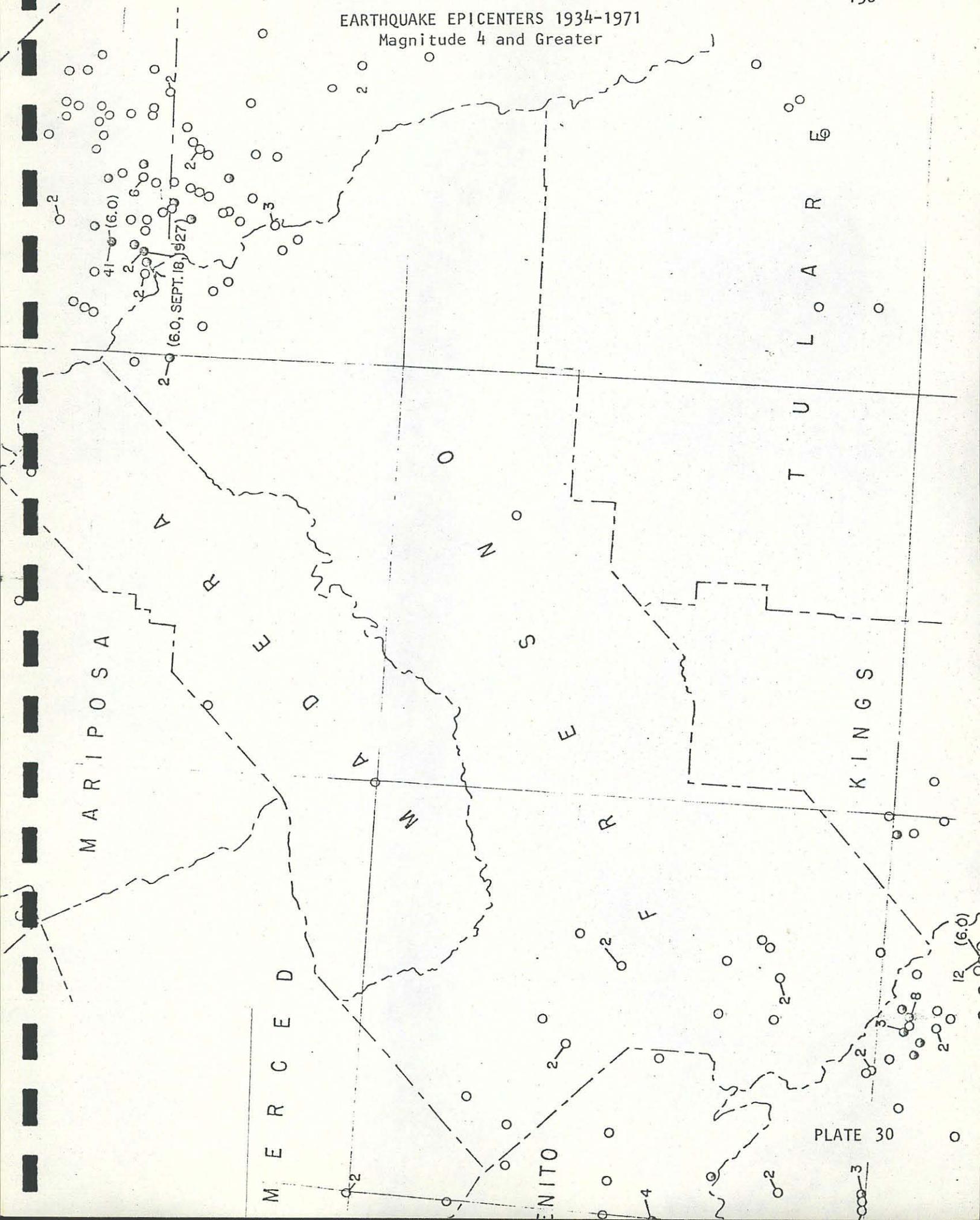
* The Richter magnitude scale was not devised until 1931. If values appear in this column for earthquakes which occurred prior to that date, the magnitudes were determined as follows: 1) if given to the nearest tenth, the records of older instruments were correlated with records of instruments now in use; 2) otherwise, historical records of intensity were used to estimate magnitude.

