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FINAL REPORT
(Revised Background Study No. 8)

POTENTIAL IMPACTS RELATED TO THE AIR
TRAINING COMMAND REALIGNMENTS

Institutional Characteristics
Transportation
Civilian Community Utilities
Land Use

for

Craig AFB, Alabama
Webb AFB, Texas
Columbus AFB, Mississippi
Laughlin AFB, Texas
Reese AFB, Texas
Vance AFB, Oklahoma

To

Air Force Civil Engineering Center
Electronics Directorate
Environmental Planning Division
Tyndall AFB, Florida 32403

December 30, 1976

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FINAL REPORT
Revised Background Study No. 8 (Final).

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Civilian Community Utilities,
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PREFACE

This report was developed as one of a number of background studies for use by the United States Air Force in preparing Final Environmental Impact Statements on proposed Defense realignment actions at several Air Force installations. This study identifies and evaluates potential impacts on governmental institutions, transportation, civilian communities utilities and land use characteristics resulting from suggested realignments--(a) closure of Craig and Webb Air Force Bases by the end of fiscal year 1977, and the redistribution of manpower resources to the other five ATC bases; or (b) closure of any two of the following ATC bases by the end of fiscal year 1977: Craig, Webb, Columbus, Laughlin, Reese and Vance Air Force Bases.

This study was prepared by the Economics and Management Science Division of Midwest Research Institute. Project participants included Mr. Robert Gustafson, and Ms. Margaret Thomas, Project Leaders; Dr. Cynthia Tinberg, Ms. Mary Kies and Mr. Marvin Luttrell. The study was under the general direction of Mr. Bruce W. Macy, Director, Economics and Management Science Division and Manager, Regional Economics Section.

We are most appreciative of the thoughtful contributions provided by many individuals in various governmental agencies at the local, regional and state level as well as numerous community spokespersons for local interests. Air Force Base information offices assisted the study team generously in data collection efforts.

Approved for:

MIDWEST RESEARCH INSTITUTE

Bruce W. Macy

Bruce W. Macy, Director
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TABLE OF CONTENTS

	<u>Page</u>
I. Introduction	1
A. Scope of Work	1
B. The Proposed Actions and Alternatives	2
C. Research Approach	3
II. Alternatives	5
A. Impact Analysis	5
III. Impact Summarization and Unresolved Issues	93
A. Irreversible and Irretrievable Commitments of Resources	93
B. Unavoidable Adverse Effects and Mitigation Possibilities	93
C. Relationship Between Local Short-Term Use of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity	116
D. Details of Unresolved Issues	117
IV. Individuals/Agencies Contacted and References	118

I. INTRODUCTION

A. Scope of Work

→ This study provides an identification and evaluation of probably environmental impacts on: (1) governmental structure, planning and decision-making, (2) off-base and on-base transportation facilities and operations, (3) civilian community utilities, and (4) existing and future land use, land ownership and value, and anticipated encroachments, resulting from an Air Force proposed mission realignment at Air Training Command (ATC) bases. The report compares the four major subject areas at each base with regard to the proposed actions and alternatives. The analysis encompasses impact areas which relate closely to the following TAB A-1 Environmental Narrative subject headings:

- 4.3 Institutional Characteristics
 - 4.3.1 Government
 - 4.3.1.1 Structure
 - 4.3.1.1.1 Local Government
 - 4.3.1.1.2 Other Jurisdictions
 - 4.3.1.1.3 Relationship of Local Community
 - 4.3.1.1.4 Federal Regions
 - 4.3.1.1.5 Designation in Special Federal Area
 - 4.3.1.2 Planning Function
 - 4.3.1.2.1 Administrative
 - 4.3.1.2.2 Legislative
 - 4.3.1.2.3 Legal
 - 4.3.2 Decision Process
 - 4.3.2.1 Key Interested Parties
 - 4.3.2.2 Significant Influence
- 4.4 Activity Systems and Plans
 - 4.4.1 Transportation
 - 4.4.1.1 General
 - 4.4.1.2 Off-Base
 - 4.4.1.2.1 Air Transportation
 - 4.4.1.2.2 Rail Transportation
 - 4.4.1.2.3 Highways
 - 4.4.1.2.4 Rapid Transit
 - 4.4.1.2.5 Trends
 - 4.4.1.3 On-Base
 - 4.4.1.3.1 Interface with Community

- 4.4.1.3.2 Internal Circulation
- 4.4.2 Utilities
 - 4.4.2.1 Civilian Community Utilities
- 4.4.3 Land Use
 - 4.4.3.1 Existing Land Use
 - 4.4.3.1.1 Summary of Existing Land Use in the Region of Influence
 - 4.4.3.1.2 Summary of Existing Land Use in the Communities/ Counties Within the Region of Influence
 - 4.4.3.2 Land Ownership and Value
 - 4.4.3.3 Future Land Use
 - 4.4.3.3.1 Adjacent Area Land Use Analysis (Future)
 - 4.4.3.4 Anticipated Encroachment Evaluation
 - 4.4.3.4.1 Existing Conditions Within the AICUZ
 - 4.4.3.4.2 Future Conditions Within the AICUZ
 - 4.4.3.5 Summary of On-Base Land and Facilities
 - 4.4.3.5.1 Primary Installation
 - 4.4.3.5.2 Cost
 - 4.4.3.6 On-Base Facilities
 - 4.4.3.6.1 Mission Facilities
 - 4.4.3.6.2 Personnel Facilities

B. The Proposed Actions and Alternatives

The United States Air Force, in an effort to reduce overhead and support costs, while maintaining a prudent pilot training capability, is examining every possible method to reduce unnecessary costs. Congressional direction has been clearly given that the Air Force is expected to take reductions in support activities and apply the savings to combat forces. The Air Force believes possibilities exist for substantial manpower and dollar savings by reducing the Undergraduate Pilot Training (UPT) base structure.

The Air Force requirement for fixed wing pilot production has declined from 4,315 in FY 1972 to 2,592 in FY 1975, with a corresponding reduction of three UPT bases. A further decline in the requirement is programmed.

Air Training Command, with seven UPT bases, has the capability of producing 2,760 fixed wing pilots per year. This represents a considerable excess capacity when compared with the projected requirement through FY 1980. Closure of two UPT bases appears to produce optimum savings while retaining an adequate expansion capability.

As a result of a preliminary review, the Air Force has determined that the following proposed actions would result in substantial resource savings without detriment to UPT or combat capability, and these proposed actions and feasible alternatives merit detailed study.

As a result of the preliminary review, the Air Force identified the following viable alternatives for further action.

1. Proposed Actions

Close Craig and Webb Air Force Bases by the end of fiscal year 1977.

In compliance with the proposed action, manpower resources would be redistributed to the other five ATC bases as indicated below:

DISTRIBUTION OF MANPOWER RESOURCES FOR PROPOSED ACTIONS

	<u>Craig</u>	<u>Webb</u>	<u>Williams</u>	<u>Columbus</u>	<u>Laughlin</u>	<u>Reese</u>	<u>Vance</u>
Manpower:	-	-	+	+	+	+	+
Officer	292	299	57	48	24	57	47
Enlisted	1,078	1,234	180	139	66	173	10
Civilian	507	605	27	27	11	28	6
Student	176	173	94	78	30	98	49

2. Viable Alternatives for Further Consideration

Close any two of the following UPT bases by the end of fiscal year 1977: Craig, Webb, Columbus, Laughlin, Reese, and Vance Air Force Bases.

