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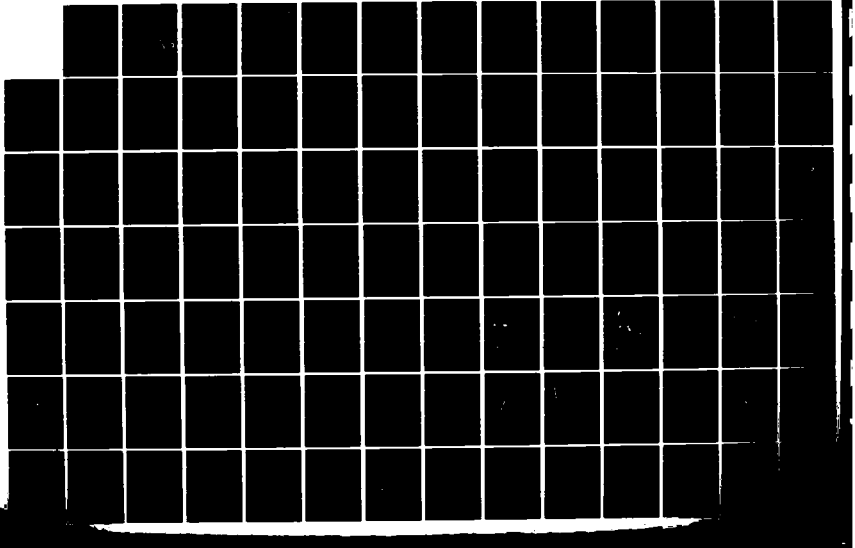

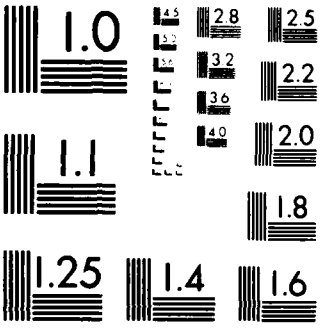

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M-X/MPS

ENVIRONMENTAL

TECHNICAL REPORT

PRELIMINARY FEIS

REVIEW COPY 2 OCTOBER 1981

ETR 36

URBAN GROWTH AND PLANNING

DEPLOYMENT AREA SELECTION AND LAND WITHDRAWAL/ ACQUISITION

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DEPARTMENT OF THE AIR FORCE

M-X ETR-36

URBAN GROWTH AND PLANNING

Prepared for

United States Air Force
Ballistic Missile Office
Norton Air Force Base, California

By

Henningson, Durham & Richardson, Inc.
Santa Barbara, California

REVIEW COPY OF WORK IN PROGRESS

2 October 1981

DEPARTMENT OF THE AIR FORCE
WASHINGTON 20330

OFFICE OF THE ASSISTANT SECRETARY

Federal, State and Local Agencies

On October 2, 1981, the President announced his decision to complete production of the M-X missile, but cancelled the M-X Multiple Protective Shelter (MPS) basing system. The Air Force was, at the time of these decisions, working to prepare a Final Environmental Impact Statement (FEIS) for the MPS site selection process. These efforts have been terminated and the Air Force no longer intends to file a FEIS for the MPS system. However, the attached preliminary FEIS captures the environmental data and analysis in the document that was nearing completion when the President decided to deploy the system in a different manner.

The preliminary FEIS and associated technical reports represent an intensive effort at resource planning and development that may be of significant value to state and local agencies involved in future planning efforts in the study area. Therefore, in response to requests for environmental technical data from the Congress, federal agencies and the states involved, we have published limited copies of the document for their use. Other interested parties may obtain copies by contacting:

National Technical Information Service
United States Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161
Telephone: (703) 487-4650

Sincerely,

JAMES F. BOATRIGHT
Deputy Assistant Secretary
of the Air Force (Installations)

1 Attachment
Preliminary FEIS

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1.0 INTRODUCTION

This ETR deals with the impacts and constraints on urban growth that may result from M-X construction, and the mitigations to alleviate these impacts and constraints. Land area requirements are also forecast on a county level.

Construction and operation of the M-X system would require a large area of land to be developed for urban purposes: residential, commercial, industrial, institutional and roadways. Long-term or permanent urban development is forecast to be approximately 2,000 acres concentrated near each of the two operating bases. Short-term or temporary development associated with the construction phase of the system would peak at about 13,500 acres. This requirement for temporary land development would be distributed throughout the M-X deployment region. Existing cities and towns would experience increased urbanization. The urban land requirements were derived from a socioeconomic model, with outputs showing land area by year (1982-1994) and by county for each of five urban land use categories. These data are presented for the Proposed Action and each of the eight deployment area alternatives in ETRs 2B through 2L, 3B, and 3C.

Whether short-term or permanent, rapid urban land development will be experienced by many communities in and near the deployment region. In the smaller communities, this land area demand could result in a doubling or more of the area presently developed. The percentage of growth in larger cities would tend to be less, but the affected land area could still be high in absolute terms.

Whether urban growth caused by M-X is viewed as an opportunity or a problem will depend on the perspective of the viewer. Regardless of perspective, the resulting growth would convert a significant amount of vacant urban and rural land to a more developed, urban condition. This conversion process will be influenced by two possible constraints: (1) plans, policies, and laws pertaining to land use and related urban development and (2) the availability of land for development. These factors are discussed below relative to the federal and state level, followed by a community-by-community review of possible constraints to urban growth. The concluding section of this ETR presents mitigations for urban growth impacts.

Whereas this ETR concerns land use and urban area expansion, there are other factors that could serve as constraints on urban growth such as water resources, wastewater, traffic, and community infrastructure. These are covered in detail in separate environmental technical reports.

2.0 CONSTRAINTS ON URBAN DEVELOPMENT

Two types of urban development constraints are presented below. First are the plans, policies, and laws which pertain to community land development at the federal, state and local level. Identification of conflicts with existing plans and policies is stipulated by the federal Council on Environmental Quality (CEQ) through regulations effective July 30, 1979. The CEQ regulations are summarized below. This is followed by a discussion of those plans which have been available for review. Conflicts and potential constraints are identified.

In many instances, M-X-induced urban growth would not so much be in conflict with a stated goal as it would necessitate the examination of current policies and goals. Of course this growth could also create difficulty in achieving stated goals. In some cases, however, M-X-induced urban growth could help achieve certain policies and goals.

The second type of constraint discussed in this ETR is the availability of land for development. A site-specific analysis has not been performed since the county-level land requirement forecasts have not been projected for individual communities. General comments are made at the community level relative to the amount of vacant urban and publicly owned land and the existance of publicly owned land which could be impacted by urban growth. Federal land ownership is particularly extensive in Nevada/Utah. For this reason, the procedures for transferring land controlled by the Bureau of Land Management (BLM) to private ownership for development are summarized in this section.

2.1 LAND USE POLICIES, PLANS AND ORDINANCES

DESCRIPTION OF CEQ REGULATIONS (2.1.1)

The federal Council on Environmental Quality (CEQ), charged with overseeing the implementation of NEPA, has published regulations on the procedures to be followed by federal agencies in preparing EISs, effective July 30, 1979. One section of these regulations (1502.15(C)) addresses federal, state, and local land use plans and policies and their role in the impact assessment process. The regulations explain that discussions shall be made in the EIS of "possible conflicts between the proposed action and the objectives of federal, regional, state, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned." Another section (1506.2(d)) of the regulations stresses cooperation between federal agencies preparing EISs and the state and local procedures: "To better integrate environmental impact procedures into state or local planning processes, statements shall discuss any inconsistency of a proposed action with any approved state or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law."

In the Federal Register on March 23, 1981, CEQ states further that the EIS must identify and describe the extent and seriousness of any immediate or future conflicts between a proposal and the objectives of federal, state, or local land use plans. The possibilities for resolving any of the identified conflicts need to be

addressed, as well as an evaluation of the continued effectiveness of the land use controls for the area. The type of land use plans and policies that need to be included in such an assessment, according to CEQ, are adopted documents for land use planning such as zoning and general plans, formally proposed plans, statements of policy as embodied in laws, and executive policy statements. The options available to decision makers relative to any identified conflicts is also addressed in the CEQ decision. The decision maker is able to go forward with the project in spite of potential conflicts, unless precluded by other laws from being inconsistent with land use plans. As a part of the Record of Decision, the decision maker is required to delineate the mitigation measures that have been imposed and to explain any decision that overrides land use plans for the area.

FEDERAL PLANS AND POLICIES (2.1.2)

In response to the above requirement, the following section discusses federal land use plans and procedures that might be affected by the project. Several different federal plans and procedures are discussed. Each discussion examines: (1) the type of planning involved; (2) the current status of the plans; and (3) any possible conflicts that might exist between the objectives of the particular planning process and the impacts resulting from community expansion due to M-X growth.

BLM Plans and Planning Procedures (2.1.2.1)

Rapid urban growth will take place in many of the communities impacted by the construction and operation of the M-X system. In some instances the availability of private land to accommodate this urban growth may be a constraining factor due to the vast area of public lands near these communities. Most of the surrounding public lands are administered by the U.S. Department of Interior's Bureau of Land Management (BLM). In order for private development (e.g., housing, commercial, or industrial uses) to take place on these lands, the BLM must identify the lands as suitable for urban uses and transfer the land under appropriate authority. As per the CEQ guidelines, the following sections provide an overview of the major conflicts between the present BLM plans (as manifested in current use, classification, management, and claims upon the land) and M-X impacts. The classification process is discussed first, accompanied by descriptions of the various classifications used by the BLM. An examination of those Utah/Nevada communities where potential conflicts may exist between BLM land and urbanization requirements is presented in Section 2.3 which reviews local development constraints.

BLM Land "Classification" and Land Transfer Procedures (2.1.2.1.1)

In the 1960s and 1970s the BLM was required to classify all of its lands as either land to be retained with multiple-use management, or as land suitable for disposal. Although the classification and Multiple Use Act was repealed, some areas are still managed under the multiple-use concept. Multiple-use refers to the management of various resources in combination so that the present and future needs of the public will be well met. Sufficient latitude should exist to allow for periodic adjustment to changing needs and conditions. Any realty action (e.g., sale, lease, withdrawal, transfer) by the BLM also requires a determination of suitability for use. Thus the classification, in the generic sense, is the means to determine whether the land in question is suitable for a proposed use. All present and potential

uses and users of the land are to be taken into consideration. Classification must also consider state and local government programs, plans, zoning, and regulations applicable to the area in which the lands to be classified are located. In the following sections the FLMPA planning requirements for land sales and the issues analyzed in the BLM land suitability process are discussed with respect to potential constraints to community expansion.

Sections 202 and 302 of the Federal Land Policy and Management Act of 1976 (FLMPA) require completion of BLM land use plans prior to the transfer of public land into private ownership. The BLM planning system accompanied by reference to local planning documents typically meets this requirement. In some cases, BLM plans will need updating to accommodate urban land transfers for M-X-induced urban expansion.

To arrive at the proper use for a parcel of land, current BLM procedures call for personnel from various disciplines to analyze the present land use from their particular perspectives and make preliminary recommendations. The proposals are then evaluated in an interdisciplinary framework and final recommendations for the "highest and best use" are made. The adjacent land uses play an important part in the final analysis. Public meetings, input, and notifications are also included in the process.

As part of the classification process, cultural resources must be inventoried and assessments made before all BLM land transfers. Both historic (pertaining to 50 or more years old) and archaeological investigations are required. In accordance with the 1966 Historic Preservation Act (Section 106), BLM guidelines require a "Class III Inventory," which is a systematic, intensive investigation of a defined project area to record surface (and some subsurface) cultural resources which might receive direct impacts from the Proposed Action. The significance of the resources must also be assessed in the context of the surrounding region.

Resource management plans are designed to guide and control future management actions and the development of more detailed and limited scope plans for resources and users. Consistent with the laws governing the administration of public lands, the resource inventory, planning, and management activities shall be coordinated with programs of federal, state, and local governments having resource planning, management, zoning, or regulation authority. The environmental analysis requirements of NEPA shall be included in this process (43 CFR Group 1600).

Land Transfer Conflicts (2.1.2.1.2)

The public lands potentially needed to accommodate community expansion are likely to be involved with one or more of the following land uses at the present time: mineral claims; oil and gas exploration; livestock grazing; energy and communications transmission; and recreation. It is in the land use planning process that these and other uses are examined, and conflicts between past and potential users addressed and resolved. Conflicts between public and nearby private land uses also need to be considered. Further discussion of problems associated with these uses and community expansion follows.

Substantial problems in the transfer of BLM land from public to private ownership could occur as a result of mineral claims filed under the 1872 General

Mining Law. Individuals and major corporations have filed thousands of mineral claims covering hundreds of thousands of acres, some of which extend across entire valleys of Nevada. With yearly assessment work the claims can be kept indefinitely, thus allowing the holder the right to use the land for mineral exploration or mining without actual title to the land. In order to resolve this conflict and make the land available for community expansion, the BLM must make a validity examination, which could involve a lengthy hearing process. Only if a claim is found to be invalid, or the claimant relinquishes his interest can the title be transferred for other uses. The presence of oil and gas leases near communities does not necessarily conflict with land transfers. A title transfer can be made subject to existing lease rights, if the use would not conflict with private development.

Livestock grazing, covered under the Taylor Grazing Act and FLPMA, is managed by a grazing permit whereby ranchers are given authorization to graze livestock on BLM land. Grazing allotments cover the majority of BLM land, although range management policies at specific locations may not allow grazing at all times. Since the values of many ranches are closely tied to their grazing allotments, the reduction or cancellation of an allotment requires a careful review of alternatives on a ranch-by-ranch basis. Under FLPMA the full termination of a grazing permit requires a two year notice. (see ETR-40, "Grazing" for more information on procedures associated with the assignment of grazing permits). Community expansion is not expected to substantially affect current grazing activities. The majority of grazing allotments are fairly distant from urban areas, and hence would not be needed for urban purposes. The amount of land required for community expansion would be low relative to that currently used for grazing.

In both Nevada and Utah, the granting of rights-of-way for energy and communications facilities should pose few problems for community expansion. This would be especially true if community planning can be done well enough in advance of title transfers to allow for the allocation of land uses to avoid later conflicts. Existing transportation and power corridors generally can be upgraded without great difficulty. Conflicts between urbanization and BLM lands used for recreation are expected to be minimal. The lands seen as most valuable for recreation tend to be located away from urban areas.

In some communities, the only private land available for urbanization is used for agricultural purposes. In areas with a high proportion of BLM land ownership, the agency may be able to minimize the conversion of agricultural lands by making public land available for urban use.

AICUZ Program (2.1.2.2)

The Air Installation Compatible Use Zone (AICUZ) program is a planning procedure established by the Air Force in 1972 for addressing noise and safety problems around Air Force airfields. With this program, the Air Force has sought to incorporate noise considerations, accident potential zones, and building height limitations into land use planning decisions made for the lands adjacent to Air Force airfields. The central feature of the AICUZ program is the preparation of an AICUZ study, or plan, which contains an analysis of the impacts of the airfield operation and a set of actions for minimizing the present and future impacts upon nearby lands. All Air Force airfields are required to prepare an AICUZ for the OBs, as the airfields for the deployment of the M-X system fall under this requirement. The

AICUZ program has six phases which comprise a process of data survey and analysis, plan preparation, and plan implementation. The following sections elaborate the steps of the AICUZ planning program and analyze the effect of the AICUZ on the communities near the OBs.

In the initial phase, operational data is gathered on the aircraft using the base. The frequency of the landings, the type of aircraft involved, and the flight paths to and from the base are gathered. Characteristics, such as flight patterns, are evaluated to determine if they can be modified to lessen the impact of noise on adjacent communities. The second and third phases are the validation of the assembled flight data and the preparation of a noise contour map. Phase four synthesizes this data with information on height limitations and accident potential zones, and delineates the total area impacted by the base. Within the total area of impact, a graduation of impacts is developed with use of compatible use districts (CUD's), i.e. areas possessing similar characteristics as to noise and accident potential. The result of this analysis is an AICUZ map that delineates CUDs around the airfield. The next step of phase four is an evaluation of the existing and future conditions external to the base. This requires that the existing and proposed land uses for the area, as indicated in the community land use plans, zoning ordinances, and regional plans be compared to the range of compatible land uses as defined by the CUD criteria. For example, the CUD criteria indicate that only 4 of the 13 CUDs would be acceptable for single family housing because of the sensitivity of residences to noise impacts and potential accidents. This comparision should indicate where both conflicts and consistencies exist between the land uses, policies, and plans.

Having defined and discussed the problem, the AICUZ study proposes the implementing actions to be taken in phase five. These implementing actions fall into two categories: the actions undertaken by the Air Force and those undertaken by the local communities. The Air Force's role is to minimize the impact of its operations in a way that reduces aircraft noise levels and accident hazards and provide the local communities with the base plans and recommendations for land uses in the impacted areas. If the Air Force's efforts in obtaining compatible land uses, master plan designations, and zoning in the impacted areas are unsuccessful, several options are available. Upon authorization the Air Force can acquire the property development rights by either easement purchases, land acquisition, or property rights exchange. The Air Force is limited to these options, since it does not have the authority to restrict land uses in areas it does not own. These options should be explored only after: 1) use of the local planning procedures has not proven to be effective, and 2) continuation of the land use would adversely affect operation of the airfield. The responsibilities of the local communities entail evaluation of the Air Force's recommendations and establishment of actions to alleviate the problems identified in the AICUZ. These may range from modification of the community's building codes to re-evaluation of their comprehensive plans and zoning ordinances.

Following implementation of the AICUZ study by the Air Force and the local jurisdictions, phase six is programmed for updates to the study. These updates may be caused by a variety of reasons, including changes in the base operations and changes in the local land use patterns.

AICUZ recommendations will cause changes in the community in the vicinity of the proposed OBs. Revisions in ordinances and plans may be needed as well as

changes in land uses and land ownership. These revisions may be necessary since many of the ordinances currently in effect in the areas adjacent to the potential OB locations are rural, with few growth pressures and hence loosely-structured zoning ordinances. As an example, a large portion of Iron County lies in an "outlying zone", in which most activities are permitted anywhere without any conditions. While this example may be an extreme one, many of the ordinances are structured in a manner that would not permit the degree of guidance needed to avoid the creation of conflicting land uses around the OB airfields. Land uses involving a concentration of people, such as schools, housing, and businesses, will need to be located away from the airfield impact zones. Building codes may also need to be strengthened in an effort to ensure adequate noise attenuation in new dwellings and buildings around the airfields. Hence, ordinances, long-range master plans, and capital improvement plans will need to be reviewed and/or updated in light of the AICUZ recommendations. Such updates would also be necessitated by the increased growth resulting from the construction and operation phases of the M-X. The magnitude of the updates is likely to be greater than amendments or modifications to the ordinances and plans. Major redrafting should be expected.

Current land uses in the vicinity of the proposed OB locations are primarily rural, with the exception of Clovis. Since rural activities would be the land use least likely to be adversely impacted by airfield operations, it would appear that AICUZ recommendations would be directed toward maintaining the current land uses in the impacted areas around the airfields. Any incompatible land uses in the clear zone would need to be changed or removed. The recommendations for the base might take the form of proposals discouraging the conversion of agricultural and grazing lands to urban activities. Urban activities such as housing and businesses could otherwise be expected around the OBs, due to construction and operation personnel desiring to live near the OBs.

Land uses in the Clovis area were analyzed in the AICUZ prepared for Cannon Air Force Base in August 1976. At that time 10 businesses, 22 homes, and 1 trailer park were identified as incompatible land uses in the vicinity of the airfield. The AICUZ recommended that the City of Clovis and Curry County utilize the CUD analysis in their long-range planning procedures. More recent data are not available to appraise whether the conflicts have been rectified, although Clovis is in the process of revising its general plan.

Changes in land ownership as a result of the AICUZ studies are difficult to forecast until the specific AICUZ studies are prepared. Areas that would be purchased under all situations would include the OB sites and the clear zones adjacent to the airfields. Further changes in land ownership adjacent to operating zones may occur through easement purchases, in-fee purchases, or property rights exchanges if land use designations for future development in the CUD areas would allow incompatible development. The Air Force seeks to minimize land use conflicts and impacts upon future residents in areas around OBs. The increased noise and accident potential around the airfields may act to depress land residential values that, under different circumstances, would increase because of the growth in the area.

U.S. Forest Service Planning (2.1.2.3)

Long-range planning by the U.S. Forest Service (USFS) is called for under the Resources Planning Act and National Forest Management Act (RPA-NFMA) to

ensure the nation has an adequate supply of forest and range resources, while continuing to maintain the quality of the environment. The Code of Federal Regulations (36 C.F.R., Part 219) sets the national direction for planning and management for natural resources on a national forest system level. The rules and policies stated there stipulate the principles by which all levels of national forest land and resource management planning will be based. Among these principles are coordination with the land and resource planning efforts of other federal agencies, state and local governments, Indian tribes, and adjacent private landowners; a systematic, interdisciplinary approach to ensure coordination and integration of planning activities for multiple-use management; early and frequent public participation; and a responsiveness to changing conditions in the land and changing social and economic demands of the public. The following sections highlight the various levels of planning activities used by the USFS; the nature of local demands upon national forest resources, and anticipated M-X-induced impacts upon national forest plans.

The major levels of planning for the national forests are national, regional, forest, and local (district). The purpose of the Intermountain Region Plan (Draft, July 1981) is to provide broad planning direction, develop standards and guidelines, and distribute the region's share of the 1980 Resources Planning Act (RPA) Program targets to the national forests of the region. Of the eighteen forests in the Intermountain Region, Toiyabe and Humboldt in Nevada, and Fishlake and Dixie in Utah will be the most affected by M-X.

Each of the national forests districts generates its own management plan from an analysis of supplies and demands upon forest resources, and from data collected and plans made on the local district level. The management plans include a reasonable range of alternatives both above and below the RPA program levels. The emphasis in the plans is on how the forest can best be used and managed to meet future demands.

Local plans, by collecting and integrating basic data on land potentials, inventories, and problems, become the basic building blocks for planning on higher levels. An estimation of the cost of implementation is part of each plan. However, the actual funding and workforce made available for implementation is dependent upon the federal budgeting and appropriation process. While some district level plans have been completed, the current regional planning effort is mostly in an early data collection phase. Completion of all forest-wide plans is expected in 1983.

Community ties to the national forests and the extent to which local, social, and economic considerations influence the resource management of those lands is an issue of concern for the region under study. Utah and Nevada are characterized by an urban-rural dichotomy. The larger urban centers have diverse economies which, except for recreation, are not dependent upon local national forest resources, while the smaller communities historically have tended to remain much more dependent upon them both economically and socially.

The primarily agricultural orientation of the past is shifting, as popular recreation demands and commodity production take precedence in the national forests. Recent energy, mineral, and industrial development has altered the size and composition of the local population, as well. USFS forest planning now seeks a better awareness of changes in the makeup of the population in the region beyond

forest boundaries, so that a realistic groundwork for future action can be set and future management options be kept open.

The draft Forest Service Intermountain Regional Plan identifies M-X as a major impacting influence on a number of resource categories. Demands for developed recreation sites will undoubtedly increase, but the Forest and Rangeland Renewable Resources Planning Act stresses dispersed, over developed, recreation, and it is doubtful whether funds for construction of additional developed recreation sites would be forthcoming. Some district-level off road vehicle (ORV) plans would have to be heavily revised with new restrictions made; the monitoring and enforcement of which will be difficult with present law enforcement resources. The proper protection of threatened or endangered species, the enforcement of hunting regulations, fuel wood, the management of christmas tree cutting, and pinyon nut gathering, will all be extremely difficult to enforce as present forest service funding remains unknown. These areas are indicative of the new directions in planning and funding which the forest service will have to increasingly emphasize if it is to cope with the complexities that will accompany the M-X project. See ETR-41 "Recreation and Significant National Areas" for more on recreation-planning activities in national forests.

STATE PLANS AND POLICIES (2.1.3)

None of the states associated with the M-X Proposed Action or its alternatives, are directly involved in land use planning or the application of land use regulations except on state owned land. The states' roles have existed in the area of legislation that would permit planning at regional and local levels and would provide for county and community level regulations pertaining to zoning. Pertinent land use planning legislation of the four states, plus policies, where available, relating to state lands are summarized and reviewed below. Tables are also presented which show the status of adoption of master plans, zoning ordinances, and subdivision regulations by the counties and communities which may be located within an M-X deployment region, or which may be expected to be impacted by the project.

Land Use Planning Legislation (2.1.3.1)

Nevada (2.1.3.1.1)

Land use planning at the municipal, county, and regional levels in Nevada is performed under the guidance of state legislation. Local planning efforts utilize the state's law enforcement powers in adopting and implementing such traditional land use planning tools as master plans, zoning ordinances, and subdivision ordinances. Plans and ordinances are required of the local and regional levels of government as part of the state statutes. Relevant portions of these requirements for master plans, zoning, and subdivision ordinances are described below.

Master plans covering the long-range physical development of cities, counties, or regions must be prepared and adopted by governing bodies of the state. Enforcement of this requirement is handled through a provision of the statutes which permits the governor to impose land use plans and zoning ordinances upon any area of the state which has not adopted such plans and ordinances.

The topics or elements to be included in the master plan are determined by the governing body from a list of 14 provided in the state statutes. Clark County, due

Table 2.1.3.1-1. Status of adoption of plans and ordinances in Nevada.

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Clark County	1974	Under revision	1974		1962	
Las Vegas	1972	Under revision (1982)	1978		1978	Major amendment in 1980
North Las Vegas	1974	Under revision	1979		ca 1975	
Henderson	1969	Under revision	1977		1979	
Boulder City	1981		1978		1976	
Lincoln County	1970	Under revision (December 1981)	N/A	Will be revised in 1982	N/A	Will be revised in 1982
Caliente	1975	Under revision (December 1981)	ca 1975		No ordinance	
Nye County	1971	Under revision (1982)	No ordinance	Under preparation (August 1981)	1966	Under revision (August 1981)
Gabbs	1980		1981		1981	
White Pine County	1970	Plan prepared in 1976 but not adopted	ca 1970		1971	
Ely	1970	Plan prepared in 1976 but not adopted	1970		1980	

T5016/9-21-21/F

N/A = Not Available

Source: Telephone communications with local officials, January-August, 1981.

to its large population, is required to adopt a conservation plan and a population plan. The remaining counties and cities in the Nevada study area can adopt, as needed, any of the following elements: community design, economic, housing, land use, public buildings, services, and facilities, recreation, seismic safety, solid waste disposal, streets and highways, traffic, and transportation. The land use, housing, population, economic, recreation, and transportation elements are some of the more commonly adopted elements.

Following development and adoption of the master plan, the individual jurisdictions are left to determine their own most practical means for putting the plan into effect. Zoning ordinances are a traditional planning tool used for implementation and as such the statutes require that "zoning regulations shall be adopted in accordance with the master plan for land use." This required consistency acts to reduce the number and magnitude of conflicts in land use designations and densities that frequently occur between the implementing zoning ordinances and the long-range master plans.

The primary intent of zoning laws is to regulate land use and the construction and use of buildings (structures such as towers or bridges). The definition and delineation of the specific zones, uses, and requirements are delegated to the individual jurisdictions. The division of land, as distinguished from the use of land, is addressed in the state statutes under the categories of subdivisions, parcel maps, and division of land into large parcels. Subdivision ordinances (applying to divisions of five or more lots) must be enacted by the governing bodies of all cities and counties. General procedures for tentative and final tract map review and approval are provided by the statutes, as well as those to be followed when proposed subdivisions are within three miles of a city boundary. In the latter case the county planning commission is required to file a description of the proposed subdivision with the city and utilize the city's findings in the approval or denial of the subdivision. The two remaining types of land division procedures described in the statutes apply when parcels larger than 40 acres are divided or when land is divided in 4 or fewer parcels (parcel maps).

Table 2.1.3.1-1 summarizes the status of adoption of plans and ordinances for the Nevada communities and counties which could be affected by one or more of the proposed M-X system deployment alternatives.

Utah (2.1.3.1.2)

Powers to zone, prepare master plans, and establish planning commissions are granted to counties and municipalities in two separate sections of the Utah state statutes. While basically similar powers and responsibilities are granted in the two sections, those governing counties are discussed first, by a description of the differences in the provisions governing cities and towns.

Section 17, Chapter 27 of the Utah Code Annotated, grants the Boards of County Commissioners the power to provide for the physical development of the unincorporated territory within the county. The Board of County Commissioners can appoint a planning commission (seven members) with responsibility for preparing a master plan. The area covered by the master plan is the unincorporated territory of the county. In addition, incorporated areas may be included in the plan to the extent to which they are related to the planning of the unincorporated areas.

However, the portion of the plan covering any incorporated areas is not official unless adopted by the respective municipality. In preparing a plan, comprehensive surveys and studies must be undertaken of the existing conditions as well as of probable future growth. The plan has the purpose of guiding a coordinated and harmonious development of the county, which will promote the health, safety, order, and prosperity of the residents as well as efficiency and economy in the use of land for urbanization, industry, recreation, and agriculture. The master plan is composed of text and maps for the physical development of the unincorporated area, plus streets and highways, parks, airports, location of utilities, and extent of community centers and housing developments.

Zoning is also granted to the boards of county commissioners or their designate, the planning commission. The location and height of buildings, the maximum proportions of lot coverage, the densities of population, and the uses of land can be regulated by zoning districts as delineated by the adopted ordinance. Following adoption and implementation of zoning ordinances by the counties, individuals who are aggrieved by the ordinances may appeal their cases to a board of adjustment. The county commissioners are required to establish boards of adjustment and procedures for handling zoning appeals.

The county commissioners are also empowered to establish an official map of the county delineating the present and future highways, streets, parks, and public building sites. The official map, following adoption, becomes the guide with which all future expenditures of public funds must be consistent. The county commissioners may also adopt ordinances prohibiting the issuances of building permits for structures on land located in proposed streets indicated on the official map.

State involvement in the land use planning process at the county level is limited to an advisory role. Section 17-27-20j of the statutes requires that county planning commissions submit master plans and zoning ordinances to the state planning commission for review prior to final adoption. The state is limited to presenting comments and recommendations on the plans which are advisory and nonbinding on the planning commissions.

The statutes do not require counties to make the land use designations consistent between the master plans and the zoning ordinances. In other states, problems have arisen in situations where designations in the two documents are sufficiently disparate as to be ambiguous in the permitted uses of the land. Hence, present or prospective landowners are unsure of the activities which are permitted on their parcels. A second issue not included in the Utah statutes but found in the enabling legislation of many other states is deadlines for adoption of master plans and zoning ordinances. In the absence of such deadlines some Utah counties are currently adopting plans and ordinances for the first time. These counties are inexperienced in the administration of plans and ordinances and hence may be at a disadvantage in utilizing them to direct future growth and control development.

Cities and towns derive their power for planning and zoning from Section 10, Chapter 9 of the Utah Code Annotated. A significant difference between the responsibilities and power granted to municipalities and those granted to counties is the subject of conformity between municipal master plans and zoning. A clause in the Code states that zoning "regulations shall be made in conformance with a

Table 2.1.3.1-2. Status of adoption of plans and ordinances in Utah (Page 1 of 2).

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Beaver County	1972		1977		ca 1978	
Beaver City	No plan	Plan prepared in 1972 but not adopted	1974	Covers only portions of the city	1979	
Milford	1980		1979			
Minersville	1972		N/A	Under revision	N/A	Under revision
Iron County	1973		1962			
Cedar City	1979		1972	Under revision	1972	Under revision
Brian Head	1980		No ordinance			Under revision
Enoch	1973	Under revision (September 1981)	ca 1970	Under revision (September 1981)	ca 1970	Under revision (September 1981)
Kanarraville	1973					
Paragonah	1973		ca 1975			
Parowan	1973	Under revision (1981)	1981	Under revision (1981)	1981	Under revision (1981)
Juab County	No plan	Under development (Fall 1981)	1977	Under revision (Spring 1982)	1977	Under revision (Spring 1982)
Eureka	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	No ordinance	Under development (Spring 1982)
Levan	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	No ordinance	Under development (Spring 1982)
Mona	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	1974	Under revision (Spring 1982)
Nephi	No plan	Under development (Fall 1981)	1979	Under revision (Spring 1982)	1980	Under revision (Spring 1982)

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Table 2.1.3.1-2. Status of adoption of plans and ordinances in Utah (Page 2 of 2).

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Millard County	1970	Under revision (1981)	1969	Under revision (1981)	1970	Under revision (1981)
Delta	1981		ca 1970	Under revision (1981)	ca 1972	Under revision (1981)
Fillmore	1981		1974	Under revision (1981)	1974	Under revision (1981)
Hinckley	1981		No ordinance	Under development (1981)	1981	
Holden	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Kanosh	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Leamington	1981	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Lynndyl	No plan	Under development (1981)	1981		No ordinance	Under development (1981)
Meadow	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Oak City	1981		No ordinance	Under development (1981)	No ordinance	Under development (1981)
Scipio	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Washington County	1972	Under revision (Late 1981)	1973	Under revision (Late 1981)	N/A	
Enterprise	1981			(1981)		(1981)
Hurricane	1979	Revised in 1980	1979	Under revision	1977	Under revision
St. George	1980		1981		1981	

T5015/10-2-81

N/A = Not Available

Source: Telephone communications with local officials, January-August, 1981.

comprehensive plan" designed to promote the general welfare of the community. Such a requirement goes toward avoiding uncertainties and ambiguities in the permitted uses of the land. A second difference in the Code is that municipalities may include areas outside of the municipal limits in their master plans if, in the planning commission's judgment, the areas bear relation to the planning of the municipality. In such external areas any actions taken shall be with the concurrence of the county or other municipality concerned. A third difference in the municipal requirements is the absence of a review of municipal master plan or zoning ordinances by state agencies.

The division of land into lots is addressed in a separate portion of the Utah Code Annotated which is applicable to both counties and municipalities. Section 57-5-1 states that "it shall be lawful for any owner of land to lay out and plat land into blocks, lots, streets, alleys, and public places." The initial step in platting (subdividing) is making a map which shows the streets and parcels of the new subdivision. This map needs to be approved by either the governing body of the county or municipality before it can be recorded, making the land division final. The county, city, or town, through its planning commission, has the responsibility for ensuring that the plat is consistent with the official map and meets the minimum lot area requirements in the zoning code. Following the final approval of the division of the land, the owner is free to sell the parcels to other individuals for development as per the applicable master plan and zoning ordinance regulations.

Table 2.1.3.1-2 summarizes the status of adoption of local plans and related ordinances for areas which could be affected by one or more of the M-X system deployment area alternatives.

New Mexico (2.1.3.1.3)

The power for land use regulation, such as zoning and subdivision ordinances, is vested in the state through its general police powers. Municipalities and counties are delegated this power through state legislation. In New Mexico several statutes are involved in transmitting this power to the local jurisdictions:

Chapter	3-19	Planning and Platting
	3-20	Subdivisions; Planning and Platting
	3-21	Zoning Regulations
	3-56	Regional Planning Act
	4-57	County Planning Commission
	15-6	State Planning Act
	47-5	Land Subdivision Act
	47-6	New Mexico Subdivision Act

The following discussion outlines the general powers and requirements that are included in the above statutes. For the sake of brevity, the statutes addressing municipal responsibilities for planning commissions, master plans, and zoning are described, followed by notations of the differences in the statutes addressing county responsibilities. The section concludes with a review of the Regional Planning Act and the State Planning Act.

Under Chapter 3, Article 19, municipalities are granted the power to establish a planning commission with the authority to plot, plan, and adopt a master plan.

The planning and platting responsibilities of municipalities (such as Clovis with a 1980 U.S. Census population of 31,194) with populations greater than 25,000, cover the city and territory within five miles of its boundaries. Smaller cities with populations less than 25,000 (e.g., Portales) have platting and planning control over the municipal area and territory within three miles of the boundaries.

The master plan prepared and adopted by the planning commission is for the physical development of the municipality. The master plan may also include areas within the platting and planning jurisdiction of the municipality if, in the planning commission's judgment, they bear a relationship to the planning of the municipality. The planning commission is required to make comprehensive surveys of existing conditions and of probable future growth in deriving the master plan. The purpose of the master plan is the harmonious development of the municipality in accordance with future needs, health, safety, morals, convenience, and prosperity. The location of streets, parks, schools, utilities, and community centers may be included in the plan for the community's physical development. Adoption of the master plan involves only the approval of the planning commission, unlike many other states where approval of the governing body is also necessary. Following the adoption, any proposals to change or modify parks, streets, public buildings or utilities requires planning commission approval.

Zoning is carried out under Chapter 3, Article 21, which grants counties and municipalities the power to zone. Parameters such as building size, use of land, and density of population can be regulated through zoning districts in the county or municipality. The county is granted power to zone all areas that are not within the corporate limits, while municipalities are allowed to zone, in conjunction with the county, areas outside of their boundaries under a clause called extraterritorial zoning. The distance to which the municipalities are permitted to exercise their extraterritorial zoning powers is dependent upon the population of the municipality. Cities with populations greater than 250,000 have extraterritorial zoning powers within three miles of their city boundaries, while the distances are two and one mile for municipalities with populations between 20,000 to 250,000 and 1,500 to 20,000, respectively. Those municipalities with less than 1,500 people do not have extraterritorial zoning powers. The procedure for exercising the extraterritorial zoning requires the county and municipality to enter into an agreement providing for the zoning of the subject area. In the absence of such an agreement a petition may be filed by residents forcing the county and municipality to arrive at an agreement.

The state statutes require zoning regulations adopted by the county or municipality to be in accordance with the master plan. Administration of the zoning ordinance may be handled by the planning commission, through the establishment of a zoning commission, or by the governing body itself.

Table 2.1.3.1-3 summarizes the status of adoption of local plans and ordinances for those areas in New Mexico which could be affected by M-X system deployment Alternatives 7 or 8.

Texas (2.1.3.1.4)

The power to annex, zone, and subdivide land, and for joint and regional planning is given to municipal governments through state legislation.

Table 2.1.3.1-3. Status of adoption of plans and ordinances in New Mexico.

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes	Date Adopted	Notes	Date Adopted	Notes
Chaves County	1973		1980		1973	Amended in 1978
Dexter	1980	Brief community Development Profile	N/A		N/A	
Hagerman	1974	Brief community "Plan and Profile"	No ordinance		Yes	Date unknown
Lake Arthur	1976	Brief community "Plan and Profile"	No ordinance		No ordinance	
Roswell	1961	Update planned	1940	Last major amendment in Jan., 1980	1954	Revised in 1957
Curry County	No plan		No ordinance		1976	
Clovis	1969		Yes	Date unknown	N/A	
Grady	No plan		No ordinance		No ordinance	
Melrose	1975	Brief community "Development Statement"	N/A		N/A	
Texico	No plan		1964		No ordinance	
DeBaca County	N/A		N/A		N/A	
Fort Sumner	1970		1970		1970	
Harding County	No plan		No ordinance		1975	
Mosquero	No plan		No ordinance		No ordinance	
Roy	No plan		No ordinance		No ordinance	
Quay County	No plan		No ordinance		1976	
Logan	N/A		1975		1980	
San Jon	No plan		1974		No ordinance	
Tucumcari	1970	Update submitted December, 1980	1975		1975	
Roosevelt County	N/A		N/A		N/A	
Causey	No plan		No ordinance		No ordinance	
Dora	No plan		No ordinance		No ordinance	
Elida	No plan		No ordinance		No ordinance	
Floyd	No plan		No ordinance		No ordinance	
Portales	1971	Update expected in near future	1973		1978	
Union County	N/A		N/A		N/A	
Clayton	No plan		No ordinance		No ordinance	

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N/A - Not available

Source: Telephone communications with local officials, January-August 1981.

Article 970a provides legislation that gives a municipality annexation rights. With these rights extraterritorial jurisdiction is included. These powers allow municipalities to have control of land outside of its corporate boundaries. This extension of power ranges from 1/2 mile for cities of 5,000 or less in population to 5 miles for cities of 100,000 and over.

Areas within the extraterritorial jurisdiction are nontaxable by the city. Subdivision regulations can be extended into the area, but violations can only be enforced by district court proceedings.

Municipalities do have the authority to designate any area in the jurisdiction as an industrial district and may provide municipal fire protection in the district. No city may be incorporated within the area of the extraterritorial jurisdiction of any other city without the written consent of the governing body of such city. In addition, no political subdivision having as one of its purposes the supplying of fresh water for domestic or commercial uses, or the furnishing of sanitary sewer services, may be created within the area of the extraterritorial jurisdiction of any city without the written consent of such city.

Article 974a provides legislation for plotting and recording subdivisions or additions to a municipality. Any tract of land to be divided into two or more parts must be described by metes and bounds and be filed and recorded with the county clerk in which the land lies. The City Planning Commission must approve the plot after a public hearing and prior to recording. If no planning commission exists then the governing body must approve the plot. The plot must conform to city plans in existence at the time of filing.

Vacations of recorded plots are also provided by state enabling legislation. A vacation plot may be requested with the consent of all owners within the area of the request. It must be approved by the planning commission or governing body which has jurisdiction.

The legislative bodies of cities and incorporated villages are given the power to zone land by dividing the city into districts which require structures upon it.

Municipalities are given the authority to appoint a body called the zoning commission. The duties of the body are to recommend the boundaries of the various districts and appropriate regulations to be enforced therein. The governing body of the jurisdiction is also enabled to appoint a Board of Adjustment to make special exceptions to the terms of the zoning ordinance.

State legislation addresses planning from a joint municipal standpoint as well as a Regional Planning Commission. Municipalities are granted authority to expend funds and participate in a joint planning commission. The commission would be established to address planning for the growth and development of such municipalities which are located in the same sphere of influence of such a planning commission.

The Regional Planning Commission Act allows cities to join and cooperate to improve the quality of life as it relates to physical, economic, and human resource development.

Table 2.1.3.1-4. Status of adoption of plans and ordinances in Texas (Page 1 of 2).