CALIFORNIA FAULTS



- FAULTS WITH REPORTED SURFACE RUPTURE DURING HISTORIC TIMES; SINCE 1769.
- - - FAULTS WHICH APPEAR TO DISPLACE QUATERNARY ROCKS OR DEPOSITS

EARTHQUAKE EPICENTERS 1934-1971
Magnitude 4 and Greater



A summary of the scientific data made available to the staff for the preparation of this element indicates two general conclusions:

1. That Central Fresno County is not likely to be visited by a catastrophic earthquake - they have been more prevalent in other parts of the state, and
2. That there is no guarantee that Fresno and Clovis will not be affected by a seismic disturbance of great intensity.

As was said in the first paragraph of this element, California is earthquake country. The state is young, in geologic terms, and is still subject to growing pains, which can be tragic in their consequences and may strike anywhere and anytime. These, after discounting their likelihood in the Clovis-Fresno area, must still be anticipated and prepared for, and the remaining section of this element will deal with this aspect of seismic safety.

Something has already been said of this in the Safety Element where evacuation routes were assessed as to their sufficiency and condition, and where emergency firefighting capability was analyzed. Discussions with the Clovis Building Inspector disclosed that he is mindful of the consequences of possible earthquakes and that the Uniform Building Code, by which he analyzes and approves proposed structures, is based upon building standards in relationship to the seismic hazards of the area (seismic zone). Moreover, he asserts that in the event of an unusually tall structure submitted for his approval, he would request the City have his work checked by a qualified structural engineer. It is reasonable to assume also that as more earthquake research is provided, the Uniform Building Code will be modified to include such new information.

After having determined that the Fire, Police, Public Works, and Building Inspection Departments have anticipated and prepared for seismic and other natural hazards, earthquake safety advice should be brought to the attention of the citizen. For although we are not able to prevent these earth convulsions yet, or even predict them accurately, steps can be taken to minimize the loss of life and suffering caused by them.

PLAN IMPLEMENTATION

(CARRYING THE PLAN INTO EFFECT)

The section on implementation addresses the question of how the goals, policies and objectives of the General Plan can be carried into effect. If it is not to gather dust, the General Plan must be put to work for the City. What should be done now to insure that our work thus far has not been in vain?

Probably the most important aspect of Plan Implementation has been decided for us by the State Government. Legislation passed in 1971-72, and due to go into effect on July 1, 1973, requires that the official zoning map be consistent with the adopted General Plan. This means, for example, that some property now zoned C-2 will have to be backzoned to an appropriate residential use if the new generalized land use map is adopted. If the City does not re-zone such property immediately, it will be in violation of State law as well as out of harmony with the adopted General Plan. For example, the 35+ acres of C-2 (Community Shopping Center District) existing since December 21, 1966 on the four corners of Willow and Ashlan, dating from 1969 and 1970 respectively, should be rezoned to accommodate an appropriate residential use. Since none of these six parcels have developed in almost 7 years, indicating that there is no real need for such extensive commercial zoning, the following proposals for rezoning are recommended:

A. The Four Corners of Willow and Gettsburg Avenues

If no site plans for development have been approved and construction thereof commenced within 1 year from the adoption of this General Plan by the City Council, the Planning Commission will initiate all necessary procedures for rezoning three of the four corners to an appropriate residential use and the remaining one to C-1 (Neighborhood Shopping Center District).

B. The Northeast and Northwest Corners of Willow and Ashlan Avenues.

If no site plans for development have been approved and construction thereof commenced within 2 years from the adoption of this General Plan by the City Council, the Planning Commission will initiate all necessary procedures for rezoning one of the two corners to an appropriate residential use, and the other to C-1 (Neighborhood Shopping Center District).

However, there are other tools and techniques that Clovis should use to insure vitality to the General Plan.