C. Research Approach

To assess and compare the potential governmental, transportation, civilian community utilities and land use impacts which are anticipated to result if the proposed or alternative realignment actions being considered for the six Air Training Command installations were to be implemented, it was imperative that the impact determination for each be based on equal depth of analysis of consistent, standardized data bases. In order to maintain consistency,

to insure comparability and to comply with this request, the conclusions presented in this report have relied heavily on published data generally available for all of the locations being considered, supplemented by specific data collection in the local jurisdictions. Discussions were held with knowledgeable representatives of local government and utility and transportation companies in each of the major communities where the AIC bases are located. Each representative was given the opportunity to identify and quantify the impacts which closure of the AFB would have on his agency or business. The staff positions of the individuals interviewed lends credence to the validity of the data provided. This report reflects their comments and integrates the statistics they presented. Because data supplied by these individuals were not necessarily uniform as to content, scope or method of compilation, a comparative analysis between communities is not advisable. Additional information and data were also drawn from the testimony, comments and prepared statements by company representatives, community officials and other interested persons found in the minutes of the public hearings held in each of the communities under study.

The data analysis was conducted in a systematic manner and identified environmental impacts which may result from the Air Force realignment, in relation to government, transportation, civilian community utilities, and land use for each Air Force base under study.

This report details the possible impacts of each proposed and alternative actions upon the four subject areas mentioned above and discusses these in terms of the following considerations:

- Comparative impacts of viable alternatives
- Probable adverse environmental effects and mitigation possibilities
- Relationship between local short-term use of man's environment and the maintenance and enhancement of long-term productivity
- Irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented
- Details of unresolved issues

II. ALTERNATIVES

A. Impact Analysis

Candidates for Closure: The following analyses provide an identification and description of impacts on governmental structure and functions, transportation facilities and patterns, civilian community utilities and land use associated with the selection of two bases for closure from six candidates. The bases chosen for possible closure include: Craig AFB, Selma, Alabama; Webb AFB, Big Spring, Texas; Columbus AFB, Columbus, Mississippi; Laughlin AFB, Del Rio, Texas; Reese AFB, Lubbock, Texas; and Vance AFB, Enid, Oklahoma.

1. Craig AFB Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact of the proposed Craig AFB closure upon local governmental bodies would be experienced chiefly in the areas of local public finance, and in institutional arrangements necessary to mitigate effects upon the commercial community and the residential market. The primary affected governmental bodies would be the Selma City Council and the Dallas County government. Slightly less than one-half of all Craig military and civilian personnel live in Selma or in proximity to the city.

Policies and plans concerning land use and economic growth in the Selma-Dallas County area are currently in existence. Closure of the base would not directly affect discussed plans for annexation of areas north of Selma. It would alleviate the need for the county to provide urban services to Selmont (an unincorporated area located between the City of Selma and Craig AFB in which approximately 2,300 persons reside--many of them Air Force personnel and their dependents) and eliminate the need to protect the fringes of Craig AFB from incompatible uses through zoning regulations.

Governmental services will be necessary to help civilian personnel currently employed at Craig AFB. About 0 percent of the civilian personnel reside within the Selma-Dallas County area.

Some changes in the emphasis of government operations are anticipated, with agencies involved in long-range planning, economic development, unemployment, welfare and taxes playing a more active role during the adjustment period. It will be the partial responsibility of the city and county governments to devise strategies for ameliorating revenue loss, preventing residential area deterioration, and improving development opportunities in the region. The development of the Selma Accord, a comprehensive planning policy document, indicate the desire of the Selma area governmental bodies to guide the area's development. It does not appear that closure of Craig AFB would result in substantial changes in the size, structure or functions of local governmental units.

Certain cooperative efforts between the base and surrounding communities, such as the Base Community Council, would be discontinued. Additionally, the ATC Community Liaison Visit Program and the program for Air Force retirees in the Selma area would be discontinued.

The anticipated closure could involve the assistance of regional governmental agencies in relieving economic pressures created by the action. Included may be the Alabama and Tombigbee Rivers Planning and Development Commission, and the southeastern regional office of HUD. Economic recovery strategies and other assistance arrangements are discussed in Part III-B of this report ("Unavoidable Adverse Effects and Mitigation Possibilities").

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

A bus transit system was recently initiated in the Selma area. This system is operated under a franchise granted by the City of Selma to the Selma-Dallas Economic Opportunity Board (EOB). It is a pilot program designed to assess the need for and feasibility of a Selma Transit System, and is a direct outgrowth of a December 1975 transit development report by JHK and Associates of Atlanta, Georgia, and OCTOBER of Washington, D.C. This system is the third in Selma since 1964, when a private operator was forced to stop operation due to economic reasons. A transit system begun in the early 1970's also encountered financial difficulties and closed after a few months.

According to the Director of the Selma Transit System (STS)^{1/} and the Selma-Dallas County Economic Opportunity Board, Inc., approximately 650 to 750 base personnel and dependents use the system per week, which represents approximately 50 percent of the total passengers generated by the system. The route between Craig AFB and the City of Selma is the most heavily traveled and was developed specifically for the convenience of Craig AFB personnel. If the system ceased operation, it would eliminate the only comparatively inexpensive means of travel for residents of Selma and greatly restrict the mobility of middle and lower income families in the area. The closure of Craig AFB would almost certainly result in the elimination of the Selma-Craig AFB route and in the reduction of about five STA staff and some vehicle requirements. The system is presently receiving government subsidies amounting to about 50 percent of the systems operating budget and the closure of Craig AFB would require increased subsidies for the system to exist.

Nearly all household goods and other freight are transported via highway and handled by local transportation agents or freight lines with terminals in Selma. The total freight shipped out of Selma area during the March 1975 through March 1976, period was 7,401,589 pounds. Of this total, Craig AFB generated shipments represented over 50 percent of the volume. Some transfer and storage firms indicate that they would lose nearly 70^{2/} percent of their business if Craig AFB closed and at least one firm would be forced out of business by the closure action.

The civilian airport in Dallas County, Selfield, receives no commercial air carriers and only limited use by base personnel. Base closure would have almost no direct effect upon current airport operations. The announcement of possible base closure has had an impact upon proposed Selfield operations, however. According to Mr. Bill Lockridge, Manager of the airport authority, two individuals intended to begin a "short stop" airline service from Selfield to Montgomery, Birmingham, and Atlanta. Approximately 30 percent of their business was expected to be comprised of Craig personnel. Due to the announcement of possible base closure, this plan was not implemented.

^{1/} Cunningham, Donal, Executive Director, Selma-Dallas County Economic Opportunity Board.

^{2/} Dennis, Aubrey A., President, A&G Moving and Storage Company, Inc.

Base personnel utilize Dannelly Field, Montgomery, Alabama, for TDY, PCS and other transportation requirements. From March 1975 to March 1976 base personnel accounted for slightly over 1,000 inbound and outland passengers through Dannelly. This represents less than 1 percent of total Dannelly commercial passenger traffic for the year (1,187 out of 195,000 passengers).

Rail service is available from Selma via three major rail carriers: Southern Railway, Louisville and Nashville Railroad, and Western Railway of Alabama. There are no plans for additional railroads in the area. A government owned spur is located in the northwest part of the base, but the base does not ship cargo or passengers by rail, and receives approximately one inbound car per quarter. Base closure is expected to have no impact upon railroad operations, except indirectly as shipping is affected by Selma area commercial activity.

U.S. Highway 80 is the major highway through Selma. Others are Alabama State Highways 22, 14, and 41.

Completion of a Selma bypass from Highway 80 to Highway 14 is scheduled for summer 1978^{1/} which will facilitate the movement of major through traffic. A project to connect Selma and Montgomery with a four-lane highway is also nearing completion. A proposal also exists to construct a four-lane extension of Highway 80 westbound from Selma; right-of-way acquisitions are to begin in late 1976. Base closure should have little direct impact upon either existing or proposed highway development.

There is no rapid transit system in the area. There are no proposals for such a system, nor does there appear to be a demand.

Approximately 600 to 700 vehicles enter the base each working day during the hours of 0645 to 0745, with approximately 400 to 500 vehicles leaving the base during the peak afternoon traffic hours of 1545 to 1645. Traffic is heavy but well-spaced, and offers little or no obstacle to smooth traffic flow. Closure of the base would reduce any congestion which might occur during peak traffic hours.