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Bailey County						
Enochs	N/A		N/A		N/A	
Muleshoe	1968	Being updated	No ordinance		1970	
Castro County						
Dimmitt	No plan		1969			
Hart	No plan		No ordinance		1980	
Nazareth	No plan		No ordinance		No ordinance	
Cochran County						
Bledsoe	No plan		No ordinance		No ordinance	
Morton City	No plan		No ordinance		No ordinance	
Whiteface	No plan		No ordinance		No ordinance	
Dallam County						
Dalhart	1965		1962		Yes	Date unknown
Texline	No plan	(May, 1981)	No ordinance		No ordinance	
Deaf Smith County						
Hereford	No plan		1975		1960	
Hale County						
Abernathy	No plan		No ordinance		No ordinance	
Edmonson	No plan		No ordinance		No ordinance	Use county regulations
Hale Center	No plan		1965		No ordinance	
Petersburg	No plan		No ordinance		No ordinance	
Plainview	1973		1975		1978	
Hartley County						
Channing	No plan		No ordinance		No ordinance	
Dalhart	1965		Yes	Date unknown	Yes	Date Unknown
Hartley	No plan		No ordinance		No ordinance	
Hockley County						
Anton	No plan		No ordinance		No ordinance	
Levelland	1978	Housing, restrictions updated	1956	Being updated	1956	Being updated
Ropesville	No plan		No ordinance		No ordinance	
Smyer	No plan		No ordinance		No ordinance	
Sundown	Yes	Date unknown	Yes	Date unknown	Yes	Date unknown

T5262/10-2-81/F

Source: Telephone communications with local officials, January-August 1981.

Table 2.1.3.1-4. Status of adoption of plans and ordinances in Texas (Page 2 of 2).

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Lamb County						
Amherst	No plan		No ordinance		No ordinance	
Earth	No plan		No ordinance		No ordinance	
Littlefield	1977		No ordinance		Yes	Date unknown
Olton	No plan		No ordinance		Yes	Date unknown
Springlake	No plan		No ordinance		No ordinance	
Sudan	No plan		No ordinance		No ordinance	
Lubbock County						
Lubbock	1974	Pop/Economics updated	1976		1975	
Moore County						
Cactus	No plan		No ordinance		No ordinance	
Dumas	1970		1967		1970	
Sunray	No plan		1961		No ordinance	
Oldham						
Adrian	N/A		N/A		N/A	
Wilderado	No plan		No ordinance		No ordinance	
Vega	No plan		No ordinance		No ordinance	
Parmer County						
Bovina	No plan		Yes	Date unknown	No ordinance	
Farwell	1976		1976		N/A	
Friona	1975		1955		1955	
Potter County						
Amarillo	1975	Updated on a regular basis	1975	Updated on a regular basis	1975	Updated on a regular basis
Randall County						
Amarillo	1975	Updated on a regular basis	1975	Updated on a regular basis	1975	Updated on a regular basis
Sherman County						
Stratford	No plan		1963		No ordinance	
Swisher County						
Happy	No plan		No ordinance		No ordinance	
Kress	No plan		1954		No ordinance	
Tulia	No plan		1971		Yes	Date unknown

T5262/10-2-81/F

Source: Telephone communications with local officials, January-August, 1981.

Table 2.1.3.1-4 summarizes the status of adoption of plans and ordinances for local Texas units of government located within the area potentially affected by either Alternative 7 or 8 for M-X system deployment.

State Land Policies (2.1.3.2)

Nevada (2.1.3.2.1)

The state-owned lands in Nevada consist of state parks, the Las Vegas and Reno campuses of the University of Nevada, the facilities of the various state government agencies, and state highway rights of way. This land amounts to about 0.2 percent of the total land of the state.

Nearly half of all state-owned land consists of state parks. Some of these lands of the state park system are Bureau of Reclamation withdrawals, or are made available through Fish and Game or Special Use Permits of the U.S. Forest Service. Further discussion of these lands in relation to M-X can be found in ETR-41, "Recreation and Significant Natural Areas."

Currently there is no comprehensive inventory of the Nevada state lands. Up until 1972 those agencies using a particular parcel of state land held title to it and administered it themselves. These lands have since been transferred to the Division of State Lands (Department of Conservation and Natural Resources) for management. A comprehensive inventory of these lands is now being compiled by that agency.

Utah (2.1.3.2.2)

The state lands are essentially school trust lands generally consisting of four sections out of every township which were granted by the Congress to Utah as part of its statehood. These are held in trust, to be administered for the benefit of the state schools. Some larger blocks of state land occur due to selection of public lands in lieu of those lands which were already transferred or otherwise reserved, such as national forests, parks, and monuments at the time of statehood. In addition to these are the sovereign state lands which include the beds of lakes and navigable rivers. State lands are not considered to conflict with urbanized growth requirements associted with M-X. Policies and procedures associated with Utah state lands are summarized below.

Management Organizations (2.1.3.2.2.1)

The division of state lands of the Utah Department of Natural Resources is charged with the leasing of state lands to the "highest and best use" so as to maximize revenues to the schools. The State Resource Development Coordinating Committee acts to furnish input and comment on those proposed uses stated in lease applications, but it is the State Land Board (for which the Division of State Lands is the staff function) which makes policy.

The State Resource Development Coordinating Committee, meeting twice a month, is comprised of personnel from other state agencies, the counties, and nonvoting federal agency representatives. The committee reviews any proposed uses for state-land resources and assesses the respective environmental consequences.

Planning and Leases (2.1.3.2.2.2)

There is no formal "classification" process similar to that of the BLM for Utah state lands. The rights to use state land for a given purpose are gained through leases, the applications for which are handled on a case-by-case basis for each parcel of land. Land use plans are very limited, existing mostly in the form of the official general use categories for which lease requests are processed. These designations are usually given to land parcels upon receipt of a lease application. The compatibility of the proposed use with the land is then assessed, aided by input from the State Resource Development Coordinating Committee. All local zoning is considered, and before land use leases are finalized, they must be approved by the relevant county area association of governments. Local, state, and federal plans and objectives also must be considered.

Nearly nine-tenths of the Utah state lands are leased for grazing purposes. Those sections with BLM grazing allotments are usually leased to the rancher holding the permit for the federal land. Conditions of the renewable ten year leases are based upon the carrying capacity designations of the surrounding BLM lands. Grazing leases on state lands are also available to those ranchers who may be distant from BLM allotments.

"Special use" leases are surface leases which allow for any activity other than grazing. Agricultural, commercial, and industrial uses fall into this category. These leases may also be obtained for specialized activity such as ski resorts and summer homes. This type of lease has a maximum time span of 51 years and is renewable.

The holder of a state-lands mineral lease pays a fee of one dollar per acre per year for the ten year life of the lease. This entitles the lessee to prospect for, and produce minerals, using the land as is necessary to accomplish those ends. Royalties on any production must be paid to the state.

Oil and gas leases are similar in form to the mineral type and are available for those areas designated by the Division of State Lands as open for oil and gas exploration. Many mineral, oil, and gas leases exist in the M-X impacts area.

Disputes and Conflicting Uses (2.1.3.2.2.3)

When leaseholders make conflicting demands upon the land, accommodation and compromise are strongly encouraged to avoid state intervention. This is facilitated by the fact that the State Land Board is charged with leasing the state lands for the "highest and best use," which is defined in Utah as that use which generates the maximum revenue for the state schools. The board may terminate any state land use lease outright, with unresolved use conflicts decided in favor of the "highest and best use." Those with weaker claims to the land (often ranchers) risk termination of their leases should no agreement between parties be reached. Holders of leases may be compensated by those other parties wishing to use portions of their land.

2.2 LAND AVAILABLE FOR COMMUNITY GROWTH

The availability of land for community growth is largely a function of physical characteristics, jurisdictional control, and ownership. These three factors are often

interrelated. For example, certain physical factors such as steep slopes or flood prone areas are not suited for most urban development. Depending on a local specific situation, local regulations and ownership patterns may inhibit development in such areas, or, at the other extreme, may actually induce growth in these areas.

For privately owned lands, the primary determinate of availability is economic in nature. This assumes that a land owner will sell all or part of his land at some price. The existence of a market, then, is simply based on whether a buyer or developer is willing to pay that price. This in turn is related to the economic value of the intended land use. Economics have a much lower direct influence on the availability of public lands. Transfer of public lands to urban use is more directly related to need and to compatibility of land uses. Procedures for the transfer of public land are summarized in Section 2.2.1.

Jurisdictional factors relate primarily to zoning and subdivision controls, as well as, the availability of urban services to support development. The legal basis for an incorporated community to expand its jurisdictional limits is provided by state annexation laws. These laws are reviewed in Section 2.2.2 for the states of Nevada, Utah, Texas, and New Mexico.

FLPMA AND BLM PROCEDURES FOR TRANSFER OF LAND (2.2.1)

Disposition of federal lands is provided for under Title II of the Federal Land Policy and Management Act of 1976 (FLPMA). Methods of releasing federal land for community expansion and urban development include sales, exchanges, and leases.

Sales (2.2.1.1)

Land sales are the typical method by which land is released for community expansion since cities generally do not have sufficient quantities of land for exchanges. Tracts of public lands may be sold as a result of land use planning, which determines if they can be released from federal ownership. The Secretary of the Interior must determine that the sale of such land meets the following criteria:

1. The tract, due to its location or other circumstances, is difficult and uneconomic to manage as federal land and is not suitable for management by other federal departments or agencies; or

2. The tract is no longer required for its original purpose or other federal purpose; or

3. The tract can be disposed of to serve important public objectives such as community expansion or economic development.

The Secretary shall determine tract sizes and conduct competitive bidding. Sealed bids made for less than fair market value are not considered. To assure equitable distribution of federal lands, the Secretary may sell lands with modified competitive bidding or without competitive bidding.

FLPMA also permits the Secretary of Agriculture to sell land from the National Forest System to an adjacent community when certain conditions are met. The stipulations state that the land must serve indigenous community objectives

that outweigh the public objectives and value realized by maintaining the land in federal ownership. The land 1) must be adjacent or contiguous to the community, 2) may not exceed 640 acres in area, and 3) may not be sold for less than its fair market value. The Secretary of Agriculture may also stipulate that ordinances be enacted, maintained and enforced by the local unit of government which would assure that use of the land would not conflict with adjacent National Forest System lands.

Exchanges (2.2.1.2)

Public lands may be transferred by exchange for nonfederal lands in order to satisfy a variety of needs, including community expansion. The exchange must be made on an equal value basis and any value difference may not exceed 25 percent of the total land value. Land exchanges may not cross state boundaries. This method is not typically used for community expansion purposes since municipalities rarely own tracts of land sufficiently large to be considered for exchange. The option of a three-way exchange involving a third party in addition to BLM and a municipality is contrary to existing Bureau policy.

Leases (2.2.1.3)

In addition, 43 CFR Part 2920, the implementing regulation for Section 302 of FLPMA authorizes residential, agricultural, industrial, and commercial uses which cannot be authorized under Title V of FLPMA. Leases, permits, and easements can be issued for public lands under these regulations. The authorized officer of the BLM may issue the lease, permit, or easement once it is determined that the proposed use is in conformance with BLM plans, policies, and programs, local zoning ordinances, and any other requirements. In addition, it must also be determined that issuance of the permit will not cause appreciable damage or disturbance to the public lands, their resources, or improvements.

STATE ANNEXATION LAWS (2.2.2)

Nevada (2.2.2.1)

Chapter 268 of the Nevada Revised Statutes details the process by which land can be annexed to a city. The initial sections of the chapter outline the creation of an annexation commission in each county. This commission has the responsibility for reviewing annexation proposals and establishing procedures for evaluation of annexation proposals. The commission is composed of representatives from each of the cities within the county and from the Board of County Commissioners. In situations where this results in an even number of commissioners, a local property owner is added to the commission. The annexation process can be initiated by one of two actions; either a majority of the property owners of an area lying contiguous to a city may request annexation, or the governing body of a city may request the annexation of an adjacent tract of land. Following receipt of the request the annexation commission is required to hold hearings on the proposal, as well as solicit input from the county or regional planning commission. The commission is also required to consider the master plan of the city within seven mi of the proposal. The statutes provide a list of socioeconomic issues that must be evaluated relative to the proposal. The issues included are population, land use, topography, future growth, community services, government structures, plus any determination by BLM

that the land is suitable for residential, commercial, or industrial development, or will be opened to private acquisition. Based upon this information the commission makes a decision to approve, approve with condition, or deny the annexation. If the choice is denial, a subsequent annexation proposal for the same area is not allowed for at least one year. As part of the hearing, property owners in the area of the proposed annexation can request that the annexation be denied. If a majority of the property owners, either in number or in assessed valuation, object to the annexation, denial is required.

Utah (2.2.2.2)

Utah legislation provides for annexation under Chapter 2, "Cities and Towns"; Part 4, "Extension of Corporate Limits - Local Boundary Commissions"; and Chapter 3, "Extension of Corporate Limits" of the Utah Code Annotated.

As a basis for policy on annexation, the state legislature has stated that sound urban development is essential to continued economic development and that municipalities are created to provide urban government services that protect the public health, safety, and welfare.

State legislation states that annexation may be initiated by a municipality or by petition of landowners. Before annexing unincorporated territory having more than five acres, a city must adopt a policy declaration. Based upon the annexation standards that agree with feasible and practicable areas projected for municipal expansion, a municipality must declare specific criteria for which the annexation should be approved.

Public hearings must be held in the annexation process before the policy declaration is adopted. The draft policy declaration must be made available for public review prior to the hearing.

Standards for annexation are set forth in the following legislation:

1. Land proposed to be annexed must be contiguous to the municipality;

2. The land must be within an area projected for municipal expansion;

3. The land must not be included within the boundaries of another municipality;

4. Annexation shall not create unincorporated islands within the municipal boundaries unless it can be shown that it is in the best public interest; and

5. If the area is urbanized, the taxes lost to the area shall not significantly exceed the actual delivery cost of services assumed by the annexing municipality.

State legislation provides for a local boundary commission to be established in each county. The members range from five to seven members and represent the municipality, the county, and the general public in each county.

The principal duty of the boundary commission is to settle protests of boundary changes for municipalities involved. The commission shall hold public hearings and review and approve, or disapprove with or without conditions, wholly or in part, proposals for boundary changes of a local entity.

State legislation also provides that urban development shall not be approved in the unincorporated area within one-half mi of a municipality if said municipality is willing to annex the area, and the area falls within planned limits of expansion, i.e., the area must be annexed as a condition of development. In some cases, though, legal or factual barriers may prevent annexation. Under these conditions, though, development may occur after a period of 12 months wherein the property owner made diligent efforts to bring about the annexation. Urban development beyond one-half mi of a municipality may be restricted or an impact statement required when agreed to in an interlocal agreement, under the provision of the Interlocal Co-operation Act.

New Mexico (2.2.2.3)

Annexation procedures in New Mexico are prescribed by Chapter 3, Article 7, of the New Mexico Statutes Annotated. Under this article, three methods are available for the annexation of territory to a municipality. The first of these is termed the arbitration method and is initiated with the municipality desiring to annex adjacent territory passing a resolution stating its intention. The county is required to establish a board of arbitration composed of three members elected by the residents of the subject territory, three members appointed by the municipality and a seventh member selected by the other six members. The board of arbitration reviews the annexation proposal and makes its decision based upon the availability of the benefits of municipal government to the subject territory. If the board's decision is against annexation the municipality is precluded from passing any further resolution of annexation for the territory for two years.

The second method utilizes a three member municipal boundary commission appointed by the governor. The procedure is initiated by either a municipality, or a majority of landowners, in the territory proposed for annexation filing a petition with the commission. The commission holds meetings on the proposal to determine if the territory is contiguous to the municipality and if municipal services can be provided to the territory. The commission is granted the latitude to approve the annexation in its entirety, to approve annexation of only a portion of the territory, or to disapprove the proposal. The third technique for annexation relies upon the owners of a majority of land in the area proposed for annexation to file a petition with the governing body of the contiguous municipality. The municipality has the option of accepting or rejecting the petition and must pass an ordinance expressing its desire.

Texas (2.2.2.4)

Annexation of unincorporated land is provided by Article 970A of Revised Civil Statutes of the State of Texas. The land owners and voters of a tract of land may submit a written petition to the city involved requesting annexation. Before any city may institute annexation proceedings, the governing body of the city shall provide an opportunity for all interested persons to be heard at a public hearing. The notice of public hearing must be published in a newspaper having circulation in the city and territory to be annexed.

Cities are allowed to annex land only within the confines of their extraterritorial jurisdiction, except in cases of city-owned property (e.g., reservations, airports). A city is limited to annexing only 10 percent of its unincorporated area in any one calendar year. However, certain exclusions to this 10 percent rule relate to city, state, or federal land used for public purposes, and land petitioned for annexation by a 50 percent or more margin of voters and/or owners. The 10 percent rule may be carried over into subsequent years but shall not exceed 30 percent of the city's total area in any one calendar year.

2.3 REVIEW OF LOCAL LAND USES AND CONSTRAINTS

Summarized below on a community-by-community basis is a description of the current land uses, master plans, constraints to land development, and planning programs of the local jurisdictions. This baseline description is followed by a review of local plans and policies and federal land ownership patterns with respect to special urbanization problems and needs created by the M-X project. Where conflicts appear to exist, they are generally related more to the rapid rate of urbanization than to the overall scale of growth. The temporary nature of a rapid urban growth also presents potential conflicts with some local policies and goals. Only those goals and policies which would appear to relate to development impacts caused by M-X are presented. This review is limited to those planning documents which were available for inspection. In most cases these plans were prepared prior to knowledge of the potential for M-X system deployment. Several communities are currently preparing plans or making updates in response not only to M-X but also to the potential impacts of mining and energy development.

Potential constraints caused by land availability are discussed only for Nevada and Utah communities, these being states where public land ownership predominates.

NEVADA COMMUNITIES (2.3.1)

The current status of the master plans, zoning ordinances, and subdivision ordinances in the Nevada deployment region are presented in Table 2.1.3.1-1. Peak-year and long-term land requirements for the Nevada/Utah counties is tabulated in Table 2.3.1-1.

Las Vegas Valley, Nevada (2.3.1.1)

Urbanized areas in Clark County, Nevada are dominated by the Las Vegas metropolitan area located in the Las Vegas Valley. Clark County has jurisdiction over the majority of the Las Vegas Valley land area while the cities of Las Vegas, North Las Vegas, and Henderson administer smaller land areas. Figure 2.3.1.1-1 is a schematic showing the relative locations of the three cities surrounded by the unincorporated areas. Boulder City lies outside of the Las Vegas Valley to the east of Henderson.

Existing land use data in the Las Vegas Valley were collected in 1979 and updated in a 1980 study by the Clark County Department of Comprehensive Planning. These data are displayed graphically in Figure 2.3.1.1-2. Comparison between Figures 2.3.1.1-1 and 2.3.1.1-2 shows that the urban development extends outward from the intersection of I-15 and US-95. The largest concentrations of urbanization are found in the city of Las Vegas, and in the county between Las Vegas and Henderson. The Las Vegas Valley covers approximately 553,000 acres, of

Table 2.3.1-1. Urban land requirements in the Nevada/Utah region by county (Page 1 of 2).

Alternative	Acres Required Peak Year	Acres Required Long Term	Acres Required Peak Year	Acres Required Long Term
	Nevada/Utah Region		Clark Co., Nevada	
Proposed Action	13,544	2,073	4,923	770
1	13,648	2,069	4,295	770
2	13,444	1,774	4,878	768
3	13,313	2,372	1,333	10
4	13,696	2,156	3,814	536
5	13,148	2,412	3,203	10
6	13,516	2,187	3,767	536
8A	8,416	982	4,292	817
	Eureka Co., Nevada		Lincoln Co., Nevada	
Proposed Action	1,152	0	1,462	148
1	1,152	0	1,541	308
2	1,152	0	1,462	148
3	1,061	0	1,060	207
4	1,152	0	1,605	317
5	1,061	0	761	0
6	1,152	0	1,389	107
8A	101	0	1,171	159
	Nye Co., Nevada		White Pine Co., Nevada	
Proposed Action	2,769	0	1,124	0
1	2,769	0	1,124	0
2	2,769	0	1,124	0
3	2,348	29	3,476	854
4	2,769	0	1,124	0
5	2,348	29	3,476	854
6	2,769	0	1,124	0
8A	1,357	0	123	0

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Table 2.3.1-1. Urban land requirements in the Nevada/Utah region by county (Page 2 of 2).

Alternative	Acres Required Peak Year	Acres Required Long Term	Acres Required Peak Year	Acres Required Long Term
	Beaver Co., Utah		Iron Co., Utah	
Proposed Action	1,833	692	463	428
1	523	141	1,827	637
2	468	16	74	1
3	715	202	2,669	830
4	671	202	2,671	830
5	2,849	897	935	611
6	2,837	897	912	611
8A	423	0	260	0
	Juab Co., Utah		Millard Co., Utah	
Proposed Action	425	0	894	0
1	425	0	867	0
2	473	25	2,557	806
3	585	0	1,028	0
4	425	0	867	0
5	585	0	1,070	0
6	425	0	900	0
8A	59	0	1,419	0
	Salt Lake/Utah Cos., Utah		Washington Co., Utah	
Proposed Action	1,041	6	76	29
1	1,031	6	237	200
2	1,209	10	73	2
3	1,272	9	381	231
4	1,156	6	381	263
5	1,304	9	79	2
6	1,202	7	76	29
8A	22	0	57	5

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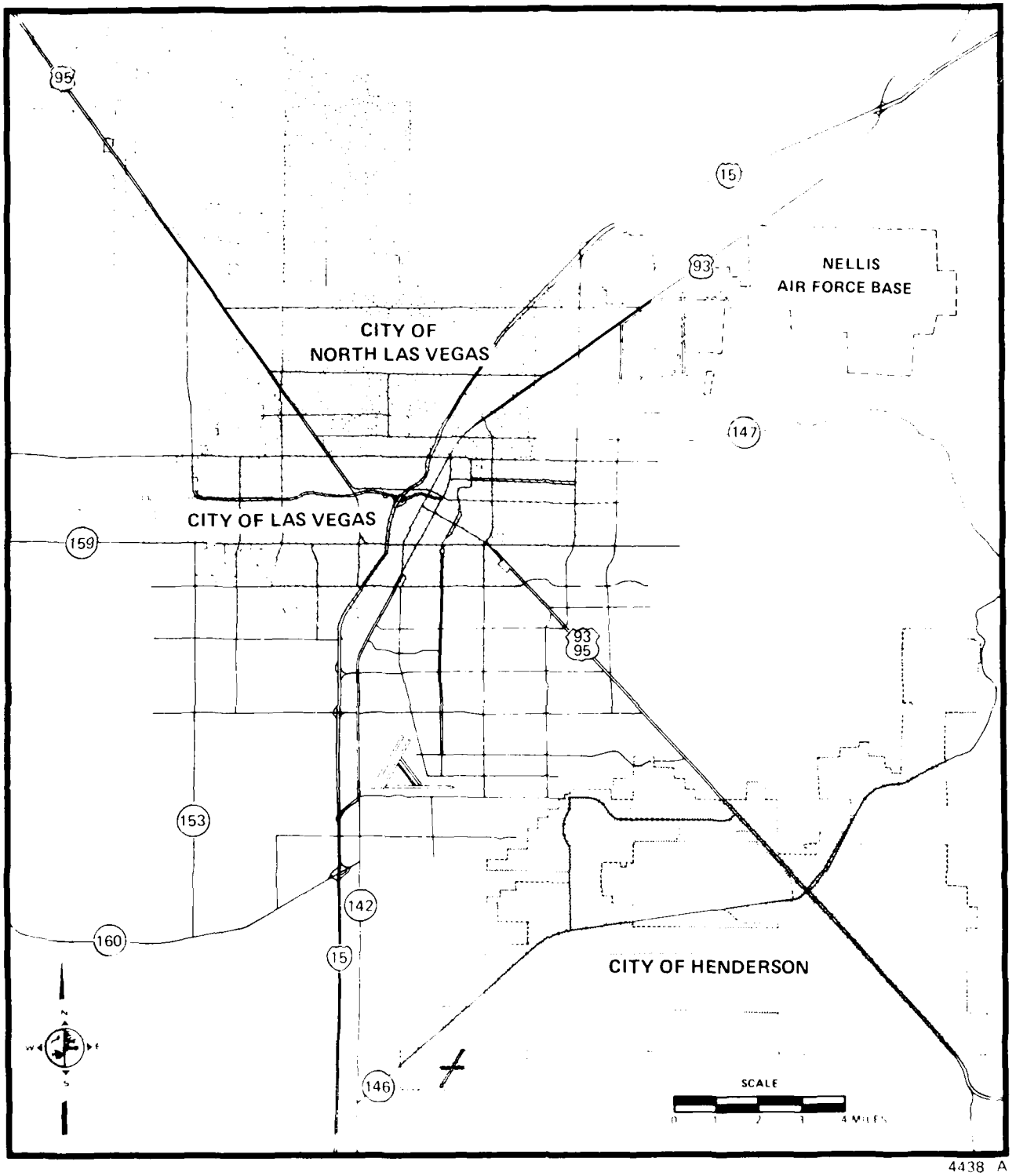

Figure 2.3.1.1-1. Cities of Las Vegas, North Las Vegas, and Henderson, Nevada.

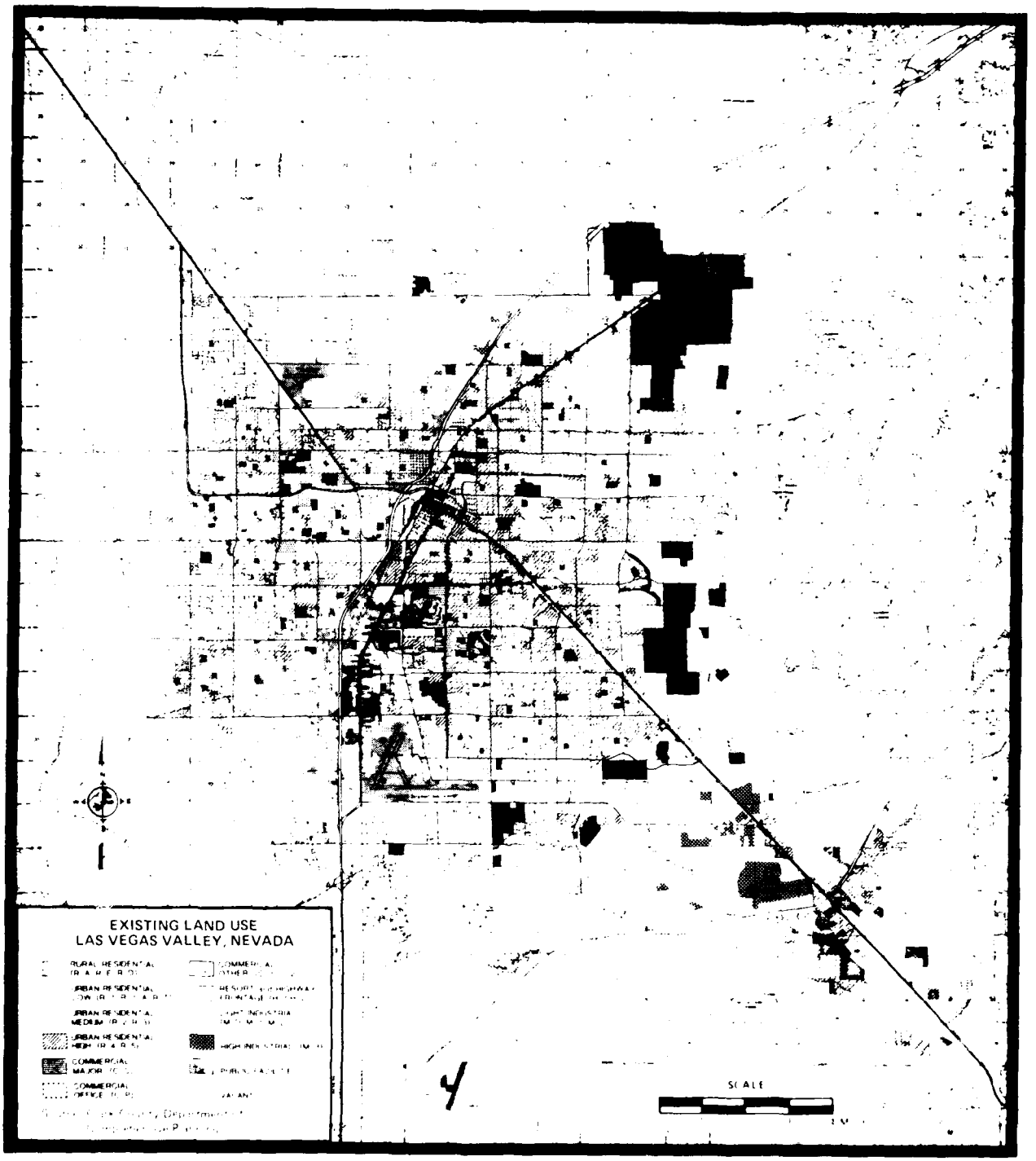

Figure 2.3.1.1-2. Existing Land Use in the Las Vegas Valley, Nevada.

Table 2.3.1.1-1. Existing land use - Las Vegas Valley, Nevada

Land Use	Las Vegas[1]	North Las Vegas[2]	Henderson[3]	Unincorporated areas	Las Vegas Valley total[4]	Boulder City[5]
Single family residential	8,108	1,403	1,989	14,645	26,442	595
Multiple family residential	N/A	265	124	N/A	3,669	42
Commercial	1,286	478	242	3,512	5,522	37
Industrial	368	1,000	628	2,469	4,465	27
Public facilities	1,800	2,373	969	8,505	11,919	1,243
Developed land subtotal	18,419[6]	5,518	3,951	24,129	52,017	1,944
Vacant	19,484[6]	16,650	45,329	217,909	299,372	20,006
Total	37,903[6]	22,168	49,280	242,038	351,389	21,950

T5083/9-9-81

N/A - Not Available

[1]Earthmetrics Inc., 1977, "Clark Count 208 Water Quality Management Plan, Evaluation of Existing Conditions."

[2]City of North Las Vegas, 1974, "Comparative Land Use Study;" Industrial category updated with 1981 City estimate, Public Facilities category includes 1,571 acres for streets.

[3]City of Henderson, 1981, "Henderson Comprehensive Plan Data Index;" Total figure derived from 1981 City estimate.

[4]Clark County, Department of Comprehensive Planning, 1979 data revised in August 1980.

[5]Boulder City, 1981, "Master Plan;" Vacant category includes 1,447 acres for utility easement.

which 351,400 are analyzed for urban development (the remainder of the valley lies outside of the urban area). Almost 299,400 acres or 85 percent of this urban area was vacant in 1980. The remaining 52,000 acres were devoted to urban uses. Table 2.3.1.1-1 provides a tabulation of the existing land uses in the Las Vegas Valley, as well as in the cities of Las Vegas, North Las Vegas, and Henderson. Residential land uses, including low, medium, and high densities, account for over half of all developed land in the valley. Commercial uses occupy approximately 5,500 acres or 11 percent of the developed land. Two-fifths of the commercial land is utilized by resorts and casinos, while shopping centers and more traditional commercial activities use the remaining three-fifths.

Development trends in the period between 1974 and 1979 show that the Las Vegas urbanized area grew by 35 percent, expanding to consume approximately 13,100 acres of formerly vacant land. The developed land use distribution for 1974 and 1979, and a breakdown of converted acres are shown on Table 2.3.1.1-2. Residential acreage grew from 1974 to 1979 at approximately the same rate as all urban uses, expanding 35 percent in five years. This means that one in every four acres in residential use in 1979 had been vacant in 1974. In the five-year period, an average of 1,560 acres per year were converted to residential uses. Commercial acreage expanded by 53 percent over the period, involving 1,135 acres of new development. A regional shopping mall contributed to this development in addition to several large shopping centers. Resort land grew 56 percent from 1974 to 1979, reflecting growth in the gaming industry. Industrial land use rose only 22 percent, the slowest growth of any category.

The development patterns of the urban growth in the Las Vegas Valley reflect a combination of public and private decisions related to land use and services. The land use pattern is generally characterized by a patchwork of development interspersed with vacant land. A preliminary analysis by the Clark County Department of Comprehensive Planning indicated that approximately 37,800 acres of vacant land exists within the Las Vegas Valley sewer service area. This is equivalent to 74 percent of all land developed in one form or another in the valley; for every four acres of developed land, three acres remain available within the currently developed portion of the valley. This is land in which a public investment in the form of infrastructure has been made, and upon which no development has taken place. Given the existing ratio of 0.12 acres per person, calculated by Clark County, an additional 315,000 persons could be accommodated on undeveloped land within existing utility service areas, assuming adequate water, sewer, and power capacities were available within the existing infrastructue.

Land ownership plays an important role in land development, and hence land use in the Las Vegas Valley, since over half of the land in the valley is in federal ownership (see Table 2.3.1.1-3). BLM is the largest land holder in the valley with approximately 277,700 acre, just over half of the 24 townships in the valley. While this BLM acreage is interspersed with privately-held parcels, public lands form the outer perimeter of the valley, lending definition to the ultimate growth configuration (Figure 2.3.1.1-3). Within the incorporated communities BLM land holdings pose other constraints to land development patterns. From a comparison between Figure 2.3.1.1-1 and 2.3.1.1-3, it is evident that large portions of the northwestern area of Las Vegas are under BLM ownership. When these lands in the northwest convert to urban uses, there is a high potential for leapfrog development and the associated efficiencies in the provision of municipal services.

Table 2.3.1.1-2. Urban land conversion in Las Vegas Valley, Nevada, 1974-1979.

Land Use	1974 Acres	1979 Acres	Net Change Acres	Net Change Percent
Residential	22,275	30,078	7,803	35
Commercial	2,141	3,275	1,134	53
Industrial	3,686	4,503	817	22
Public Facilities	8,360	10,966	2,606	31
Resort	1,302	2,026	724	56
Total	37,764	50,848	13,084	35

T5305/9-10-81

Source: Clark County Department of Comprehensive Planning, December 1980, "Task One: Existing Conditions."

Table 2.3.1.1-3. Land ownership Las Vegas Valley, Nevada.

Ownership	Acres	Percentage
Bureau of Land Management	277,657	50.2
Department of Defense	13,960	2.5
Water and Power Resources Service	9,120	1.6
National Park Service	5,120	0.9
Private, State, Local	247,103	44.9
Total	552,960	100.0

T5303/9-23-81/F

Source: Clark County Department of Comprehensive Planning, December 1980, "Task One: Existing Conditions."

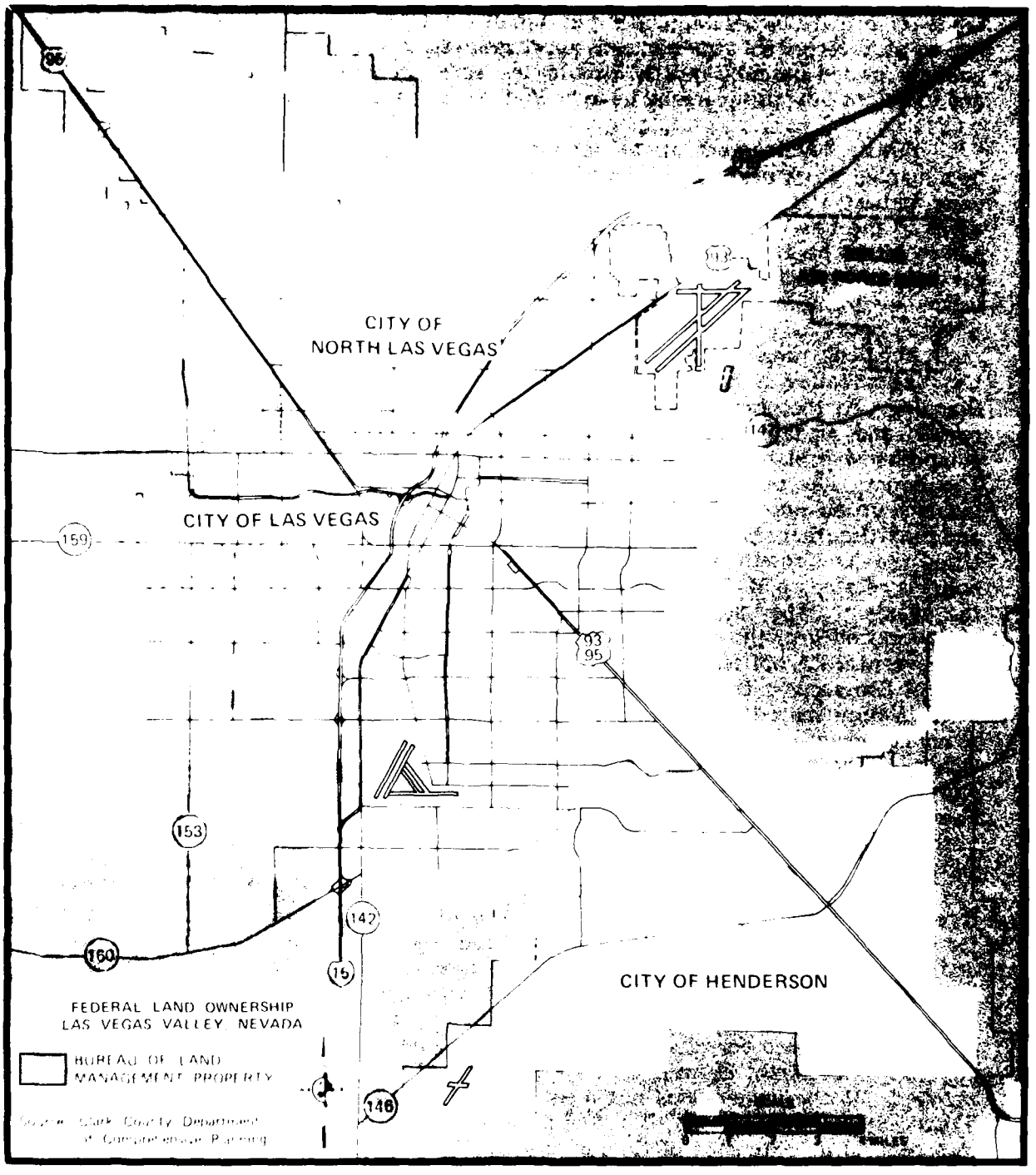

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Figure 2.3.1.1-3. Public Lands Administered by the BLM in Las Vegas Valley, Nevada.

As trustee for the public domain, BLM from time to time releases land for private development, in accordance with federal policy. Consequently, BLM has influenced development and land use patterns. The checkerboard pattern in the southwest portion of the valley was largely created through the auctioning of public lands for private ownership under the "Small tract Act" in the late 1950s. This area, known as Enterprise Town, contains approximately 71 sq mi of scattered private and publicly owned parcels, mostly two to ten acres in size. Subdivision development and efficient land use planning have been difficult as a result of the pattern.

Future development of the vacant land in the Las Vegas Valley is constrained by a number of natural and man-made factors. Land development suitability studies done as part of the "Clark County 208 Water Quality Management Plan" identified areas of the Las Vegas Valley that are constrained by noise, slopes, soils, drainage, and wildlife habitats. Other constraints, such as air quality and infrastructure facilities, e.g. highways, water supply, and sewer capacities can reduce the rate of urban development.

The long range land use planning process for the unincorporated areas of the Las Vegas Valley is handled by the Clark County Department of Comprehensive Planning. At the present time the Department is engaged in a seven-step process to revise and update its current general plan (adopted in 1974). The new comprehensive plan will give the county a framework for growth to the year 2000. The county has published its inventory of existing conditions and is currently involved in an impact analysis of baseline trends, identification of critical issues, and identification of goals and policies. The Department has also prepared a study titled "M-X: Growth Management Policy Plan" which describes local goals and policies related to M-X activities in Clark County and analyzed M-X impacts upon the goals. The study examined three alternative scenarios for handling M-X-induced growth: a new town built around an OB at Coyote Spring; a "Las Vegas centered" option assuming a major impact in the Las Vegas Valley due to a lack of life support facilities at the OB and construction camps; and a "Moapa/Las Vegas Valley shared" option assuming a split in impacts with most operations and some construction impacts in the Moapa Valley with services provided by Clark County. The conclusion of the analysis was that the "Las Vegas Valley centered" option would show the least relative impact if all factors were weighed evenly. Facilities not utilized at the end of the "bust" cycle would be used by natural growth in the Las Vegas Valley, while in the Moapa Valley they would remain unused.

The county's current zoning ordinance, adopted in 1974, is administered through use of resolutions of intent, in which to owner resolves to develop the land for a particular use. Under this process a land owner may apply for a zone change, and after the public hearing the land owner may be granted the zone change subject to certain conditions. The land owner is given an specified amount of time to comply with the conditions, usually one year. This process allows the owner to obtain the required permits and begin development. If the owner complies with the conditions set forth, as well as the resolution of intent, the land is automatically rezoned. If the owner does not meet the conditions, the land remains zoned as it existed before the request. Before expiration of the resolution of intent, the owner may request an extension of time of the resolution of intent. The county subdivision ordinance has been amended several times since its adoption in 1962, while the mobile home ordinance was adopted in 1976.

Las Vegas (2.3.1.1.1)

Of the three cities in the valley, Las Vegas has the largest amount of land developed for urban uses: over 18,400 acres as of 1981 (see Table 2.3.1.1-1). This is approximately one-third of the developed land under jurisdiction of Clark County. From Figures 2.3.1.1-1 and 2.3.1.1-2, it is apparent that most of the developed land is in the southern portion of the city, proximal to the intersection of I-15 and US-95. Approximately 17,900 acres of the developed land in the city is south of Lone Mountain and Craig Roads, while only 530 acres lies north of these roads. In contrast, the vacant land in the city is evenly distributed between the southern and northern areas, with approximately 9,300 acres to the south of the roads and 10,200 northwest. The addition of new territory is also being pursued by the city, as evidenced by approximately 2,600 acres which were annexed in 1980. The city anticipates that future growth, possibly induced through M-X activities in Lincoln County and Coyote Spring, will take place in the northern portion of the city. However, BLM land ownership, as a proportion of total municipal territory, is very high in this area of the city, and could act as a constraint to efficient land use development. On a citywide basia, BLM owns over 4,000 acres of 11 percent of the city's land area.

The city's master plan, adopted in 1972, is undergoing revision during 1981. The plan functions as a policy package for development in the various planning areas of Las Vegas. Densities and specific plans are designated for each planning area. The program to update the plan has completed the baseline data collection phase, which precedes the establishment of citizen review committees. Completion of the update is expected by spring 1982. The zoning ordinance is revised periodically, with its most recent amendment occuring in April 1978. The subdivision ordinance received its latest major amendment in April 1980. At the present time there is discussion of amending the subdivision ordinance with a large-parcel map section.