In the first place, the Zoning Ordinance must be considered. Clovis has only recently revised and modernized its zoning ordinance and in the 18 month it has been in effect, it has not been found wanting. Nevertheless, during the work on the General Plan, a number of suggestions were made concerning its improvement. For example, an open-space zone should be added for land that is to accommodate NO development other than agriculture. This will be very important if the proposals regarding land within one mile of the City limits are honored. Also, a public zone should be incorporated in the Zoning Ordinance. Presently most public facilities in Clovis are on land zoned R-2. This derives

from ancient practice in Clovis but it cannot be defended upon zoning or planning logic. If a "Public Use" zone were added to the Ordinance, School District and Clovis Municipal properties could be rezoned to this more correct land use designation at once.

In addition, Fresno County should be urged to add an Urban Reserve District to the County Zoning Ordinance in order to assist Clovis in controlling development in the unincorporated area to the north and east of the City. The purpose of the proposed district would be to retain for future urbanization land that will eventually be in the City. Such an urban reserve district would be helpful because the County, by implementing it, could prevent the intrusion of permanent agricultural uses into areas proposed for future urban development, thereby eliminating potential conflicts.

Moreover, a floating or overlay boulevard zone ought to be added to the Zoning Ordinance at once in order to guide the development of Shaw and similar important Clovis thoroughfares when they are burdened, as a result of community growth, with heavier traffic loads. Such a tool will not only insure a more pleasant overall appearance but will provide a more effective and efficient arrangement of buildings, ingress and egress facilities and pedestrian and vehicular safety.

Finally the Citizens Review Committee, after lengthy discussion, suggested revising the sign and outdoor advertising sections of the industrial zones. The members proposed modifications of the height, size, type and shape of signs in these zones to produce a more refined and aesthetic appearance of industrial developments, especially those existing and future concerns on Clovis Avenue.

Secondly, the subdivision ordinance should be revised and modernized. Unlike the Zoning Ordinance, the subdivision ordinance of Clovis has not been restudied and recast except on an ad hoc basis, since it was last revised and printed in 1960. In addition to minor changes including the radius of cul-de-sacs, the length of blocks, and the provision of planting strips between curbs and sidewalks, additional development control techniques should be included such as:

1. Allow for changes in minimum lot sizes that are now possible because the new Zoning Ordinance provides for Unit Planned Developments which entails substantial modification of property development standards.
2. Provide in the subdivision ordinance the new State requirement that Tentative Maps cannot be approved unless they are consistent with the General Plan.
3. Consider requiring dedication of land for open space corridors, bicycle paths and bridle trails.

The work of recasting the subdivision ordinance should be a team project involving the staffs of Planning, Public Works, Engineering, Building Inspection and the City Attorney. Developers and builders should be consulted frequently to avoid features so harsh and unrealistic that new development and construction in Clovis would be stymied.

Thirdly on the agenda for implementation are specific plans and public project development plans. A specific plan is a development proposal for an area showing more detail than the General Plan, but less than a site plan. Section 65450.1 of the Government Code provides for specific plans (See General Plan Land Use Map) for proposed neighborhoods in the General Plan. Section 65450 describes the contents of such specific plans. The provisions of this section follow:

Such specific plans shall include all detailed regulations, conditions, programs and proposed legislation which shall be necessary or convenient for the systematic implementation of each element of the general plan listed in Section 65302, including, but not limited to, regulations, conditions, programs and proposed legislation in regard to the following:

(a) The location of housing, business, industry, open space, agriculture, recreation facilities, educational facilities, churches and related religious facilities, public buildings and grounds, solid and liquid waste disposal facilities, together with regulations establishing height, bulk and setback limits for such buildings and facilities, including the location of areas, such as flood plains or excessively steep or unstable terrain, where no building will be permitted in the absence of adequate precautionary measures being taken to reduce the level of risk to that comparable with adjoining and surrounding areas.