^{1/} Alabama Department of Highways, Montgomery, Alabama.

The impact of base closure upon on-base transportation would be the eventual cessation of all such traffic by both military and civilian personnel.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

Dallas County is served by six water systems, one of which is controlled and utilized by the U.S. Air Force, and one by a private development corporation. The sources of Craig AFB's water supply are three deep wells which provide a maximum safe yield of 816,000 gallons per day, which is sufficient to satisfy present demand. The incorporated areas of the county (Selma, Orrville, and Plantersville) are served by municipal water systems. The Dallas County Water and Fire Protection Authority has recently completed a water system in the Selmont area. The project was completed through a Federal Grant of \$455,000 and water bonds of \$750,000, both from HUD, with repayment over 40 years. To date, only \$3,000, has been paid on the principal, leaving an indebtedness of \$747,000. It is estimated by the Dallas County Water and Fire Protection Authority, that the closure of Craig would result in a 15 percent loss of domestic customers. Based on a minimum rate, they would result in a loss of approximately \$480.00 per month; annually amounting to more than the \$3,000 due for the next 4 years on the bond principal. The closure of Craig AFB may also result in the closure of Nathan B. Forrest Homes, a 200-unit housing project served by the Authority. This would be a revenue loss of an additional \$400.00 per month to the system. The total revenue loss would reduce the present break-even operation to one requiring financial support from county tax payers. The closure of Craig AFB could also curtail and postpone an important sewage system planned for the Selmont area. This system, financed with federal aid, was to be built when the water works became a reality.

Dallas County is now in the midst of building a \$650,000 drainage system in the area. The project will improve the health conditions in the Selmont area and closure of Craig AFB could substantially restrict the completion of the project.^{1/}

The impact of base closure on sewerage systems will be felt chiefly in the Nathan B. Forrest Homes, a public housing project adjacent to the base. Sewage generated by the project, which averages 30,000 gallons per day, is treated at the base treatment facility.

^{1/} Bryant, Pauline, Plant Manager and Operator, Selmont Water System.

Extensions of Selma's sewer system are planned for areas where development has occurred but which are not yet served by sanitary sewers; these areas are located north and west of the city. No communitywide sewerage system exists in the unincorporated areas of Selmont, where residents depend upon individual facilities. Due to its location in the floodplain of the Alabama River and its soil conditions, the provision of a system of sewage facilities has been restricted.

Electric power is supplied to the area by the Alabama Power Company. Total base consumption is presently in excess of 23 million kilowatt-hours per year. Demand by on-base users is estimated at less than 10 percent of that of off-base users, and the company's capacity is considered adequate for present conditions, with no major plans for expansion under consideration. Total electricity sales for the fiscal year ending December 31, 1975, in the City of Selma and its police jurisdiction was \$9,382,065. The percentage of sales to military or civilian personnel connected with Craig AFB was \$225,900 or 2.4 percent of the total sales.

The closure of Craig AFB would result in a revenue loss to the Alabama Power Company of \$459,859 annually from Craig AFB and \$175,700 from the loss of residential revenue from housing units. Loss of revenue due to closing of marginal commercial establishments and reduced commercial activity was not estimated. The following facilities now providing service to Craig AFB will become idle: 14,000 KVA, 44/4 KV Craig AFB Substation; 2.05 miles of 44 KVA pole line; 8,000 KVA or 13.3 percent of the 60,000 KVA, 115/44 Selma Transmission Substation. Closure of Craig AFB would also create a loss of nine full-time employees.^{1/}

Natural gas is supplied to the base by the Alabama Gas Company. Consumption is limited to 1,400,000 cubic feet per day during periods of high demand. This supply is considered adequate under all but the most severe conditions. Closure of Craig AFB would mean a loss of \$190,000 in revenue by the Alabama Gas Company from gas supplied Craig AFB and approximately \$150,000 in revenue per year from gas supplied off-base military and civilian personnel.^{2/}

South Central Bell Telephone Company services Selma and Craig AFB. It is conservatively estimated that revenue losses to

1/ Wadyard, R. E., Jr., District Manger, Alabama Power Company-Selma District.

2/ Mr. Etherage, District Manager, Alabama Gas Company, Selma, Alabama.

the telephone company from the closure of Craig AFB would be approximately \$150,000 at Craig AFB and \$265,778 from civil service and military personnel living off-base. These figures do not include any residual affect from the closure of Craig AFB.^{1/}

Craig AFB has no space for sanitary landfill and all solid waste is removed from the base by contractor to the county landfill. The average monthly amount is 7,000 cubic yards. Solid waste generated by the base is approximately one-tenth of that generated by the surrounding region. Current capacity for solid waste disposal exceeds demand, but no major plans for expansion are under consideration. Base closure is expected to have a limited impact upon the area's solid waste disposal system.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Land use in Dallas County is primarily agricultural, with more than 40 percent of its 624,320 acres in cropland and pasture, Figure 1. Less than 3 percent of the entire county can be termed urban or build up. The population of the county is almost equally divided between urban and rural. The urban population is largely concentrated in Selma, the only incorporated place in the county with more than 2,500 inhabitants. Expected land use changes in the county are the expansion of urban areas (Selma, Orrville and Plantersville), abandonment of less productive agricultural sites, and increased rural nonfarm activities. It is expected that by 1983 Selma will experience an increase in commercial and industrial land use (25 and 110 acres, respectively) and in residential land use in particulat (120 acres). Estimates of current land use in both the city and the county are presented below (Tables 1 and 2).

Impacts related to the economic and population losses experienced by Dallas County and the City of Selma as a result of base closure are not expected to significantly affect the pattern of land use. Except for commercial developments along Highway 80, the area immediately surrounding Craig AFB is primarily agricultural or undeveloped. A 1974 AICUZ study conducted at Craig indicated that area land use patterns were not substantially affected by base operations. Residential land uses in the unincorporated area of Selmont

^{1/} Mr. Hester, District Manager, South Central Bell Telephone Company, Selma, Alabama.