North Las Vegas (2.3.1.1.2)

The City of North Las Vegas has a total land area of 22,200 acres, of which three quarters is vacant (see Table 2.3.1.1-1). The spatial distribution of the developed and vacant areas shown that development is located in the southern and south-eastern areas of the city, near I-15 and US-93. Vacant areas extend northward approximately 8 to 10 mi from the developes area. The location of I-15, expected to carry most of the construction and operations traffic to and from the proposed Coyote Spring OB, and the large amount of vacant land makes North Las Vegas the potential receptor of a large amount of M-X-induced growth.

North Las Vegas adopted its general plan in 1974. Although it has been revised since, the utility of the plan has diminished over time and an update is now underway. The subdivision ordinance was adopted in 1975, shortly after the general plan. It is also considered to be out of date and in need of revision. Minor changes to the zoning ordinance since its adoption in December 1979 have kept it current with state legislative requirement. At the present time there is no discussion of growth management as sufficient water is available.

Henderson (2.3.1.1.3)

The City of Henderson in the southeastern corner of the Las Vegas Valley has the largest land area of the three incorporated cities in the Valley, almost 50,000

acres (see Table 2.3.1.1-1). However, urban development covers less than one-tenth of the city leaving the remaining 92 percent of the city vacant. The developed area is clustered around the intersection of US-93/95 and state route 147. Site and environmental constraints due to slope, soils, and stream courses reduce the ability to develop certain areas of the vacant land. These areas are identified in the "Clark County 208 Water Quality Management Plan." Due to Henderson's location beyond Las Vegas and North Las Vegas relative to the proposed Coyote Spring OB site, the amount of M-X-induced urban growth would likely be less than that in other areas of the valley.

Henderson's master plan is being revised in 1981 with completion expected by the end of the year. The previous general plan was adopted in 1969 while the zoning ordinance was most recently amended in 1977. Adoption of the subdivision ordinance took place in 1979.

Boulder City (2.3.1.1.4)

Although Boulder City lies to the southeast of Henderson and outside of the Las Vegas Valley it may be considered part of the Las Vegas metropolitan area. The distance from the Coyote Spring OB is approximately 75 mi, and due to the intervening residential opportunities in the Las Vegas Valley, urban growth in Boulder City from M-X would be low relative to the above communities.

Like Henderson, less than 10 percent of the land area in Boulder City is developed for urban purposes. Table 2.3.1.1-1 provides data on the 1980 existing land use in Boulder City. The second largest land use is residential with almost 600 acres of single family development and approximately 40 acres of multifamily development. Several large easements for power transmission lines trisect the city, occupying 1,450 acres, an area slightly less than the total urbanized acreage.

The city adopted a "Petaluma type" growth management ordinance in July 1979 in response to problems with sewer capacity (state water quality standards were not being met) and rapid population growth. With the exception of owner-built units, the ordinance limits the number of residential units constructed in the city to 120 per year. In 1979 and 1980 there were no applications under the ordinance for new reidential units, while in the first five months of 1981, 58 units had been applied for and approved. Since taking effect, 484 occupancy permits have been issued; primarily for units which were already being processed. Under consideration of this growth management program, the city revised its master plan in April 1981. The theoretical holding capacity for the city under the new master plan shows build-out to be 7,900 acres of urban development. The city's zoning and subdivision ordinances were adopted in 1978 and 1976 respectively.

Policy and Goal (2.3.1.1.5)

Growth management policy planning for Clark County specifically targets:

1) The evolution of local governments that will promote citizen participation in the determination of public policy, and facilitates the efficient solution of public problems through coordinated growth management actions that will result in efficient use of land resources and provision of services so as to maximize future development options.

2) The provision of a quality of life which is sound, healthy, safe, and aesthetically pleasing for all residents and visitors. This can be done by fostering a physical environment that will nurture a variety of lifestyle opportunities that are responsive to individuals' psychological, and physical needs.

3) The development of a diversified, well-balanced economy for the region which will maximize employment and economic opportunity for all segments of the population, while recognizing and encouraging the individual facets of the existing economy.

Additionally, the report titled "M-X: Growth Management Policy Plan," published by the Clark County Department of Comprehensive Planning, presented the following recommended land use policies in response to the proposed M-X system deployment in Clark County:

1. Promote compatibility in land uses;

2. Coordinate the transfer of public lands to meet the needs of community expansion;

3. Promote orderly expansion of urban growth to provide efficient utilization of resources;

4. Recognize the role of the private sector in the establishment of land use patterns;

5. Recognize environmental constraints in the establishment of land use patterns;

6. Recognize fiscal constraints in the establishment of land use patterns;

7. Recognize land use management relationships among government levels and entities.

Discussion (2.3.1.1.6)

If the project is fully deployed under the Proposed Action configuration, Clark County will become impacted by an additional 5,000 acres of urban development. The long-term net increase could be as much as 780 acres. The county's attitude and position with respect to development is one of efficient patterns, adequate provision of facilities and services, and optimum economic opportunity and benefit. Short-term and long-term proposals for any type of development in Clark County should be carefully planned and implemented in consonance with these objectives. The county's planning recognizes the resource it has in the land and the implicit requirement for effective management of development. The county has developed a growth management framework based upon service standards and reserve capacity in related facilities and services. Any development in Clark County which results from the deployment of the project will be reviewed for consistency. The management framework will be utilized to evaluate all development proposals. Mitigations will be identified for those developments that are incompatible with local policy.

The growth management policy plan prepared in April, 1981, in response to the DEIS, identified three growth assimilation alternatives for consideration vis-a-vis M-X deployment options calling for an OB at Coyote Spring. The three alternatives are (1) a new town at Coyote Spring, (2) Las Vegas centered growth, and (3) Moapa/Las Vegas Valley shared growth. The three alternatives were evaluated with respect to 25 impact issues; land availability and land use was not included as an evaluation factor. Only "economic development diversification" was identified as receiving positive impact (and did so under each of the three alternatives). The other factors ranged from "no impact," to "moderately negative impact," to "negative impact" depending on growth alternative. Overall, the Las Vegas Valley centered growth alternative was evaluated to result in the least-negative impact. The report recommended: "development of growth management policies reflective of goals and objectives geared toward the efficient use of capital resources and the preservation of agricultural lands centering growth in the Las Vegas Valley."

Federal Lands Constraints (2.3.1.1.7)

The high demand for expanded urbanization in the Las Vegas Valley will definitely impact federal land control. Figure 2.3.1.1-4 depicts the large area of public land in the northeast quadrant of Clark County. However, the lands administered in the Las Vegas and Coyote Spring areas each represent two large and distinctly different types of land management situations. The current BLM policy direction for the lands they administer in, and immediately adjacent to The City of Las Vegas is for eventual disposal. There are roughly 10,000 acres of land in this area, comprised of isolated parcels ranging from 2.5 to 150 acres, with most in the 2.5-5 acre range. Under P.L. 96-586 (the Santini-Burton Sale), at least 700 acres of land per year in an area including Las Vegas and vicinity must be offered for sale to the public. The offering of these parcels is to continue yearly for fifteen years. Nevertheless, the availability of BLM land for urban development in and adjacent to the city of Las Vegas is particularly critical to achieving planned and managed growth incuded by M-X system deployment. As noted previously, over 4,000 acres of BLM land lies within the Las Vegas city limits; predominantly in the northwest sector of the city where growth is expected to occur. This condition represents a major conflict with urbanization related to M-X. Figure 2.3.1.1-3 identifies public land ownership in and adjacent to Las Vegas.

While a number of parcels are leased as parks or to churches under the Recreation and Public Purposes Act, other land sales found to be in the public interest continue under the guidelines of FLPMA. As with all BLM land sales, competition with the private sector is to be avoided. All local zoning and plans are closely considered, and coordination with community goals stressed.

Mineral claims on BLM administered land within Las Vegas have been largely determined to be null and void through validity checks, although some of these findings have been challenged (with varying results) in the courts. Many claims were automatically invalidated since they were for sand and gravel, which do not fall under the general mining law.

From a resource management point of view the proposed urban development at Coyote Spring involves many conflicts to be resolved before disposal. These are of a more intense nature than if a community already existed here. BLM administered land west of US-93 is a large wilderness study area; to the east lies a grazing

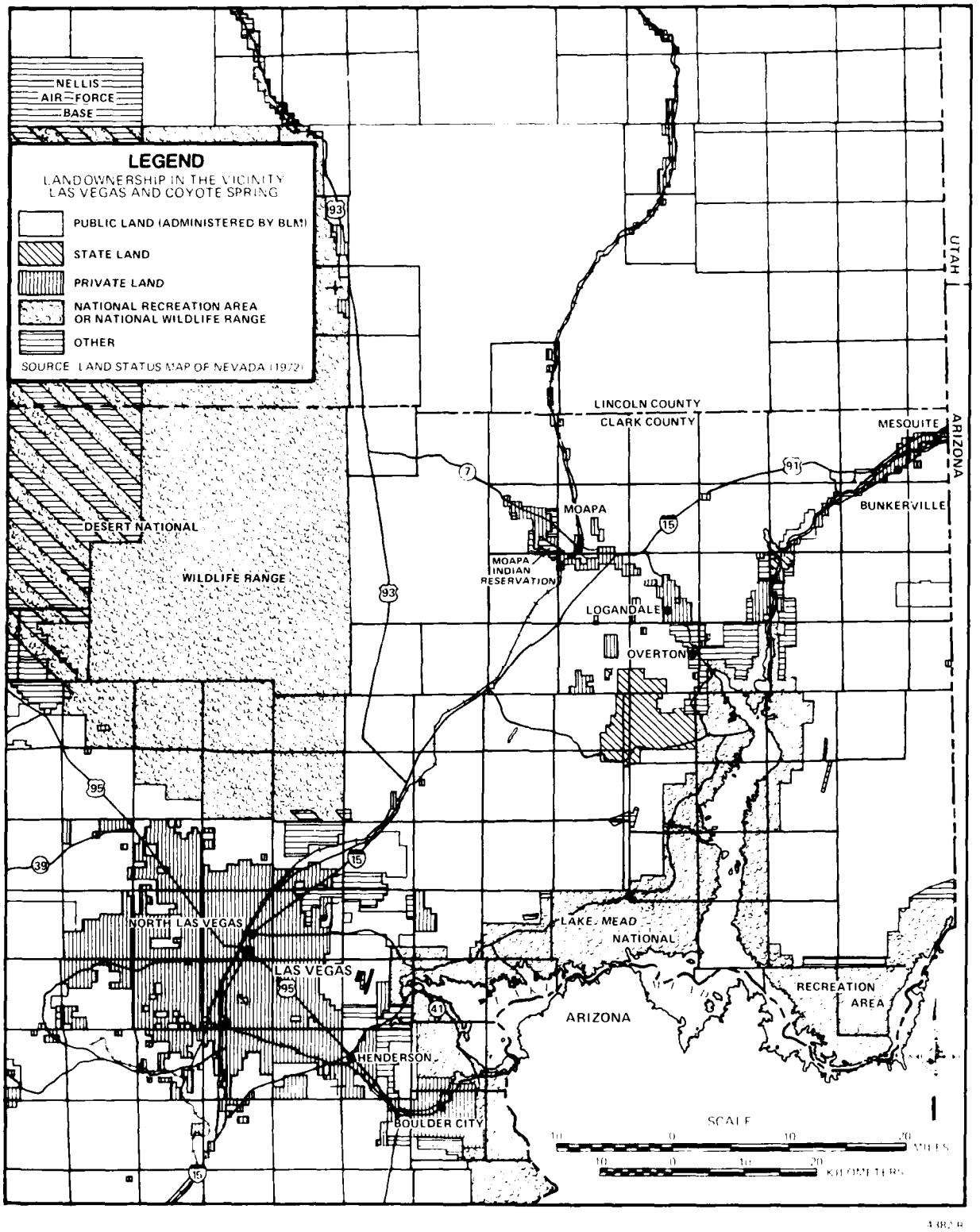

Figure 2.3.1.1-4. Land ownership in Clark County, Nevada.

allotment of potentially high interest to ranchers. Arrow Canyon, Sheep Canyon, and Delamar Canyon are bighorn sheep range, and the entire area is a desert tortoise habitat. These factors are incompatible with urbanization. In addition to the habitat concerns, a question of who would be the actual parties to approach the BLM for land disposal remains to be answered.

Moapa Valley, Nevada (2.3.1.2)

Moapa Valley's land use policies are consistent with those of Clark County.

Within the Moapa Valley area are the unincorporated towns of Moapa Valley (recently formed by the merger of the unincorporated towns of Overton and Logandale), and Glendle, and the rural areas of Moapa and Warm Springs. The valley, which is primarily an agricultural area, is the closest settled area to Coyote Spring Valley and about 30 mi southeast of the OB site.

Since the entire Moapa Valley area is unincorporated, zoning in the area is handled with "holding zones" and resolutions of intent as described above for the Las Vegas Valley. The majority of the land in the Moapa Valley area is in the R-U (rural open) holding zone. This zoning classification accounts for state and federal lands adjacent to the developed areas within the valley. Figure 2.3.1.2-1 illustrates the zoning classifications in the unincorporated towns. Acreages for the various zoning districts, exclusive of R-U (rural open), are presented in Table 2.3.1.2-1. Overton has the greatest amount of land available for urban use, approximately 1,200 acres. Logandale has a large amount of residentially zoned land, approximately 230 acres. Of the total 5,500 acres in the Moapa Valley area 65 percent (3,580 acres) is agriculturally zoned and 35 percent (1,930 acres) is zoned for urban uses.

Policy and Goal (2.3.1.2.1)

Long-range planning options for the Moapa Valley at the present time have been explored in two documents published by the Clark County Department of Comprehensive Planning: "Moapa Valley Resource Inventory and Socio-Economic Profile" and M-X: Growth Management Policy Plan." The ongoing Clark County effort to adopt a comprehensive plan will establish future directions for Moapa Valley. Moapa Valley's land use policies are consistent with those of Clark County in that they:

1) Provide for growth management;

2) Maximize quality of life potential;

3) Provide for the development of a diversified, well-balanced economy.

Discussion (2.3.1.2.2)

Project deployment with an operating base at nearby Coyote Spring Valley could place some potentially extreme development pressures on Moapa Valley. The population in the valley is extremely stable, and most families have been residents for over 20 years. Recent planning and zoning decisions have acted to maintain the status quo in the valley. Resultant project growth would exceed growth expected

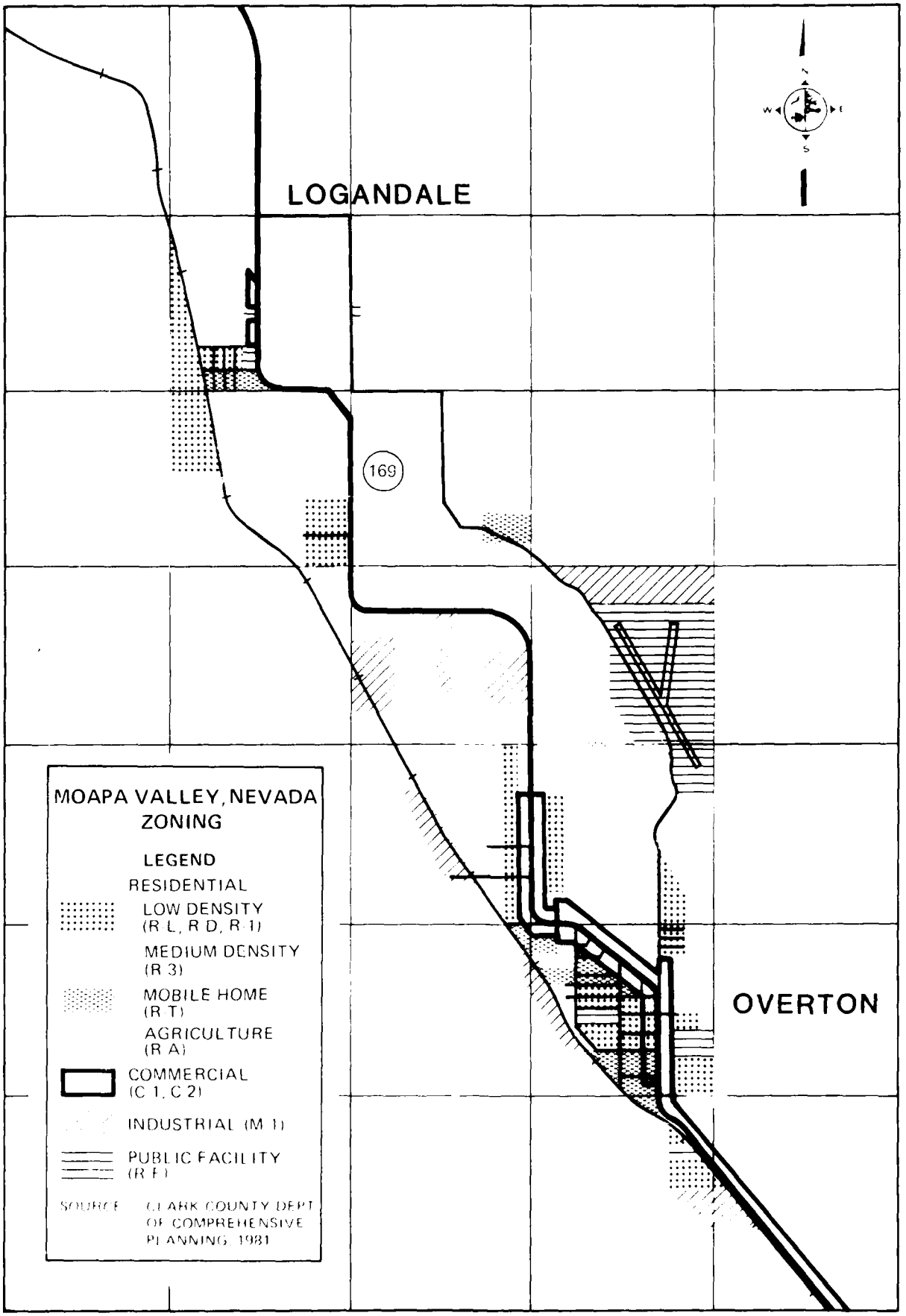

Figure 2.3.1.2-1. Zoning in the Moapa Valley, Nevada.

Table 2.3.1.2-1. Acreage by zoning district - Moapa and Virgin valleys, Nevada.

	Zoning District	Moapa Valley						Virgin Valley		
		Glendale	Logandale	Moapa	Overton	Warm Springs	Total	Bunkerville	Mesquite	Total
R-A	Residential Agriculture	1,164.48	--	559.7	316.66	1,539.76	3,580.6	--	--	--
R-E	Rural Estates	--	159.73	--	164.92	--	324.65	--	34	34
R-D	Suburban Estates	--	--	--	23.86	--	23.86	--	--	--
R-1	Single Family	--	27.73	--	118.0	--	145.73	114	120	234
R-T	Mobile Home	--	39.46	15.86	79.35	--	134.67	230	88	318
R-3	Multiple Family	--	--	--	1.2	--	1.2	--	--	--
T-C	Trailer Court	2.1	--	--	13.3	--	15.4	--	--	--
R-U-P	Recreational Park	2.9	--	--	--	--	2.9	--	--	--
C-1	Local Business	1.2	12.0	1.72	69.4	--	84.32	--	--	--
C-2	General Commerical	38.26	--	--	120.23	27.6	186.09	1	107	108
H-2	Highway Frontage	43.7	--	--	--	42.9	86.6	2	61	63
M-1	Light Manufacturing	--	--	--	311.45	--	311.45	31	--	31
M-3	Heavy Industrial	--	2.4	298.0	--	--	300.4	--	--	--
P-F	Public Facilities	4	16.3	2.12	293.78	--	316.2	11	51	62
Total Zoned Area		1,256.64	257.62	877.4	1,512.15	1,610.26	5,514.07	389	461	850

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Sources: Clark County Department of Comprehensive Planning, April 1981; Ibid., 1979, "Virgin Valley, Nevada, Comprehensive Land Use Plan."

and planned for Moapa Valley. Portions of the peak-year urban land impact expected for Clark County could be accommodated in Moapa Valley, but indiscriminate development, even for a short period of time, could produce a lasting impact. It will be extremely important in mitigating probable impacts at Moapa Valley to coordinate project implementation planning with county and local planning. Approximately 40,000 acres of irrigated farmland exist in the area, and additional unmanaged growth would constitute a serious threat to a sustaining portion of the economy.

Federal Lands Constraints (2.3.1.2.3)

Most the land in the Moapa Valley study area is owned by federal or state agencies. Federal agencies with ownership and/or control of land in the Moapa Valley vicinity include the BLM, Bureau of Reclamation, Bureau of Indian Affairs (Moapa Indian Reservation) and the National Park Service. The BLM controls a major portion of the land including most of the land to the east and west of the developed areas along the Muddy River. Control of land by the National Park Service is limited to the areas along the Lake Mead Shoreline. Approximately 94 percent of the survey area is under federal administration, with the remaining 6 percent under private ownership. This land ownership pattern has confined land development to the privately-owned areas.

Associated impacts would directly affect the private property in the valleys. Land for urban development would need to be released from BLM ownership in order to meet the demand without adverse effects on the agricultural economy. For further information, see land ownership map (Figure 2.3.1.1-4) and the Las Vegas Valley discussion presented above.

Virgin Valley, Nevada (2.3.1.3)

The Virgin Valley further to the east along I-15 from the Moapa Valley, is also predominantly agricultural land. By nature of its location along I-15, the unincorporated town of Mesquite is the commercial center of the valley. Mesquite has several service industries that support the transient trade between Las Vegas and Utah. Bunkerville is the second settlement in the valley with a developed area about one half that of Mesquite. The valley contains only 400 homes and a population of 1,200 people. Projections to the year 2000 suggests the population will increase to approximately 1,500 people, based upon local development constraints.

Zoning in the Virgin Valley is presented in Figure 2.3.1.3-1. According to the zoning area totals, the sizes of Mesquite and Bunkerville are rather comparable, with approximately 460 and 390 acres respectively.

Policy and Goal (2.3.1.3.1)

In response to public input concerning the availability of private land for development, the Clark County Department of Comprehensive Planning prepared "Virgin Valley, Comprehensive Land Use Plan" for guiding community growth. The land use plan extends and implements the major policies of the Clark County by incorporation to include:

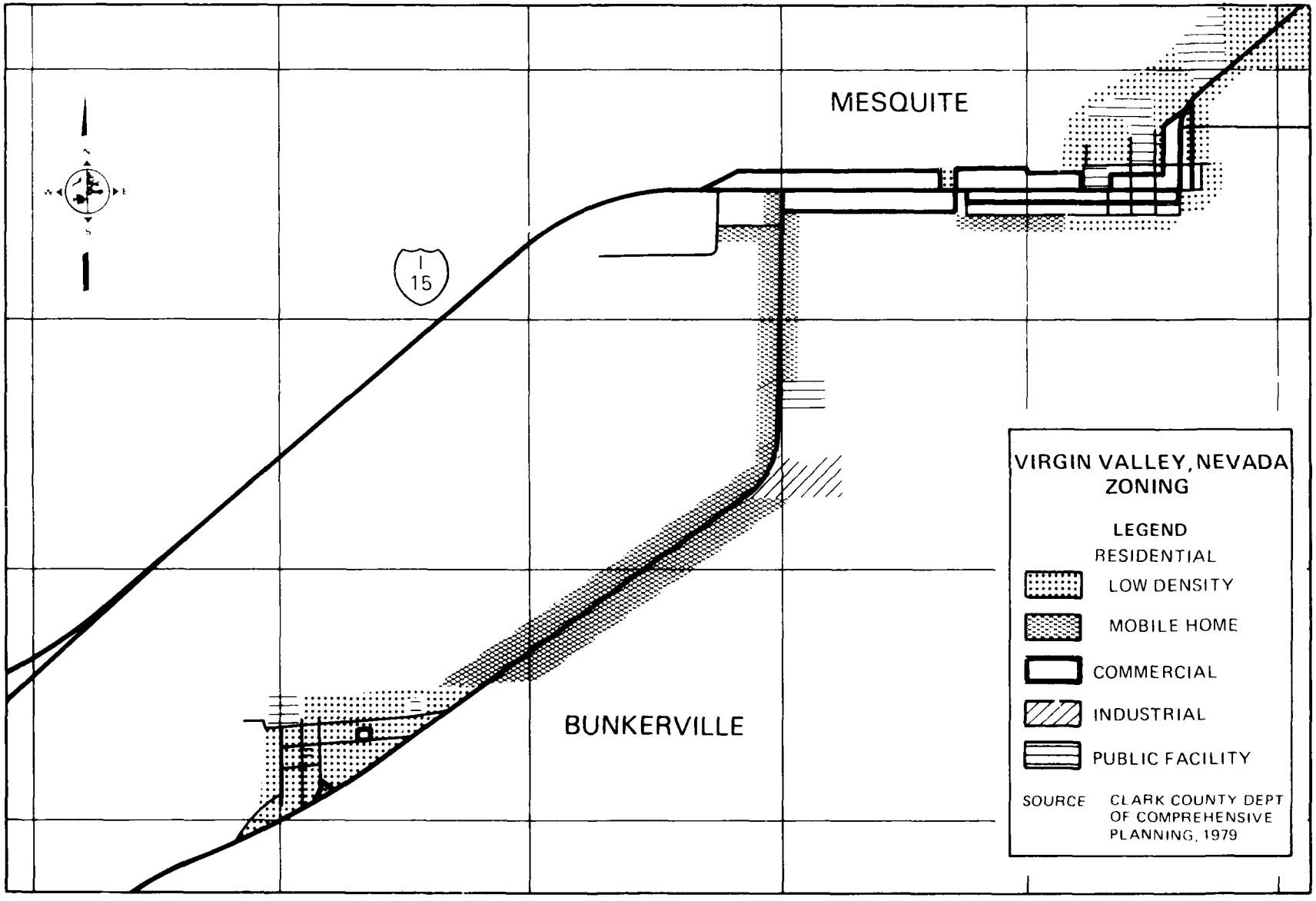

Figure 2.3.1.3-1. Zoning in the Virgin Valley, Nevada.

1) Growth management;

2) Maximization of quality of life opportunities;

3) A diversified, well-balanced economy.

Land use is dominated by agriculture, but major community concerns include those factors necessary to support any additional development.

Discussion (2.3.1.3.2)

M-X development would increase urban land in minor areas of existing vacant or agricultural land uses. Settlement within physically sensitive areas is discouraged by local and county ordinance. Local planning includes conversion of a fairly large tract of desert lands to urban use. A portion of the project's urban land impact on Clark County could be accommodated in Virgin Valley if adjacent farmland was not encroached upon. The extent of this accommodation will be determined upon (1) the ability of the local urban centers to support growth and (2) the ability of necessary federal lands to be converted to developable areas as required.

Federal Lands Constraints (2.3.1.3.3)

At the time of the above study, in 1979, there were several proposals for land transfers in the Valley between BLM and various parties, including private individuals and the US Forest Service. The county also examined the procedures to be adopted for county purchase of several tracts of land as well as direct sale by BLM. The need for such transfers is seen as a result of mounting development pressures for the conversion of the valley's limited agriculture lands to urban uses and homesites.

For further information, see the land ownership map (Figure 2.3.1.1-4) and Las Vegas Valley discussion presented above.

Lincoln County, Nevada (2.3.1.4)

Lincoln County, Nevada is located to the north of Clark County and west of Washington, Iron, and Beaver counties in Utah. Total area in the county is approximately 6.8 million acres, of which only 67,900 acres, or one percent, is under private ownership. Agricultural land uses occupy over one half of the private land, and urban land uses occupy only 2 percent of the private land. Three of the four urbanized communities, Caliente, Panaca, and Pioche lie in the eastern portion of the county. The fourth urbanized community is Alamo, in the central portion of the county. The remaining settlements in Eagle Valley, Rose Valley, Meadow Valley, and Pahranagat Valley are primarily rural in nature.

Long-range planning in Lincoln County has been handled through master plans prepared by private consultants. A 1975 master plan prepared for the county and City of Caliente has been used by the county as a guide for land use decisions although it was not officially adopted by the county. The map from the master plan is displayed in Figure 2.3.1.4-1. As can be noted from the map, the county is dominated by the "open space" lands owned by BLM. Agricultural areas are small in

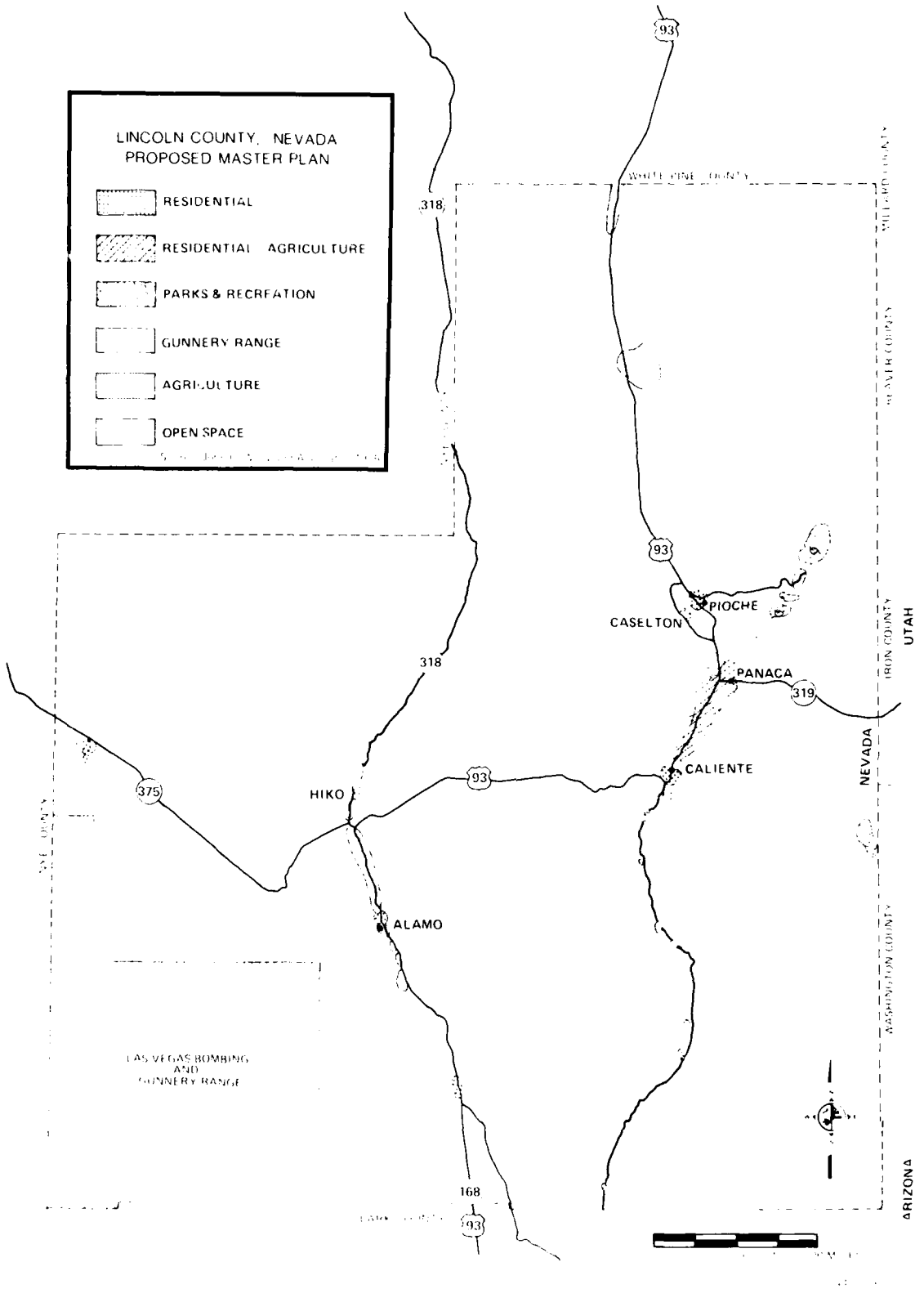

Figure 2.3.1.4-1. Proposed (1975) Master Plan for Lincoln County, Nevada.

number and limited to the valley floors. A large area of mixed residential and agricultural land use is along the US-93 corridor between Caliente and Panaca.

Policy and Goal (2.3.1.4.1)

The 1975 proposed master plan included the following policies to limit urban uses.

1) Residential development should take place in urban centers.

2) Commercial development should be in clusters or centers and avoid strip conditions.

3) Industry should be located only in areas where highway and rail service is readily available.

4) Agricultural areas should be protected from development for the purpose of supporting an important economic sector.

5) The county should coordinate development of a system of public sites for recreation including community parks, parkways, natural reservations, and playgrounds.

6) Open space should be protected from development until satisfactory evidence is given that an adequate water supply is available.

7) Public lands should be withdrawn for specific use and be converted only after careful and considerable study.

Discussion (2.3.1.4.2)

Depending on project deployment alternatives, Lincoln County would be required to convert 800 to 1,600 acres into new urban land uses. Long-term development after the project is constructed would be in the range of 150 to 300 acres of net increase. The small communities in the county will not be able to meet all the demand required of the county. Their services and systems are limited, and much of the impact will have to be absorbed by development of nonurban land resources. Protection of prime agricultural land will be necessary to mitigate probable economic impacts associated with removal of land from productivity. Vacant land is scarce and can not be expected to accommodate full urban land requirement.

Federal Lands Constraints (2.3.1.4.3)

Federal lands may have to be brought into development if full impacts are to be absorbed. Public lands would be disposed of as individual projects are formulated, and compatibility with planning and adjacent uses is determined. Disposal of public lands for residential or other urban purposes should only take place when urban services are available or can be conveniently provided. Federal property, and its availability, constrains the issue of mitigating urban land impacts associated with deployment of the project. The high proportion of public lands in Lincoln County is evident from Figure 2.3.1.4-2 which shows land ownership in the

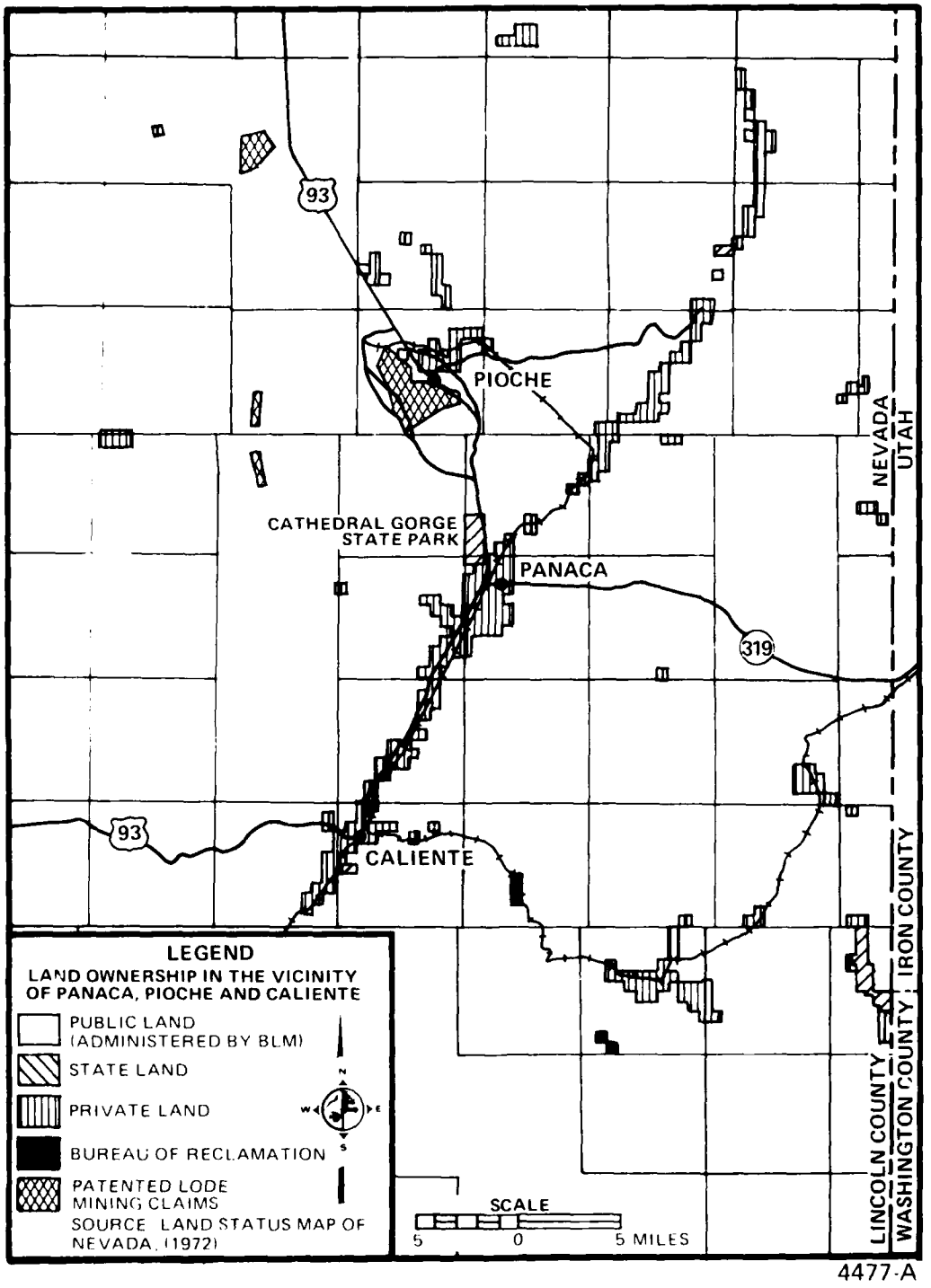

Figure 2.3.1.4-2. Land ownership in the vicinity of Panaca, Pioche, and Caliente, Nevada.

vicinity of Caliente, Panaca, and Pioche where the major concentration of urban development exists in the county.

Alamo, Nevada (2.3.1.5)

Policy and Goal (2.3.1.5.1)

Alamo, approximately 40 mi north of the proposed Coyote Spring OB site, is the smallest of the four urbanized communities in the county. Urban land uses, exclusive of roads, cover only 20 acres of land in the community (see Table 2.3.1.5-1). Two thirds of the land area (approximately 110 acres) in the unincorporated community are vacant, thereby providing room for the community to treble in size. The central area of Alamo, as shown in Figure 2.3.1.5-1, lies to the west of US-93.

Alamo's stated land use policy is developed from the 1975 proposed Lincoln County Master Plan and indicates the following as constraints on development of future land uses.

1) Land should be developed uniformly outward from, and adjacent to the community.

2) Commercial development should be confined to existing community areas.

3) Agricultural land should be protected and lands with high water tables in the valleys should be avoided.

4) Industrial development should avoid agricultural areas and should be located away from agricultural areas.

5) Community facilities should be provided through special districts in the community where special or specific need exists.

6) Solid waste disposal should be centralized and should be located to minimize water pollution.

Discussion (2.3.1.5.2)

Land use policy is directed toward compactness and efficiency in development, while preserving vital agricultural space. The identity of the city as a small residential center is essential in its future planning. Lincoln County will have to absorb and support a maximum peak-year development demand of 1,460 acres if the project is deployed under the Proposed Action. Not all that demand will be thrust upon Alamo. However, a development demand will be exerted, particularly in the residential and commercial support areas. The community may be able to maintain its residential posture, but short-term impacts will negate some of the long-term slow rate growth patterns that were expected. Support systems and services will be immediately impacted, and planned improvement schedules will be adversely impacted. Planned improvement schedules will be adversely compacted. Existing development policy would be severely challenged if development exceeded expectation without prior adjustment and mitigation. The forthcoming Lincoln

Table 2.3.1.5-1. Existing land use Lincoln County, Nevada.

	Alamo		Caliente		Panaca		Pioche		Lincoln Co. Total	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Residential	8.2	5	33.9	4	19.6	5	31.4	17	93.1	6
Mobile Home	3.9	2	6.2	1	8.6	2	2.6	1	21.3	1
Commercial	1.0	1	8.1	1	0.8	0	3.7	2	13.6	1
Industrial	--	--	10.6	1	0.5	0	3.0	2	14.1	1
Public/Quasi-Public	6.6	4	43.6	5	17.5	5	11.6	6	79.3	5
Streets	35.6	21	50.9	6	117.4	31	58.2	32	262.1	16
Developed Land Subtotal	55.3	33	153.3	17	164.4	43	110.5	60	483.5	30
Agriculture	0.1	--	4.8	1	70.7	19	--	--	75.6	5
Vacant	112.3	67	732.1[1]	82	147.2	38	72.1	40	1,063.7	65
Total	167.7	100	890.1	100	382.3	100	182.6	100	1,622.7	100

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[1]Includes 23.5 acres of vacant land that have been annexed since 1975.

Source: John C. Willie and Associates, 1975, "Lincoln County Master Plan."