(b) The location and extent of existing or proposed streets and roads, their names or numbers, the tentative proposed widths with reference to prospective standards for their construction and maintenance and the location and standards of construction, maintenance and use of all other transportation facilities, whether public or private.

(c) Standards for population density and building density, including lot size, permissible types of construction, and provisions for water supply, sewage disposal, storm water drainage and the disposal of solid waste.

(d) Standards for the conservation, development, and utilization of natural resources, including underground and surface waters, forests, vegetation and soils, rivers, creeks, and streams, and fish and wildlife resources. Such standards shall include, where applicable, procedures for flood control, for prevention and control of pollution of rivers, streams, creeks and other waters; regulation of land use in stream channels and other areas which may have a significant effect on fish, wildlife and other natural resources of the area, the prevention, control and correction of soil erosion caused by subdivision roads or any other sources, and the protection of watershed areas.

(e) The implementation of all applicable provisions of the open-space element as provided in Article 10.5 (commencing with Section 65560) of this chapter.

(f) Such other measures as may be necessary or convenient to insure the execution of the General Plan.

A specific plan for the East Clovis/High School area should be prepared immediately, and should be the first neighborhood to receive attention. Embodying as many of the features listed above as possible, it should at least show the circulation system, uses of land including proposed open space and conservation areas, proposed average densities, recreation facilities, public utility arrangements and drainage facilities. In addition, a specific plan for the Central Business District should be undertaken immediately. It is discussed more extensively on pages 142 and 143.

The specific plan should not be cast in concrete. Since there are many ways in which a neighborhood or a community may develop, alternatives should also be shown. They should encourage the use of Planned Unit Developments and be thought of as important tools of General Plan implementation. The options should provide opportunities for investment capital and development consistent with the overall goals of the General Plan.

Public project development plans emphasize the design and scheduled development of such facilities as public utilities, public buildings, streets, parks and recreation features. Specifications for park design, public building landscaping, street tree planting, and most importantly, City entrance landscaping, beautification and identification must be considered. The City should work closely with the Chamber of Commerce in connection with City entrance planning to insure that more well designed amenities greet inbound traffic than is presently the case.

Fourth on the list of implementation items concerns annexation planning. Certainly that which is urban should be municipal, as all residents and property owners of the larger entity would benefit by living under one rather than several governmental jurisdictions. Urban services could be extended and the problems of the unincorporated areas would be eliminated. In addition, governmental response to the entire urban community of Clovis would improve and everyone in the City would gain by the infusion of interest and leadership derived from the new members of the Clovis body politic.

Obviously a phased program of annexation is now in order. It should consider the problem of annexing the county islands in the bowels of Clovis as well as the areas on the urbanizing fringe of the City. Such a comprehensive program should be preceded by advanced study and in this, the Local Agency Formation Commission should be involved. During this phase of Plan Implementation, the County Government ought to work closely with the City in order that development goals, standards and regulations are applied in strict accordance with the Clovis Zoning Ordinance and with the New General Plan. Clovis should be closely involved with Fresno County in the planning and development of areas it will likely inherit via the annexation process. This should be the case not only for county land in the Clovis Urbanizing Area, which is of most critical importance, but for the entire General Plan area as well. Thus, what the City in due time annexes will conform rather than conflict with the plan's long range goals.

As a fifth item on the agenda of implementing the General Plan, Clovis should deal with the spectre of future slums by utilizing the procedures of code enforcement, rehabilitation and renewal. While all recent construction in Clovis has been in accord with up-to-date zoning, building, electrical and plumbing codes, neighborhoods developed prior to the adoption and enforcement of these ordinances are showing signs of blight and deterioration. Such areas in Clovis

should be identified at once and designated as "Code enforcement areas." Working with property owners as closely as possible, code defects should be noted and "tagged" in order to achieve compliance, even though belated, with the City Ordinances. Encouragement in this respect should be the main technique for obtaining compliance, with mandated action used only as a last resort. However, if constructive code enforcement policies can be cooperatively and sympathetically applied by the City, blight and deterioration can be retarded if not eliminated entirely. The public and private sector will both gain from these code enforcement policies.