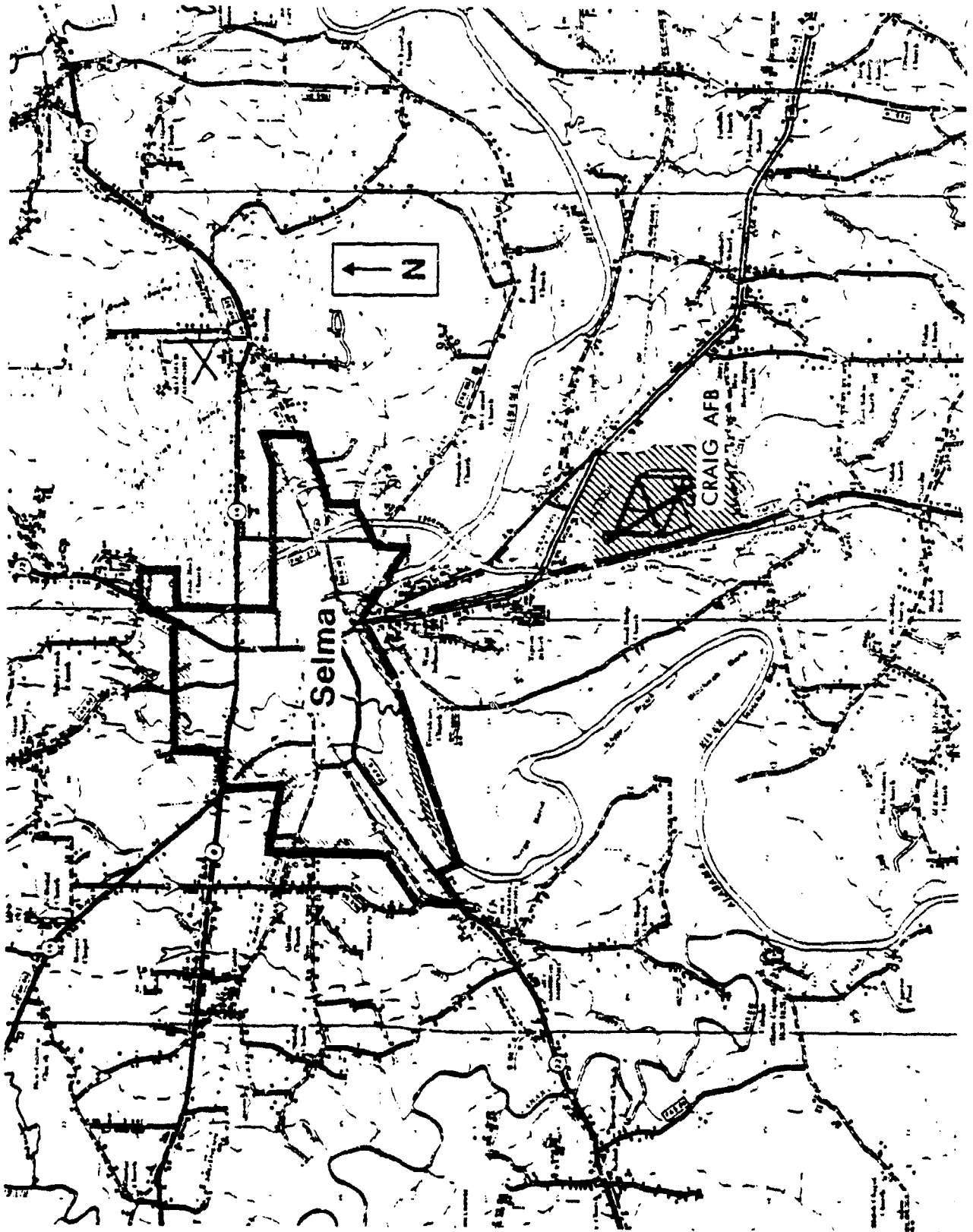


Figure 1 - Craig AFB and Vicinity

TABLE 1

CURRENT LAND USE IN THE CITY OF SELMA

<u>Land Use</u>	<u>Acres</u>	<u>Percent Total Developed</u>
Residential	1,991	49.0
Commercial	241	6.0
Public/Institutional	544	13.0
Railroads	93	2.5
Streets	1,079	26.0
Total Developed	4,062	100.0
Vacant	2,834	
Total Land Area	6,896	

Source: Selma Accord, page 2.

TABLE 2

CURRENT LAND USE IN DALLAS COUNTY

<u>Land Use</u>	<u>Acres</u>	<u>Percent</u>
Urban and Built Up	13,941	2.2
Cropland and Pasture	252,476	40.4
Planted Pine	12,426	2.0
Roads	11,971	1.9
Water Cover	6,287	1.0
Forest and Other	327,219	52.5
Total	624,320	100.0

Source: Land Use Analysis, Alabama-Tombigbee Rivers Regional Commission,
p. 242 (1973).

between Craig and Selma will be affected, however. The total number of military personnel in the area is undetermined; however, a substantial proportion of the approximately 2,300 Selmont area residents are employed at the base. Residential land use in the area is expected to decline sharply. Base closure may also result in the reduction or elimination of trailer parks constructed to the northeast of Craig along Highway 80.

The loss of these sources of income is expected to have a substantial impact upon business and professional services, retailing, wholesaling, and real estate. Real estate operations will be particularly affected, as all military and approximately 62 percent of the DAF civilian personnel are expected to relocate.

Land Ownership and Value (AFERN 4.4.3.2)

The land value and ownership of the area immediately surrounding the base, which is largely agricultural, have been described by local realtors as highly stable. Land value is considered more significantly affected by proximity to Highway 80 than to the base. Real estate turnover in the City of Selma and the unincorporated area of Selmont are highly influenced by Craig operations, however. In a study by local realtors, it was found that 30 percent of all home sales were made to military personnel. The announcement of possible base closure has resulted in a significant increase in the number of homes for sale in the Selma area. Property values have also reportedly dropped markedly since the announcement, by as much as 15 percent.

Future Land Use (AFERN 4.4.3.3)

The impact of base closure upon future land use is uncertain. The Selma Accord, in which strategies for change and economic development are discussed, contains this estimate of future land use needs (Table 3). These projections were made under the assumption of continued active operation of Craig AFB. It is possible the proposed action would affect land use and land use plans based upon this assumption. The relatively large proportion of land devoted to residential uses may be reduced due to the loss of population; it is also possible that mitigation measures adopted by local or regional government bodies may increase the relative distribution of commercial or industrial land use.

TABLE 3

FUTURE LAND USE IN THE CITY OF SELMA

<u>Land Use</u>	<u>1983 Acres</u>	<u>1993 Acres</u>
Residencial	3,260	3,380
Single Family	2,420	2,430
Multifamily	840	950
Commercial	100	125
Industrial	260	370
Total	6,880	7,255

Source: Selma Accord, page 57.

Existing land use plans call for avoidance of future growth in the areas south and east of Selma, which lie in the floodplain of the Alabama River and are subject to inundation. The unincorporated area of Selmont lies in this floodplain. While there has been discussion of annexation of areas north of Selma, no such action has been planned for the Selmont area. Base closure is not expected to substantially affect any plans for development of this area. It is possible, however, that base closure will have an adverse impact upon the operations of various retail establishments, located south of Selma along Highway 80. It is also possible that substantial residential vacancy rates will result in the Selmont area, and programs to mitigate the effect of such vacancies and to maintain the physical quality of structures could be found to be a necessary element of future land use planning.

Anticipated Encroachment (4.4.3.4)

Base closing precludes the need for concern of current encroachment problems.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

No formal plans have been announced for reuse of the base; therefore, the impact is unknown.

2. Webb Air Force Base Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

Base closure is anticipated to have several impacts upon local government operations. The structure of local government is not expected to alter as a result of the action. (Currently a county judge and four commissioners head the Howard County government while a Council Manager form of government consisting of four council members and a mayor exists in Big Spring.) Governing bodies, however, will have to adjust to the loss of population, employment, and revenue caused by base closure. Some of the agencies affected will be those dealing with economic development, long-range planning, unemployment, welfare, taxes, and utilities. Responsibility for these functions lies largely with the Big Spring City Council. In addition, the City of Big Spring will need to address housing vacancy and associated problems.

Currently, 99 percent of the Webb AFB military personnel and 89 percent of the civilian employees reside in Big Spring (see Table 4).^{1/} Government services will be needed to help the civilian personnel employed at Webb AFB who will need new jobs or will move from the area.

Base personnel participate in community affairs in several ways. The "Century Club of Big Springs," which was formed by local civic leaders as a function of the Chamber of Commerce, has been instrumental in promoting base/community relations. The Legislative Affairs Committee of the club has been active in obtaining congressional support and appropriations for construction of new facilities at Webb AFB. Since the sole purpose of this organization was promoting base/community relations it would be terminated with the closure of Webb AFB. Base personnel also serve on several City Council-appointed boards: the planning and zoning board, the parks and recreation board, the Big Spring Traffic Commission; and the committee to rewrite litter ordinances. In addition, approximately 620 military personnel and their dependents hold jobs within the region, 89 percent of which are in Howard County.^{2/} The impact of the termination of these base-community interactions is not expected to be significant.

^{1/} U.S. Air Force communication, October 1975.

^{2/} USAF communication, Summary of Region's Economy.