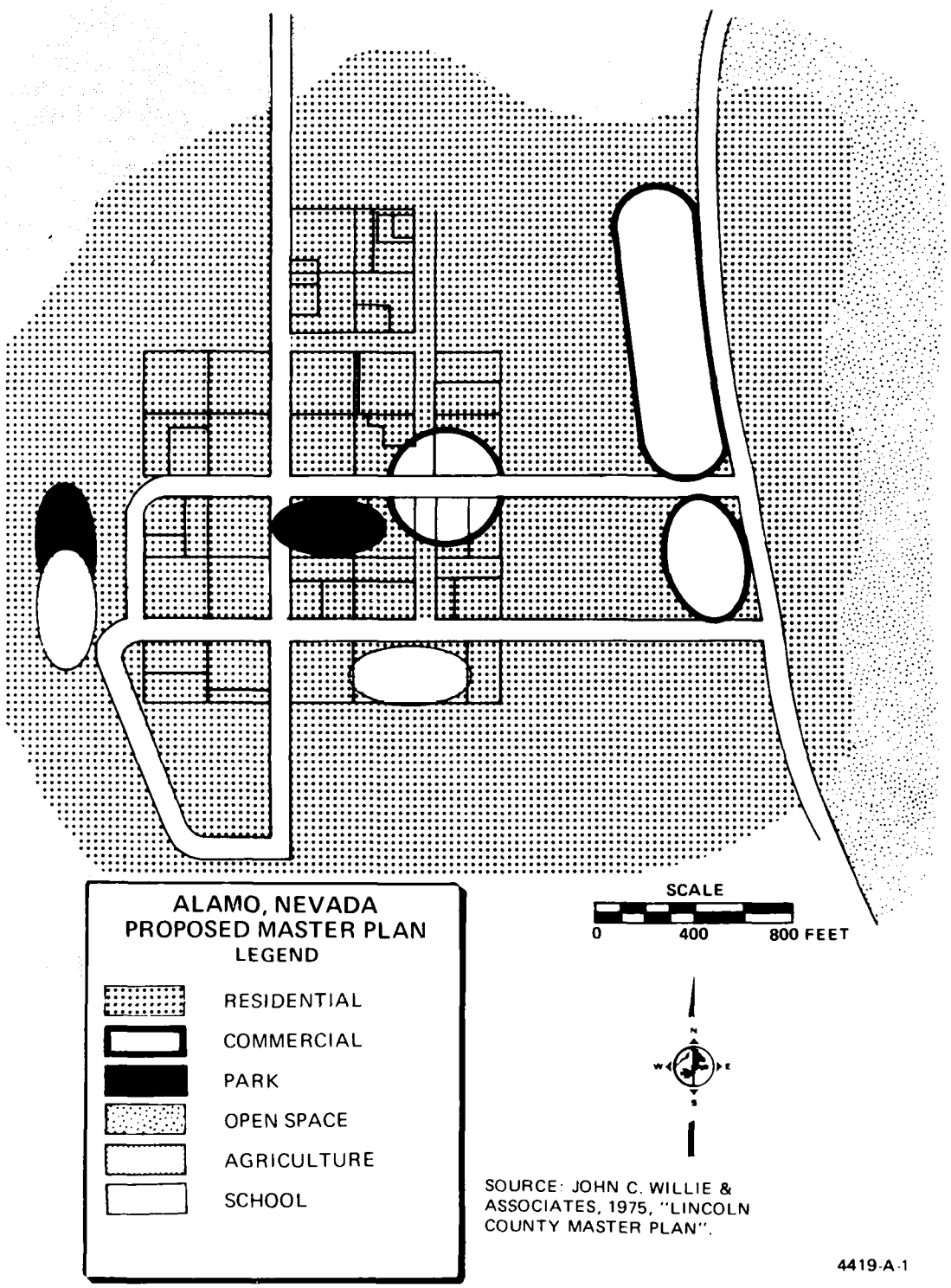

Figure 2.3.1.5-1. Proposed Master Plan (1975) for Alamo, Nevada.

County master plan hopefully addresses these issues.

Federal Lands Constraints (2.3.1.5.3)

The 1975 proposed Lincoln Master Plan states that Alamo could support an additional 1,500 persons (570 percent increase) within the existing platted area of the community if present densities are maintained. This would require about 70 acres for residential development, exclusive of streets. Map inspection indicates a considerably larger area of privately owned land surrounding Alamo, primarily to the north, west, and south of the community. Major growth to the east could be constrained by federally controlled lands, but overall, this is not considered a problem.

Caliente, Nevada (2.3.1.6)

The City of Caliente, with almost 900 acres of land area, is the largest community in Lincoln County (see Table 2.3.1.5-1). However, approximately 730 acres or 82 percent of the city is vacant. The developed land uses include 34 acres of single family residences, 6 acres of mobile homes, and 44 acres of public, school, church, and park land uses. Caliente also has the highest proportion of industrially used land in the county--11 acres. In 1975, the city adopted the master plan that was prepared in conjunction with the county (see Figure 2.3.1.6-1). Caliente has contracted with the county for revision of its master plan. Completion is expected in December 1981. Since 1975, the City has annexed 23.5 acres of vacant land for future use as a mobile home area. As the only incorporated community in Lincoln County, Caliente adopted its own zoning in the mid-1970s. The City does not have a subdivision ordinance at the present time.

Policy and Goal (2.3.1.6.1)

Development policy adopted by the city of Caliente is taken from the Lincoln County Master Plan and includes:

1) Utilization of available vacant land for annexation and development;

2) Provision of a wide range of housing choices with proper siting, protection, and type-determination based upon identified need;

3) Commercial development along major streets and traffic arteries and designed to standards of off-street parking, landscaping, and pedestrian access;

4) Maintenance of a one-acre minimum lot size where agricultural uses are considered;

5) Site plan review of all industrial development should be made in accordance with policy which would include landscaping and pollution standards.

Discussion (2.3.1.6.2)

Caliente's land use policies are typical of smaller communities and are consistent with those of the 1975 proposed Lincoln County Master Plan. Adjacent open space shown on the master plan map for Caliente indicates that expansion of

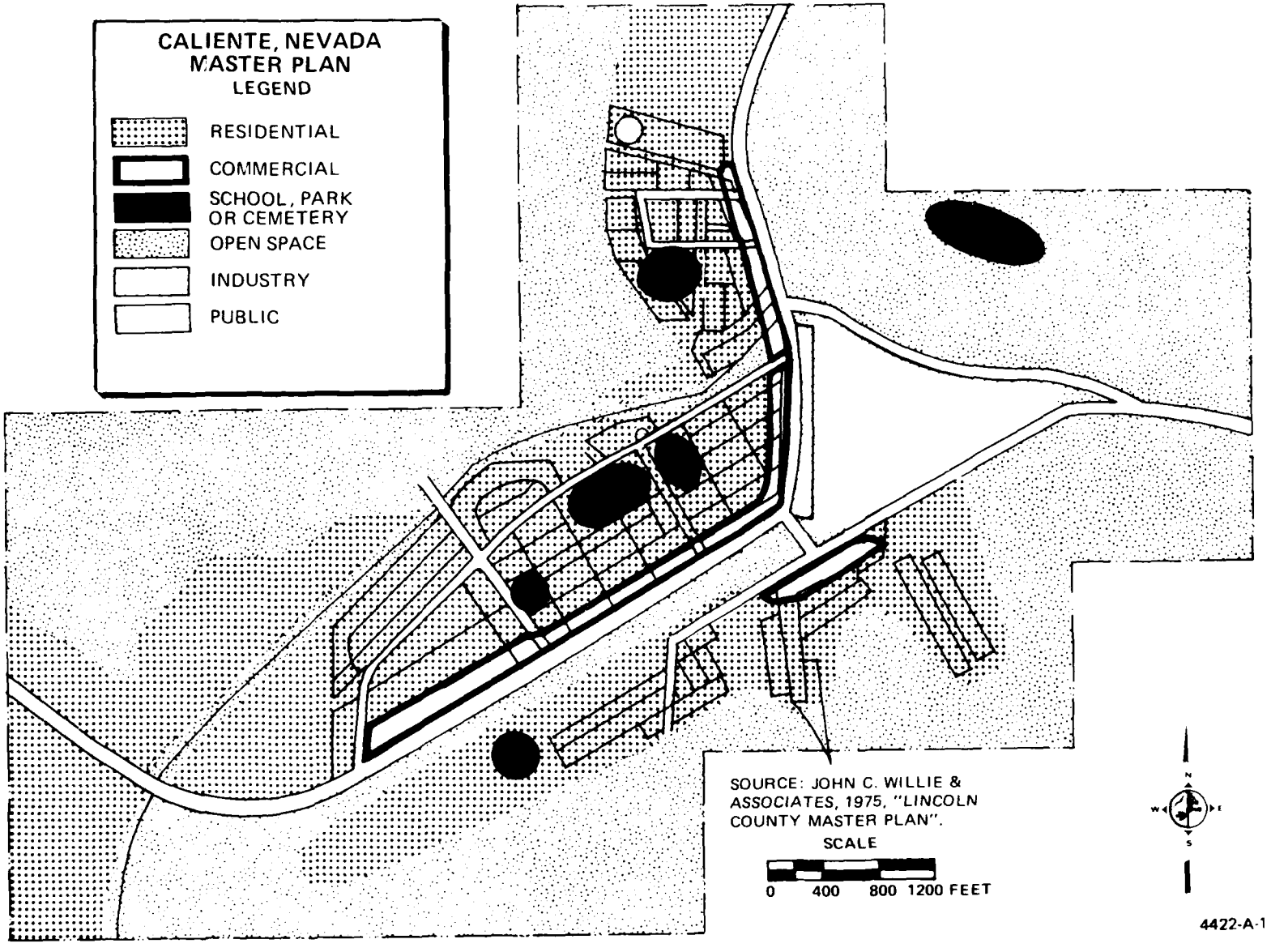

Figure 2.3.1.6-1. Master Plan for Caliente, Nevada.

the predicted land pattern could be made without taking exception to current policy statements. Development required for project deployment, however, should be uniform and represent a logical extension of the existing urban pattern, permitting system and services impacts to be more easily mitigated as growth progresses. Should deployment of the project require that significant development be sustained by the city, care should be exercised in planning and implementing such development in order to reduce local impacts.

Federal Land Constraints (2.3.1.6.3)

Although 99 percent of Lincoln County is under federal land control, there is sufficient privately owned land near Caliente to accommodate significant population increases. About 82 percent of the incorporated area is vacant, and private land surrounds the city. Much of the vacant land is due to the fact that the current population is 64 percent of its historical peak in the 1940's when railroad activity was strong. The public lands which do surround Caliente are not particularly suited for urban development, due to the higher elevations and rugged terrain. Mineral claims would also present problems for land transfer.

Panaca, Nevada (2.3.1.7)

Panaca lies at the junction of State Route 319 to the proposed Beryl OB site in Iron County, Utah, and US-93 leading south to Caliente and north to Pioche (see Figure 2.3.1.4-2). The land area of Panaca is approximately 380 acres, but major portions of this total are streets (117 acres), vacant (147 acres), and in agricultural use (70 acres). The remaining area for urban structures is only 47 acres in size (see Table 2.3.1.5-1). The land use map proposed for Panaca in the 1975 master plan is shown in Figure 2.3.1.7-1.

Policy and Goal (2.3.1.7.1)

The policies summarized below are taken from the 1975 proposed Lincoln County Master Plan.

1) A wide range of housing types should be developed.

2) Commercial development should be located in designated areas, strips should be avoided, and adequate off-street parking should be provided.

3) Agricultural land should be withheld from development.

4) Industrial development should be located near or adjacent to existing uses and supportive utilities.

5) Community facilities should be implemented through specific improvement districts.

Discussion (2.3.1.7.2)

The small urban centers of Lincoln County could be required to absorb up to a maximum of 1,600 acres of peak-year urban development depending on deployment alternative. Panaca will bear only a portion of that responsibility, but will

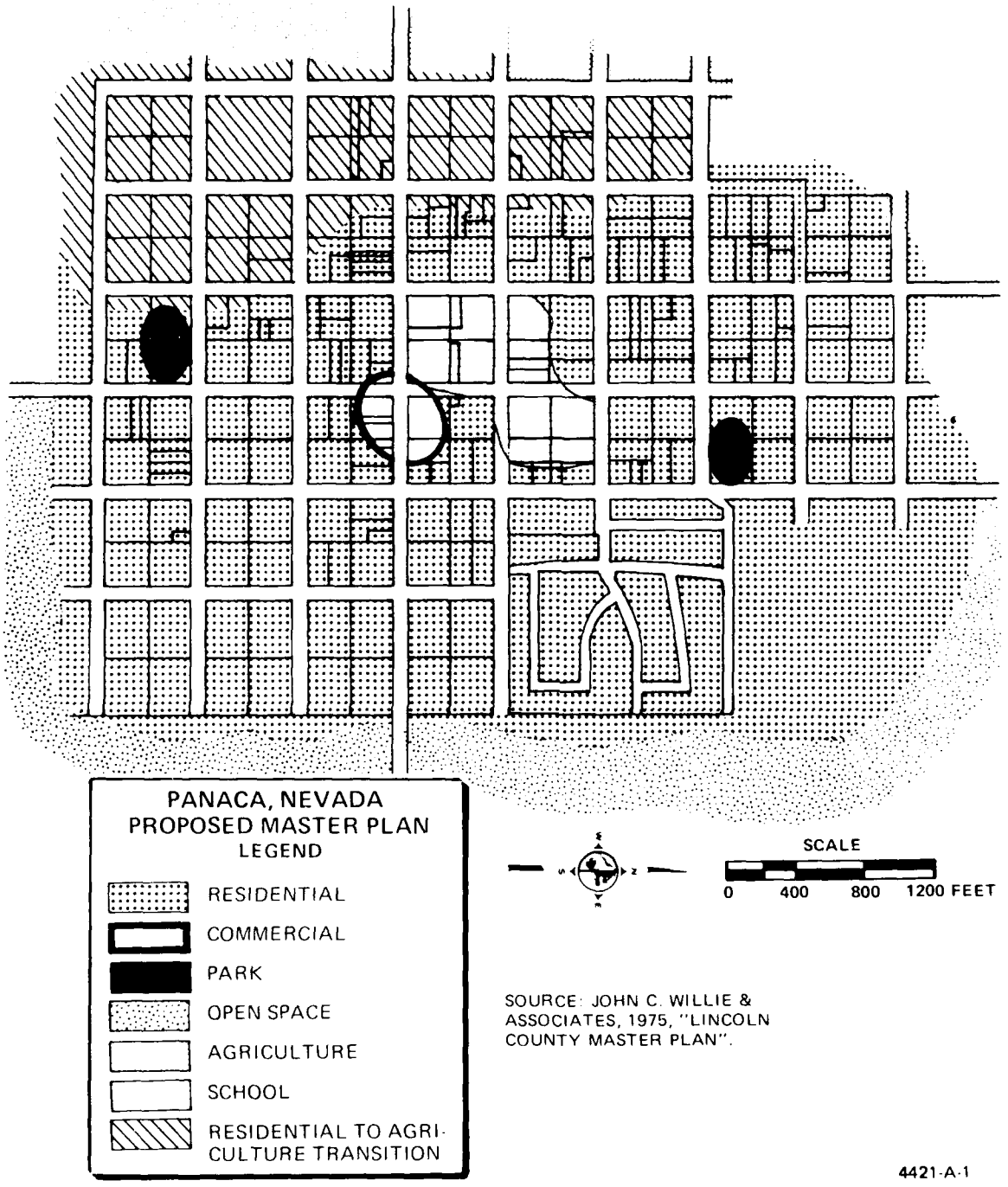

Figure 2.3.1.7-1. Proposed (1975) Master Plan for Panaca, Nevada.

nevertheless experience impacts from project deployment. The community has only 147 acres of vacant land on which to support development before a conversion of use process is begun. The proposed master plan for Panaca (see Figure 2.3.1.7-1) depicts residential infill within the existing community with a transition from agricultural to residential land use planned for the western fringe area.

Federal Lands Constraints (2.3.1.7.3)

Panaca abuts BLM acreage on the east but large areas of privately owned land exist to the northwest, west, and southwest of the community (see Figure 2.3.1.4-2). Most of this area is used for agricultural purposes. In fact, agriculture is the prominant land use within the community, accounting for 18.5 percent of the area. The land use plan calls for expansion into the agriculture area on the west, but this is not necessarily due to the nonavailability of land on the east side of town. The town has acquired land from the BLM on the east side in past years. Overall, federal land control is not considered a major constraint.

Pioche, Nevada (2.3.1.8)

Pioche is the county seat for Lincoln County and has an economy that is tied to mining and mineral processing. As can be noted from Figure 2.3.1.4-2, a large area of patented mining claims on private lands lie to the south and west of Pioche, while other lands lie to the north. In 1975 there were over 70 acres of vacant land in Pioche (see Table 2.3.1.5-1). The total area of the community was approximately 180 acres with 60 percent of the total developed for urban purposes. Figure 2.3.1.8-1 displays the 1975 master plan map for Pioche. The new master plan being prepared for Lincoln County will supercede this map following adoption after December 1981. Zoning and subdivision matters in Pioche are handled by the county.

Policy and Goal (2.3.1.8.1)

Pioche's land use policy, as stated in the 1975 proposed Master Plan for Lincoln County, is given below.

1) Vacant land should be used for residential development.

2) Development should occur in an even pattern without sprawl.

3) A wide range of housing types should be developed.

4) Controlled commercial development of all types should be regulated by type and use area, and should be subject to off-street parking, landscaping, signs, and other improvement controls.

5) Agricultural lands should be protected from development.

6) Industrial development should be subject to individual site plan review and to air, water, and noise pollution standards.

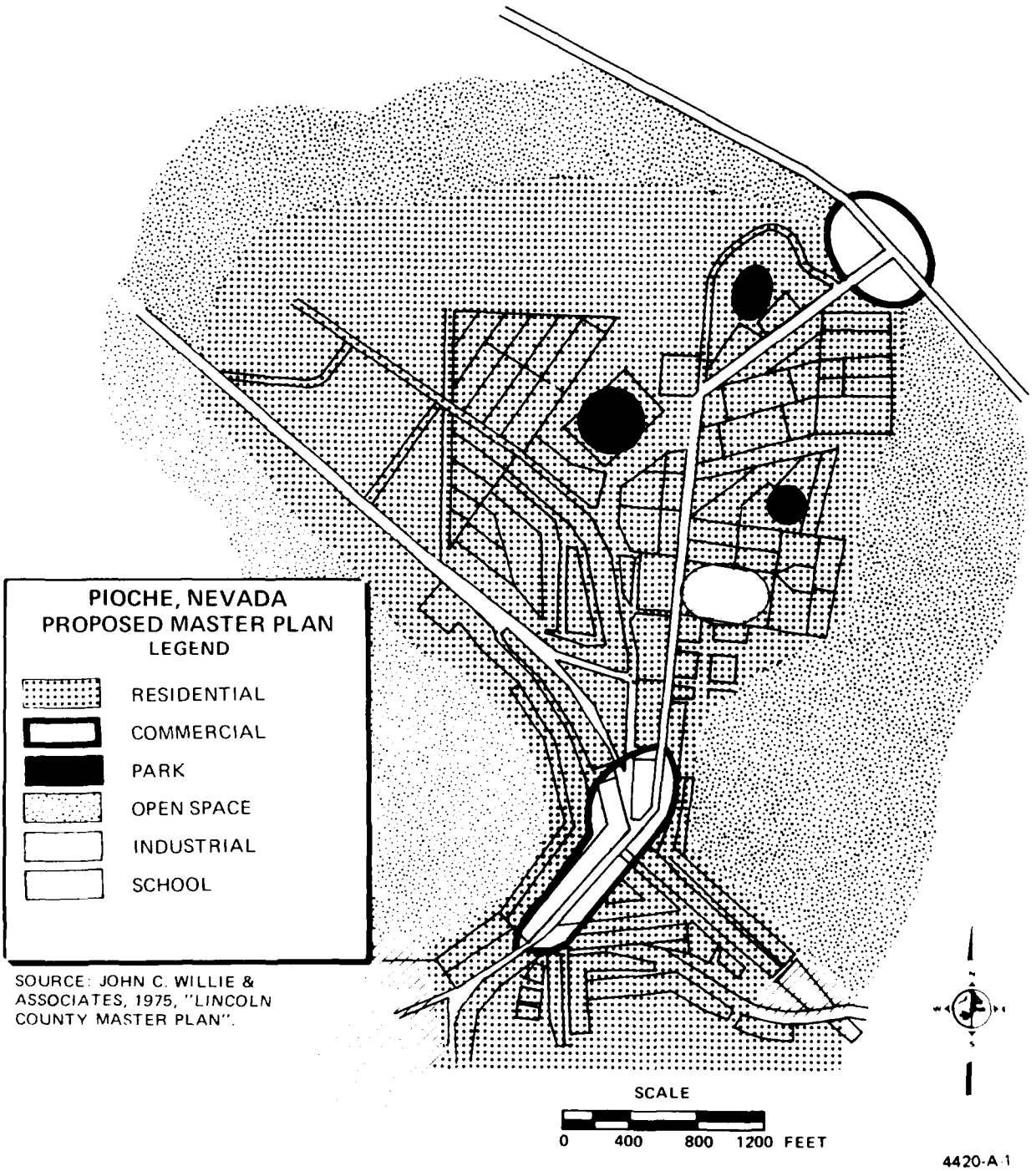

Figure 2.3.1.8-1. Proposed (1975) Master Plan for Pioche, Nevada.

Discussion (2.3.1.8.2)

The 1975 proposed master plan for Pioche shows considerable capacity to accommodate growth beyond its current population projections without significant impact to its land use policy. According to the 1975 plan, the community is expected to reach only 825 to 1,425 persons by 1990, yet land use planning shows that the projected development pattern may be expanded into designated open space areas without impacting current policy. These findings may be altered when the revised master plan for Pioche is released in December 1981. The 1975 master plan map, Figure 2.3.1.8-1, shows residential expansion to both the north and south. Pioche is capable of absorbing a proportionate share of peak-year urban land impacts from deployment of the project if overall residential density increases. Caution should prevail, however, when examining the implementation of such development. Small-scale systems and service delivery mechanisms are extremely sensitive to short-term demand. Mitigation measures can be planned and implemented if given the proper planning, timing and resources. Small communities become quickly impacted or compelled to react to development demand in an unpredicted manner.

Federal Lands Constraints (2.3.1.8.3)

Pioche is substantially surrounded by public lands to the west, south, and east (see Figure 2.3.1.4-2). The Lincoln County Plan states that Pioche can accommodate an additional 700 persons if existing landowners make land available. Physical constraints, primarily hillside areas, may put pressure on the release of public lands if growth exceeds the planned levels. The plan states that "public lands immediately adjacent to an existing community and a part of its natural growth pattern, should be made available for community development by the public agency involved." Federal land control may therefore become a consideration at Pioche. Transfer of BLM land for urban development at Pioche may be severely constrained by a profusion of mineral claims in the area.

Nye County, Nevada (2.3.1.9)

Policy and Goal (2.3.1.9.1)

The goals and policies of the Nye County General Plan are:

1) The preparation of a comprehensive development plan containing adopted area goals and encouraging interagency cooperation;

2) The encouragement of individual development proposals to be in keeping with the county General Plan as well as the Community's General Plan;

3) The development of methods and controls to preserve county environment;

4) The protection of streams, rangelands, mountains, open views, and meadows from development that would reduce the county's desirability to the tourist and the local resident;

5) The encouragement of voluntary and legislative mandate to improve community attractiveness and civic improvement.

These policy statements address the general areas of land use, but the plan does contain specific policy for each individual use.

Discussion (2.3.1.9.2)

M-X system deployment could require as much as 2,800 acres of additional urban land to be developed in Nye County to accommodate the short-term construction impacts. The long-term urban land area requirements are expected to be negligible. Only the communities of Gabbs, Tonopah, Pahrump, Beatty, and Round Mountain offer possibilities of central development, and they may be quickly impacted by urban development. Local policy toward development is directed toward a lifestyle target that must be maintained even over short-range, excessive demand for urban land development. The county must maintain its own values if project deployment is not to have excessive, long-term, and irreversible impacts. Mitigation by interagency cooperation and communication is a local policy target and holds promise as the most logical technique for county development.

Federal Lands Constraints (2.3.1.9.3)

Nye County is expected to double its population by 1990 to almost 10,000 persons under baseline conditions. Additional growth and demand for land will come from second home markets, new community development, and a continuing rural-urban trend. Local planning stipulates that additional demand for urban land for development be provided where possible from disposition of federal lands. Approximately 93 percent of the land in Nye County is under federal management, and most private lands are tied up in long-term agreements for grazing and cattle raising. There is a relative lack of private, taxable land from which to generate tax income for development support.

Local county planning indicates a critical need to acquire additional land for urban development through transfer of federal lands. Usable land is constrained by mountainous or difficult terrain, agricultural lands, and range/grazing land. The Nye County Plan recommends that development demand be met by government land sales, particularly from the test range and the Beatty area. Additional growth, beyond limits and capabilities of small communities, is recommended by policy and plans to be located there. This additional land would mitigate local community effects of the project and permit short-term, high-impact development, required by the project, to be developed. Since net long-term urban demand is negligible to the county, such property could be returned to government regulation or returned to private use.

Gabbs, Nevada (2.3.1.10)

Policy and Goal (2.3.1.10.1)

The land use policies of Gabbs are directed toward producing a community with adequate services, public facilities, and housing opportunities available for all its residents, while retaining the advantages of smallness and promoting the individuality of the community. In order to achive that goal, the city has as its objectives:

1) Expansion of the availability of commercial services and facilities within the community;

2) Provision for the arrangement of future land use activities that will be compatible with existing land use patterns;

3) Improvement of the appearance and esthetics of the community;

4) Promotion of housing opportunities and choices in the community;

5) Provision for the limited, orderly expansion of the community, if such expansion is forthcoming. Growth should be limited to about 400 additional persons, if possible;

6) Encouragement of a greater diversification in the economic base of the community.

Discussion (2.3.1.10.2)

Gabbs now supports a population of 800 people, primarily persons locally employed in local mining and mineral extraction. Plan policy limits projected population to 1,200 persons. The city has approximately 300 acres of urban development and a total area of 1,920 acres, a considerable potential for growth. The deployment of the project would mean that Nye County would have to accommodate a maximum peak-year development of 2,800 acres within the first 5-6 year construction period. Gabbs has a significant amount of open space to convert to development, and it could, if required, accommodate a portion of the expected growth. However the objectives of the community plan provide for limited growth, and further development of the existing community. Growth as a result of the project could have a significant benefit for this and other small towns if it extends existing facilitites and services and provides a methodology or an inducement to improve service delivery community-wide. Without parallel growth in municipal facilities and services, Gabbs cannot support further development. Impacts associated with the project would be significantly adverse without application of well-planned mitigation measures.

Tonopah, Nevada (2.3.1.11)

Policy and Goal (2.3.1.11.1)

A master plan and formal set of development policies do not exist specifically for Tonopah. The community is unincorporated even though it is the county seat and has the highest concentration of population in the county. The Nye County General Plan is therefore applicable to Tonopah - see Section 2.3.1.10 above for the summary and discussion of Nye County planning policy.

Additionally, the Nye County Plan made a specific recommendation for Tonopah as follows:

"Do not 'zone' Tonopah in the usual sense, but establish a unique Historic Preservation District. Keep maximum land use flexibility in rural sections."

Discussion (2.3.1.11.2)

M-X system concentration would create a high demand for urbanization in Nye County; peak requirements would range from 2,350 to 2,770 acres under the various

alternatives calling for full deployment in Nevada and Utah. A major portion of the Nye County requirement would be attracted to Tonopah since it is the largest urban area in the county and is located within the general DDA region.

The large urban land area requirement is entirely short-term in nature. This "boom" type growth is certainly in keeping with the history of Tonopah and the other communities (past and present) in Nye County. Tonopah is one of the few communities in the county's history, however, to survive the "bust" following rapid growth. Future rapid growth caused by M-X would be in direct conflict with the following statement in the Nye County General Plan: "Tonopah should really be left as it is..." and the historic preservation zoning policy stated above.

The community has taken steps to control development. The subdivision ordinance was updated in 1977; a mobile home ordinance adopted in May, 1981; and a zoning ordinance is to be completed by August, 1981. Although boom-type growth is an integral part of Tonopah's history, the development resulting from M-X would be of significant magnitude as to severely strain the community's ability to provide services and maintain its present identify.

Federal Land Constraints (2.3.1.11.3)

Tonopah is situated in a roughly 12 sq mi area classified as patented mining claims. This land is owned in fee simple and therefore technically available for community growth without conflicting with public land ownership. Other constraints, though, such as terrain and existing land use, drastically limit the amount of land available for sound urban development. Growth on the scale forecasted for M-X may well require the release of BLM land in the vicinity of Tonopah in order to accommodate sound land development.

White Pine County, Nevada (2.3.1.12)

Urban development in the unincorporated areas of White Pine County is undertaken under the direction of the White Pine Board of County Commissioners and the White Pine County Regional Planning Commission (representing the county and the City of Ely). The county adopted a general plan in 1970 and had a revision prepared in 1976. The revision was not adopted by the county and since that time a second revision effort was initiated, but not completed in early 1981. The county adopted zoning and subdivision ordinances in 1970 and 1971, respectively, in order to implement the general plan. The zoning ordinance provides for the classification of county land into various use categories and sets forth the standards and requirements for each type of development. The ordinance was recently amended to provide an industrial park zone thereby permitting the development of an industrial park. The subdivision ordinance, governing the division of land into smaller parcels, is in need of revision according to county officials. The White Pine County Regional Planning Commission administers both of the above ordinances.

The general plan prepared in 1976 analyzed the entire county in terms of existing settlements, soil limitations, slopes, flooding zones, and seismic hazards. From these variables, a land development suitability map was derived. One of the classifications shown on the map is "lands capable of supporting urban development." The areas falling into this classification, based upon local site conditions, cover a large portion of the county: north of Ely in the Steptoe Valley; north of McGill in

the Steptoe Valley; edges of parts of Spring Valley; Snake Valley east of Baker; the central portion of Butte Valley; the southwest corner of White Pine County (Smoky Valley); and the area between Preston and Lund. The plan did not recommend expansion of urban development into any of these areas recognizing their remote location vis-a-vis existing communities and the plan's policy for incremental growth of existing communities. Future urban growth was directed to Ely, Ruth, McGill, Preston-Lund, and Baker. The outlying nonurban areas of the county were recommended for use as shown in Figure 2.3.12-1.

McGill, Ruth, Preston-Lund, and Baker are unincorporated communities under the jurisdiction of the county. McGill, about one-third of the size of Ely in terms of urban development, is the second largest urban area in White Pine County, while Ruth ranks third. Existing land uses in 1976 for these two communities are shown in Table 2.3.2.12-1. Preston-Lund and Baker each with less than 100 acres of urban development, are the smallest unincorporated settlements in the county and are not included in the above table. McGill and Ruth, being unincorporated have no corporate boundaries, but were measured in terms of the original townsite plots. Ruth and McGill have a combined total of almost 125 acres of vacant and open space land. In McGill, the site of the Kennecott smelter, industrial land is the category with the most vacant land, while in Ruth the vacant land is split between residential and industrial land. Land use maps from the 1976 proposed general plan are illustrated in Figures 2.3.1.12-2 and 2.3.1.12-3, respectively.

Policy and Goal (2.3.1.12.1)

Policies and goals were established for the 1976 general plan effort by an advisory panel of business, agriculture, and public representatives. These policies are outlined below.

The land use policy of the White Pine County Plan is:

1) To provide for controlled growth;

2) To adopt realistic zoning and land use planning; and

3) To maintain property rights.

Only 3 percent of the land in White Pine County is in private ownership and expansion is difficult. Most open space available for development is federally owned, and a major planning issue is the preservation of farmland in order to protect the agricultural economy.

Discussion (2.3.1.12.2)

The existing population of White Pine County is approximately 12,000 persons, and the population is expected to reach 13,400 by the year 1995 under baseline conditions. The General Plan recommends that development be targeted toward the City of Ely's vacant or redevelopable land. That policy will be impacted immediately if the project is deployed at its projected 1,100 to 3,500 acre level of urban land requirement in White Pine County. The net long-term urban land gain in the County would be negligible except under Alternatives 3 and 5 which include an OB site near Ely. The major deployment impact would therefore be due to early, peak-year demand that would deplete the vacant land resource of Ely, and possibly,

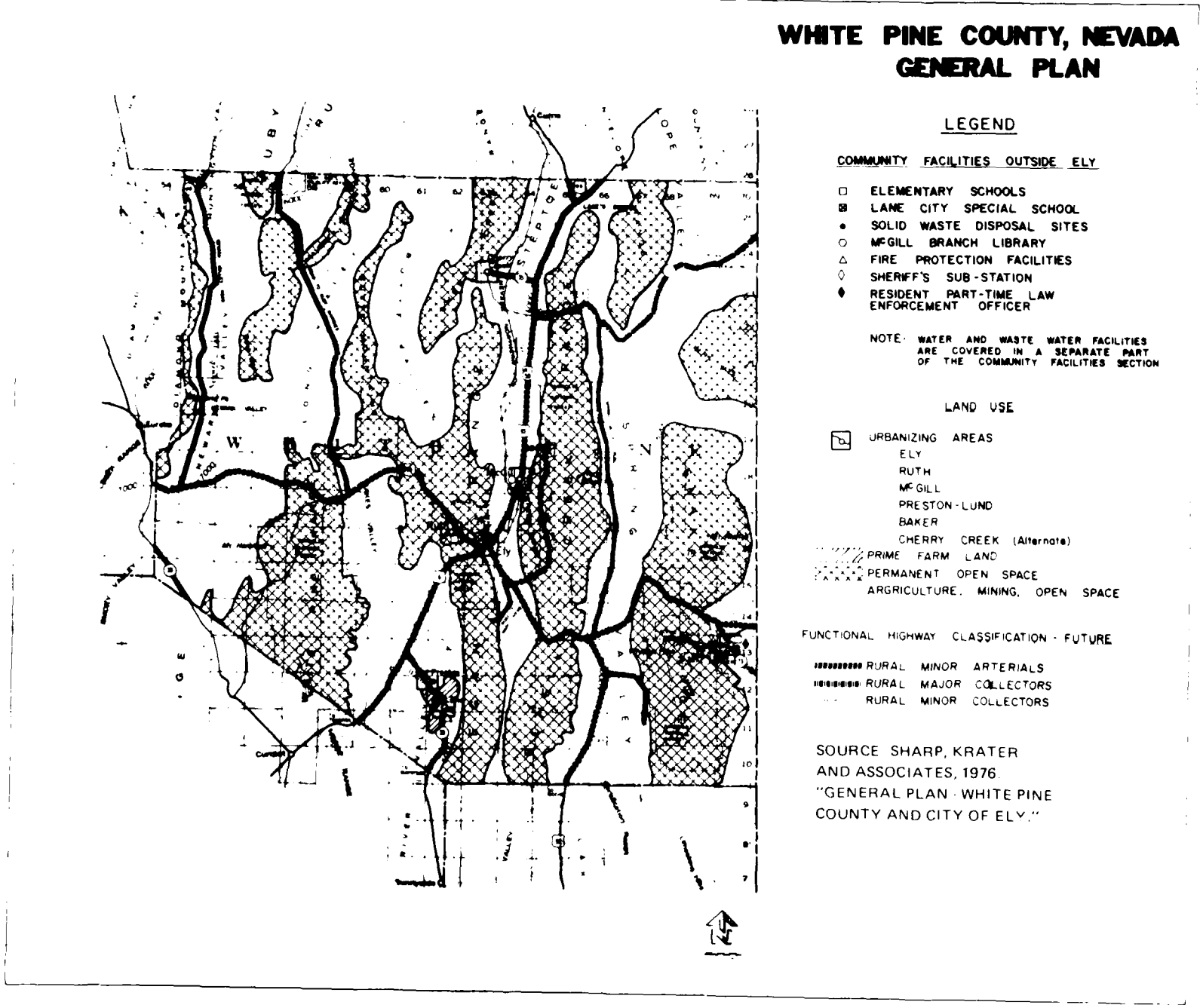

Figure 2.3.1.12-1. Proposed (1976) General Plan for White Pine County, Nevada.

Table 2.3.1.12-1. Existing land use -- White Pine County, Nevada.

Land Use	Ely		McGill		Ruth		White Pine County Total	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Single Family Residential	436.8	21	170.9	37	71.4	32	679.1	25
Mobile Home Residential	41.6	2	13.9	3	13.4	6	68.9	3
Multiple Family Residential	20.8	1	9.2	2	0	0	30.0	1
Commercial	83.2	4	9.2	2	2.2	1	94.6	3
Industrial	41.6	2	13.9	3	0	0	55.5	2
Public and Quasi-Public	187.2	9	55.4	12	46.8	21	289.4	11
Streets and Railroad	499.2	24	110.9	24	44.6	20	654.7	24
Developed Land Subtotal	1,310.4	57	383.4	83	178.4	80	1,872.2	68
Underdeveloped and Open Space	769.6	37	78.6	17	44.6	20	892.8	32
Total	2,080.0	100	462.0	100	223.0	100	2,765,0	100

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Source: Sharp, Krater, and Associates, 1976, "General Plan for White Pine County City of Ely"; HDR Sciences.

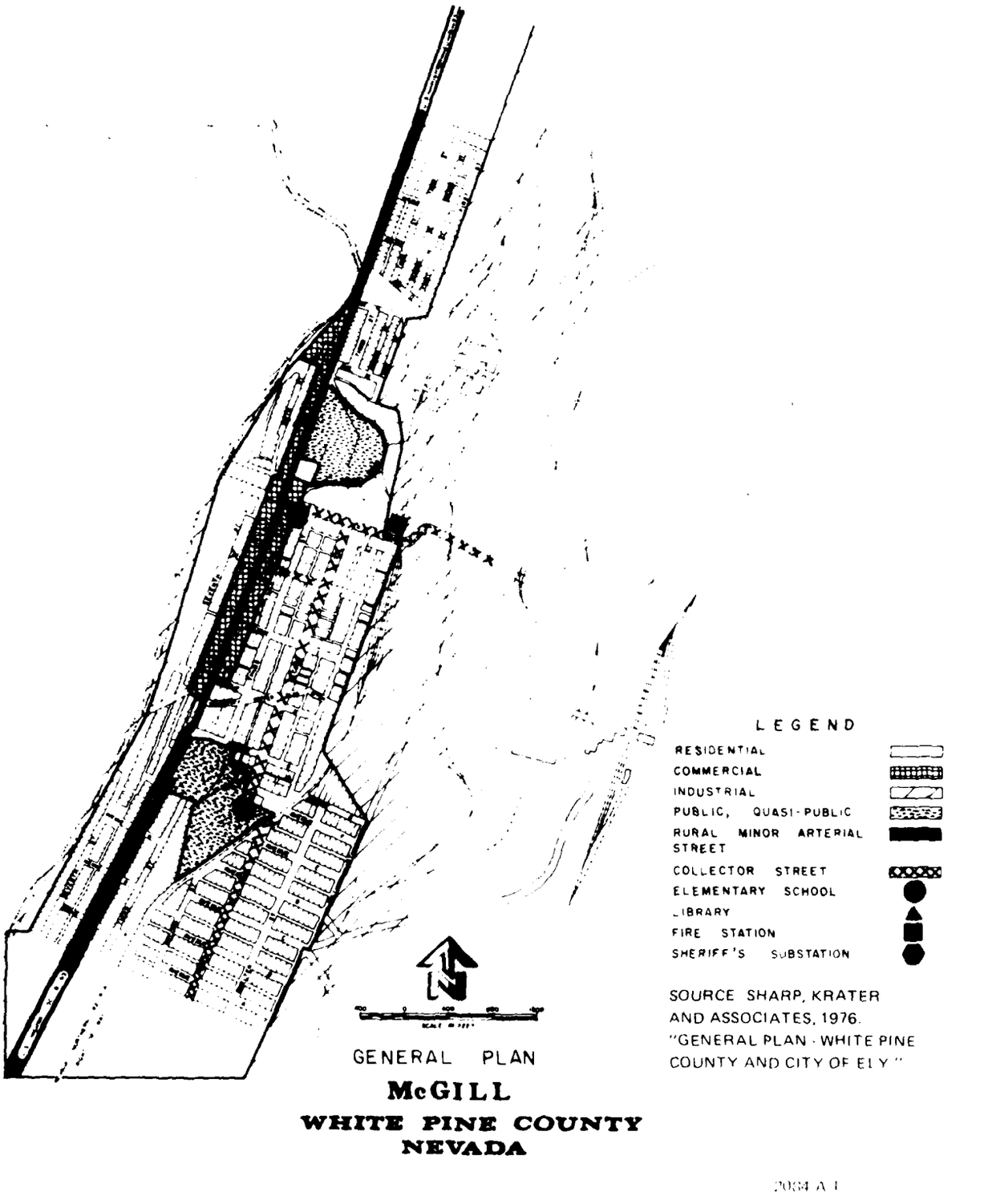

Figure 2.3.1.12-2. Proposed (1976) General Plan for McGill, Nevada.

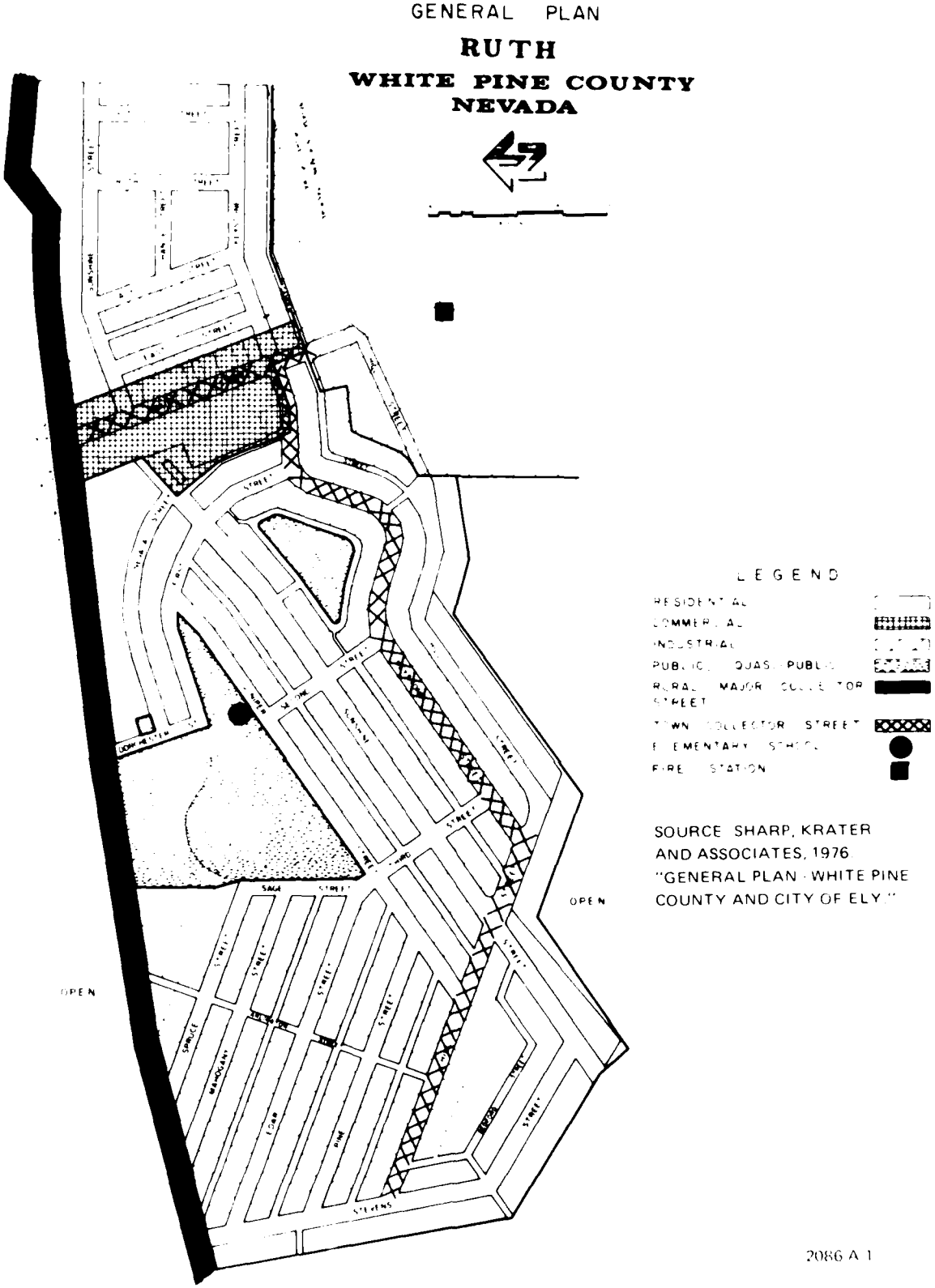

Figure 2.3.1.12-3. Proposed (1976) General Plan for Ruth, Nevada.

impact the prime county land. The small communities of Ruth, McGill, Preston-Lund, and Baker also could become immediate targets, in the short-term. Supportive land uses, such as commercial, should not be permitted to be developed in a strip-type form along streets and highways. The strength of local policy must be observed if short-term project construction is not to produce lasting impact on the communities. The general plan for White Pine County does address the possibility that a "new-town" concept might be the solution to lessening community impact locally.