Where slum conditions exist, i.e., where deterioration has progressed beyond the point of redemption by "code enforcement" as outlined above, the processes of rehabilitation and renewal are available.

Although these terms are often used interchangeably, renewal usually involves more extensive renovation, oft-times implying removal of developments so infected with blight that rehabilitation by remodeling or rebuilding is impossible.

The City should investigate and analyze its neighborhoods, including residential, commercial and industrial, in order to determine where this type of urban surgery is necessary. If malignant blight is detected, it should be dealt with immediately as this urban malady seldom if ever corrects itself. If such major deterioration is identified and if the City elects to act, federal and state programs, depending on current funding policies, are available. Both federal and state programs should be investigated. The California Community Redevelopment Act may be used either in conjunction with federal aid or by itself. If Clovis takes advantage of federal and/or state programs in its rehabilitation or renewal aspirations, the City Council should constitute itself as a Redevelopment Agency, rather than appoint a Board of Directors responsible to the Council.

Private rehabilitation and renewal should also be considered by the City. Although federal and state financing offers inducements and advantages, if private capital can and will develop a project in conjunction with General Plan and in cooperation with the City staff and do so without governmental assistance, such public help is unnecessary and superfluous. Since such large scale projects often entail the clearing of old structures and extensive off-site public improvements, however, which neither the developer nor the City can generally afford to provide, careful study by all concerned should precede any abandonment of the idea of governmental assistance in this area.

A very important sixth item in the implementation section concern the Central Business District. The plan for the CBD should be one of the specific plans proposed under item three previously mentioned.

A commitment to renovate the Central Business District must first reflect a desire to do so on the part of the CBD Business Community in particular and the Citizens of Clovis in general. Long discussed in a nebulous form, the idea must be crystallized before a general consensus can be developed. The four elements talked about over the years include the western theme, additional off-street parking, a new circulation system, especially in connection with Bullard Avenue as it bisects the CBD, and a possible civic center development as discussed in the commercial section of the Land Use Element.

The idea of creating off-street public parking in the alleys in the CBD ought to be explored, especially the proposal to provide parking in such areas bounded by western style rail fences. This would be consistent with the western theme idea, an idea that should be encouraged as much as possible.

To advance the ideas and prospects for the development of the CBD, a citizen's committee of those intensively interested should be formed as soon as possible. This should not be difficult, considering the success of the Citizens Review Committee that has worked so diligently in the formative phases of the entire General Plan.

One of the first steps after the CBD Citizens Committee becomes operative is to instruct the staff, especially Planning and Public Works, to develop alternatives for the design and development of the central area. Of course, the future location of the New City Hall and related facilities will play an important role in the proposals. Nevertheless, the overall renewal of the CBD should be accorded high priority on any list of specific plans to be under-taken by the City. State and federal assistance if such is available should not be discounted as a tool for implementation here.

Seventh on the list of the implementation element is a long range Capital Improvement Program. A C.I.P. is a financial corollary to the General Plan in that it proposes a rational procedure for carrying out the goals and policies of the plan relative to major expenditure items needed by the Community. Moreover, the C.I.P. lists these major improvements or investments in an order of priority over a period of years rather than on a "piece-meal," year to year basis as such are when incorporated in the conventional annual budget.

Also, programming such major expenditure items over a period of years forces a community to decide which public improvements are needed most and helps toward having financing available when such items are needed.

In addition, a Capital Improvements Program helps coordinate the plans of several governmental agencies in providing public services. For example, Fresno County, the City of Fresno, and several special districts all provide services in the Clovis General Plan Area.

The 1972-73 budget for Clovis contained a section devoted exclusively to Capital Outlay, a first step toward the development of a long range Capital Improvement Program. The City is now in the first stages of extending this effort to include a five-year capital budget. While this constitutes a beginning, the C.I.P. ought to be projected in increments of five year periods to cover the life of the General Plan and moreover, be kept up-to-date.