TABLE 4

REGION OF INFLUENCE AS DEFINED BY PLACES OF
RESIDENCE OF ITS EMPLOYEES, 1975^{a/}

<u>Place of Residence</u>		<u>Webb AFB Military Employees</u>		<u>Webb AFB Civilian Employees</u>		<u>Webb AFB Total Employment</u>	
<u>Community</u>	<u>County</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Ackerly	Martin	0		1		1	
Andrews ^{b/}	Andrews	8		0		8	
Big Spring	Howard	2,128	99	594	89	2,722	97
Carlesbad ^{b/}	Tom Green	1		0		1	
Coahoma	Howard	1		17	3	18	1
Colorado	Mitchell	0		9	1	9	
Forsan	Howard	0		3		3	
Garden City	Glasscock	0		1		1	
Knott	Howard	0		1		1	
Lamesa	Dawson	0		1		1	
Midland	Midland	5		10	2	15	1
Odessa ^{c/}	Ector	1		0		1	
San Angelo ^{b/}	Tom Green	1		0		1	
Sand Springs	Howard	2		21	3	23	1
Snyder	Scurry	1		2		3	
Stanton	Martin	3		8	1	11	
	Totals	2,151	100 ^{c/}	668	100 ^{c/}	2,819	100 ^{c/}
	Howard County Totals	2,131	99	632	95	2,767	98

^{a/} Source: Data obtained from United States Air Force Communication, October 1975. Listed above are personnel living in all communities within 1 hour (50 miles) driving time from Webb AFB.

^{b/} Towns indicated are beyond 50-mile radius but are included to denote residence of assigned personnel.

^{c/} May not add to 100 percent due to rounding error.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The Big Spring area is served by two airports: Howard County Airport, which is chiefly used by privately-owned aircraft; and Midland-Odessa Regional Airport, which offers commercial air service. Military cargo shipped via commercial air lines amounted to 223 pounds in 1975. Military passengers and dependents traveling via commercial air lines in 1975 numbered 64 from Howard County Airport and 2,600 from Midland Airport. No reduction in services is expected as a result of base closures.^{1/}

Webb AFB utilizes the services of the Texas and Pacific Railroad for freight supply. The exact tonnage shipped by the railroad for Webb AFB is unknown, however, during FY 75, 1,539 tons of freight shipments were processed by the base transportation division. Rail passenger service is not available in the area, although AMTRAK passenger service is being negotiated.

Webb AFB is served by seven local storage and moving businesses. They are small, family owned and operated businesses, some of which were founded primarily to serve Webb AFB. Webb AFB represents from 50 to 90 percent of the business done by these companies. The estimated revenue from moving and storage in the Big Spring area is estimated at more than 1 million per year. Closure of Webb AFB would represent a loss of more than \$500,000 annually to the industry and three or four companies would be forced out of business.^{2/}

Business service is provided by Greyhound Lines and Continental Trailways. Revenue losses associated with the Webb AFB closure is conservatively estimated at more than \$36,000.^{3/}

Taxi service in Big Spring is supplied primarily by one Yellow Cab Company. Annual revenue losses due to the closure of Webb AFB would range from \$15,000 to \$20,000 based on 1975 figures. Revenue losses would mean a cut back of service with the elimination of about two taxis and the loss of three to four jobs.^{4/}

- ^{1/} Banks, Wilson H., Airport Director, Midland-Odessa Airport;
Bob McClure, Howard County Airport.
- ^{2/} Morehead, Jim, Morehead Transfer and Storage Company, Big Spring,
Texas.
- ^{3/} Owens, Jim, Greyhound Lines, Inc., Big Spring, Texas.
- ^{4/} Russell, George, Yellow Cab Company, Big Spring, Texas.

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Since there is no public transit available in the area, the automobile is the major mode of local transportation. Various associated services to the automobile such as gas stations, repair shops, new and used car dealers and tire, battery and accessories shops will be affected by the closure. In addition, the road system in the area will have a substantial reduction in the number of automobiles thus reducing congestion in the area. Plans for improving Highway 87 are pending but base closure should not alter these plans.

On-Base (AFERN 4.4.1.3)

Automobile traffic in Big Spring is not noticeably affected by AFB operations. Base employees arrive at and depart from the base approximately 30 minutes earlier than most employees at other work locations, and thus generate little traffic congestions. Traffic patterns would be affected only in that the routes from Big Spring to Webb, especially along Highway 80, would be much less frequently traveled; high congestion which occurs at peak base traffic hours would be eliminated.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The source of Webb AFB's water supply is the City of Big Spring, which obtains its water from the Colorado River Municipal Water District (CRMWD). Big Spring's average daily capacity is 10 million gallons, with a maximum capacity of 15.0 million gallons (see Table 5). Average daily demand on-base is 390,000 gallons, with a maximum daily demand of 1.5 million gallons. The area's water supply is currently adequate. Base closure would expand the area's water supply reserve.

The Colorado River Municipal Water District, which is owned by various cities it serves, bills each city a fixed minimum charge and also adds to this a fee of 6 cents per 1,000 gallons of water used. Of the \$830,000 estimated payments to the district for raw water, some \$652,308 (78.6 percent) is fixed charge. It is estimated that the annual water requirements of the City of Big Spring would be reduced by a total of 444 million gallons if Webb AFB is closed. By reason of the annual fixed charge and the reduction in water requirements, the average cost per thousand gallons of water purchased from the district by the city during the first year following the closing of the base would increase by 3.35 cents per 1,000 gallons, which would amount to an increased burden on the remaining citizens of Big Spring of approximately \$79,763 for that year. Due to the depressed economic condition that would prevail in the city should

TABLE 5

CAPACITY AND DEMAND OF CIVILIAN COMMUNITY UTILITIES--BIG SPRING, TEXAS

<u>Utility</u>	<u>Water</u>	<u>Sewage</u>	<u>Electrical</u>	<u>Natural Gas</u>
Current Capacity	15.0 MGD per day	3.8 MGD per day	1,536,000 KW per day ^{a/}	NA ^{c/}
Current Demand	10.0 MGD per day	2.8 MGD per day	1,000,000 KW per day ^{b/}	1,800,000 MCF per year
Base Demand	0.52 MGD per day	0.35 MGD per day	5,500 KW per day	213,575 MCF per year
Planned Expansion	5.0 MGD per day	Meet any potential growth	Meet any potential growth	Meet any potential growth

- a/ Generating capacity located in close proximity to Big Spring. System capacity is much greater.
- b/ Approximate demand of the West Texas area.
- c/ NA = Not Available.

Sources: City Manager, Big Spring, Texas, Texas Electric Service Company,
and Pioneer Natural Gas Company.

Webb cease to exist, it is believed that the \$79,763 burden would be compounded by an additional 15 percent, making a total financial burden of \$91,728. A water rate increase for Big Spring would be necessary to offset these charges. The increased financial burden would pass to other area cities, supplied by the district, in subsequent years, by reason of the characteristics of the water rate formula as contained in the contract with the district's member cities.^{1/}

The sewage collection systems for the base cantonment area and for the family housing area connect with that of the City of Big Spring. The city furnishes sanitary sewer connections and receives, treats and disposes of all sanitary sewage generated by the base. Approximately 0.35 million gallons of waste are produced daily on-base. This represents 9.2 percent of the city treatment plant's capacity of 3.8 million gallons per day. Webb has been allotted 21 percent of the plant's capacity. Base closure would reduce the collection and treatment load of the plant, and result in additional excess capacity.

Electric power in Big Spring is supplied by Texas Electric Service Company. The company's power system serves more than 100 cities, towns, and communities in North Central and West Texas and has a net generating capability as of December 31, 1975, of 4,233,541 kilowatts. Within a 120-mile radius of Big Spring, there are two generating stations with a total capability of 1,536,000 kilowatts. The current demand on these two units from the West Texas portion of the TESCO system is approximately 1,000,000 kilowatts which is during the maximum summer time load conditions. The capacity of the system is unlimited with current plans to build an "express feeder" into the Webb AFB that would double the load capability. The existing contract with Texas Electric Service Company is for a maximum of 6,000 kilowatts demand and this was raised from 4,000 kilowatts at the last contract negotiation. The direct loss of revenues from the closure of Webb AFB is estimated at approximately \$766,313 per year to the electric utility.^{2/} This includes the following revenue losses:

^{1/} Ivie, O. H., General Manager, Colorado River Municipal Water District, Big Spring, Texas.