Federal Land Constraints (2.3.1.12.3)

The proposed (1976) White Pine County general plan map (Figure 2.3.1.12-1) depicts agriculture, mining, and open space as the predominant land use, essentially all of which is under public land ownership. The plan has also identified lands capable of supporting urban growth (listed above) should current urban centers be unable to support anticipated growth demand.

Only 3.4 percent of the land area in White Pine County is in private ownership. (See Figure 2.3.1.12-4 for a display of the public and private ownership patterns in the central area of the county.) It may become necessary or desirable in certain instances to transfer some lands from federal control to private ownership to support project development demand for urban land. By local planning policy, however, these options should be pursued only after vacant urban land is consumed within and adjacent to existing communities in the county.

Ely, Nevada (2.3.1.13)

The City of Ely adopted its general plan in 1970 and, like the county, declined to adopt the general plan prepared in 1976. The city's zoning and subdivision ordinances were prepared in 1970 and 1980, respectively. The city is anticipating that its master plan and zoning ordinance will be revised by the White Pine County Regional Planning Commission if it is successful in hiring a planner in the summer of 1981. Residential housing in Ely covered almost one quarter of the city's land area in 1976: single family housing used 437 acres; mobile homes, 42 acres; and multi-family housing, 21 acres (See Table 2.3.1.12-1). Vacant and open space lands in Ely totalled 770 acres or 37 percent of the city's land area, a proportion that should be sufficiently large to accommodate baseline growth during the long range planning period of the general plan. However, two proposals have been recently made for annexation of lands to the northwest and south of the city. The proposal to the northwest, approximately 40 acres in size, is motivated in part by the recently expanded gold mining operations of Anselco. The area to the south of town is approximately 6.5 sq mi. The land uses proposed for this area are primarily housing with small portions set aside for commercial and light industry. Need for this annexation is partially-based upon growth expected from M-X activities.

The 1976 general plan proposed that future low density residential development take place: 1) on the south side of Ely between US6 and US93, and 2) to the northwest of town. The land use map proposed in 1976 is displayed in Figure 2.3.1.13-1.

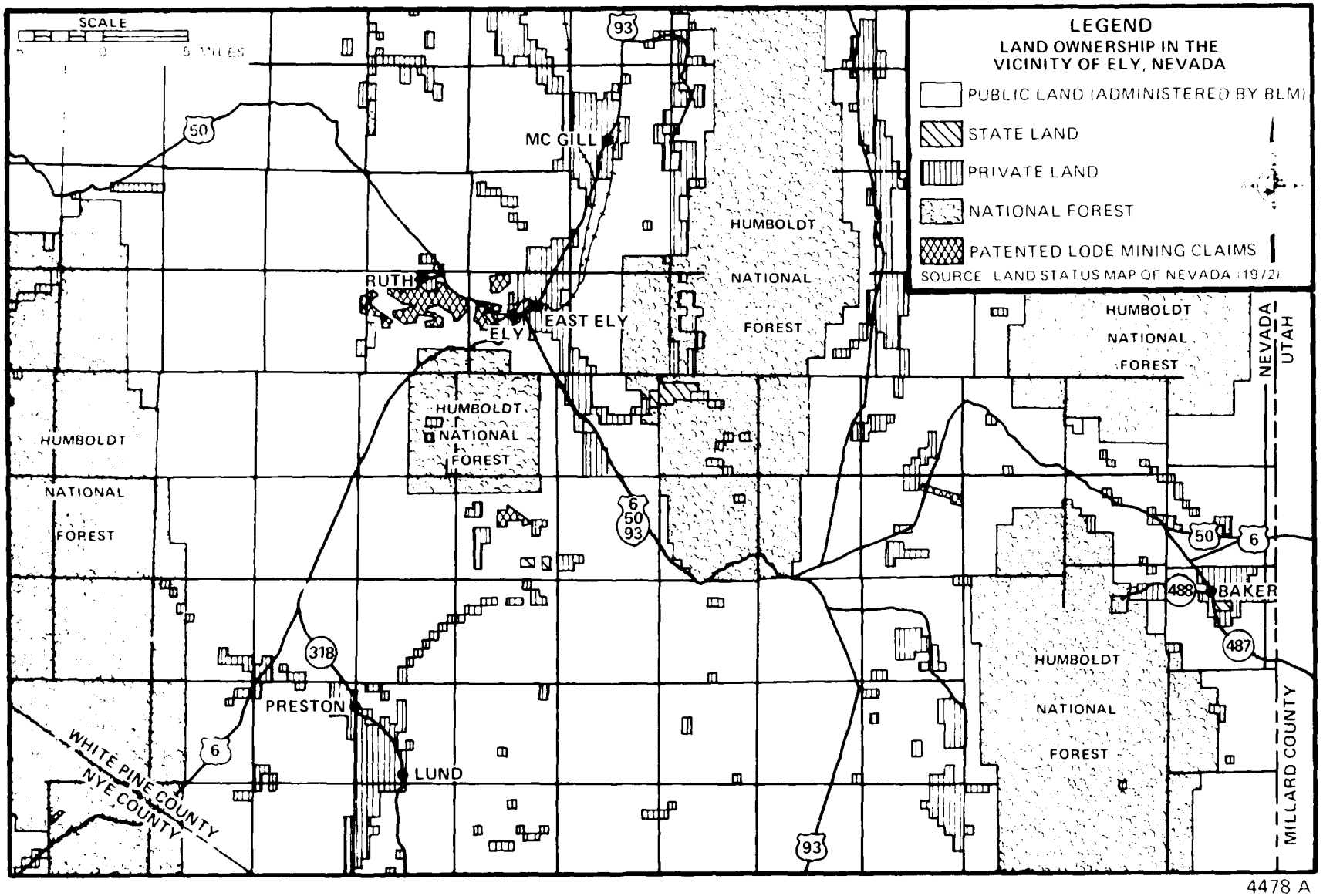

Figure 2.3.1.12-4. Land ownership in the vicinity of Ely, Nevada.

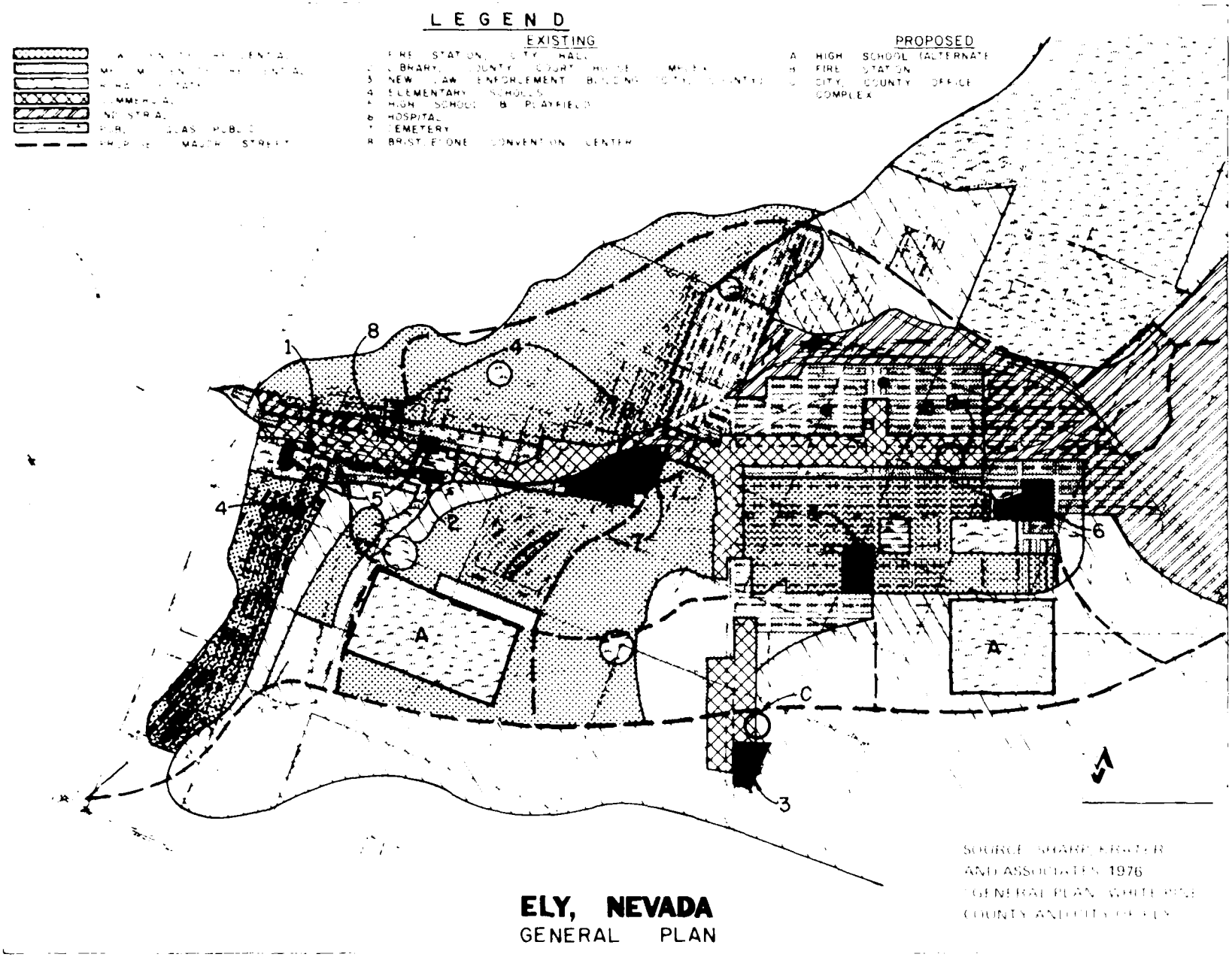

Figure 2.3.1.13-1. Proposed (1976) General Plan for Ely, Nevada.

Policy and Goal (2.3.1.13.1)

The 1976 proposed general plan for Ely states that growth and development objectives are to:

1) Provide for controlled growth designed to enhance and preserve the small town, rural way-of-life enjoyed by the local residents of White Pine County;

2) Preserve existing agricultural lands in White Pine County whenever possible to protect the agricultural base of the County and to plan for the orderly expansion of certain designated urban areas;

3) Adopt realistic zoning and land use planning that recognizes the unique situation in an area of rural population;

4) Recognize the need to assure that private property rights are affected to the absolute minimum necessary to accomplish the objectives, and work toward the established goals as part of White Pine County's long-range comprehensive general plan.

Discussion (2.3.1.13.2)

The City of Ely is a community of approximately 7,700 persons, and the 1976 plan projected accommodation of 8,500 persons under baseline conditions. Ely is the primary urban center in White Pine County and would therefore have a natural attraction for new urban land development associated with the M-X system. The Proposed Action and most of the system alternatives could result in a temporary land requirement at Ely in the 500 to 1,000 acre range, with long-term needs being negligible. The scale of development is significant to a community which presently has only about 1,500 acres in urban development. Furthermore, Alternatives 3 and 5 call for an operating base sited near the city. This would result in a long-term development demand for 850 acres in White Pine County and a cumulative short-term peak of about 3,500 acres. Even without the operating base, development demands at Ely would conflict with the city's policies as stated above. "Orderly expansion" would be difficult since the community could be expected to grow significantly over a period of just several years. The temporary nature of this development would also detract from orderliness. Large and rapid growth would also challenge the goal of preserving the "small town, rural way-of-life." Ely would be expected to accommodate this growth purely from a land area standpoint. The total planned urbanized area would need to expand, however, unless residential densities were to increase.

Federal Land Constraints (2.3.1.13.3)

With 95 percent of White Pine County under federal land control, the Regional Planning Commission has gone on record in support of transferring as much BLM and USFS land to state and private ownership as possible. The Ely General Plan stipulates that any such transfer would have to be in accordance with the general land use plan. This plan calls for contiguous urban area growth, with residential expansion in the northwest and southwest section and industrial land development to the east. Public land could become a constraint for major urban growth at Ely. The

community is substantially surrounded by public land as shown in the land owne map, Figure 2.3.1.12-4. Several thousand acres are currently under consider for public to private ownership transfer. Legal descriptions of the land parcel which people have expressed a desire to be offered for sale are now being prep Potential road networks (easements) are being considered in conjunction with Regional Planning Commission in an attempt to identify potential land suitable urban use near Ely and to tie together the various blocks of land.

UTAH COMMUNITIES (2.3.2)

All five counties in the Utah DDA region have adopted or are in the proce adopting master plans and implementing ordinances. Table 2.1.3.1-2 summarizes adoption and revision status of the counties and the associated communities. peak-year and long-term urban land requirements for these counties are four Table 2.3.1-1.

Beaver County, Utah (2.3.2.1)

Urban development in the unincorporated portions of Beaver County is gu by a master plan adopted in 1972. The areas covered by the master plan primarily rural with the exception of four small settlements at Adams Greenville, Manderville, and North Creek. Figure 2.3.2.1-1 shows the eas portion of the land use map for the master plan.

The county's zoning ordinance and the most recent version of the cou subdivision ordinance were adopted in 1977. In light of growth from M-X several other development projects noted below, Beaver County and its incorpor communities are considering contracting for a study of the county and muni master plans and planning ordinances. The main purpose would be a comparisc zoning ordinances looking for generic weaknesses and possibly undating the ma plans. A similar type of zoning ordinance analysis was prepared in 1978 as pa the Planning District V Comprehensive Plan.

Several potentially large-development projects in addition to M-X are u discussion in the Beaver County area. These projects include the following: molybdenum mine approximately 15 mi northwest of Milford; (b) An alunite pr in the Milford area which is currently in abeyance; (c) A 20 megawatt power which may be constructed pending the outcome of test borings for geothe activity; and (d) a railroad spur or coal slurry pipeline through Beaver Coun Kaiporowitts Plateau, which may be necessary if coal mining is permitted i Plateau area. The time of the above projects vis-a-vis M-X construction operation has not been determined.

Policy and Goal (2.3.2.1.1)

The following policies and goals have been excerpted (except as noted) fro Beaver County master plan prepared in 1972.

1) The county master plan identified most of the federal and state lan well as many of the marginal private lands, for "multiple use." designation makes the lands subject to conditional use permit development. Principal uses proposed, where appropriate, are for

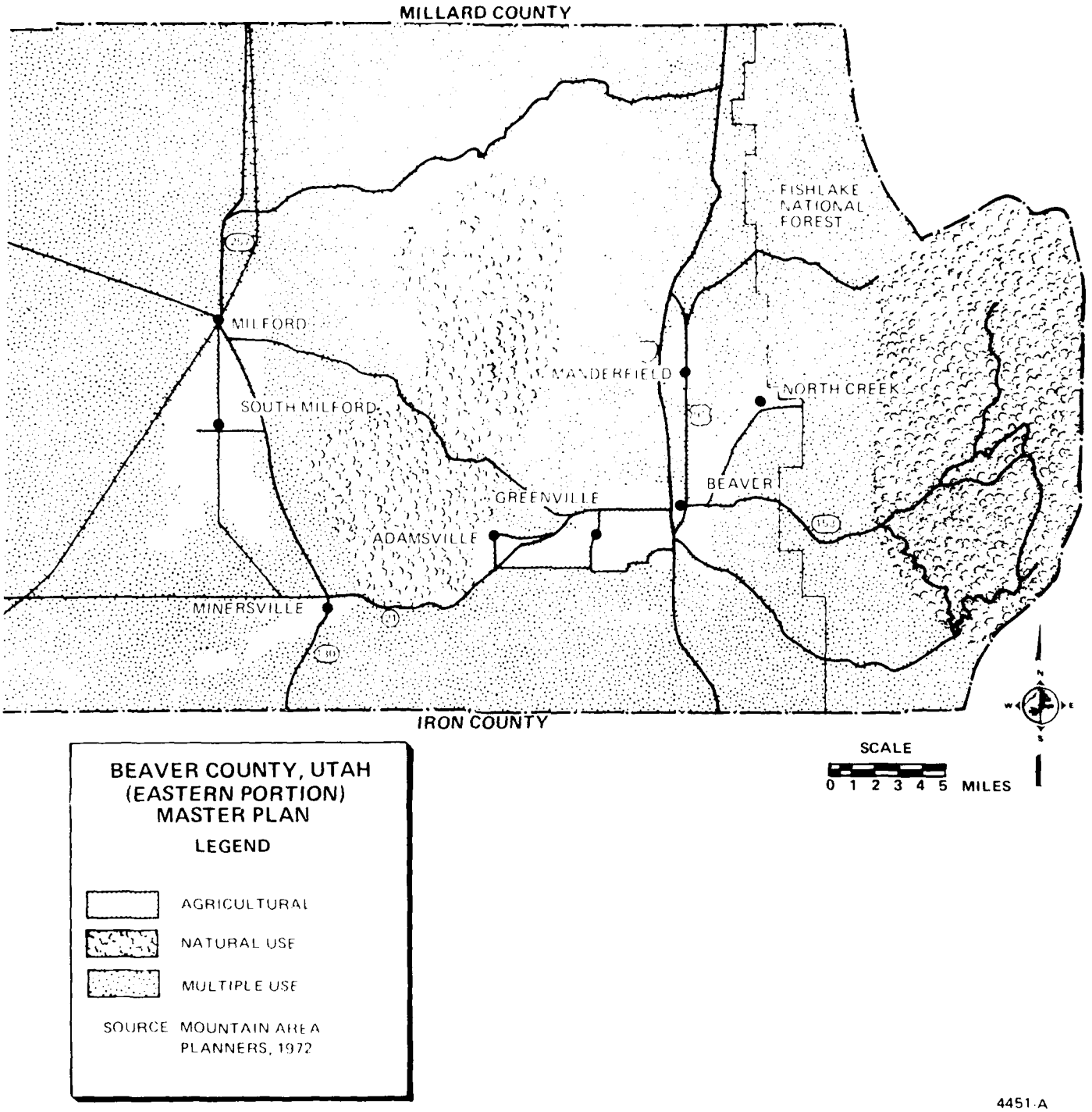

Figure 2.3.2.1-1. Eastern portion of Master Plan for Beaver County, Utah.

stock grazing, mining, and recreation (with accessory housing). Emphasis should be on management practices to assure better conservation and wise use of natural resources, soils stability, plant cover, water quality and scenic beauty. Local, state, and federal officials should coordinate legislative efforts with private and public land owners and users to realize the intent of long-range plans for beneficial utilization of the county's resources.

2) New urban-type developments, both residential subdivisions and commercial developments, should be permitted only within boundaries of incorporated municipalities, except for projects specially justified in other locations.

3) New residential subdivisions in unincorporated areas should be prohibited until the present subdivisions have been fully developed, and then approved only where the projects are justified both as to need and location. This policy should apply to both year-around and seasonal home developments. Exceptions might be residential developments which support approved recreational, industrial, educational or other improvements, they can be provided with water and sewers, will not unreasonably damage the natural environment, and are designed to harmonize with scenic values of the area.

4) Scattering of commercial uses throughout the county, or stringing them along highways or major roads should be prohibited. In order for the municipalities to properly receive new businesses, space and services should be made available in locations that are appropriate.

5) Develop existing and potential agricultural assets to a maximum.

6) Prevent encroachment of urban-type uses into agricultural areas.

7) Nonagricultural uses should not be permitted to encroach into rural areas, except single-family homes on not less than ten acres in the rural residential classification, and twenty acres in the agriculture classification as shown on the Master Plan.

8) Areas presently (or potentially) used for agriculture should be protected and preserved for this exclusive use.

9) Support continued growth in the county up to approximately 15,000 people, if proposed industrial projects and generated secondary employment opportunities will provide sufficient jobs to support that population level. (Source: Planning District V Comprehensive Plan, Appendix XIII).

Discussion (2.3.2.1.2)

The variety of uses permitted under "multiple use" (see policy number 1 above) may bring requests for the mobile home developments and similar temporary support facilities in these areas. The extent to which these uses would be consistent with the multiple use concept would be a determination of the local decisionmakers.

The visibility needed to appreciate some of the Beaver County vistas will be degraded as a result of the higher particulate levels caused by M-X construction activities. Scars on the landscape, road cuts, and general construction activities will disturb the natural vegetation of Beaver County and hence conflict with portions of the above policy. Another conflict will arise due to the degradation of water quality resulting from construction activities.

Policies 2 through 4 address the location of new urban development. In general, new urban growth should be confined to the existing communities. Exceptions may be made but must be warranted by special circumstances. A determination of whether the area support centers or construction camps (if any are located in Beaver County) would fall into the category of exceptions would have to be made by local decision-makers. If the special circumstances are found to be present, water supply and sewers as well as protection of environmental values would be needed. Conflicts with the above policies could arise through development of residential subdivisions outside of existing communities due to short-term growth pressures from construction workers.

Policies number 5 through 8 address issues related to rural areas and the protection of agricultural land. Construction workers opting to live in mobile homes or campers may choose to locate in rural areas presently used for agricultural uses. The potentially large number of families selecting such an option would create pressures for individual farmers and rural landowners to split their land into smaller parcels. In light of the already severely limited supply of private land in Beaver County the division of significant amounts of land into 10 and 20 acre parcels could seriously harm the long term viability of the county's agricultural production.

The population target expressed in policy number 9 would be exceeded by the population expected under Alternative 5. The first OB at Milford (Alternative 5) would result in a peak population level of approximately 36,000 in 1987 and 1988. The population would taper off to approximately 18,000 by 1994. Other Nevada/Utah alternatives, such as Alternative 4 without an OB at Milford, would have smaller population increases shown in Beaver County resulting in population levels of 11,000 in the peak years and 7,000 in the long term. To describe such population levels as "in conflict" with the goals of Beaver County would be an understatement. The increases in population levels above the goals would mean over twice as much development in the county as envisioned by the county residents. Concurrently impacts and stresses placed upon the natural resources, agricultural lands, and infrastructure systems would be over 100 percent greater than that desired by the local population.

Although a time frame for the population growth is not included in the county goal it is presumably of a longer term than the seven year growth period that would be caused by M-X. High growth rates are associated with quality of life impacts as described in ETR-35, "Quality of Life."

The nature of the growth, i.e., dependency upon a single project, would also be in conflict with the county's goal. The population described by the goal would be more able to sustain any fluctuations in economy than a population dependent upon the policies of single entity, in this case national defense priorities.

Beaver City, Utah (2.3.2.2)

Urban development in Beaver County is concentrated in three communities in the eastern half of the county; Beaver City, Milford, and Minersville. Beaver City, as noted in Table 2.3.2.2-1, is the largest of the communities with almost 825 acres of land inside city limits. Of this amount, about 62 percent is used for urban development, 6 percent for agriculture, and 32 percent is vacant. Commercial development in Beaver City accounts for about 15 acres of land and about 2 percent of the land area. There appears to be adequate room in commercial areas for continued expansion of this area. Streets are one of the larger land users, accounting for almost as much total acreage as is presently devoted to single-family residential use. It is typical for most pioneer communities laid out on a gridiron pattern to have over 20 percent of the land area devoted to streets.

A master plan and map were prepared for Beaver City as part of the planning effort for Beaver County in 1972 (see Figure 2.3.2.2-1). The city declined to adopt its portion of the master plan and as a result does not currently have a master plan. The prospect of M-X would probably force the city into adopting a master plan, possibly one prepared in conjunction with the zoning ordinance study by the Five County Association of Governments (FCAG). The city adopted a brief zoning ordinance covering a portion of the city in 1974. Subdivision regulations were adopted in late 1979.

Policy and Goal (2.3.2.2.1)

Specific goals and policies for Beaver City are not identified in the 1972 proposed Beaver City Master Plan. However, policies for future growth are implicit in the proposed master plan map. Goals and policies identified above for Beaver County are also considered generally applicable to Beaver City.

Discussion (2.3.2.2.2)

Beaver City would be particulary affected by those M-X deployment alternatives which include an operating base sited near Milford. Although most of the M-X induced growth forecasted for Beaver County would probably occur at Milford, Beaver City will also be an attraction to growth, especially because of the access afforded by Interstate Highway 15. Any development in the area west of the highway would be in direct conflict with the Master Plan since this area is designated for agriculture and low density residential (one unit/20 acres). Large amounts of residential development on the south, east, and north fringes of the community could also be in conflict with the plan as these areas are designated for a density of only one unit per every ten acres. Two general requirements would be needed if Beaver City were to accommodate significant population growth without expanding the overall planned limits of urbanization: first, development infill would need to occur on existing vacant and underutilized land; and second, planned densitites would need to be increased in the fringe areas.

See also discussion comments under Beaver County.

Federal Lands Constraints (2.3.2.2.3)

The nearest public lands are at least one mile from the existing city limits. Public land control would not be a direct constraint on urban area growth. Figure 2.3.2.2-2 shows land ownership in the vicinity of Beaver, Milford, and Minersville.

Table 2.3.2.2-1. Existing land use - Beaver, County Utah.

Land Use	Beaver City		Milford		Minersville	
	Acres	Percent	Acres	Percent	Acres	Percent
Residential	240.3[1]	29	90.2	17	39.7	9
Commercial	15.0	2	7.0	1	2.4	1
Industrial	0.4	--	8.5	2	--	--
Public	21.1[2]	3	29.8	5	8.5	2
Church/Cemetery	12.3	1	--	--	--	--
Streets	223.3	27	56.7	11	98.6	24
Developed land subtotal	512.4	62	192.2	36	149.2	36
Agriculture	46.1	6	0.7	--	89.9	2
Vacant	264.8	32	345.2	64	174.7	42
Total	823.3	100	538.1	100	413.8	100

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[1]Includes 5.7 acres of mobile homes.

[2]10.1 acres of schools, 11.0 acres of parks.

Sources: Five County Association of Governments, 1978, "Comprehensive Plan for Planning District Five"; Five County Association of Governments, 1980, "Milford Land Use and Housing Elements."

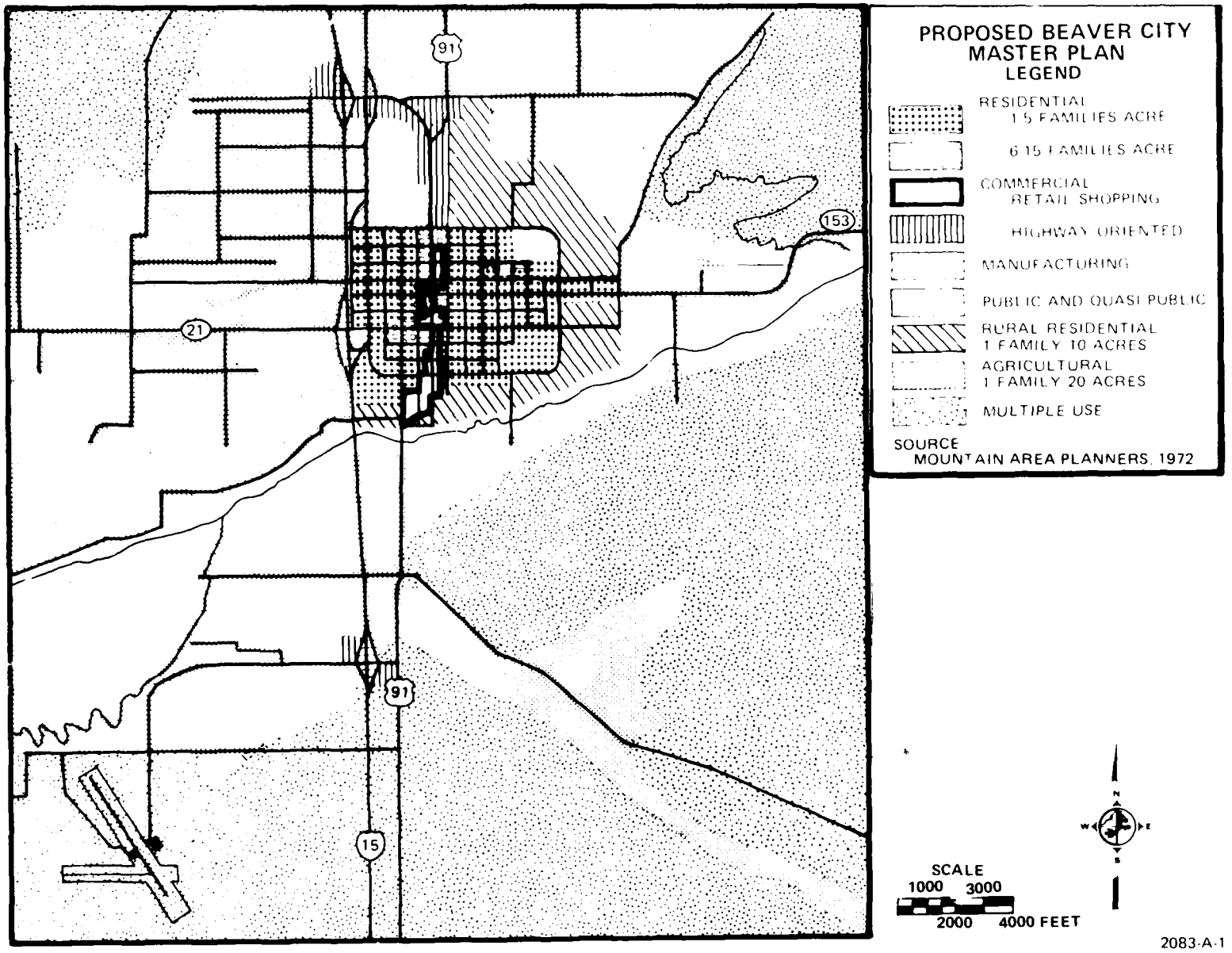

Figure 2.3.2.2-1. Proposed (1972) Master Plan for Beaver City, Utah.

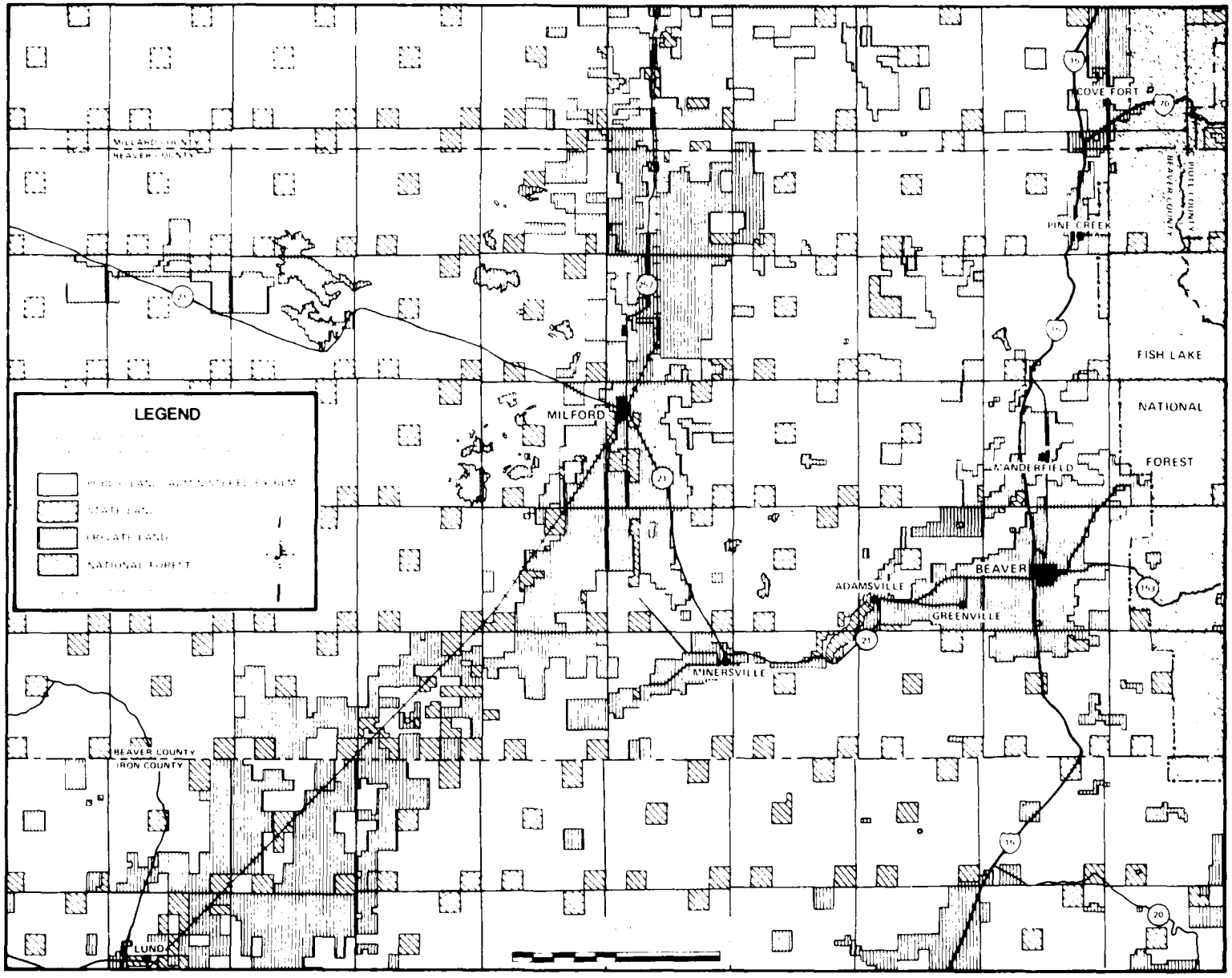

Figure 2.3.2.2-2. Land ownership in the vicinity of Milford, Beaver, and Minersville, Utah.

Milford, Utah (2.3.2.3)

The City of Milford since 1976 has annexed about 40 acres of vacant land bringing the total land area in the city to almost 540 acres. The dominant portion of the city, 64 percent or 345 acres as shown in Table 2.3.2.2-1, is vacant while only 90 acres are developed for residential purposes. Due to its location closest to the potential Milford OB site, the city could expect to receive a large share of the urban growth in Beaver County resulting from OB construction and operation. This growth would be in addition to any growth generated by the projects noted above under the Beaver County discussion and an industrial park that the city is trying to establish on the east side of town. In 1980, the city adopted "Milford Land Use and Housing Elements" prepared by FCAG for guidance in handling future growth. The document divided the land use element into five sections which analyzed current land uses, potential growth projects in the area, baseline land use needs for the current population, conditions of the public facilities, and established goals and policies for the city. The conclusions of the baseline land use element stated that in absence of additional development projects, Milford's current pool of vacant land would be able to handle baseline growth without new annexations. The land use element does not account for M-X growth and would need revision should the M-X be approved. The map for the land use plan is shown in Figure 2.3.2.3-1. The zoning and subdivision ordinances were adopted in 1974 and 1979 respectively with the former enforced by the Beaver County building inspector. Milford has a seven member planning commission in charge of zoning and land use matters.

Policy and Goal (2.3.2.3.1)

Policies and goals for the City of Milford are available from Milford's "Land Use and Housing Elements." The following policies are of interest to M-X impacts:

1. An increasing amount of Milford's water is being used by households living outside of Milford's city limits. Should Milford grow and water supplies become inadequate, serious problems could arise. To avoid any future problems and to assure that households living outside the city limits understand their water situation, Milford should consider (a) explaining to future persons requesting a water hook-up, but living outside the incorporated limits of Milford, that as long as those persons remain outside the incorporated limits they are considered secondary customers, and if water shortages arise, Milford will serve its residents first or (b) requiring subdivisions or persons wishing to annex into the city to turn over to the city a number of water rights. The amount of water will be specified by the city.

2. Milford has been experiencing a combination of both a slow rate of growth and a slow decline during recent years. To ensure growth Milford should encourage development in the area.

Discussion (2.3.2.3.2)

The extraordinarily large amounts of peak year growth associated with Alternatives 5 and 6, as well as the high growth peaks under the remaining Nevada/Utah alternatives, will likely be in conflict with the first policy, as unprecedented numbers of households seek to locate mobile homes and permanent homes in Milford city limits. The ability of Milford to supply sufficient quantities of

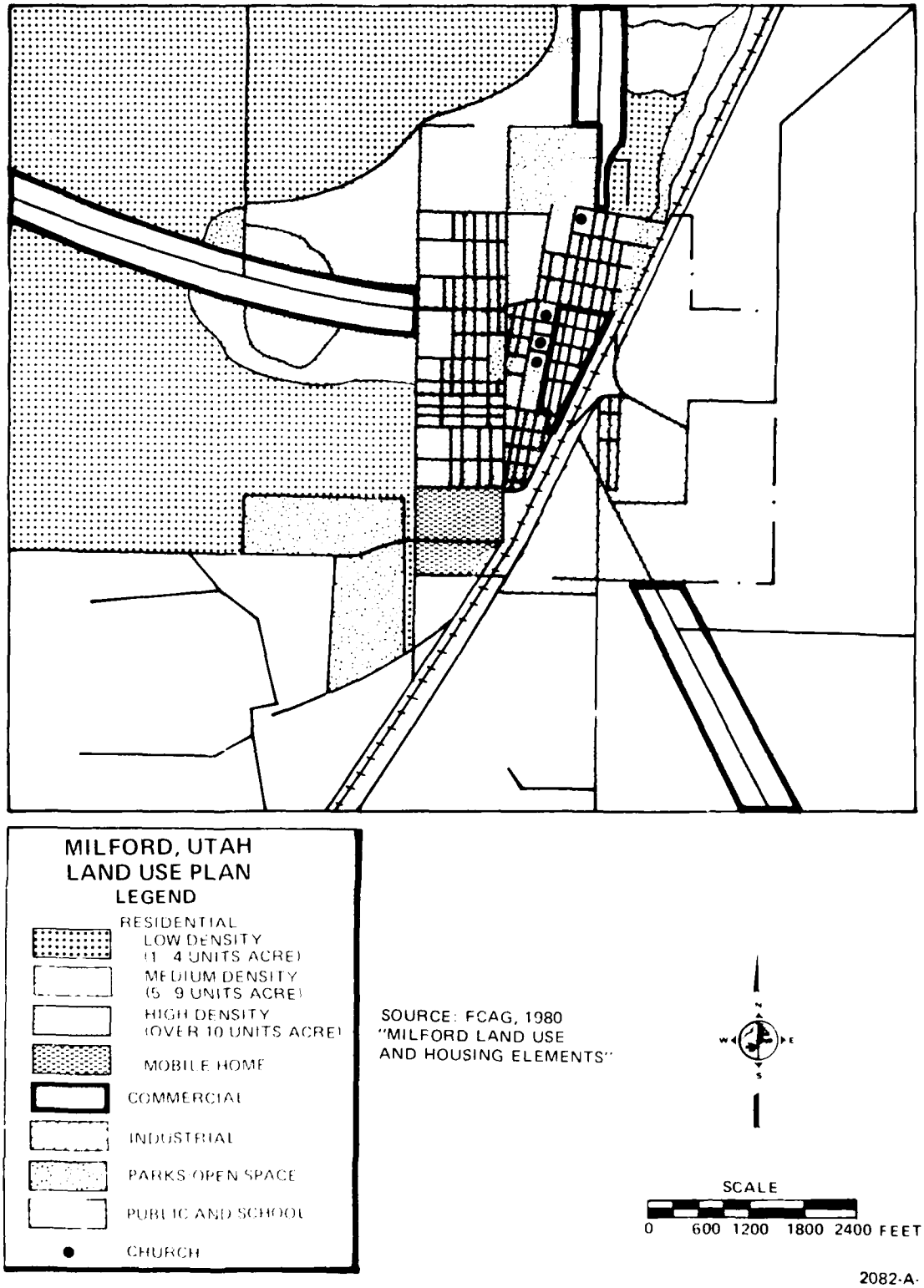

Figure 2.3.2.3-1. Land Use Plan for Milford, Utah.

water to accomodate the growth is uncertain. Milford's policy as expressed above will aid in alerting the public to the problem, but may not go far enough to rectify the situation.

As expressed in policy number two above, Milford seeks orderly and well-managed growth. The M-X growth will be a boom and bust-type of growth characterized by limited amounts of time for advance planning and preparation. The growth will be large and rapid and will severely impact the City of Milford. Depending upon the deployment alternative selected, the long-term effects on Milford may be a permanent high level increase in economic activity or economic activity may decline to a lower level increase above the baseline economic activity in the area. The Milford Land Use Plan (Figure 2.3.2.3-1) shows residential growth to the west at low densitites. These densities would have to increase if significant population growth were to occur in addition to expected baseline conditions (e.g., resulting from an OB sited near Milford) and the overall urban area were to remain within the geographical limits planned. The area designated for mobile home land use would probably need to expand. This would achieve a higher density for housing of a temporary nature to accommodate the short-term impacts created by construction forces.