Finally, on the agenda of implementation is the very important matter of keeping the General Plan up-to-date by the constant study of trends and the periodic revision of the document.

A General Plan is a general guide for future development. It is a graphic and textual way of saying that "we know where we want to go at this point in time and how we want to get there." But since tomorrow is a new day and the situation in the General Plan area may be different, we must make certain that our finished product is sufficiently amendable to permit changing directions if such is warranted by changing conditions. Continued study and research will suggest when the plan should be amended or revised, and the Citizen's Committee should play a major role in this up-dating process.

A plan that is not constantly revised to stay abreast of change is next to worthless. It generally gathers dust and money spent on it constitutes a waste of public funds. But to say that the plan should be amendable is not to say that it should be flexible and resilient. Its goals and policies should be followed until they are changed in the light of new conditions as noted above. If the Plan proposes residential development in a certain area, governmental actions should abide by and reflect that policy. They should not short circuit the plan by allowing, for example, professional-commercial uses in such residential areas, under the rationalization that the plan is sufficiently flexible to accommodate those uses.

To the extent that the plan is flexible in this sense, it is no plan - no guide, and the work will have been done for naught. Recent state legislation, however, as noted earlier in this section, mandates governmental conformity to the General Plan and although it is not certain how this legislation will be executed, it is generally expected that hereafter more attention will be paid in the future to the General Plan.

A growing city without a General Plan is like a rudderless ship in an ocean storm. Without the guidance that a general plan can provide, growth tends to be haphazard and nondescript. But a city with a general plan that is not kept current is like a ship in an ocean storm with a stuck rudder. Healthy growth and development will stagnate and obviously, the general plan will not produce the expected results.

If this plan does indeed constitute a pattern for the future, if it is accepted by investors and developers alike as a reasonable guide, if all governmental agencies involved in the area respect its goals and policies and officially act accordingly, and finally if the Citizens Review Committee in particular and the residents of the area in general provide intelligent periodic review and revision, a strong foundation for an attractive and viable Clovis General Plan Area will be firmly in place.

APPENDIX A

MINORITY REPORT

Citizen Committee Minority Report

Planning is designed to aid orderly growth and to protect property from mixed and undesirable uses.

Zoning is the instrument used to keep planning operating in an orderly manner.

The development of any project usually requires mortgage money or other big financial loans. Zoning is basic to borrowing money and thus to any large development.

There are times when zoning has been granted too far in advance of development or when the development does not develop as fast as first planned. This is often caused by a rapid change in the money availability or the *surrounding and supporting development is slower than expected.*

Zoning is a bond or a trust granted to land for orderly development. To back zone without the voluntary action of the owner immediately gives the entire area an atmosphere of fear, doubt, and distrust in the integrity of the governmental body involved. Politically the issue can become complex legally and an unnecessary expense to the city pursuing the policy of back zoning.

Clovis, at this time, is attractive to developers because there has been little or no back zoning. Growth has been steady and stable.

Forced back zoning can only bring about distrust and disaster to the area. It is clearly breaking faith with the property owner.

Everyone loses in pressured back zoning procedure. The city loses taxes, the property owners suffers great financial losses. The processing of involuntary back zoning is expensive to the city and the property owner concerned.

The premature development of a zoned area may bring about unstable and undesirable tenants which often results in business failures.

Beginning in 1955 the City of Clovis had premature developments that failed-

Ranch Estates #2, #3 and #4, and other subdivisions

The Clovis Shopping Center at Sunnyside and Tollhouse

The Bowling Alley on Shaw Avenue-are prime examples of premature developments. These failures made loan institutions reluctant to loan money on any venture and Clovis became known as "a high risk area".

Back zoning will invite law suits or bad publicity which come from this type of procedure.

Clovis is making great strides in growth and development at this time. We believe it is imperative that growth continues. It would be disastrous to force back zoning.

Any back zoning should be initiated by the property owner.

APPENDIX B

AMENDMENTS