^{2/} Redding, J. D., Division Manager, Texas Electric Service Company, Big Spring, Texas.

	<u>(\$)</u>
Webb AFB	327,372
Residential	295,016
Commercial and Industrial	143,925

Natural gas is supplied to the base by Pioneer Natural Gas Company. Base consumption is approximately 585,000 cubic feet per day, while off-base demand is 4,336 million cubic feet per day. Current gas company capacity is 6,500 million cubic feet daily. While Webb AFB has not been requested to curtail natural gas consumption during periods of cold weather, certain industrial users have received such requests. Base closure would result in an increase in natural gas supply for the region.

The closure of Webb AFB would represent a loss in revenues to the Pioneer Natural Gas Company ranging from about \$406,000 to \$605,000. The immediate revenue from Webb AFB itself would be approximately \$218,000 per year. The domestic (residential and small businesses) revenue loss would range from \$180,000 to \$300,000 based on population losses of 15 percent to 25 percent, respectively. Commercial revenue loss would range from \$39,500 to \$118,500 and reflects a loss of 5 percent to 15 percent in commercial revenues.^{1/}

Telephone services are supplied by the Southwestern Bell Telephone Company. Loss of total service and equipment revenues at Webb AFB is estimated at \$288,000 per year. Other major revenue losses include; on-base PBX and telegraph equipment, \$13,191, and residence service to military personnel on- and off-base, \$9,388. The estimates do not include revenue losses associated with civilian personnel who presently live in Big Spring and work at the base and would leave the area.^{2/}

Solid waste collection, transportation and disposal is handled by contractors. Solid waste generated by the base is disposed of in the Big Spring municipal land fill area. Current demand

^{1/} Pittman, D., Pioneer Natural Gas Company, Big Spring, Texas.

^{2/} LaGalley, D., Southwestern Bell Telephone Company, Midland, Texas.

for solid waste disposal space exceeds capacity and a new landfill site has been obtained which will serve, at current demand levels, for 25 years. Base closure is not expected to have a significant effect upon city waste disposal.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

The close interrelationship between the base and the City of Big Spring is evident from Figure 2. The northern side of the base is bounded by U.S. Highway 80, and both commercial and residential lands are found along this highway. Many of the residential areas between the highway and the base contain housing stock in extremely poor condition; there are also dilapidated apartment houses, trailer courts, and motels. The extent to which residents of this area depend on or interact with Webb AFB is not known; it is assumed that many of the approximately 130 military and civilian employees who own housing units of less than \$10,000 value live in this area due to its proximity to the base (see Table 6). There are also some parts of the residential area north of the base with housing in fair condition (primarily between the Airport Elementary School and the base). The immediate impact on these residential lands with the closure of Webb AFB would likely be to depress housing values for those residences in moderate condition, eliminate marginal trailer park and apartment house operations, and reinforce the trend of rapid deterioration of many remaining dwellings. The future use of the base lands and facilities may also affect the value and desirability of these residential areas.

Commercial businesses on the north side of U.S. Highway 80 where it borders the base are largely automotive commercial, but are likely more directly related to the existence of the major highway than to the proximity of the base proper.

The large residential area southeast of the base (off Randolph Boulevard) which is currently exclusively military housing would likely become available for communitywide use and remain as residential land.

Land Ownership and Value (AFERN 4.4.3.2)

Much of the land immediately to the north of the base, particularly along Highway 80, is used for residential and commercial purposes. While the exact relationship of these functions to the base

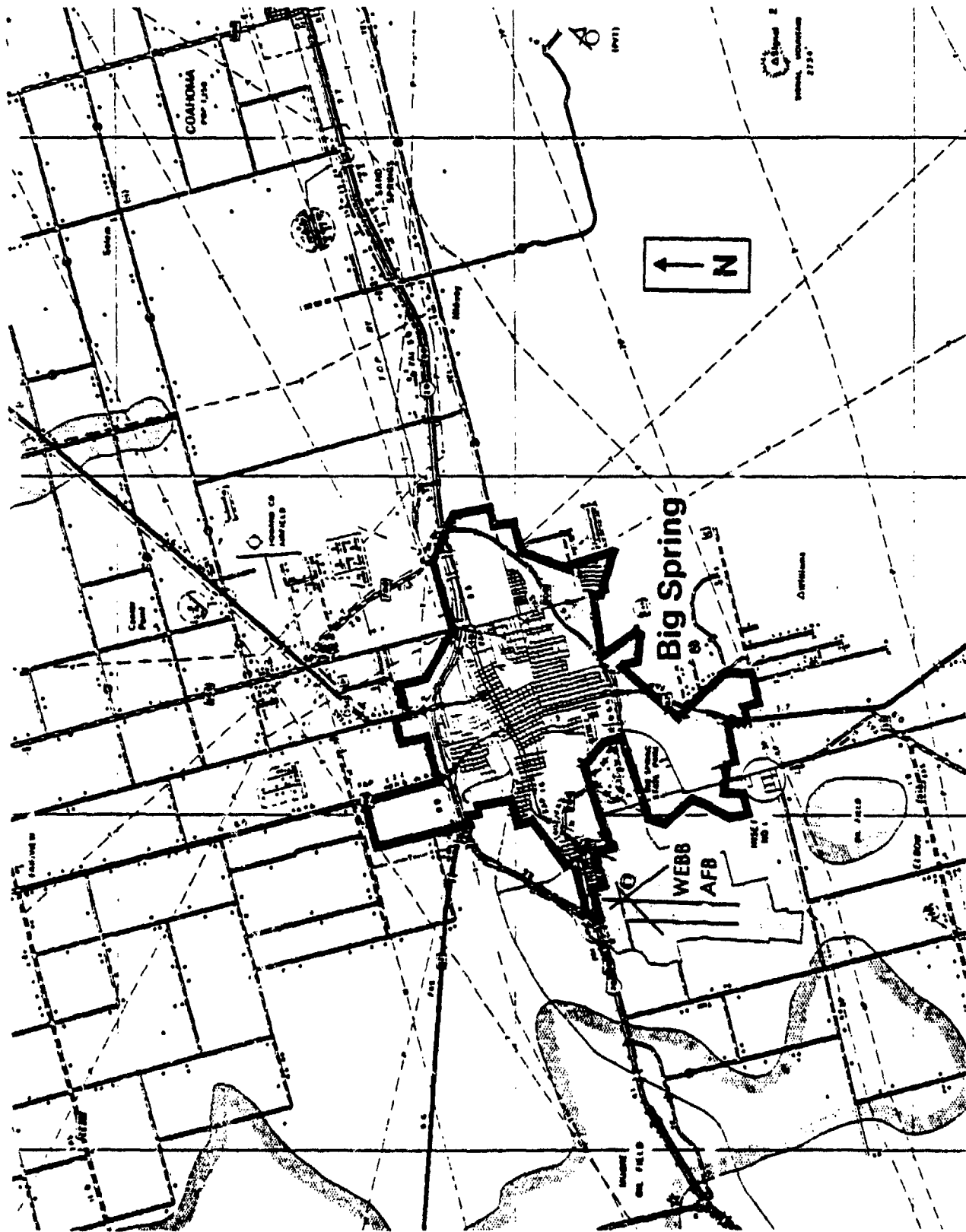


Figure 2 - Webb AFB and Vicinity

TABLE 6

VALUE OF OWNER-OCCUPIED HOUSING, COMMUNITY/COUNTY

Value of Unit	Military		Employee		Community	
	Number	Percent	Number	Percent	Number	Percent
Under 5,000	3	1.0	7	1.2	923	17.8
5,000 - 9,999	51	17.7	69	11.7	1,648	31.8
10,000 - 14,999	42	14.6	155	26.4	1,433	27.7
15,000 - 19,999	57	19.8	140	23.8	615	11.9
20,000 - 24,999	50	17.4	72	12.2	248	4.8
25,000 - 29,999	33	11.5	63	10.7		
30,000 - 34,999	12	4.2	33	5.6	195	3.8
35,000 - 39,999	11	3.8	21	3.6		
40,000 - 44,999	15	5.2	17	2.9	71	1.4
45,000 - 49,999	7	2.4	3	0.5		
50,000 - 54,999	2	0.7	4	0.7		
55,000 - 59,999	2	0.7	1	0.2	38	0.1
60,000 and over	3	1.0	3	0.5		
Median	15,000 - 19,999		15,000 - 19,999		10,000 - 14,999	
Total	288	100.0	588	100.0	5,171	99.3