Federal Land Constraints (2.3.2.3.3)

Public land is not considered a significant constraint to community growth in Utah because of the availability of private land around existing citites and towns. This is true at Milford also, but local interest has been expressed for release of BLM land northwest of the city to accommodate community expansion. When such requests concern smaller parcels adjacent to communities, the BLM generally considers transfer of ownership to be desirable since the agency's planning function is not particularly suited to urban problems and issues. Figure 2.3.2.2-2 shows land ownership in the vicinity of Milford.

Minersville, Utah (2.3.2.4)

Of the three Beaver County communities, Minersville has the smallest amount of land devoted to urban uses. According to Table 2.3.2.2-1 about 42 acres are utilized for residential and commercial uses. This small amount of current urban land could initially act to discourage large amount of urban growth from taking place in Minersville, in spite of its proximity to the Milford OB site. Prior to intense development in the town, a problem of soil drainage and waste disposal must be handled. At the present time, the community uses septic tanks and the minimum lot size needs to be increased to one-half acre to permit sufficient septic tank drainage. An application has been filed with EPA for construction planning funds for a sewage treatment plant.

Minersville has reached its current land area of 414 acres through a number of annexations in recent years. Twenty-six acres on the east side of town were added in 1977, and then two parcels totalling 31 acres were annexed in 1978. The town's zoning and subdivision ordinances were scheduled for revision in early 1981, while the master plan was prepared and adopted in conjunction with the country's master plan in 1972 (see Figure 2.3.2.4-1). The town officials are considering participation in the master plan and zoning study by FCAG, if the study is approved for community assistance funding. The county has a five acre minimum lot size in the unincorporated areas surrounding Minersville.

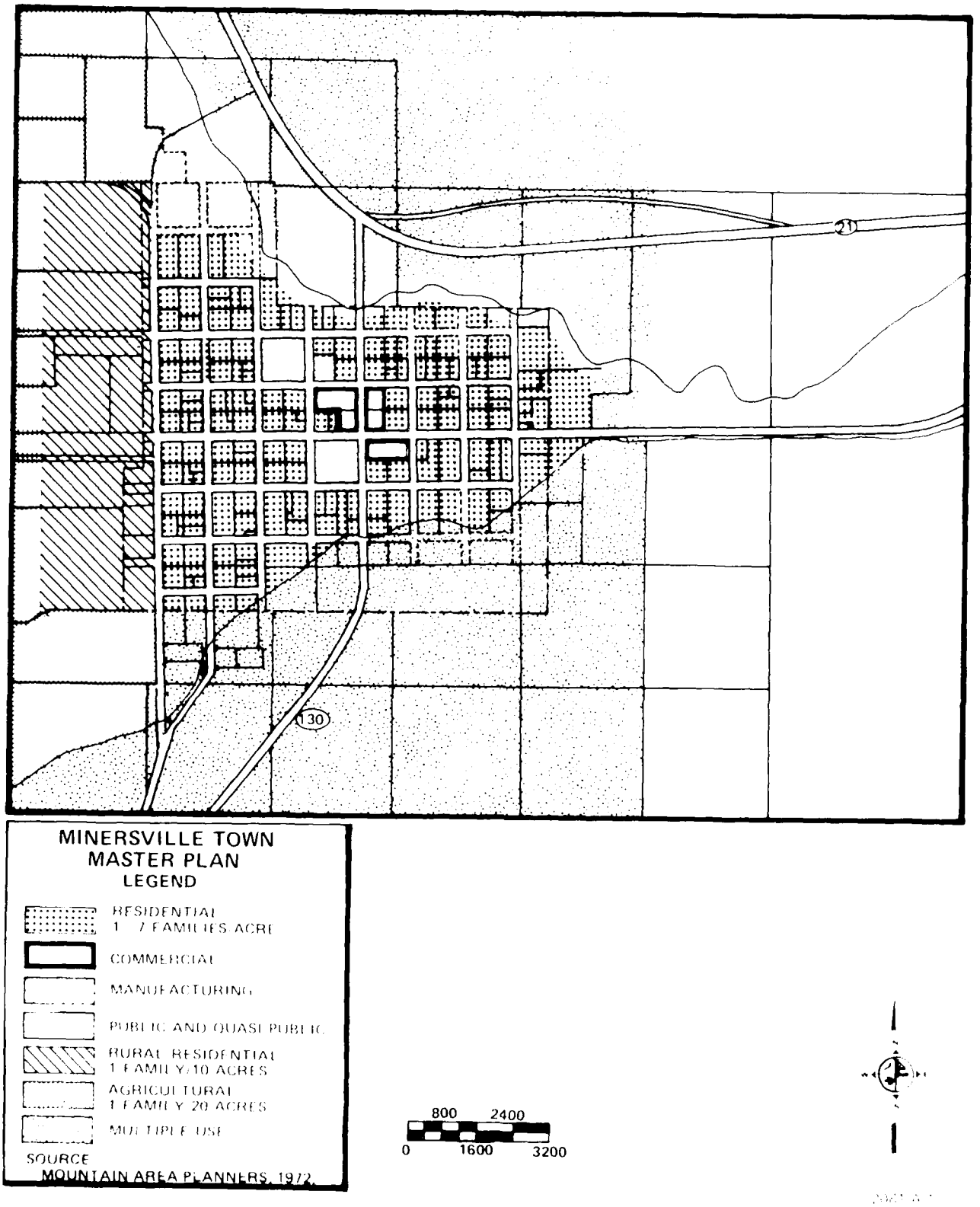

Figure 2.3.2.1-1. Master Plan for Minersville, Utah.

Policy and Goal (2.3.2.4.1)

The Minersville Master Plan is contained within the document covering the Beaver County Master Plan, published in 1972. Except for those which may be implicit through the future land use map, specific goals and policies for Minersville are not identified. Policies and goals identified above for Beaver County are considered generally applicable to Minersville, since the plans are elements of a single document. Specific goals and policies for Minersville are not identified, although directions for future growth are implicit in the master plan land use map.

Discussion (2.3.2.4.2)

Minersville would expect urban growth pressures resulting from the siting of an M-X operating base near Milford, although possibly at relatively lower levels than in other Beaver County communities. The Minersville Master Plan only calls for low density residential growth beyond the current town limits, with all of this area being designated west of Fourth West Street. This is the logical direction for growth given the drainage courses bordering the town on the north and south and converging on the east. Although a large area of vacant land exists within the town, densities may have to be increased to accommodate additional population growth without expanding the limits of planned urbanization. Prior to an increase in densities, the community would need to install sewer lines and construct a sewage treatment plant.

See also discussion comments under Beaver County.

Federal Land Constraints (2.3.2.4.3)

Public land administered by BLM is in close proximity to Minersville to both the north and south. However, a larger area of privately owned lands is to the west, which is the planned direction of growth for the community. Federal land control is not considered a direct constraint on urban growth at Minersville. See Figure 2.3.2.2-2 for land ownership patterns in the Minersville area.

Iron County, Utah (2.3.2.5)

In 1972, Iron County, in conjunction with its incorporated communities, contracted for the preparation of master plans for the incorporated and unincorporated areas of the county. This plan is still in effect in the unincorporated areas and the towns of Kanarraville and Paragonah. The Iron County zoning ordinance aimed at implementing the master plan, was adoptd in 1973 (see Table 2.3.2.5-1). The ordinance is oriented toward rural activities with a minimum of restrictions regarding the control of land development. As such, the boom growth of M-X development would necessitate a complete revision of the ordinance. Beryl, which is the closest rural settlement to the OB site, serves the ranching and farming activities in the Escalante Valley. Future growth in Beryl is guided by the county's master plan and zoning ordinance.

Policy and Goal (2.3.2.5.1)

The following statements, extracted and paraphrased from the recommendations in Iron County Master Plan are policies most applicable to potential M-X impacts.

Table 2.3.2.5-1. Status of adoption of plans and ordinances in Iron and Washington Counties, Utah.

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Iron County	1973		1962			
Cedar City	1979		1972	*Under revision*	1972	Under revision
Brian Head	1980		No ordinance			Under revision
Enoch	1973	Under revision (September 1981)	ca 1970	Under revision (September 1981)	ca 1970	Under revision (September 1981)
Kanarraville	1973					
Paragonah	1973		ca 1975			
Parowan	1973	Under revision (1981)	1981	Under revision (1981)	1981	Under revision (1981)
Washington County	1972	Under revision (Late 1981)	1973	Under revision (Late 1981)	N/A	
Enterprise	1981			(1981)		(1981)
Hurricane	1979	Revised in 1980	1979	Under revision	1977	Under revision
St. George	1980		1981		1981	

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N/A Not Available

Source: Telephone communications with local officials, January-August 1981.

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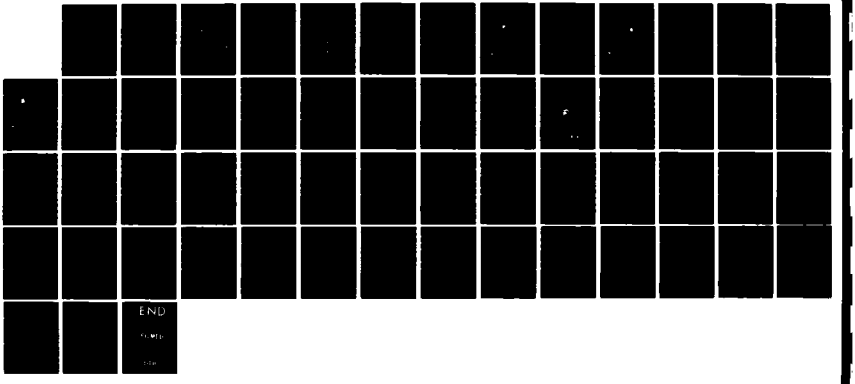

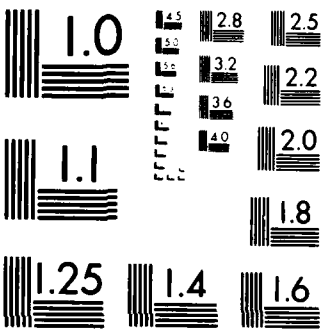

1) Subdivision of agriculture land for residential or other urban development should be limited to parcels of 10 or more acres.

2) Mobile home development should occur in planned parks or subdivisions of a high quality nature.

3) Residential development should be in and around existing growth centers which are, or may more easily be, in a position to provide the necessary services. Iron County should not become an urban service county. Incorporated communities should annex land before development takes place.

4) Commercial land use development should not occur in a strip pattern along major highways connecting various communities in the county.

Discussion (2.3.2.5.2)

Projected urban land requirements in Iron County are high for all Nevada/Utah deployment alternatives except numbers 2, 7, and 8. Requirements are particularly high for Alternatives 1, 3, and 4 due to the OB siting near Beryl. Short-term land demand may be as high as 2,670 acres with permanent land development requiring as much as 830 acres. This level of rapid growth is likely to conflict with each of the above policies. There will be a tendency for development to occur in the vicinity of existing communities, but outside of their defined urban areas unless the county zoning ordinance is revised. This could lead to higher than planned densities at the urban-rural fringe areas. Conflict could also be expected relative to the mobile home policy due to the rapid rate of development. Much of the temporary housing needs for the construction forces would be satisfied through mobile homes. Increased levels of commuting in the county, not only during construction but also relative to an OB site at Beryl in the long term, would tend to promote strip commercial development along the highways.

Federal Land Constraints (2.3.2.5.3)

Iron County has a relatively high percentage of privately owned land (35 percent); federal land control would not be a general constraint to urban development. Figure 2.3.2.5-1 is a land ownership map for both Iron and Washington counties.

Cedar City, Utah (2.3.2.6)

Cedar City is the largest community in Iron County in terms of total land area (almost 4,700 acres), and vacant land (1,920 acres) as noted in Table 2.3.2.6-1. Cedar City has also undergone the largest amount of growth in the past several years, expanding from a developed area of approximately 1,500 acres in 1972 to over 2,000 acres in 1979.

The master plan for Cedar City, rewritten in 1979, analyzed several alternative growth scenarios for the city. The final land use map of the master plan is presented in Figure 2.3.2.6-1. The Cedar City planning commission has five members, with the building inspector and engineering department fulfilling the planning implementation roles. The entire ordinance book for the city, including the

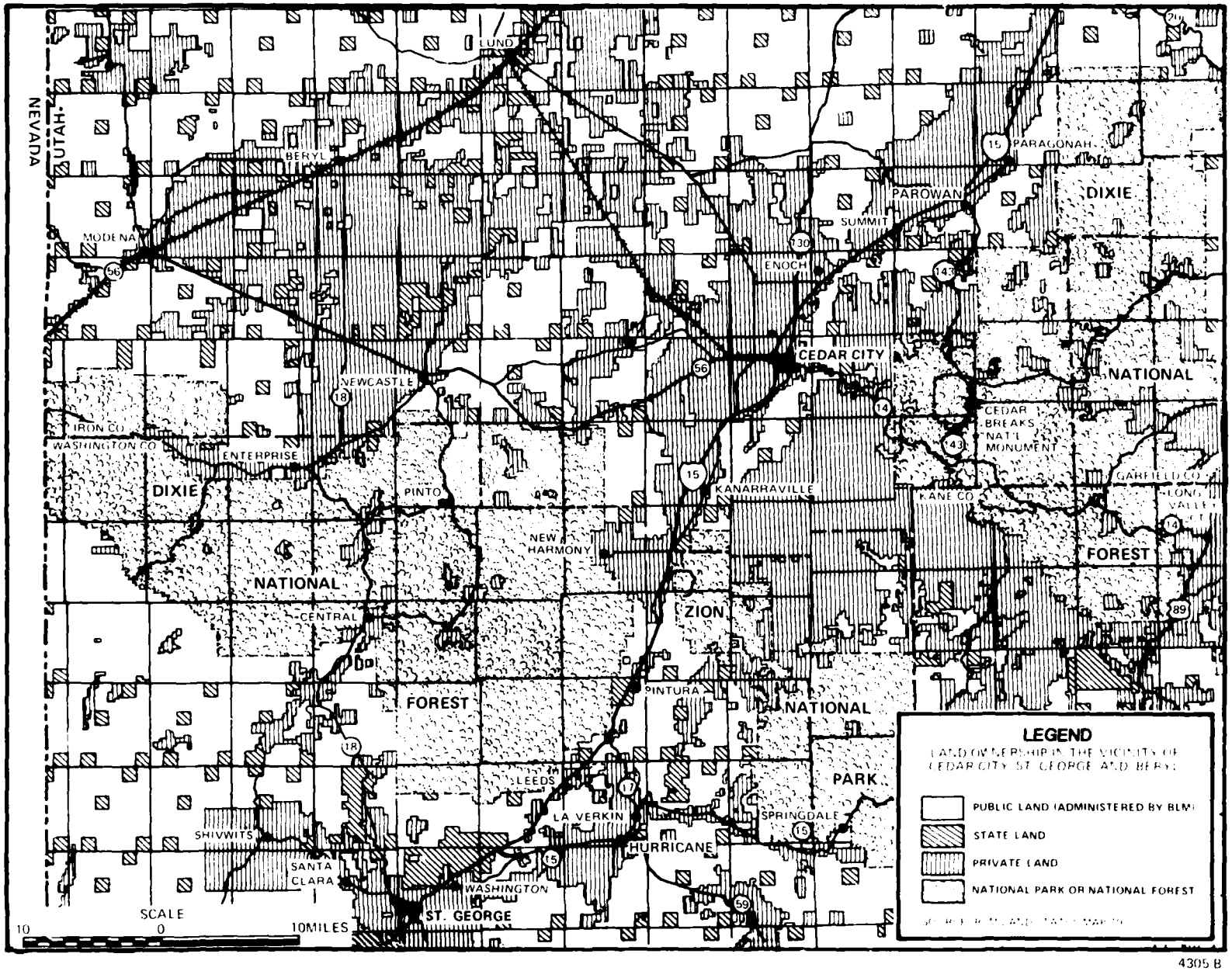

Figure 2.3.2.5-1. Land ownership in the vicinity of Cedar City, St. George, and Beryl, Utah.

Table 2.3.2.6-1. Existing land use - Iron County, Utah.

Land Use	Cedar City		Enoch		Kanarrville		Newcastle		Paragonah		Parowan		Iron County Total	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Single Family	569.5	12.1	226.1	12.9	12.8	4.5	9.2	3.3	30.0	10.1	231[1]	10.3	1,078.6	11.3
Mobile Home	59.8	1.3	23.0	1.3	1.8	.6	1.0	.4	2.6	.9	--	--	88.2	.9
Multi-Family	33.9	.7	--	--	--	--	--	--	--	--	--	--	33.9	.4
Commercial	181.4	3.9	3.8	0.2	.9	.3	--	--	.8	.3	19	.8	205.9	2.2
Public	186.0	4.0	4.2	0.2	--	--	--	--	--	--	122[2]	5.4	312.2	3.3
Religious	40.5	.9	3.7	0.2	.6	.2	2.7	1.0	.9	.3	--	--	48.4	.5
School	--	--	10.8	0.6	--	--	.7	.2	2.0	.7	--	--	13.5	.1
Industrial	126.5	2.7	2.7	0.2	--	--	--	--	--	--	4	.2	133.2	1.4
Park and Cemetery	144.5	3.1	7.2	0.4	--	--	--	--	2.8	.9	23	1.0	177.5	1.9
Streets	668.7	14.2	131.1	7.5	53.9	18.9	49.2	17.4	70.1	23.7	101	4.9	1,074.0	11.2
Developed Land Subtotal	2,010.8	42.8	412.6	23.5	70.0	24.6	62.8	22.2	109.2	36.9	494	22.0	4,9050.6	51.8
Agriculture	769.6	16.4	654.6	37.3	110.5	38.7	63.9	22.6	77.6	26.2	109	4.9	1,785.2	18.7
Vacant	1,917.7	40.8	687.4	39.2	105.0	36.7	156.2	55.2	109.2	36.9	1,633	72.8	4,608.5	48.2
Total	4,698.1	100	1,754.6	100	285.5	100	282.9	100	296.0	100	2,242	100	9,559.1	100

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[1] Includes all residential categories.

[2] Includes airport (80 acres).

Source: University of Utah, 1979, "Cedar City Master Plan"; Five County Association of Governments, 1981 "Enoch Master Plan"; Ibid 1978, "Comprehensive Plan for Planning District Five, Appendices"; Architect/Planners Alliance, 1980, "Parowan, Utah Comprehensive Plan."

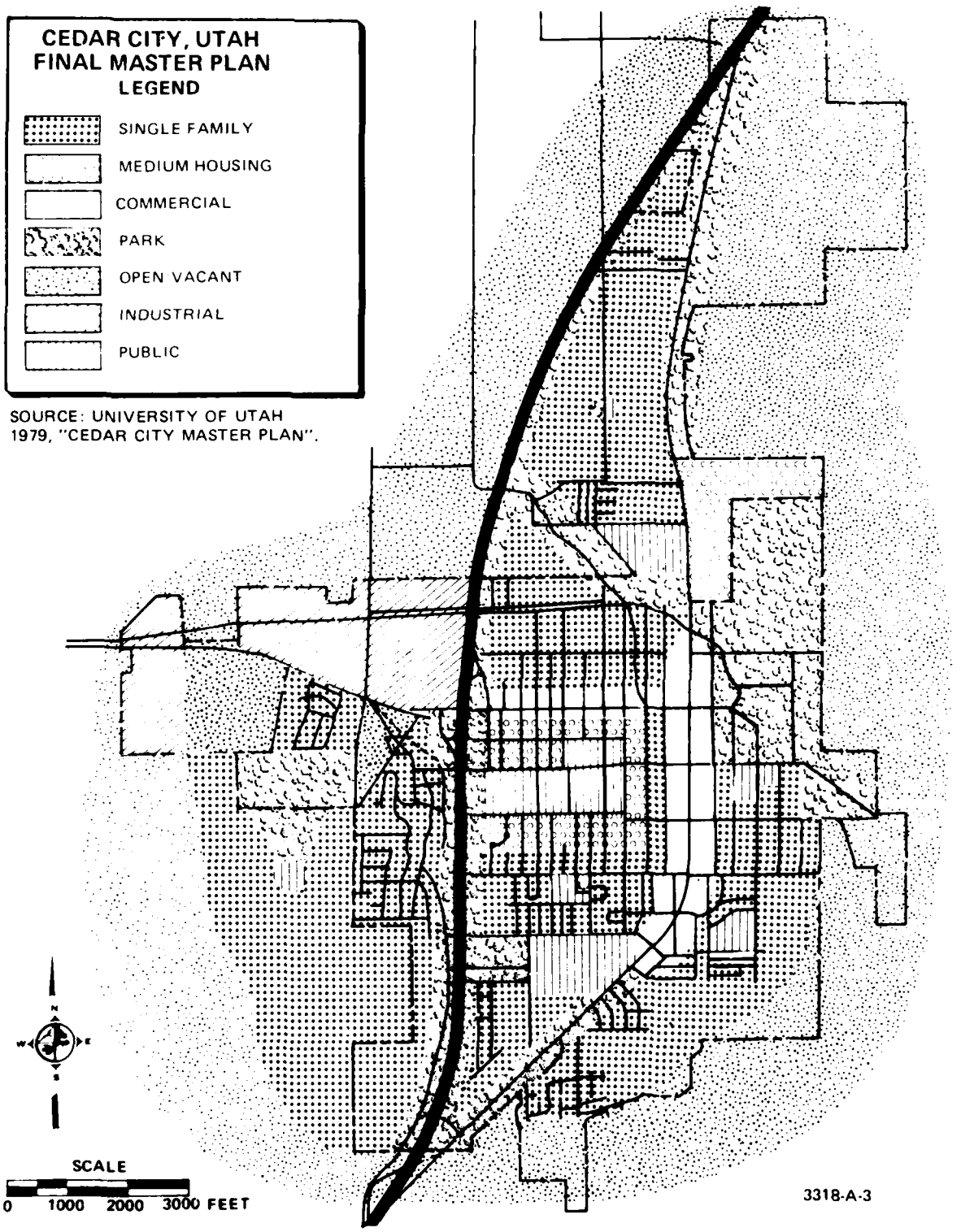

Figure 2.3.2.6-1. Master Plan for Cedar City, Utah.

zoning and subdivision ordinances, was in the process of revision during the spring of 1981, with adoption expected by fall 1981.

Policy and Goal (2.3.2.6.1)

The following policies have been paraphrased from the Cedar City Master Plan.

1) A diversified economy with emphasis on light manufacturing should be encouraged. The level and growth of development should be geared to maintain a natural increase in jobs plus a moderate level of additional growth. A moderately higher wage structure should be encouraged to raise the economic standard over time, but not adversely affect those on fixed incomes.

2) It is desirable to develop vacant lots and the areas directly adjacent to currently developed property, before the vacant agricultural land beyond the city limits is developed.

Discussion (2.3.2.6.2)

The impact of the M-X construction phase will be in conflict with the initial goal of a diversfied economy and an emphasis on light manufacturing. The M-X growth will be heavily weighted in favor of construction labor, which in this case would be a non-basic indusry. The rate of growth in employment during the initial construction years would be very rapid and therefore inconsistent with the community's desire for a moderate level of growth in jobs. The later decline in employment at the completion of construction would be accompanied by a surplus of workers over jobs. The wage structure of the direct M-X construction workers is expected to be significantly higher than the prevailing wages. The eventual effect on persons with fixed incomes will be adverse as rents and costs of other goods increase.

New residents coming to Cedar City will select homesites according to their location, availability, price, and urban services. The ability of Cedar City to implement the second policy by ensuring that vacant lots in the developed areas of town are selected prior to those in agricultural areas outside of the city is dependent upon several factors. The city can establish a phasing program using incentives and disincentives to encourage development in different areas of the city. The city must also act to discourage the subdivision and development of land in the agricultural areas outside of the city if the program is to be successful. Such actions would need to be in concert with Iron County. The Cedar City Master Plan calls for residential expansion in all quadrants of the city except the northwest. Population growth resulting from those M-X deployment alternatives with an operating base sited in the Beryl area would conflict with the existing plan. Either the ultimate area of urbanization would need to expand or planned residential densities would need to increase.

Federal Land Constraints (2.3.2.6.3)

Public land ownership near Cedar City is not considered to be a constraint to the community's growth (see Figure 2.3.2.5-1).

Enoch, Utah (2.3.2.7)

Enoch, 5 mi to the north of Cedar City has become a residential suburb through annexation of several 80-100 acre tracts of residential land. These additions have enabled Enoch to grow from about 20 acres of developed land in the early 1970's to over 400 acres in 1981 (see Table 2.3.2.6-1 for existing land use data). The Five County Association of Governments (FCAG) updated Enoch's master plan, zoning, and subdivision ordinances during early 1981. The adoption of these documents is scheduled for late summer 1981 (see Figure 2.3.2.7-1 for the 1973 master plan map). Since 1970, there has been a ban on new mobile homes in the city. Although enforcement of the ban has had some problems it may continue into the future, or be replaced by a strict mobile home ordinance. Such an ordinance would likely confine mobile homes to mobile home parks. Sites would be designated for the mobile home parks, and explicit development standards would be set regarding the provision of infrastructure facilities, streets, and minimum lot sizes.

Policy and Goal (2.3.2.7.1)

Since Enoch has not formally adopted its revised master plan at the time of this writing, the following policies have been extracted from the Enoch Master Plan adopted in 1973.

1) A community clean-up program should be encouraged.

2) Maintain a low density residential character to the community.

3) Maintain a contiguous development pattern.

4) Community services should not be extended outside the city limits.

5) Enoch should serve the area shown as the natural growth area before extending city boundaries beyond that limit.

Discussion (2.3.2.7.2)

Since 1973, when the above policies were recommended, Enoch has grown considerably. The city population increased by over 600 percent between 1971 and the end of 1980, and then doubled in January, 1981, from 900 to 1,800 persons with the annexation of three subdivisions. The developed area now comprises a substantial portion of what had been considered the long-term growth limits of the city as shown in the 1973 master plan map. Enoch has apparently been able to deal with rapid growth and remain sensitive to the above policies.

Enoch could expect continued high demands for residential development if the M-X system resulted in an operating base sited near Beryl. This would be due to close proximity to both the Beryl OB and Cedar City. The ultimate result of such action, specifically at Enoch, is indeterminate at this time. The city is clearly looking towards quality residential development of a permanent nature. Rapid growth induced by M-X, particularly related to the construction phase, will raise conflicts with this policy by increasing the demand for mobile home development. It should also be noted that continued physical expansion of the city will require more conversion of agricultural land to urban uses.

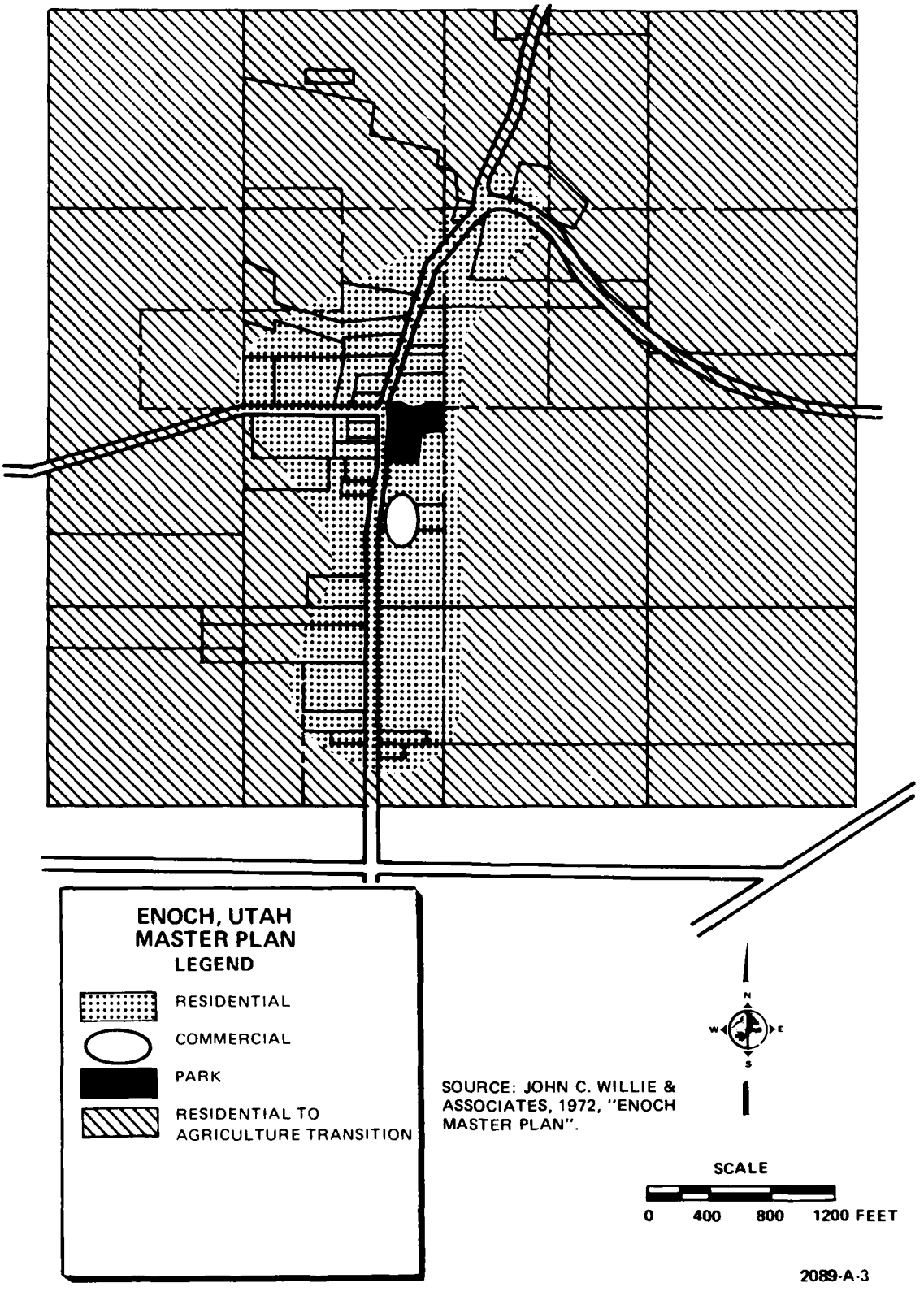

Figure 2.3.2.7-1. Master Plan for Enoch, Utah.

Federal Land Constraints (2.3.2.7.3)

Public land control is not considered a constraint on growth at Enoch.

Kanarraville, Utah (2.3.2.8)

Kanarraville, in southeastern Iron County, would undergo lesser amounts of urban development than most other Iron County communities as a result of M-X activities. The water system in Kanarraville is currently on the Utah Bureau of Safe Drinking Water list of "nonapproved" systems, and hence federal financing for home construction loans is not available for the community. In 1973, the Town of Kanarraville adopted its portion of the master plan prepared for the county. The map for the master plan is shown in Figure 2.3.2.8-1. Existing land use data for Kanarraville are provided in Table 2.3.2.6-1. The goals and policies listed below from the 1973 Kanarraville Master Plan are discussed under the assumption that the "nonapproved" status of the water supply system is removed.

Policy and Goal (2.3.2.8.1)

1) Commercial development should be encouraged to locate in the area identified for commercial growth and expansion on the master plan map. Efforts should be made to avoid the creation of a strip of commercial land through the entire community on both sides of the main highway and in-depth development should be encouraged.

2) Kanarraville should adopt a policy of encouraging growth within the existing community. Public services, such as water, street improvements, etc., should not be provided outside the city limits.

3) Efforts at subdivision of land in the agricultural areas adjacent to Kanarraville, in the unincorporated portion of the county, should be opposed by the residents of Kanarraville as long as the density in the existing community is as low as it is. Any outlying subdivision will sooner or later come to Kanarraville for services, which Kanarraville cannot hope to provide to scattered areas.

4) Efforts should be made to encourage continued use of land surrounding the community for agricultural purposes.

Discussion (2.3.2.8.2)

The demand for commercial land can be expected to increase in order to supply the goods and services required by M-X-induced growth. The location and design of any new commercial development and therefore implementation of the first policy is a local responsibility that is regulated by the zoning and subdivision ordinances.

The present "nonapproved" status of the Kanarraville water supply system, in effect, acts contrary to policies 2-5. Since incoming homebuilders cannot hook up to the Kanarraville water supply system, any new growth is forced to locate outside of the town limits. Kanarraville must act to ameliorate the inadequacies in its

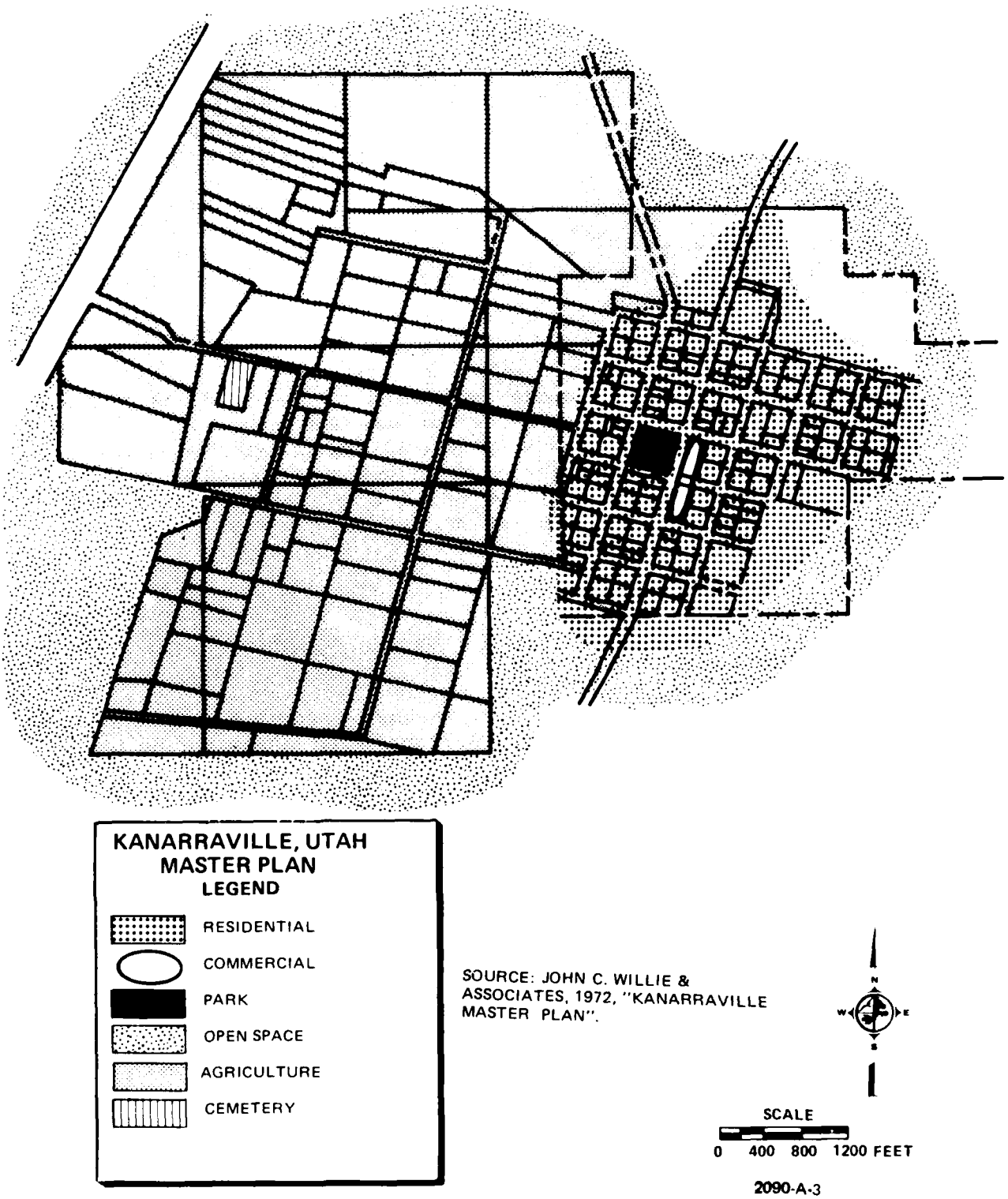

Figure 2.3.2.8-1. Master Plan for Kanarraville, Utah.

water supply system before it will be able to enforce its policy on the location of new growth. It can be expected that an OB at Beryl (Alternatives 1, 3, or 4) would be accompanied by an increase in residents in communities such as Kanarraville. Homesites in rural areas may be desired by these newcomers, and rural landowners may seek to subdivide their land to satisfy the demand. As such the subdivision would be contrary to the growth policies of Kanarraville. The area depicted for residential expansion in the Master Plan map is quite small. Any growth beyond the planned limits of urbanization would require conversion of agricultural land on the northern limits of the town and beyond the town limits to the west.

Federal Lands Constraints (2.3.2.8.3)

Expansion of Kanarraville to the east would conflict with public land administered by BLM. Large areas of privately owned land exist west of the town (see Figure 2.3.2.5-1).

Newcastle, Utah (2.3.2.9)

Newcastle, one of the closests settlements to the Beryl OB site, has approximately 60 acres devoted to urban land uses (see Table 2.3.2.6-1). Over one-half of Newcastle (approximately 160 acres) is vacant with the remaining 25 percent in agricultural use. The water system in Newcastle is rated by the state as "not approved, corrective action". The system is scheduled for or undergoing improvements to correct its "not-approved" status. The master plan map from the 1973 master plan is illustrated in Figure 2.3.2.9-1.

Policy and Goal (2.3.2.9.1)

The following policies for Newcastle have been extracted from the Iron County Master Plan adopted in 1973.

1) Urban growth at Newcastle assumes improvements are made to the "not approved, corrective action" (1980 status) water system.

2) Newcastle should not consider expansion of its present street system to include new growth until such time as existing areas are much more developed.

3) Vacant building lots should be made available to potential residents.

4) Agricultural land surrounding Newcastle should be preserved.

Discussion (2.3.2.9.2)

M-X system deployment alternatives which include an operating base near Beryl will generate a high demand for urbanization in Iron County. Lesser demands will result from base sitings near Milford in Beaver County. By its location Newcastle will certainly be impacted by an OB at Beryl. Newcastle in its own right, though, would not exert an attractive force on development. The community is not incorporated and lacks urban services, including commercial development, which would attract even short-term population growth. It should be noted, however, that even a small portion of the M-X-induced development in the county would

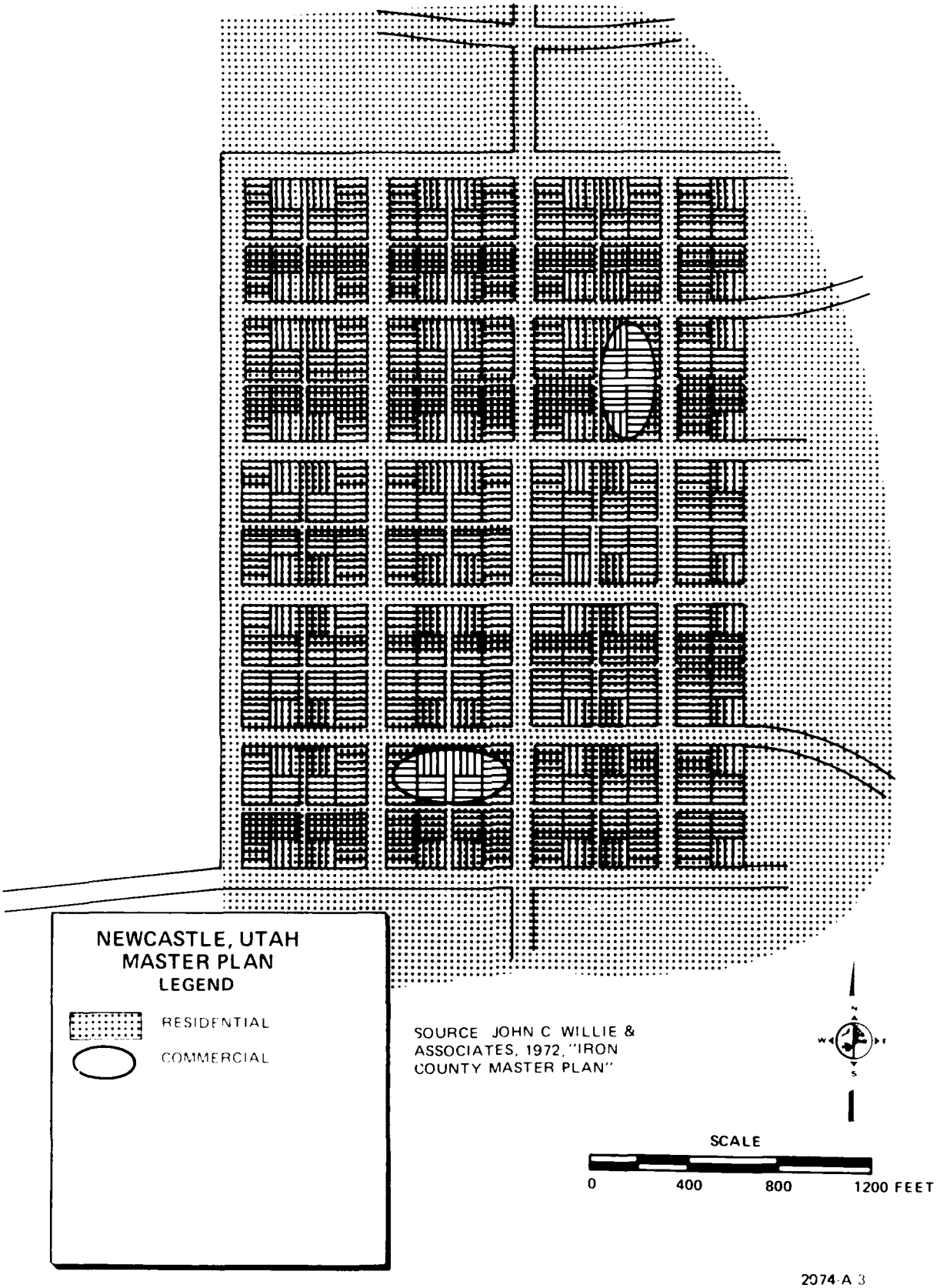

Figure 2.3.2.9-1. Master Plan for Newcastle, Utah.

overwhelm Newcastle. There were only 37 homes, none of which were vacant, and one commercial business (a gas station) at the time the Newcastle plan was prepared. Rapid new growth could result in better utilization of existing vacant land in the community, but would probably exceed the capability to provide proper services. Any development in the surrounding agriculture area would be in direct conflict with the above stated policy.

Federal Lands Constraints (2.3.2.9.3)

Newcastle is near a boundary separating large areas of private and public lands, private lands being to the northwest in the general direction of a proposed OB near Beryl. Federal land control is not considered a significant constraint on urban land development at Newcastle. See Figure 2.3.2.5-1 for land ownership patterns in the Newcastle area.

Paragonah, Utah (2.3.2.10)

Paragonah by its location may be subject to urban growth from an OB at either Beryl or Milford. The Town of Pargonah uses the master plan prepared unde the contract with the county as its policy document for future growth. See Figure 2.3.2.10-1 for the master plan map. The Planning and Zoning Committee of the town has four members. Since the houses in town are on septic tanks there is a 12,000 square foot minimum lot size. The zoning ordinance was prepared in the mid-1970s and due to the amount of vacant land within the town boundaries the town has not felt the need to adopt a subdivision ordinance. There is sentiment in Paragonah for adopting a mobile home ordinance requiring mobile homes to have the same minimum lot size as conventional homes.

Policy and Goal (2.3.2.10.1)

The following policy statements have been extracted and paraphrased from the Paragonah Master Plan, adopted in 1973, where they were presented as recommendations.

1) Paragonah should not annex new lands or otherwise expand its town boundary.

2) Paragonah should take steps to encourage residential development, even as a "bedroom" community serving other population and employment centers.

3) The community should oppose any proposals for land subdivision adjacent to Paragonah. The town should not extend public services to any such subdivisions which are developed.

4) Strip commercial development should be avoided, particularly between the interchanges on I-15.

Discussion (2.3.2.10.2)

A large proportion of the land area within the Paragonah town limits is vacant and presumably developable. This is in part due to the long-term population decline

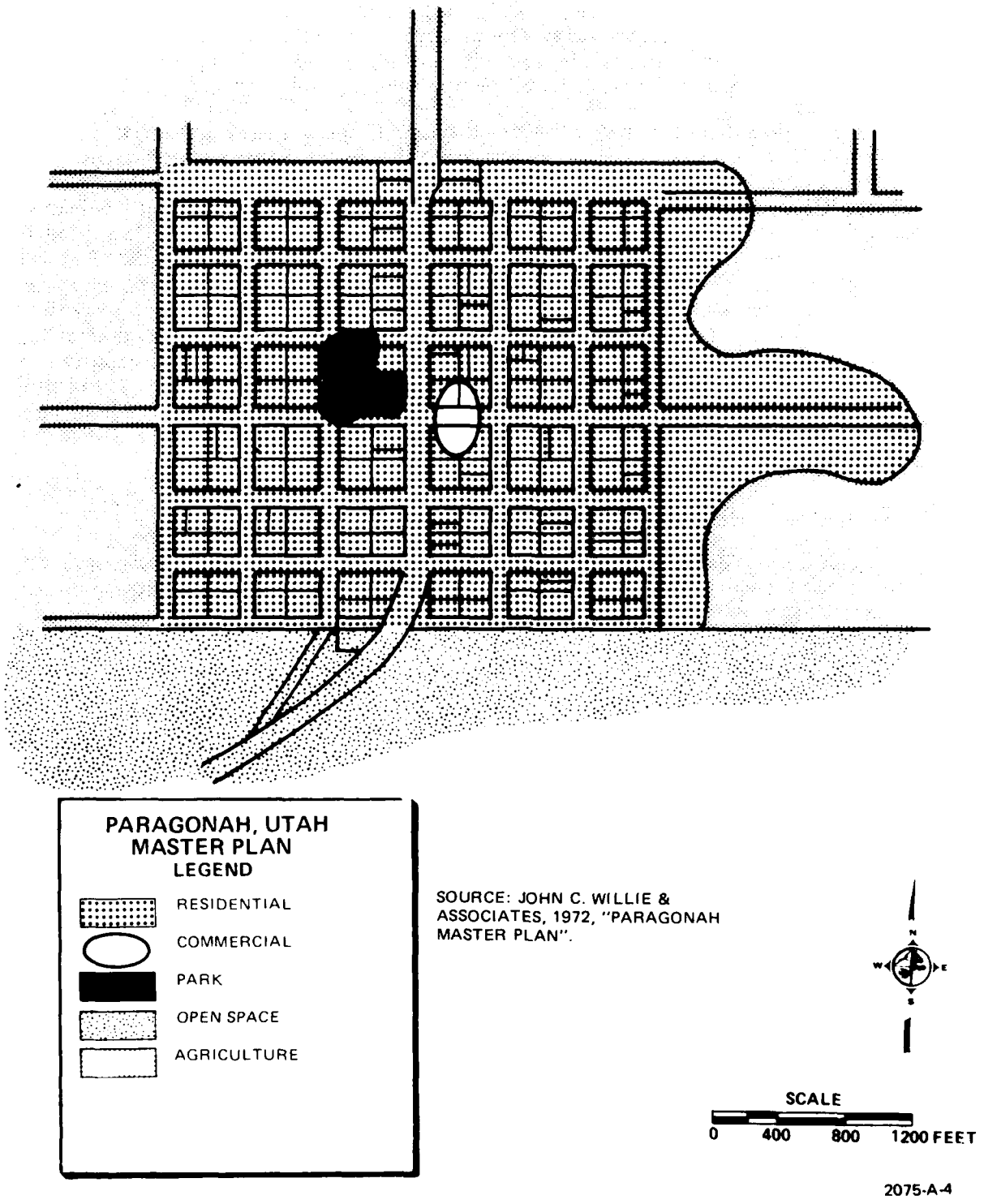

Figure 2.3.2.10-1. Master Plan for Paragonah, Utah.

experienced between 1950 and 1970. The 1973 Master Plan stated that Paragonah could easily accomodate an additional 2,000 persons in its present land area at a density of 4 dwelling units per acre. The effect of this on septic tank fields and the provision of public services may be another matter. Because of population declines, however, existing public service capability may well be underutilized.

As mentioned in the Iron County discussion, the primary potential for high levels of M-X induced urban development would come from those alternatives which include an operating base sited near Beryl. Most of this growth would probably occur at Cedar City. A smaller portion could also result at Paragonah both by direct impact from the OB and indirectly from the growth at Cedar City. This type of growth would be in direct support of Paragonah's goal for residential development and "bedroom" community status. Major policy conflicts would not be expected unless growth demand is in excess of the town's capability to absorb growth, a capacity which appears to be relatively high. It should be noted, though, that a high percentage of growth may only be of a short-term nature. The town has experienced population declines in the past and may not desire to do so again. Preventing subdivision development outside the town limits will be largely dependent upon cooperation from Iron County and its enforcement of ordinances in the unincorporated areas.

Federal Lands Constraints (2.3.2.10.3)

Significant growth to the east and south of Paragonah would be constrained by public lands. However, the interstate highway would help encourage growth to the north and west where large areas of privately owned land exist.

Parowan, Utah (2.3.2.11)

Parowan is a community dominated by vacant and agricultural land which collectively occupies almost 78 percent of the land area. Housing is the major use of developed land covering 230 acres or 10 percent of the city acreage (see Table 2.3.2.6-1). The City of Parowan reviewed and scheduled the adoption of its new master plan during the summer of 1981. The city also acted during 1981 to revise its zoning and subdivision ordinance.

Policy and Goal (2.3.2.11.1)

Parowan's 1981 master plan includes the following policies for future growth.

1) New development should be encouraged in the now-developing parts of the city as much as possible rather than scattered in outlying parts of the city. This would bring about the efficient use of utility lines and other public services, and also help to eliminate the blight of neglected vacant lots in older parts of Parowan.

2) Construction of the Brian Head sewer west of the Parowan city limits will create additional development pressure. However, annexation or development of this land should be limited until development of the older part of the community is established.

3) Parowan should not supply water to users outside of the corporate limits of the city. Persons outside the city desiring water service should be

required to first annex into the city. This same policy should also apply to city sewage users.

Discussion (2.3.2.11.2)

In order to direct growth to the "now-developing parts" of the city, as recommended under the first policy, a phasing mechanism or growth management ordinance would be necessary. Without such a mechanism it is likely that the rapid M-X-induced growth could not be directed in an efficient manner to the preferred areas of Parowan. Such a procedure would take time for implementation as well as extend the city's review period for new development projects. Both requirements would be difficult to meet under a rapid growth situation unless a temporary moratorium on projects was declared by the city.

The completion of the Brian Head sewer line will indeed create additional development pressures in the areas adjacent to the sewer line as noted in the second policy. However, the city's ability to limit development in the area is restricted to areas within the city limits. The unincorporated areas are under the jurisdiction of the county, and with rapid growth conditions the county may not be able to fulfill Parowan's policies. Alternatively, if Parowan decides to annex the land prior to development, the city may restrict the future development through its master plan and zoning ordinance.

The high growth rates anticipated due to M-X construction would be likely to result in pressures for development of land outside of the Parowan city limits. Strict application of the third policy would force incoming workers and families to locate inside the city limits or provide their own water supply and/or septic tanks. The cost of a private well may be high enough to preclude individual wells for new dwellings.

Washington County, Utah (2.3.2.12)

Washington County, Utah is adjacent to Iron County (proposed Beryl OB site) and proximal to Clark County, Nevada (proposed Coyote Spring OB site). The relatively low elevation and the mild climate in the southern portion of Washington County have fostered the growth of numerous communities in the area. These range in size from several communities with urban land areas (exclusive of streets) between 30-40 acrs to St. George with a land approaching 13,000 acres. Gunlock, Ivins, Leeds, Pine Valley, Pintura, Rockville, Santa Clara, Springville, Toquerville, Veyo, and Virgin are some of these communities serving as rural settlements for local farming and ranching interests or as summer home retreats for part-time residents. The urban services available in these communities are minimal, some towns have only a central store/gas station or are surrounded by large amounts of agricultural lands. La Verkin, the largest of these communities, has a more-developed urban area with about 50 acres of residential development evenly split between single family residences and mobile homes (see Table 2.3.2.12-1). Stores and commercial activities cover 4 acres in La Verkin; streets cover 94 acres. There is still a considerable amount of land in La Verkin being used for agricultural purposes, about 22 percent or some 550 acres. The potential for expansion in the Town of La Verkin is very limited because of the river and Ash Creek Wash as well as the proximity of Hurricane and Toquerville on either end of La Verkin. The hill to the east of La Verkin also precludes extensive growth in that direction. However,

Table 2.3.2.12-1. Existing land use--major communities in Washington County, Utah.

Land Use	Enterprise		Hurricane		La Verkin		St. George		Washington		Total	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Single Family	132.4	16	78.6	4	24.2	1	649.6	5	61.3	3	946.1	5
Multi-family	3.3	--	1.6	--	--	--	105.8	1	0.9	--	111.6	2
Mobile Home	9.9	1	30.8	2	27.8	1	128.8	1	52.0	3	249.3	1
Commercial	5.3	1	6.8	--	4.0	--	195.8	2	4.7	--	216.6	1
Industrial	4.8	--	20.6	1	7.4	--	311.2	2	--	--	344	2
Public	3.8	--	4.8	--	0.6	--	35.8	--	0.4	--	45.4	--
School	4.6	--	23.1	1	--	--	97.3	1	10.8	1	135.8	1
Park	17.1	2	16.1	1	47.4	2	2,563.7	20	12.4	1	2,656.7	13
Religious/Cemetery	13.5	2	1.8	--	1.8	--	65.1	1	--	--	82.2	--
Streets	94.8	11	83.4	5	94.0	4	798.0	6	194.2	10	1,264.4	6
Developed Subtotal	289.4	33	267.6	14	207.2	8	4,951.3	39	337.9	18	6,053.0	30
Agriculture	59.4	7	429.8	24	550.8	22	1,110.6	9	274.8	14	2,425.8	12
Vacant	487.5	59	1,124.1	61	1,774.6	70	6,778.1	52	1,329.6	68	11,493.8	58
Total	836.3	100	1,821.6	100	2,532.6	100	12,840	100	1,942.3	100	19,973	100

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[1]Includes 38.7 acres for river.

[2]Includes acreage for cemeteries.

Sources: Five County Association of Governments, 1981, "Enterprise Master Plan"; Ibid, 1978, "Comprehensive Plan for Planning District Five, Appendices," telephone communication with John C. Wiley and Associates, 5 August 1981.

annexations will probably not be necessary since La Verkin has almost 1,800 acres of vacant land.

The land use in the unincorporated communities of Washington County is guided through the Washington County Master Plan adopted in 1972. This plan was amended in 1980 with an open space element and an existing-conditions element. Implementation of the master plan is handled through the zoning ordinance adopted in April 1973 and amended with a residential estate district in April 1979. At the present time, Washington County is involved in updating the master plan and zoning ordinance. Completion is expected by the end of 1981. To date, the county has not adopted a mobile home ordinance.

Policy and Goal (2.3.2.12.1)

The Washington County Master Plan presented several recommended goals for growth and development. Those which pertain to urban development are summarized and condensed below:

1) Achieve sustained economic stability through comprehensive economic development policies; expand opportunities for increased incomes; sustain employment stability at a consistent, moderate rate of growth.

2) Anticipate and prepare for increased demands for community services resulting from growth.

3) No plans or development should be approved in the county without a thorough analysis of all potential resource developments affected there by. The county must play a role in all decisionmaking processes involving Washington County.

4) Growth should be concentrated within existing communities whenever possible, and when development takes place in the county it should be developed at a standard consistently similar to that in land in the adjacent communities.

5) Zoning, subdivision, and building code ordinances should be amended and updated as necessary to keep up with the demand of growth and development.

Discussion (2.3.2.12.2)

Urban land requirements in Washington County are relatively small under the Proposed Action with a short-term demand of 76 acres and a long-term need for 29 acres. Existing communities in the county should be able to absorb this growth in general conformance with the county master plan policies. The peak year situation, due to the short-term construction activity, does conflict, however, with the goal for "sustained" economic development and a "moderate" growth rate.

The greatest potential for policy conflict would come under Alternatives 1,3, and 4 due to the siting of an operating base near Beryl, north of Washington County. Short-term urbanization requirements would be significantly higher, ranging from 237 acres under Alternative 1 to 381 acres in Alternatives 3, and 4. This clearly

conflicts with the "moderate" growth rate policy and would challenge the capability to prepare for increased demands as noted in the second policy statement above. The need for land development controls such as zoning and subdivision ordinances would be increased. Potential also exists, though, for support of at least a part of the first policy statement listed above. The OB near Beryl would result in a long-term military and civilian population growth. This would help achieve economic stability and diversification and expand opportunities for increased incomes.

Federal Land Constraints (2.3.2.12.3)

Federal land ownership comprises 79 percent of the Washington County land area; 45 percent of the county is under BLM control, 25 percent is forest service land and the balance is national park and Indian reservations. Private ownership accounts for only 17 percent of the area. Overall, though, public land control is not a constraint to urban type development. In fact, it could help satisfy the county goal of directing new development to existing communities. The extent of public land ownership in Washington County is shown by Figure 2.3.2.5-1.

Enterprise, Utah (2.3.2.13)

The City of Enterprise lies in northern Washington County only 25 mi south of the proposed Beryl OB site. The land area of Enterprise, almost 840 acres, makes it the largest community within 40 mi of Beryl. Although the community has a large number of summer homes, its primary orientation is towards agriculture and farming. The community is expecting to have a surge of growth resulting from the reopening of a nearby silver mine. In view of this and potential M-X-induced growth, the Five County Association of Governments recently prepared a master plan for the community. Existing land uses as of April 1981 are provided in Table 2.3.2.12-1. Over half of the land area or almost 490 acres is vacant land. The single family housing category contains many large lots which are used for gardening or keeping livestock. Mobile homes, which occupy almost 10 acres are scattered throughout the community. A mobile home ordinance, regulating mobile home standards and subdivisions, plus the zoning and subdivision ordinances are scheduled for adoption in 1981. Enterprise currently uses septic tanks and is waiting for state and federal aid in constructing a wastewater treatment facility. As of June 1980, Enterprise's ranking on the state's priority list for funding was number 72.

Policy and Goal (2.3.2.13.1)

The Enterprise Master Plan, dated April, 1981, contains a number of goals and policies. Those which most relate to the potential urban land development created by the M-X system are listed below.

1) The extent of population growth should depend on the ability to sufficiently provide public services.

2) The city should have a zoning ordinance; subdivision development should be allowed only after proper application and review by the planning commission and approval by the city council; all subdivisions shall be accompanied with installation of adequate public facilities.

3) Agricultural land adjacent to the city limits should be encouraged to remain.

4) Increases in residential and commercial land usage should not occur so rapidly that the quality of services and facilities are impaired.

5) Residential properties should be protected from any adverse impacts resulting from commercial or industrial development.

6) Annexation of land should only occur if such action reflects the goals and policies set forth in the plan.

Discussion (2.3.2.13.2)

The potential for conflicts with the above policies is most probable under Alternatives 1,3, and 4 which call for an operating base sited near Beryl, in Iron County. As noted in the Washington County discussion, a demand for several hundred acres of urban development could be expected under these alternatives. St.George is the primary urban growth center in the county and would tend to attract development because of the larger scale of urban services and amenities. Enterprise, however, is much closer to the potential OB site and has good highway linkage to the area, and would therefore attract development simply due to its proximity to the Beryl area.

Conflict with the above policies would be dependent on the ultimate magnitude of growth and the rapidity at which it would occur. Conflicts would most likely affect the first and fourth policies stated above, relating to the ability of the community to provide services in support of new growth. Land availability should not be a problem with nearly 500 acres (58 percent of the total) in the community classified as vacant. Assuming a high proportion of this area is available and developable, Enterprise could presumably absorb the entire Washington County forecasted requirements purely from a land standpoint. Absorbing this magnitude of growth over a short time period, though, would severely strain the community resources. Even with the large area of vacant urban land, significant new demand for development could result in the conversion of surrounding agricultural lands, in direct conflict with the master plan policies.

Federal Lands Constraints (2.3.2.13.3)

Urban development in and immediately adjacent to Enterprise is not constrained by federal land control. Land ownership patterns in the vicinty of Enterprise are displayed in Figure 2.3.2.5-1.

Hurricane, Utah (2.3.2.14)

The City of Hurricane, almost 20 mi east of St. George has almost one quarter of its land area devoted to agricultural purposes and 60 percent lying vacant (see Table 2.3.2.12-1). The remaining 267 acres include a large proportion of residential land; 79 acres of single-family residences, 31 acres of mobile homes. The high proportion of mobile homes is found in most of the above Washington County communities and is in contrast to lower proportions for mobile homes in the more northern Utah counties. The popularity of mobile homes in Washington County may be attributable to the lower elevations and milder winters. Hurricane adopted its master plan in 1979 and revised it in 1980 following several annexations. The zoning and subdivision ordinances were adoptd in 1979 and 1977 respectively; both are in the process of being revised.

Policy and Goal (2.3.2.14.1)

The policies listed below have been excerpted from the City of Hurricane's master plan.

1) The most important and valuable natural resource this county (Washington) has is its agricultural land and therefore the highest and best use for prime agricultural land is to keep it in agricultural production. Residential development should be limited to areas where farming is not being practiced rather than using farmland for residential or other urban purposes. To conserve the prime agricultural lands of the Hurricane Valley and to retain its rural-agricultural character all prime agricultural lands in the valley should be zoned into one of the following zones: Agricultural 2.5, 5, 10, or 20 acres.

2) The existing city ordinance should be carefully studied and revised if necessary to insure the continuation of the policy of locating mobile homes only in mobile home subdivisions or parks. The ordinance should also require, at least in the mobile home subdivisions, the installation of all urban services that are found elsewhere in the city including a public sewer system, adequate waterlines, surfaced streets, curb and gutter, and access to and from the area on adequate streets. It is also recommended that the minimum size of lots in mobile home estates remain at 7,000 sq ft.

3) The city should encourage the continued development of the existing mobile home areas as well as the development of new mobile estate and park areas. However, such activities must be very closely supervised to insure high quality developments.

Discussion (2.3.2.14.2)

The premier policy to protect agricultural land will come under pressure for relaxation from individuals needing residential homesites. The extent to which agricultural land can be left in production and homesites for incoming residents be provided is dependent upon the policies of the Hurricane City Council in approving requests for zoning changes, plots, and amendments to the master plan. Experience in other urbanizing areas has shown that a portion of rural landowners will seek to subdivide their land for residential development in order to realize a large capital gain instead of retaining their land in agricultural production. Approvals of such requests can often bring about land-use conflicts between residential and farming activities, in addition to the loss of agricultural production.

The increase in demand in Hurricane for mobile home spaces will not be as dramatic as in other communities in the deployment area. However policies numbered 2 and 3 are important since the demand for mobile home spaces will still increase and will likely be of a temporary nature during the construction period. Hence there may be pressures for a waiver of some of the most costly infrastructure requirements for mobile home parks, e.g. paved roads and underground utilities (as specified in the zoning ordinance). The minimum lot size of 7,000 sq ft. may also be subject to a waiver request. The cost for enforcement of the mobile home ordinance may increase in order to ensure the "high quality developments" desired by the city.

St. George, Utah (2.3.2.15)

The City of St. George, the commercial and industrial center of southwestern Utah, has had its recent growth tied to resorts, time-sharing condominiums, and hotels. Over the past ten years, this growth has made St. George the largest city in terms of land area in the four-county Utah study region; over 12,800 acres or 20 sq mi (see Table 2.3.2.12-1). As of August 1981, 39 percent of the land was developed for urban purposes including 2,500 acres of parkland. Residential land occupies approximately 885 acres: approximately 650 acres of single-family housing, 105 acres of multiple-family housing, and 130 acres of mobile homes. The city also has the largest amount (approximately 310 acres) of industrial land of any city in the Utah four-county study region. Although vacant land occupies half of the city (almost 6,800 acres), St. George is considering annexations that would more than double its present size. The areas, to be considered as two annexation proposals, have a total acreage of about 32 sections or 20,480 acres. The sections lie to the south of the city and extend to the Arizona state line. Current land uses include two sections (1,280 acres) of residential land, seven sections (4,480 acres) of agricultural land, and the proposed Warner Valley Power Plant site. The remainder of the land is vacant and overlays gypsum deposits and, hence, is usable only for mining. About three-quarters of the area is owned by the State of Utah or BLM.

The city completed an update of its master plan in 1980 and revised its zoning and subdivision ordinances in 1981. The master plan map is presented in Figure 2.3.2.15-1. If the proposed annexations are approved, the master plan and map wil need to be revised or amended. While there is ample water for new growth, the city's sewage treatment plant-capacity is expected to be reached in three years. The city has been trying to expand and/or move the sewage facilities, but to date has not received the necessary approvals. The city holds a fairly low position on the state's priority list for wastewater plant funding--number 44 as of June 1980.

The City of Washington lies directly to the east of St. George and acts as a suburb to the larger city. Single family and mobile homes are the dominant land uses in Washington utilizing approximately 62 and 52 acres, respectively, (see Table 2.3.2.12-1). Vacant land in Washington, equivalent to two-thirds of the land area, lies predominantly in the hillside areas north of town. If expansion of the community should become necessary, annexations would primarily be on the southern or eastern edges of town.

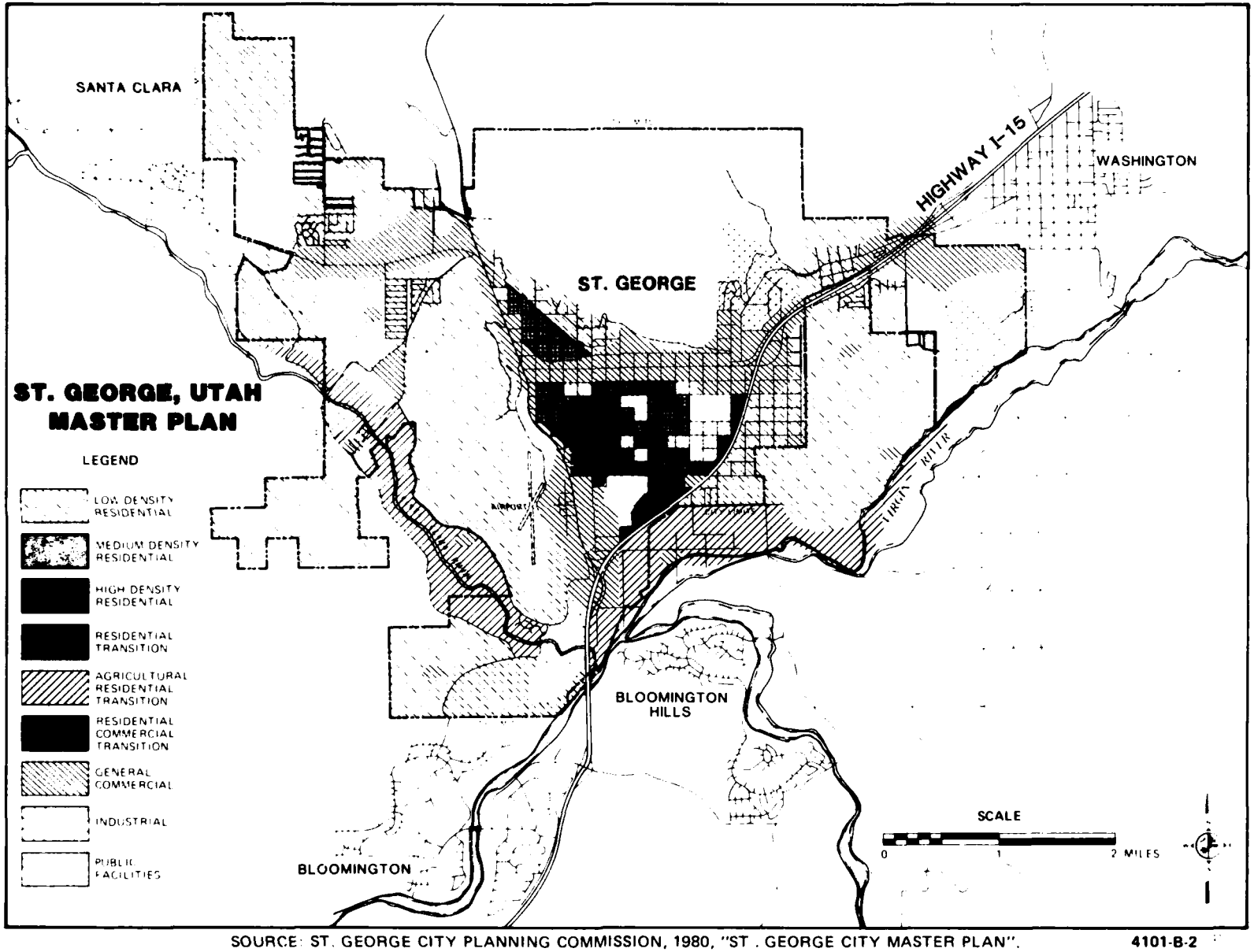
Policy and Goal (2.3.2.15.1)

The following policies have been extracted from the 1980 St. George Master Plan:

1) Agricultural land should remain in cultivation and residential growth limited to other areas.

2) Residential development should occur and be able to accommodate low, medium, and high densities. Careful consideration must be made as to recreation, access, hillsides, flood plains, infilling, spot zones, and mobile homes mix.

3) Commercial development should have limited access along major highways and should be constructed with grading and hillsides in



SOURCE: ST. GEORGE CITY PLANNING COMMISSION, 1980, "ST . GEORGE CITY MASTER PLAN". 4101-B-2

Figure 2.3.2.15-1. Master Plan for St. George, Utah.

consideration. Appropriate uses for each level of commercial zoning and locations should be considered in new construction.

4) Identify sites for additional industrial development and encourage clean types of industry to locate in the city. Locate sites close to the interstate system. Sites should be large enough to justify city services.

Discussion (2.3.2.15.2)

A great deal of growth has occured in St. George since 1970. At that time the city contained approximately 3,000 acres. Since that time the land area has increased 400 percent, and the population has almost doubled. The present growth rate is putting a strain on some city services and facilities. As the population expands in St. George, the available facilities and services will need expansion also. Careful control of the growth is important so that services can be developed on an equal basis with the growth.

Peak-year growth projections for Washington County resulting from M-X show a need for urban land ranging from 57 to 381 acres depending on the deployment alternative. Long term needs range from 2 to 263 acres. The highest requirements are associated with an OB at Beryl, although the growth pressures on St. George would be light since the city is over 60 miles away. The city estimates that by developing the centers of underdeveloped blocks, 500 to 600 new building lots could be developed. This could provide space to absorb some peak and long-term needs with current land inventories.

Federal Land Constraints (2.3.2.15.3)

Almost 79 percent of Washington County is federally owned. However, most of the land exists in the northern portions of the county. No federally owned land is adjacent to the city that would prevent urban growth within a 7 mile radius.

Millard County, Utah (2.3.2.16)

Millard County has historically been a slow-growing county with a minimum of land use and development controls. The Six county Commissioners Organization, the reginal planning commission for Millard County and its communities, presently conducts A-95 reviews, land use and impact studies, and provides local planning assistance. In view of the Intermountain Power Project (IPP), Millard County and the ten incorporated communities in the county established Millard Intergovernmental Cooperative Association (MICA). MICA, in conjunction with the county, has contracted for the preparation and/or revision of the master plans, zoning ordinances, and subdivision ordinances of the county and incorporated communities. While the county adopted its first master plan in 1970, these are the first master plans that have been prepared for the remainder of the jurisdictions. Table 2.3.2.16-1 provides information on the status of the plans and ordinances for the county and associated communities.

The ten communities in Millard County plus the county are in the process of finalizing and adopting master plans. Community-specific goals and policies are not presently available. Therefore relevant statements have been taken from the 1979 "Six County Development Plan" prepared by the Six County Commissioners Organization.

Table 2.3.2.16-1. Status of adoption of plans and ordinances in Millard and Juab Counties, Utah.

Jurisdiction	Master Plan		Zoning Ordinance		Subdivision Ordinance	
	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)	Date Adopted	Notes (Expected Date of Completion)
Juab County	No plan	Under development (Fall 1981)	1977	Under revision (Spring 1982)	1977	Under revision (Spring 1982)
Eureka	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	No ordinance	Under development (Spring 1982)
Levan	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	No ordinance	Under development (Spring 1982)
Mona	No plan	Under development (Fall 1981)	No ordinance	Under development (Spring 1982)	1974	Under revision (Spring 1982)
Nephi	No plan	Under development (Fall 1981)	1979	Under revision (Spring 1982)	1980	Under revision (Spring 1982)
Millard County	1970	Under revision (1981)	1969	Under revision (1981)	1970	Under revision (1981)
Delta	1981		ca 1970	Under revision (1981)	ca 1972	Under revision (1981)
Filmore	1981		1974	Under revision (1981)	1974	Under revision (1981)
Hinckley	1981		No ordinance	Under development (1981)	1981	
Holden	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Kanosh	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Leamington	1981	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Lynndyl	No plan	Under development (1981)	1981		No ordinance	Under development (1981)
Meadow	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)
Oak City	1981		No ordinance	Under development (1981)	No ordinance	Under development (1981)
Scipio	No plan	Under development (1981)	No ordinance	Under development (1981)	No ordinance	Under development (1981)

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N/A = Not Available

Source: Telephone communication with local officials January-August 1981.

Policy and Goal (2.3.2.16.1)

There is a high potential for the development of energy resources in the Millard County area. While this provides jobs and alleviates economic burdens, it may have serious problems, particularly in community infrastructure and socioeconomic impacts and conflicts.

Programs need to be established that will assist local community leaders in providing expanded services, financing needed facilities, and calculating future impacts.

The public needs to establish priorities relative to the type of future growth that is desired. A growth-management system needs to be established to coordinate actions between the regional planning agency and local jurisdictions for handling growth impacts.

One of the greatest deficiencies in the area is the lack of relevant planning information on which community leaders can base their future community development and planning decisions. This is particularly acute with smaller communities.

Discussion (2.3.2.16.2)

The Intermountain Power Project (IPP) and other projects in the Millard County area have resulted in additional planning activities by several planning organizations. The staff of the Six County Commissioner's Organization has recently completed an evaluation of the plans, ordinances, and codes, and an inventory of the infrastructure facilities in the county. The Millard Intergovernmental Cooperative Association has been coordinating planning activities needed as a result of IPP. The M-X Policy Board, funded through M-X impact assistance monies, has undertaken baseline and impact studies that include the Millard County jurisdictions. These planning programs should aid the Millard County communities in identifying the most severely impacted facilities and resources. Further federal monies through the M-X Community Assistance program may aid in financing necessary services and facilities.

Federal Land Constraints (2.3.2.16.3)

Relative to the three counties south of Millard County, private land ownership in Millard County is extensive. Approximately 13 percent of the land area in Millard County is privately owned, 10 percent is state owned, and 77 percent is federally owned. The Delta-Hinckley area is surrounded by sufficient quantities of private land to handle M-X urban land requirements.

Juab County (2.3.2.17)

Land use controls and planning in Juab County have until recently been limited to zoning and subdivision ordinances for the county, the City of Nephi, and a subdivision ordinance in Mona. Although Juab County and the incorporated communities of Eureka, Levan, Mona, and Nephi have contracted for the preparation of master plans, they do not presently have formally adopted goals and policies. In the absence of local policies and goals, relevant statements for the area have been excerpted from the 1979 "Six County Development Plan."

Policy and Goal (2.3.2.17.1)

Planning information, community mapping, and identification of flood plains, environmental hazards, and earthquake faults need to be generated for local land use decisionmaking.

Most of the communities have outdated or overburdened water and sewer systems. These are seen to be a serious deficiency in the quality of life and may inhibit new businesses from locating in the area.

Notwithstanding the high possibility of boom-town housing problems caused by energy developments, there is a severe housing crisis in many parts of the area.

Discussion (2.3.2.17.2)

The construction of the Intermountain Power Project (IPP) in northern Millard County is anticipated to induce urban growth in Nephi and Eureka while M-X activities would bring higher levels of growth to all four Juab County communities. In this light, the Six County Commissioners Organization, of which Juab County and its communities are members, has compiled an evaluation of the current plans, ordinances, and codes of the Juab County's jurisdictions. Also included in this study, prepared for the M-X Policy Board, was an inventory of the community infrastructure and facilities. Continued funding of these data collection and land-use planning efforts will be available through the M-X Community Assistance Program.

The ban on federal home loan guarantees due to the nonapproved status of the community water systems stymies the construction of new housing. Hence the addition of new housing units to help alleviate the housing crisis is difficult unless private financing can be obtained. The above communities may be able to apply for aid under the Community Assistance Program in order to improve their water supply systems.

Federal Land Constraints (2.3.2.17.3)

Private lands in the vicinity of Nephi, Eureka, Mona, and Levan are sufficient for M-X-induced urban land requirements.

NEW MEXICO COMMUNITIES (2.3.3)

Regional land-use planning activities in the New Mexico part of the deployment region are carried out by the Eastern Plains Council of Governments (EPCOG) which covers the counties of Union, Harding, Quay, Guadalupe, De Baca, Curry, and Roosevelt. No counties in this region have adopted their own general plans, but community plans for Dexter, Hagaman, Lake Arthur, and Roswell in Chaves County, Clovis (Curry County), Fort Sumner (De Baca County) Tucumcari (Quay County), and Portales (Roosevelt County) have been adopted in the 1970s and provide material for the discussion that follows. The current adoption status of the general plans and ordinances in the New Mexico deployment region counties is

presented in Table 2.1.3.1-3. Peak year and long-term requirements for the Texas/New Mexico counties are available in Table 2.3.3-1.

Eastern Plains Council of Governments (2.3.3.1)

Policy and Goal (2.3.3.1.1)

The following are from "Summary Statement: Land Use Element," published in 1977:

1) Encourage the use of every acre of land in a manner consistent with its soil capabilities;

2) Encourage the minimization of soil loss and the improvement of productivity through the application of needed conservation prac.. ;

3) Encourage the preservation of productive lands, especially irrigated lands for agriculture use only;

4) Encourage the wise use and proper treatment of land being put to new uses;

5) Encourage the development of sound economic data relative to the wise use of marginal lands.

Discussion (2.3.3.1.2)

Under the EPCOG jurisdiction temporary conversion of land to urban purposes during the construction phase is expected in all counties except Guadalupe. Short-term demand for urban land use in the EPCOG region is 5,900 acres for Alternative 7 and 4,900 acres for Alternative 8. Long-term urban land requirements for the two alternatives are 1,319 acres and 1,416 acres, respectively, all falling into Curry and Roosevelt counties due to the influence of the Clovis OB. Most of this land-area demand will be met by the conversion of vacant urban land and rural land on the fringes of the existing communities.

As the urbanization process takes place, conflicts with the regional goals stated above can be expected. There would likely be instances where community growth has no physical choice but to consume agricultural land. In other instances, factors such as land economics, proximity of services and aesthetics may make agricultural lands more desirable than existing vacant land within the community. The degree to which these conflicts arise will be influenced by the existence and application of land development regulations in the communities and the unincorporated area of the county.

Dexter, New Mexico (2.3.3.2)

Policy and Goal (2.3.3.2.1)

The land use policy of Dexter is contained in its generalized land use plan. Development is not expected to exceed its existing corporate boundaries, and the community is expected to be surrounded by agricultural usage. Current population

Table 2.3.3-1. Urban land requirements in the Texas/New Mexico region by county (Page 1 of 2)

Alternative	Acres Required Peak Year	Long Term	Acres Required Peak Year	Long Term
	Bailey Co., Texas		Castro Co. Texas	
7	362	0	319	0
8B	217	0	32	0
	Cochran Co., Texas		Dallam Co., Texas	
7	83	0	1,813	459
8B	23	0	556	0
	Deaf Smith Co. Texas		Hale Co. Texas	
7	655	0	50	459
8B	313	0	200	0
	Hartley Co., Texas		Hockley Co., Texas	
7	1,592	506	49	459
8B	322	0	4	0
	Lamb Co., Texas		Lubbock Co., Texas	
7	67	0	684	230
8B	23	0	242	208
	Moore Co., Texas		Oldham Co., Texas	
7	353	200	49	0
8B	310	0	29	0
	Parmer Co., Texas		Potter/Randall Co., Texas	
7	392	0	2,402	981
8B	27	0	662	197

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Table 2.3.3-1. Urban land requirements in the Texas/New Mexico region by county (Page 2 of 2).

Alternative	Acres Required Peak Year	Long Term	Acres Required Peak Year	Long Term
	Sherman Co., Texas		Swisher Co., Texas	
7	187	0	36	0
8B	394	0	11	0
	Chaves Co., New Mexico		Curry Co., New Mexico	
7	514	0	3,406	792
8B	676	1	3,041	903
	DeBaca Co., New Mexico		Harding Co., New Mexico	
7	88	0	344	0
8B	69	0	360	0
	Quay Co., New Mexico		Roosevelt Co., New Mexico	
7	338	0	699	527
8B	770	0	643	513
	Union Co., New Mexico		Texas/New Mexico Region	
7	72	0	13,117	2,695
8B	36	0	7,153	1,822

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is approximately 900 persons and there are approximately 350 utility connections. The land-use plan is designed to permit growth within the physical and resource limits of the community, its services, and its facilities.

Discussion (2.3.3.2.2)

M-X deployment under Alternatives 7 and 8 forecast only temporary urban land requirements for Chaves County, these being about 500 and 675 acres, respectively. Most of this development will be attracted to Roswell, the primary urban center in the county. However, even 15 to 20 percent of this growth would be of significance to Dexter. The city is planned to accommodate only a limited amount of growth within its own ability to support and provide a constant level of service delivery. All but a limited amount of growth would therefore be in conflict with the city's general development plan.

Hagerman, New Mexico (2.3.3.3)

Policy and Goal (2.3.3.3.1)

A community development profile and plan report for Hagerman was published in 1974. The document included six development policy statements which have been condensed and summarized as follows:

1) Remove or renovate all dilapidated housing units.

2) Work for the beautification of the central business district.

3) Accomplish improvements to the water system, street system, and sewage collection system.

4) Develop a water recreational complex.

Discussion (2.3.3.3.2)

The urban land requirements in Chaves County resulting from Alternatives 7 and 8 are all of a temporary nature, and most are expected to be satisfied by the Community of Roswell, which has significantly more urbanized development and urban services than Hagerman. To the extent that some development would be attracted to Hagerman, it would not necessarily conflict with the above policy objectives but could place additional need for their accomplishment in the short term. An increase in housing demand could provide economic incentive to upgrade the existing housing stock and would be supportive of the first objective above. This would be preferable to the establishment of temporary housing for construction workers.

Lake Arthur (Chaves County), New Mexico (2.3.3.4)

Policy and Goal (2.3.3.4.1)

A community development profile-and-plan report for Lake Arthur was published in 1976. Eleven "development policy statements" are contained in the report; those having potential affects from M-X development are condensed and summarized as follows:

1. Initiate new housing construction, renovation of existing marginal housing and removal of dilapidated structures;

2. Encourage the development of service and light industry;

3. Increase tax base;

4. Continue the development of recreational services and facilities.

Discussion (2.3.3.4.2)

Chaves County is located at the southern extremity of the DDA region (Alternatives 7 and 8) and Lake Arthur is located near the southern edge of the county. Urban land requirements in the county would only be of temporary nature relating to the DDA construction period. Total peak demand ranges from about 500 to 675 areas, most of which would probably be attracted to Roswell, which has nearly 80 percent of the county's population. For these reasons the urban land impact on Lake Arthur would be small, and no significant conflicts with the above policy statements are expected. A small demand for development could in fact help accomplish these policies.

Roswell (Chaves County), New Mexico (2.3.3.5)

Policy and Goal (2.3.3.5.1)

The most recent comprehensive plan for Roswell was completed in 1961. In effect, the community does not have a plan because of the document's age and the cumulative effect of community development actions over the past twenty years. An areawide planning report, prepared by the Southeastern New Mexico Economic Development District in 1979, did present four development objectives for Roswell. These are summarized below, but as presented in the report they are recommendations and not official statements of policy.

1) Maintain existing employment, create more jobs, lower the unemployment rate, and raise the disposable income levels of Roswell households.

2) Upgrade the level of public services in Roswell in order to better serve existing users and attract newcomers.