Source: TAB A-1, Environmental Narrative, Phase II; Military Civilian Employees--personal survey including 90.9 percent military response and 70.4 percent civilian response, extend to 100 percent population, 1975; Community Census Data, General Social and Economic Characteristics.

is unknown, it is reasonable to assume that base closure will result in declining property values and changes in land ownership patterns. Interviews with local realtors indicate that uncertainty concerning the future of the base has resulted in reduced home sales, lower offers for homes placed on the market, and a hesitation on the part of property owners to sell under current unstable conditions. It is expected that commercial property will also lose value, especially in the immediate vicinity of the base due to population loss. Industrial land not related to the base should remain somewhat stable in value due to the inelasticity of its demand. However, if the base is turned over to industrial land uses the values for developed industrial land could be expected to decline.

The impact of base closure upon the land ownership and value of the farm and ranch land to the south and west of Webb is expected to be minor.

Future Land Use (AFERN 4.4.3.3)

Current growth, especially residential land use in Big Spring, is occurring to the north, east and southeast--basically on the opposite side of town from the base. This pattern of growth should continue, but at a decreased rate with closure of the base. However, the nature of base reuse could have an influence on the direction of the growth, especially if new uses do not have the negative environmental effects associated with an air force base (i.e., noise, etc.). If appropriate uses are not developed on the base, the southwest area of Big Spring may be expected to experience minimal growth activity and a major loss in property values.

The pattern of residential land use could change with a surplus of housing, reduction in housing values, and the rise in unemployment in the area. Where housing stock is deteriorating this trend will accelerate; enforcement of housing code standards will force abandonment of some residential areas entirely.

Plans for industrial growth in an area approximately 1 mile northeast of the north boundary of the airfield will likely continue; with the removal of the height restrictions and also the noise and safety limitations previously imposed by the base there will likely be a reappraisal of the industrial developments to be placed in this area.

Anticipated Encroachment (AFERN 4.4.3.4)

The proposed action would eliminate any problems of encroachment which may exist at the present time near Webb AFB.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

Future usage of the land and facilities currently occupied by Webb AFB is unknown.

3. Columbus AFB Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact of the alternative action to close Columbus AFB on the local units of government in the influence region will vary by community. Impacts related to local government funding of various community services will be felt primarily in Columbus, Mississippi. Other communities which will be affected include Caledonia, Hamilton and Steens in Lowndes County, and Baldwin in Prentiss County.

Governmental services will be needed to help the civilian personnel employed at Columbus AFB who will need new jobs or will move from the area.

Both financial and manpower resources of government operations will be strained in the local communities. Some changes in the emphasis of governmental operations are anticipated with agencies involved in long-range planning, economic development, unemployment, welfare, taxes, and city utility services requiring a more active role during the adjustment period. The City of Columbus will be involved in insuring the preservation of housing quality during this period of high turnover. The role of the mayor and council in Columbus will assume greater importance as the change-over progresses and greater community guidance is required.

The County Board of Supervisors in Lowndes County will be involved in the action because this board has final approval of any ordinances within the county. Any requirements for city coordination are processed to the county through the Board.

Some committees, such as the Military Affairs Committee, set up jointly by local governments and the Air Force to achieve harmony between the community and the AFB will be terminated.

Various government agencies having jurisdictional responsibility beyond the local community will be required to reevaluate their long-range plans as well as day-to-day operations. The agencies in Lowndes County include the Board of Education, Election Commissioners, the Columbus Municipal Separate School District and the Board of Supervisors.

The anticipated action could involve the assistance of regional governmental agencies which will focus their attention on relieving economic pressures. These would include the North Mississippi Industrial Development Association, Mississippi Municipalities Association, the Appalachian Region Commission, Tennessee/Tombigbee Waterway Authority, Tombigbee River Valley Water Management District and the Golden Triangle Planning Development District.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the candidate action on off-base transportation operations and facilities varies by mode of transportation. Most significant impacts will be on air passenger travel at the Golden Triangle Regional Airport, Columbus, Mississippi, where there are 10 scheduled passenger flights daily. It is estimated that 25 percent of the passenger traffic through the terminal is by Columbus AFB personnel.^{1/} This reduction in passenger traffic will have an impact on flight schedules, ticket sales, food and sundry services, baggage and airport limousine services at the airport. The possible reduction in the number of flights will affect businessmen who use the airport regularly.

The impact on rail service will be negligible. Rail passenger service is nonexistent at the rail terminals in Lowndes, Monroe and Clay counties. Rail cargo shipments to the AFB, which are restricted to the movement of some large or bulky items and some large vehicles, are insignificant.

The impact on bus passenger travel will be minimal because use by air force personnel is small.

The impact on highway transportation will be a reduction of congestion on existing roads near Columbus AFB during peak hour flow. School bus requirements will be reduced and the use of some buses may be eliminated.

Highway traffic in the region will be minimized with the reduction of a significant proportion of the approximately 8,000 vehicles presently registered at Columbus AFB.^{2/}

1/ Director, Golden Triangle Regional Airport.

2/ TAB A-1, Environmental Narrative, Columbus AFB (AFERN 4.4.1.3.2).

Plans for widening U.S. Highway 45 near the AFB will need to be reevaluated on the basis of the proposed action.

The closure of Columbus AFB would mean a loss of more than \$617,000 annually to operators of moving and storage businesses in Lowndes County (see Table 7).

On-Base (AFERN 4.4.1.3)

The impact of the proposed action concerning on-base transportation would be the eventual cessation of such operations.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the proposed action on civilian utilities will be minimal. The capacity and demand for electrical, water, sewerage and solid waste disposal facilities are presently adequate to meet current civilian demand. Utilities used by the Air Force are provided by on-base facilities. Therefore, civilian utility capacities and demand are not affected by on-base utility needs.

Electric capacity (supplied by TVA) is unlimited and there are no plans for expansion. The base presently utilizes approximately 44 million kilowatt-hours per year at an average cost of \$0.0175 per kilowatt-hour, or \$770,000 annually. This revenue will be lost by TVA. Columbus AFB's contract with TVA contains a termination clause requiring the Air Force to reimburse TVA for expenses associated with retiring their facilities, as well as to pay the undepreciated cost of installation and overhead. The amount of this payment is unspecified.

Water capacity in Lowndes County is 6 million gallons per day, and plans for a 2 million gallon per day increase in capacity is under study. Present consumption is approximately 5 million gallons per day.

Sewerage is presently collected in three lagoons. Current demand is estimated at 5 million gallons per day. Approximately \$14.7 million has been appropriated for a 10 million gallon per day system. This proposed plant does not visualize a base tie-in.^{1/}

^{1/} Columbus-Lowndes Chamber of Commerce.