3) Expand housing variety and availability for Roswell households in all income categories.

4) Increase the level of amenities available to Roswell residents, e.g. private and public cultural and educational opportunities.

Discussion (2.3.3.5.2)

Alternatives 7 and 8 result in an urbanized land demand of 514 and 676 acres, respectively, for Chaves County. All of this demand is expected to be of a short-term, temporary nature associated with construction activities of the DDA. It is expected that most of this demand would be realized in the Roswell area

because of its central location in the county and because it is the primary urbanized area -- nearly 80 percent of the county population resides at Roswell. The city is expected to grow (ranging from a low forecast of 90 acres per year average to a high of 540 acres annually) and the M-X development would certainly accelerate this growth in the short term. Whereas this growth may cause problems, it is not necessarily in conflict with the development objectives stated above. The lack of a current, comprehensive plan to guide future growth is perhaps the most serious concern at this point, regardless of the source of this growth.

Clovis (Curry County), New Mexico (2.3.3.6)

Clovis, Curry County, and the surrounding jurisdictions are members of Eastern Plains Council of Governments (EPCOG), the regional planning agency and A-95 Clearinghouse for a seven-county region in eastern New Mexico. As part of its local planning assistance program EPCOG handles land-use planning matters for Melrose, Texico, and Grady, all rural communities surrounded by agricultural lands in Curry County. Melrose, 24 mi west of Clovis, is the largest of these three rural communities with 425 acres of developed land (see Table 2.3.3.6-1). Texico on the New Mexico/Texas border opposite Farwell, Texas has 290 acres of developed land while Grady in northern Curry County has 100 acres of development.

The City of Clovis is the county seat for Curry County and acts as the commercial center for eastern New Mexico and western Texas. Within the city, the Santa Fe railroad acts as the planning and psychological border between the northern and southern sectors. Residential and commercial land uses lie in the northern area with new housing developments being constructed in the northeastern corner. The southern area is dominated by the railroad yard, grain elevators, and stockyards thereby discouraging nonindustrial uses. Airplane traffic from Cannon Air Force Base, lying six mi to the west of Clovis, passes over the agricultural land and scattered residences that are found in the western part of the city. Existing land use data by use category (e.g., residential, commercial, industrial) are not available for the city of Clovis. However, as of late 1980, 82 percent of the 8,320 acres in the city was used for urban purposes while 1,460 acres were vacant (see Table 3.4.6.3.10-1). The community has experienced growth during the 1970's with annexations of 119 acres in 1974, 39 acres in 1975, and 73 acres in 1976. New construction has primarily been within the city limits, especially along the four highways leading out of the city. EPCOG has identified Clovis as one of four primary growth centers in the seven-county region.

The City of Clovis' general plan was adopted in 1969 and is currently being revised. Figure 2.3.3.6-1 provides a map of the land-use element from the 1969 general plan. The plan contains elements designed to guide the selection of sites for specific land uses; the land-use element, the circulation element, and the community facilities element. The city has extraterritorial zoning authority extending its zoning jurisdiction an additional two mi outward from the city limits. This authority is administered through a joint city of Clovis/Curry County extraterritorial zoning board. However, the board has largely been inactive due to considerable citizen opposition to extension of the city's zoning power.

Cannon Air Force Base prepared a "TAB A-1 Environmental Narrative" in 1975 which contained suggestions for density and building restrictions for the areas impacted by noise and accident potentials around the base. Urban uses for housing, stores, and offices on the base totalled 870 acres in 1980.

Table 2.3.3.6-1. Existing land use - Curry County, New Mexico.

Community	Vacant	Developed	Total
Clovis	1,460	6,860	8,320
Melrose	695	425	1,120
Grady	80	100	180
Texico	240	290	530
Total	2,475	7,675	10,150

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Source: Personal contact with Eastern Plains Council of Governments, 30 October 1980.

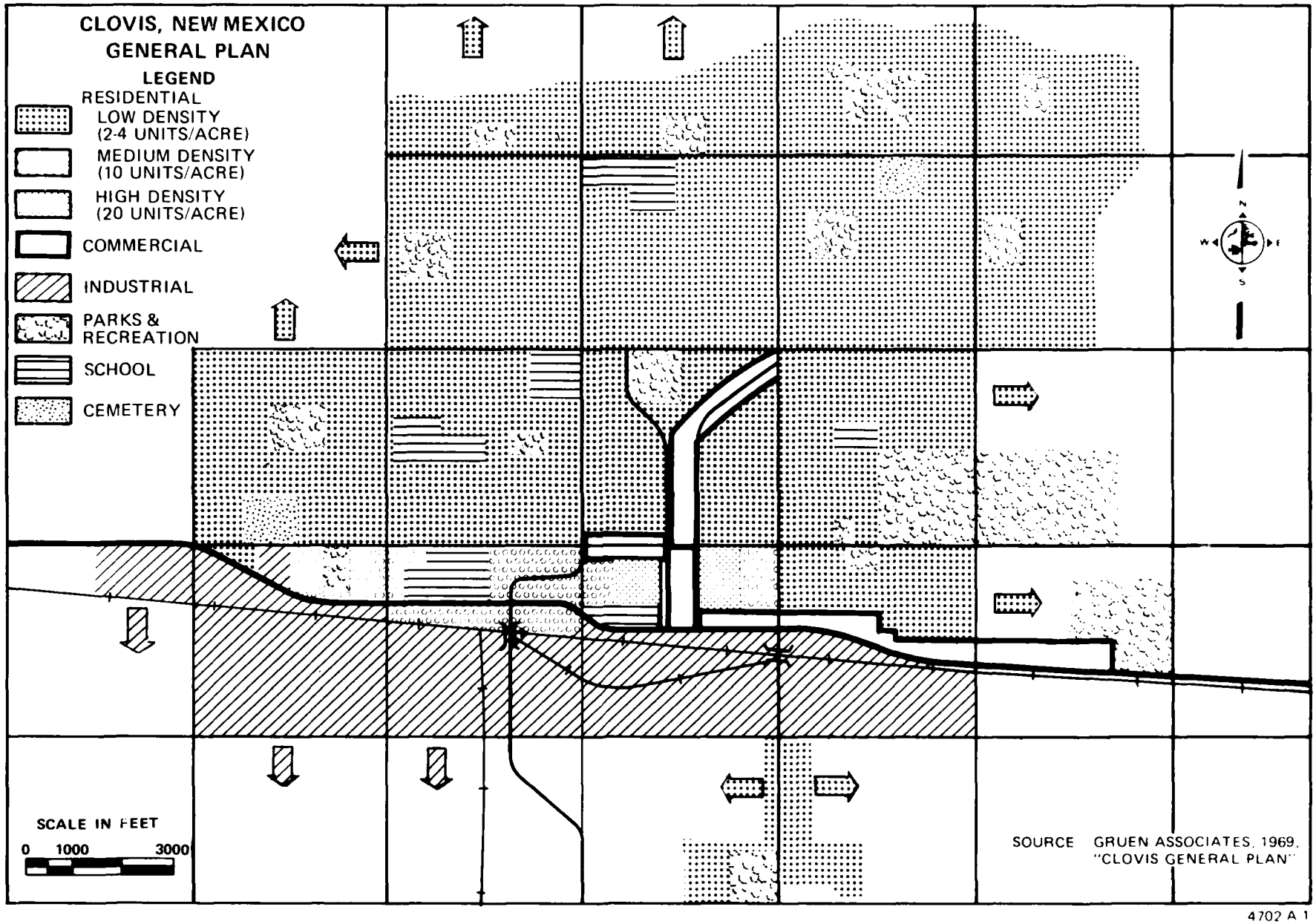

Figure 2.3.3.6-1. General Plan for Clovis, New Mexico.

Policy and Goal (2.3.3.6.1)

The Clovis General Plan, adopted in 1969 for a planning horizon of 1990, incorporated the following major goals to guide future planning and development in the city:

1) Encourage orderly growth as opposed to wasteful urban sprawl.

2) Focus on the sound development of vacant or underutilized land within the city limits.

3) Focus on the revitalization of deteriorating residential and commercial areas, and on improving the attractiveness of the physical environment.

Discussion (2.3.3.6.2)

Alternatives 7 and 8 each include an operating base to be sited in the Clovis area. This would result in significant short-term growth pressures resulting from the construction phase and would also result in long-term land development induced by the ongoing operations of the base. The degree to which the above goals will be realized is largely dependent on the extent to which land-use controls and policy decisions are implemented consistent with the plan. However, if development conditions become too restrictive, growth could occur beyond the community's jurisdiction. Public land ownership would not be a constraint to growth as evidenced by Figure 2.3.3.6-2. This growth pattern, then, would be in direct conflict with the policy and goal stated above.

The general plan forecasted a healthy growth rate for Clovis, with population increasing at least 47 percent over the 20-year planning period and requiring an additional 7,255 acres of urban development. The implementation of either Alternative 7 or 8 would create demand for a 50 percent increase in this planned growth with the added land requirements occurring over just several years (assuming all of the Curry County M-X-induced growth occurs in the Clovis area). This rapid growth on top of the healthy baseline growth will certainly strain the goal of "orderly" expansion. If channelled properly, though, this intense pressure for rapid growth could promote the goals of developing vacant and underutilized land, and revitalize deteriorating areas as the economic forces of increased land values become more evident.

The temporary needs of about 75 percent of the short-term growth (area wise) for M-X would generally be in conflict with the goal for improving the attractiveness of the physical environment. However, because Clovis does have a strong baseline growth in the longer term, there is definite potential that some portion of the short-term requirements resulting from the M-X construction phase can be met by permanent, not temporary, land development since there would be a future demand from general community growth. There would need to be conscious efforts toward making this happen since temporary, lower quality development would be cheaper for the occupant (residence, business or whatever) and thus have a significant competitive edge relative to higher quality, permanent development.

One possible solution would be to subsidize private development (of a high-quality nature) in the short-term period so that it is competitive on the "open" market with

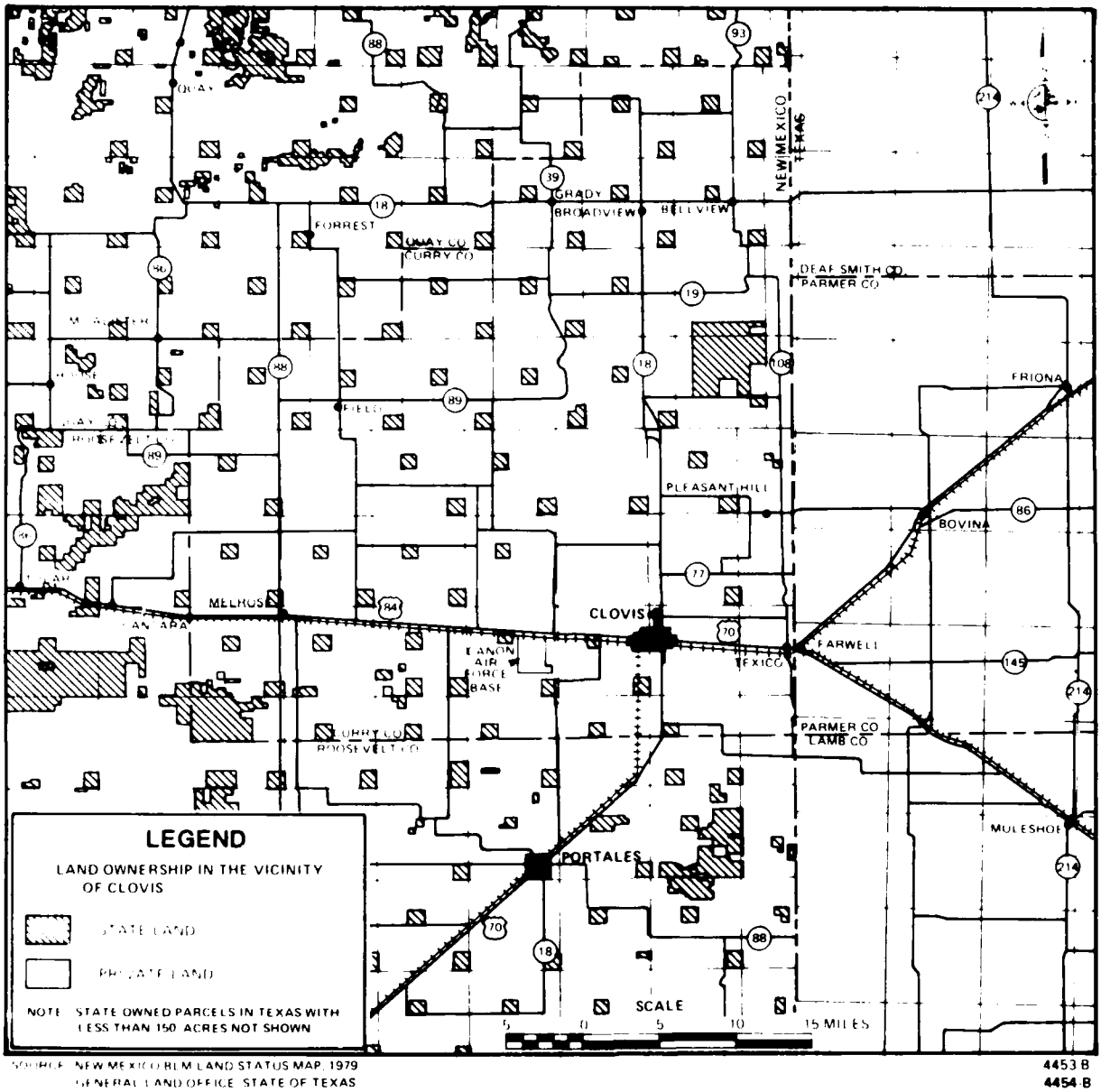

Figure 2.3.3.6-2. Land ownership in the vicinity of Clovis, New Mexico.

temporary development. This would require a "public cost" initially but could result in significant savings in the long run by encouraging efficient land use, eliminating the need for converting urbanized land back to a vacant state, and by preventing a deterioration of land values.

Fort Sumner, (De Baca County) New Mexico (2.3.3.7)

Policy and Goal (2.3.3.7.1)

Fort Sumner began its development and has proceeded from those early years without regard to land use controls. The development of its Comprehensive Plan signaled the advent of a new policy to preserve property values and to eliminate chaotic growth and development of land. This policy implemented as a plan has prevailed in municipal practice since 1969.

Discussion (2.3.3.7.2)

Regardless of the deployment alternative chosen, Fort Sumner will have difficulty supporting and achieving unforseen growth in the near future. Full project deployment in Texas and New Mexico will fully impact planned growth in the city. The projected population by the year 1990 is only 3,100 persons. The community is planned to continue in its role as a small, central city that is rurally and agriculturally based. Agricultural land along the Pecos River is highly productive and quite sensitive to encroachment. Such encroachment is a specific growth limitation and would threaten an important economic sector of the community. The M-X project could require that approximately 90 acres of developed land be added at a time when planning and development processes have just been formulated. The community is restricted physically, but would be expected to accommodate projected levels of full development long before adjustments in facilities and services can be made. As with most small communities, the timing of the demand placed upon it will impact Fort Sumner's land-use policy and development commitment by requiring an early, unanticipated response from a restricted resource base.

Tucumcari, (Quay County) New Mexico (2.3.3.8)

Policy and Goal (2.3.3.8.1)

Land use policy is based upon the basic tenets of land-use planning:

1) Development of, and adherence to, a general land use plan;

2) Encouragement of compatible land uses and separation of incompatible development;

3) Designation of land uses based upon realistic assessment of need;

4) Provision of ample space for industrial development near transportation;

5) Location of community facilities with respect to population distribution, current and expected;

6) Provision of functional, attractive, and convenient public buildings;

7) Revision of development controls to reflect modern urban practice;

8) Examination of plan amendments and changes to reflect reduction of local impact and achievement of long-term development.

Discussion (2.3.3.8.2)

The land-use planning that Tucumcari has promulgated is directed at long-term moderate growth of 3,000 persons over twenty years. The city now contains 2,900 acres, 1,700 of which are developed. To accommodate this growth objective, approximately 770 acres will have to be developed. Full deployment of the M-X project in Texas and New Mexico would require more than a full 50 percent of that objective be met over a short period of time, five years for example. The project would impact the city to the extent that a twenty year span of planned expenditures for development would have to be applied in half the time and well in advance of thoughtful planning. In addition, the long-term contribution of the M-X project to local development is expected to be negligible, reducing community benefits to accommodating short-term impacts. Urban systems and services would necessarily be extended beyond reasonable expectation of long-term use. The total impact of the project would be to foster short-range demand for long-range facilities and services, an impact the city has not expected to face until the year 2020.

Portales, (Roosevelt County) New Mexico (2.3.3.9)

Portales lying 19 mi to the south of Clovis is the Roosevelt County seat. Portales is about one-third the size of Clovis in terms of land area. In 1969 residental uses occupied approximately 620 acres, equivalent to one quarter of the land area while streets covered over 900 acres, almost one-half of the developed land area (see Table 2.3.3.9-1). Current residential growth has mostly been on the edges of the corporate limits. Since water and sewer extensions were made available to the unincorporated areas in the early 1970's, the city has had trouble annexing these areas into the city. Redevelopment activities are being encouraged in the northwest sector of town. Land-use planning is guided by the city's comprehensive plan adopted in 1969.

Policy and Goal (2.3.3.9.1)

The land use development policy of the City of Portales is contained in a set of community goals that are intended to provide continuing planning motivation and a structure whereby all resources and efforts of the community may be organized. The goals reflect intent of policy and are paraphrased below:

1) The achievement of orderly development based upon natural character and resources available;

2) The improvement of the economic base to increase employment opportunity and economic amenities;

3) The stimulation of commerce and industry to provide increased economic opportunity for all;

Table 2.3.3.9-1. Existing land use - Portales, New Mexico

Land Use	Portales	
	Acres	Percent
Residential	621.5	26
Commercial	89.1	4
Industrial	5.5	0
Public	309.4	13
Park	25.2	1
Streets/Railroad	958.4	40
Developed Land Subtotal	2,009.1	84
Agriculture	156.3	6
Vacant	237.9	10
Total	2,403.3	100

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Source: Jose Luis Yguado and Associates, 1970, "Comprehensive Plan - Portales, New Mexico."

4) The establishment of land use patterns which facilitate social and economic activities;

5) The adoption of a comprehensive plan which reflects these community goals and includes available land use control tools;

6) The encouragement of citizen participation in planning to facilitate shaping of the community.

These statements form a land use policy that dictates development within resources, stimulation of the economy, enhancement of opportunity, commitment to a continuing process, and inclusion of the community in the determination of collective value.

Discussion (2.3.3.9.2)

The land use plan for the City of Portales was designed to meet an expected population increase of 20,000 persons by the year 2000. Currently about 92 percent of its total land is developed. To accommodate the expected growth approximately 1,000 additional acres will be needed. The effects of the M-X project will be to add an immediate 1,700 acres (total Roosevelt County requirement) to that long-term, anticipated development responsibility if the project is deployed in Texas and New Mexico. The net long-term impact is an addition of 500 acres to the urban pattern and a resultant project population increase. The short-term; 5 - 6 years' impacts will strain local resources and will place an immediate responsibility to react in the most expeditious manner on the city, which is agriculturally-based and becoming a typically urban center. The policies above will be directly and heavily impacted. Portales will be responsible for measures beyond its ability. The land use plan was designed to optimize development and resource base. The decisions to be made will necessarily balance expenditure against benefits and opportunity that development provides Portales's citizens. Development beyond that which is expected places severe strain on the reaction the community can make in accommodating short-term demand.

TEXAS COMMUNITIES (2.3.4)

Two regional planning commissions in Texas provide land use planning assistance for the counties in the Texas deployment region. The Panhandle Regional Planning Commission (PRPC) region includes Castro, Dallam, Deaf Smith, Hartley, Moore, Oldham, Parmer, Potter, Randall, Sherman, and Swisher counties. Bailey, Cochran, Hale, Hockley, Lubbock, and Lamb counties are members of the South Plains Associations of Governments (SPAG). The plans prepared by these two regional planning commissions serve as the policy documents for guiding future growth at the county while municipal general plans serve this function at community level. The following sections have utilized material from the PRPC and SPAG regional land resources management plans and municipal general plans of Dalhart (Dallam and Hartley counties), Littlefield (Lamb County), Lubbock (Lubbock County), Dumas (Moore County), Farwell (Moore County), and Amarillo (Potter and Randall counties). The current status of the general plans and ordinances in the Texas deployment region is presented in Table 2.1.3.1-4 while the peak-year and long-term urban land requirements are found in Table 2.3.3-1.

Panhandle Regional Planning Commission, Texas (2.3.4.1)

In January, 1978, the 25-county Panhandle Regional Planning Commission (PRPC) adopted a Regional Land Resource Management Plan. This plan identified trends in socioeconomic development and established goals and policies aimed at giving guidance and direction to growth in the 25-county area. Furthermore, city and county governments were encouranged to develop implementing ordinances adequate to carry out the planning goals and policies that relate to their particular area. The plan discusses two types of patterns of urban growth that might take place in the Panhandle communities. One is labeled "cluster" growth pattern in which growth takes place around already existing communities. This form of growth uses extensions of existing public facilities and utilities, and encourages development of vacant land within the existing community area. The pattern would discourage growth along major highways where most croplands and other agriculturally-related enterprises are located. The alternative to cluster development is a "corridor" growth pattern. In this pattern, growth takes place along a rather narrow corridor adjacent to the major highway system. This pattern of land-use development is expensive in terms of linear extension of utility systems. Often utility services associated with community development are provided through septic systems and individual wells. The plan recommended the cluster pattern for use in future plans and zoning ordinances adopted by the member jurisdictions.

Policy and Goal (2.3.4.1.1)

The regional land resource management goals are to encourage:

1) Planned growth of the cities and counties throughout the region;

2) Conservation, protection, and economic development of natural resources;

3) Conservation and development of recreation lands.

The PRPC's objectives include contiguous urban growth, water and sewer planning, development of public utilities, suitable use of developable land, development of vacant lands, beautification of both public and private lands, and the establishment of development standards.

Discussion (2.3.4.1.2)

Deployment of the project in the 23-county region will place a burden upon regional planning and management of land use. An operating base in Dalhart will generate significant impacts during construction phases and also in the long-range operation of resulting facilties. The land resource management goals stated above will be directly impacted by the project, particularly by its requirements for urban land. PRPC's policies are consistent with those of their member counties and cities, and if they are uniformly observed, mitigation of adversity will result. The counties and small cities are typically rural and subject to all the sensitivities associated with that role. Development is encouraged and economic growth is actively sought. However, such must occur within local capability or a wide variety of mitigation measures must be applied.

South Plains Association of Governments, Texas (2.3.4.2)

Policy and Goal (2.3.4.2.1)

The land development policies of the South Plains Association of Governments (SPAG) are to:

1) Avoid development of incompatible land uses;

2) Prevent destruction of scenic areas;

3) Promote the preservation of all scenic and historic areas;

4) Incorporate visual impact regulations into land use controls;

5) Locate new residential development where adequate provision can be made for facilities and services;

6) Avoid locating industry where environmental impacts could occur and where support systems are readily available; and

7) Conserve agricultural land resource and establish its best use.

Discussion (2.3.4.2.2)

M-X deployment in the Texas deployment area will produce a wide range of impact upon regional land-use policy, particularly as regards new residential needs and supporting development. Urban land usage directly effects a number of small communities in the region, and all are not equally able to support development. Systems, services, and utilities in these rural areas have been developed to an optimum, but are small scale. Expansion to project-scale requirements will not be easy or economical, and there is little related community planning available to substantiate it. Consistency of purpose, intent, and cooperation between local and regional agencies may mitigate some impacts, but the magnitude of development will have to be designed to the sensitivity of both local and regional environments if lasting impacts are to be avoided.

Dalhart, (Dallam and Hartley Counties) Texas (2.3.4.3)

The information available for existing land uses in Dallam and Hartley counties is primarily oriented toward regional land uses rather than detailed urban land uses. Table 2.3.4.3-1 provides 1970 data on the land uses in Dallam and Hartley counties. The areas used for urban land uses are 7,900 and approximately 24,700 acres, respectively. However, these figures include land for railroads and highways, plus the Dalhart airport in Hartley County. As a result, the "urban land" data do not reflect the amount of land used solely for community land uses, such as housing, commercial, and industrial land uses. Projections of future regional land uses were also made by the Panhandle Regional Planning Commission (PRPC) and are shown in Table 2.3.4.3-2. In comparison with the existing land use data (Table 2.3.4.3-1), the "urban land" in Dallam County is expected to grow by only 350 acres or 4.5 percent by the year 2000. This is in contrast to the 30 percent growth (over 7,600 acres) projected in Hartley County by the year 2000. The larger increase projected in Hartley County is not explicable, however, a large portion of the expected urban

Table 2.3.4.3-1. Existing land use - Dallam and Hartley counties.

Land Use Category	Dallam County		Hartley County		Bi-County Total	
	Acres	Percent	Acres	Percent	Acres	Percent
Federal Land	77,582	8.1	--	--	71,582	4.1
Urban Land[1]	7,900	0.8	24,678	2.6	32,578	1.7
Water Areas	2,585	0.3	2,200	0.2	4,785	0.3
Rangeland	547,043	7.2	670,565	70.4	1,217,608	63.8
Dryland Crops	227,630	23.8	177,028	18.6	404,658	21.2
Irrigated Crops	85,260	8.9	72,972	7.7	158,232	8.3
Other Uses	8,160	0.9	4,749	0.5	12,909	0.7
Totals	956,160	100.0	952,192	100.0	1,908,352	100.0

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[1]Includes land for cities, villages, highways, railroads, and airports.

Source: Panhandle Regional Planning Commission, 1978, "Regional Land Resources Management Plan."

Table 2.3.4.3-2. Projected land use - Dallam and Hartley counties, in 2000.

Land Use Category	Dallam County		Hartley County		Bi-County Total	
	Acres	Percent	Acres	Percent	Acres	Percent
Federal Land	77,582	8.1	--	--	77,582	4.1
Urban Land[1]	8,254	0.9	32,292	3.4	40,546	2.1
Water Areas	2,585	0.3	2,200	0.2	4,785	0.3
Rangeland	451,941	47.3	441,968	46.4	893,909	46.8
Dryland Crops	124,751	13.0	145,983	15.3	270,734	14.2
Irrigated Crops	282,887	29.6	325,000	34.1	607,887	31.8
Other Uses	8,160	0.9	4,749	0.5	12,909	6.8
Totals	956,160	100.0	952,192	100.0	1,908,352	100.0

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[1]Includes land for cities, villages, highways, railroads, and airports.

Source: Panhandle Regional Planning Commission, 1978, "Regional Land Resources Management Plan."

growth may be related to the Dalhart airport. On a regional basis, the projections show a reduction in rangeland and dryland crops, and a proportionate increase in irrigated cropland, due primarily to improved irrigation.

The City of Dalhart's Comprehensive Plan adopted in 1965 identified existing urban land uses at the time and recommended land-use pattern for future growth. The 1965 land area of the city was almost 1,500 acres, with about two-thirds of the land area developed according to the following categories: residential, about 30 percent; commercial, six percent; industrial, 12 percent; public and quasi-public, six percent; and streets, 46 percent (see Table 2.3.4.3-3). The existing land use patterns in 1965 showed the developed areas to be concentrated near the center of town with some development extending to the south and east. The comprehensive plan called for a ring of neighborhood shopping centers to be built around the downtown area. More recent land use maps are not available to identify the extent to which this development pattern has been implemented.

The town of Texline, 36 mi to the northwest of Dalhart, is the second largest community in Dallam County. The town prepared its first master plan in mid-1981. Zoning and subdivision ordinances to implement the master plan have not been prepared. In Hartley County the City of Channing could be expected to receive urban growth pressures as a result of M-X activities. The city does not at the present time have a master plan for any implementing ordinances.

Policy and Goal (2.3.4.3.1)

Dalhart's primary land use objective is to accommodate growth and development only when the city is able to provide such growth with comparable community facilities and services, particularly water and sewerage facilities. The city has been developed in a compact pattern, a distinct advantage in providing municipal services under limited resources and tax base. Future planned growth is expected to continue that policy.

Discussion (2.3.4.3.2)

Dallam and Hartley counties are expected to accommodate 3,400 additional peak-year acres of development under Alternative 7 and, due to the siting of the Dalhart OB, would have a long-term demand for 965 acres. Alternative 8 excludes this operating base resulting in only a short-term temporary urban land requirement of 878 acres. Dalhart presently contains 1,500 acres, but only 70 percent of that is developed. The city contains a major regional transportation system of highways, rail, and air facilities and is a hub of a large geographic area. Planned growth has been designed to accommodate more than 10,000 persons in a developed area of 9,000 acres. Dalhart can physically and economically cope with the impacts associated with the M-X project if resources and development timing are carefully planned. It would be difficult for the city and its systems to react to large demand over short periods of time. M-X impacts could be accommodated physically, but supporting systems and services would have to be implemented well in advance of planned improvement. The M-X-induced growth would only be in conflict with the city's policy, then, to the extent that such growth would outpace the ability to provide services at current standards.

Table 2.3.4.3-3. Existing land use-- Dalhart, Texas.

Land Use	Acres	Percent
Single family	274.5	18
Multifamily	8.8	1
Commercial	59.2	4
Industrial/Railroad	129.2	9
Public	55.5	4
Streets	464.7	32
Developed land subtotal	992.0	67
Vacant	480.2	33
Total	1,472.1	100

T5302/10-2-81

Source: Homer A. Hunter Associates, 1965, "Comprehensive Plan, Dalhart, Texas."

Littlefield, (Lamb County) Texas (2.3.4.4)

Policy and Goal (2.3.4.4.1)

Land use planning and development in Littlefield is focused upon strategies for specific uses:

1) Promotion of residential development based upon the neighborhood system, instead of inefficient urban sprawl, and the protection and support of personal property values and municipal tax base;

2) Strengthen CBD as a dynamic focal point and develop properly located neighborhood shopping;

3) Provide adequate space for industrial expansion;

4) Develop an organic land use pattern in balance with overall city development.

Discussion (2.3.4.4.2)

The City of Littlefield is expected to reach 20,000 to 30,000 population by the year 2000 under baseline conditions. Approximately 600 acres of new land must be developed in order to accommodate that level of development. Approximately 300 new residents are expected at that time, an approximate 37 percent increase in population. Land-use patterns are projected that will fully utilize the city's resources, particularly transportation. The M-X project would require only slight alteration of original plans or strategies, and the expected impacts of the project on the community could be effectively mitigated without major disruption of plan or policy. A significant impact results from the use of the land for development. Land-use demand near Littlefield would have to accept reductions both in rangeland and productive farmland. These impacts would remove such lands from production and would be irreversible in most cases if continued over a 5 to 6 year period.

Lubbock, (Lubbock County) Texas (2.3.4.5)

Policy and Goal (2.3.4.5.1)

Lubbock is attempting to accommodate growth and development through "proper planning" where "commercial, industrial, public service, and private sector needs can be met to intelligently accommodate development." The city serves as a market center for agriculturally-based activities and has developed major transportation links with a large number and variety of markets. Local land use planning seeks to:

1) Encourage the use of new techniques in land-use planning to effectuate better utilization of urban land,

2) develop procedures and criteria for evaluating relative costs and benefits of alternatives in land use.

Discussion (2.3.4.5.2)

Lubbock is a major urban center of a large geographic region. It is a center of commerce, transportation, education, service, and industry. Lubbock's 85 sq mi urban area is approximately 50 percent developed, and its potential for growth is significant with its resources. Its fully-planned potential is approximately 250,000 persons. The city is structured to accommodate expected full development and may be well able to absorb expected M-X project impacts, under either Alternative 7 or Alternative 8. Planned expansion is well in excess of requirements of both peak-year and long-term impacts. Plans, policies, and ordinances are expected to guide the city to its full development, and reaction to M-X deployment requirements may be well within land use policy for the urban region. Lubbock is a major urban area and far better equipped to foster, support, and accommodate immediate changes in land-use demand.

Dumas, (Moore County) Texas (2.3.4.6)

Policy and Goal (2.3.4.6.1)

The plan for the city of Dumas identifies land-use principles and standards that act as guidelines for policy determinations and decisionmaking. These principles are aligned with land use objectives by specific uses such as:

1) Minimize urban sprawl that drains resources;

2) Provide a sound framework for neighborhood development;

3) Maintain viability of the CBD as a retail center through redevelopment as well as new growth;

4) Promote industrial development by developing municipal facilities to support new industrial growth;

5) Develop an efficient transportation system;

6) Provide a full range of public, community facilities for all citizens.

Discussion (2.3.4.6.2)

Dumas contains an area of 2,000 acres, only 300 acres of which is undeveloped. Its population is expected to increase by 3,200 persons by the year 1990. To accommodate that growth, 1,200 acres of new development would have to be added, if population projections are realized. An additional 300 acres would be required by M-X assuming the entire Moore County requirement is fulfilled in the Dumas area. The impacts associated would not severely impinge on the proposed planning. However, the occurrence of that impact over expected short durations would necessarily hinder implementation of development. Resources and their availability at critical decision points will determine the severity of the associated impacts. Those impacts expected from Alternative 7, full deployment in Texas and New Mexico, would require a net long-term increase of 200 additional acres that were not considered a part of the community planning. Given adequate resources, those impacts could be absorbed well within the scope of local planning. Alternative 8,

deployment in both the Utah/Nevada and Texas/New Mexico regions, would require about the same level of short-term, peak development but all of it would be of a temporary nature. This would provide an additional challenge and could well conflict with the policies stated above.

Farwell, (Parmer County) Texas (2.3.4.7)

Policy and Goal (2.3.4.7.1)

Farwell's comprehensive planning effort is directed toward achieving a balance of community goals and objectives, and major emphasis has been placed upon achieving a "healthy and desirable place within which to live and work" by:

1) Protecting and improving potable water sources;

2) Development of environmental protection controls;

3) Achieving a desirable relationship between available resources and the amount and intensity of development;

4) Achieving high standards and reasonable procedures for development, land use, construction, and redevelopment;

5) Preventing misuse and waste of land through comprehensive planning; and

6) Reinforcing and redeveloping the center city through planning and program implementation.

Other stated goals and objectives further refine and add detail to the commitment above.

Discussion (2.3.4.7.2)

Impact on the city of Farwell will be significant if Alternative 7 is implemented. When its plan was developed in 1974, the city included approximately 500 developed acres and 1,600 people. Projections indicate that by the year 2020, additional land-use requirements may reach a level of 300 acres and a population of 2,100 persons. The community's planning is oriented to life quality objectives and long-term results under limited growth. Conflicts would therefore be expected under Alternative 7 which projects requirements of nearly 400 acres of additional land-use development in Parmer County. This would occur over a very short period of time, placing extreme impact on facilities, services, protection, and lifestyle.

Amarillo, (Potter/Randall Counties) Texas (2.3.4.8)

Policy and Goal (2.3.4.8.1)

Development planning and policy of the city is designed to achieve the following and, in so doing, implement the community's land use plan:

1) Create a compact, orderly, and economic pattern of development for the community;

2) Provide a guide for the development and expansion of community facilities and municipal utilities;

3) Create a series of open space areas as linear greenbelt parkways adjacent to the natural drainageways, playa lakes, and major thoroughfares throughout the urban area which will be the major structuring element of the city;

4) Provide a basis for decisions relative to future zoning requests and the platting of land for urban use;

5) Encourage a high quality of physical development and protect existing values and desirable community features;

6) Establish and protect adequate area for future industrial and commercial uses.

Discussion (2.3.4.8.2)

Amarillo's corporate limits encompass approximately 42,000 acres, 60 percent developed and 40 percent undeveloped. The holding capacity of the area at a "continued, rapid growth rate" would be 400,000 persons by 1990. Current development has contributed to only half that number. An undeveloped area of approximately 16,000 acres is as yet unused. Local planning and zoning practice has been designed in coordination with, and in support of, a comprehensive land-use plan. The peak-year and long-term effects of the project on urban growth in Amarillo could be absorbed if the city were to develop as expected. Alternative 7 would place considerable burden on resource and implementation capability over the short run, but residential impacts could be easily absorbed if resources were available to adjust to demand. Service delivery systems would have to be carefully considered. If Alternative 8 were to be chosen, a more effective response could be marshalled and reaction to short-term demand could be more positive and implementable.

3.0 MITIGATION MEASURES

Mitigation strategies for urban land use should be directed toward reducing the urban land requirements in communities, planning for an orderly growth, and transferring additional federal lands for urban growth to the communities having no, or little room, for development on private lands. The Air Force will take the following direct measures to reduce the impacts on the communities:

- Provide temporary life support communities in coordination with community planning effort. Such an action could serve to reduce the temporary demand for urban land in the existing communities by levels dependent upon the nature and number of the life support communities. The life support community would serve to redirect some of the workers away from the existing communities, if the communities find it difficult to accommodate all in-migrants.

- Plan infrastructure (roads and utilities) for temporary facilities to consider follow-on community use. The infrastructure left by the Air Force after the completion of the project could be utilized by the communities for long-term development.

- Dispose of excess housing units after project completion in accordance with law and regulations. This will provide already-developed housing to communities and counties, if demand for such housing is created by the long-term development plans of the communities and counties.

Local government will be consulted on all measures. In addition, the Air Force would advocate the following measures be considered by the federal, state, and local governments.

- Provide federal assistance for state and local comprehensive planning. This action would aid local and state agencies in the Nevada/Utah area, which is poorly suited (for the large scale growth impacts of the M-X construction program) in developing locally-oriented, regulatory ordinances. Federal assistance for planning in the states of Nevada and Utah has been provided through congressional appropriations during 1980 and 1981. Legislation is underway for the provision of additional funding to mitigate, to the extent possible, M-X-related impacts on communities. A detailed discussion of M-X cooperative community planning and the community assistance program is included in ETR-38 (Mitigations).

- "Make public land available for community development." In the Nevada/Utah communities constrained by limited amounts of private land, such an action could aid in mitigating land-availability impacts. However, problems may be posed by the urgency of the land requirements in the land-locked communities impacted during the peak construction years of 1985-1987, and the time required for the release of land under BLM regulations. A fast-tracking procedure for the quick release of lands in the most severely impacted communities could help in alleviating this problem.

Mitigation approaches are presented below which could be undertaken by different levels of government (local, state, and federal) to aid in reducing the adverse consequences of large-scale conversion of non-urban land to urban uses.

- Application by local governments for Community Development Block Grants/Small Cities Program to support local land use planning efforts.

- Application by state, local, and regional governments, private communities or by developers, and public land development agencies for federal assistance under New Communities-Loan Guarantees (Title VII Guarantees) program. This program, although not funded in FY 1979 and 1980, with same anticipated for 1981, is included for its potential, were it to be funded, as a component of an M-X community impact assistance program. Assistance in the form of loan guarantees and grants is provided to encourage development of well-planned new communities and major additions to existing communities. Funds may be used for land acquisition and development for residential, commercial, and industrial use and construction of public facilities.

- Preparation or updating and adoption of zoning ordinances, subdivision regulations, mobile home ordinances, and comprehensive plans by local governments to guide growth induced by M-X construction activities. Plans need to account for boom/bust cycle of M-X construction program. (For status and adoption dates of master plans, zoning ordinances, and subdivision regulations in Nevada, New Mexico, Texas, and Utah, see Tables 2.1.3.1-1, 2.1.3.1-2, 2.1.3.1-3, and 2.1.3.1-4).

- State and local governments could initiate development fees which would provide front-end monies for processing zoning permits, reviewing subdivision proposals, enforcing land use regulations, and providing urgently needed community services.

- Recruitment of personnel at municipal and county level to enforce zoning ordinance and subdivision regulations. Funding for such positions during M-X construction phases could be made through M-X community impact assistance program.

- Utilization of land banking by municipalities, counties, or states to direct temporary urban facilities to suitable locations during peak construction period.

- Identification by cities and counties of areas suitable for temporary urban facilities.

- Encouragement through county or state actions, the establishment of new towns or development zones to handle a portion of the peak and/or long-term urban land needs. Clark County Department of Comprehensive Planning, in "M-X: Growth Management Policy Plan" (April 1981), analyzed three options for handling the M-X-induced growth: a new town built around an OB at Coyote Spring, an option involving some new town concepts through development split between Moapa Valley and Las Vegas Valley, and a third option centered on the Las Vegas Valley.

- Adoption of ordinances at municipal and county levels requiring environmental impact analyses of land development projects.

- Encouragement by local and regional governments for the construction of temporary facilities that will provide benefits over the long term, e.g., facilities for mobile homes that can be used as campgrounds and RV overnight areas following the end of the construction period.

- Establishment of urban service areas to ensure that urban development will take place only within designated zones.

- Designation of planned unit development (PUD) zones where a mixture of land uses specially suited to construction workers and their families may be developed on a temporary basis, e.g., housing, recreation, neighborhood commercial, day-care facilities. Such PUDs could encourage the selection of housing by workers in suitable locations rather than in outlying rural and/or agricultural areas.

- Creation of community services and facilities trust funds wherein private land developers contribute to a pool of funds from which future needs are totally or partially financed. These future needs could include such items as extending water and sewer lines, upgrading streets to handle higher traffic volumes and perhaps even dismantling temporary developments. The trust fund contribution could be determined by the scale and nature of the development, and participation would be a condition for development to occur.

- Establishment of regional planning commissions serving Eureka, Lincoln, and Nye counties in Nevada. Funding of such commissions during M-X construction years could be accommodated through M-X Community Impact Assistance Funds.

- Provision of financial and technical assistance to aid communities in filing requests for release of BLM land for community expansion purposes.

- Facilitation by BLM of land sale requests in the vicinity of communities where urban expansion would extend into agricultural lands.

- Establishment of state-and university-sponsored training programs in land use and growth management for officials and administrators from impacted local governments.

- Creation of a department of local affairs at state levels to provide technical assistance for land use planning. Additional funding of Nevada State Land Use Planning Agency through M-X community impact assistance monies for technical planning assistance to Nevada counties and cities.

- Actions by states to ensure that regional planning commissions examine issues of regional significance vis-a-vis urban land use, e.g., availability of urban land, conversion of agricultural land to urban land, and the impingement of urban uses on rural areas.

- Expansion of the urban services and amenities available at construction camps in order to encourage a greater proportion of construction workers and their families to reside at the camps.

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