TABLE 7

PERSONAL PROPERTY SHIPMENTS WITH LOWNDES COUNTY AGENTS,
NOVEMBER 1975 TO NOVEMBER 1976

<u>Type of Service</u>	<u>Revenue</u> <u>(\$)</u>
Van Line shipments	366,996
Mobile Homes	16,335
Inbound/Outbound household goods and hold baggage shipments-- packing and crating, local moves	90,415
Storage in transit	90,253
Nontemporary storage	47,538
U-Haul (do it yourself)	<u>5,900</u>
Total	617,437

Source: Traffic Management Office, Columbus AFB, December 8, 1976.

Revenue losses by motor freight, rail freight and air cargo carriers in the Columbus, Mississippi, area due to the closure of the base are estimated at approximately \$113,500 annually (see Table 8).

TABLE 8

REVENUES FROM FREIGHT SHIPMENTS FROM COLUMBUS AFB,
NOVEMBER 1975 TO NOVEMBER 1976

<u>Mode of Travel</u>	<u>Inbound</u> <u>(\$)</u>	<u>Outbound</u> <u>(\$)</u>	<u>Total</u> <u>(\$)</u>
Commercial Air	16,806	2,418	19,224
Rail	20,407	6,103	26,510
Truck	24,368	40,551	64,916
Bus	--	232	232
United Postal Service	--	<u>2,649</u>	<u>2,649</u>
Total	<u>61,578</u>	<u>51,953</u>	113,531

Source: Traffic Management Office, Columbus AFB, December 8, 1976.

The closure of Columbus AFB would result in cancellation of a contract to dispose of the solid waste generated at the base. This contract, amounting to \$120,000 per year, would be lost revenue for the R. D. Smith Company, a Texas-based firm, and the local community. Although the profit derived from the contract does not remain in the area, the majority of the contract value is consumed in the area in the form of equipment purchases and salaries of local employees of the company.^{1/}

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

The principal impact will be the evacuation of the 4,411 acres held by the federal government and comprising Columbus AFB which is located approximately 10 miles north of Columbus, Mississippi (Figure 3). Land surrounding the AFB is not expected to change significantly from its present agricultural use. There are several large industries within Lowndes County.

However, the alternative action will create a substantial number of residential vacancies in communities and rural areas where military personnel assigned to Columbus AFB reside in off-base locations. The impact on residential vacancies will be particularly acute in Columbus, Mississippi.

The residential market would be increased substantially by various types of housing. Among the military living off-base in Lowndes County, 109 reside in single family units and 40 of these own their homes; nearly 400 live in apartments and 485 live in mobile homes. Approximately 62 percent of the DAF civilian employees are expected to relocate; about 400 of the civilians own their own homes.^{2/} The resulting vacancies could number as high as 1,000 for sales and rentals of single multiple and mobile units. The vacancy rates in Lowndes County are currently running about 2.2 percent for homeowners and 12 percent for rentals (see Tables 9 and 10).^{3/}

Similar impacts may occur among commercial establishments where closures may be created by the reduction in population and spending power in the area (Tables 11 and 12).

^{1/} Buchanan, W. E., Associate Civil Engineer, Columbus AFB.

^{2/} TAB A-1, Environmental Narrative, Columbus AFB, Columbus, Mississippi (AFERN 4.2.5.1.3).

^{3/} Information provided by U.S. Air Force, Department of Defense.

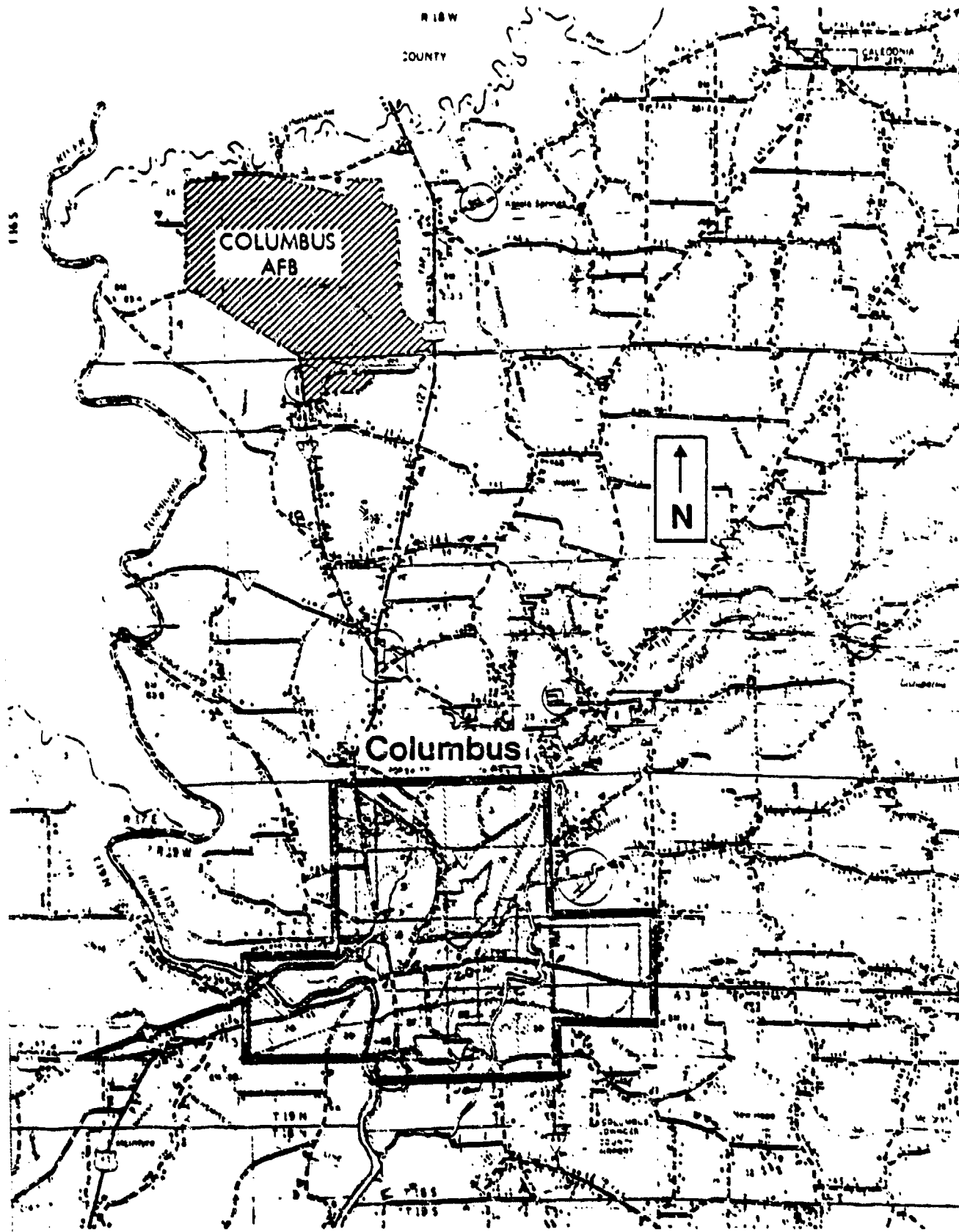


Figure 3 - Columbus AFB and Vicinity

TABLE 9

HOUSING AND VACANCY TRENDS IN LOWNDES COUNTY

<u>Lowndes County</u>	<u>1970</u>	<u>Current</u>
Population	49,700	54,200
Number of housing units	15,385	18,023
Number of occupied units	14,084	17,323
Owner-occupied	57.9%	57.9%
Rental-occupied	42.1%	42.1%
Number of vacant units	1,301	1,600
For sale only	185	227
Homeowner vacancy rate	2.2%	2.2%
For rent	589	847
Rental vacancy rate	10.4%	12.0%
All other vacant units	427	526

Source: TAB A-1, Environmental Narrative, Columbus AFB (AFERN 4.2.5.1.3).

TABLE 10

TYPES OF OFF-BASE HOUSING USED BY MILITARY AND CIVILIAN EMPLOYEES OF COLUMBUS AFB IN LOWNDES COUNTY

<u>Units in Structure</u>	<u>Military Off-Base</u>	<u>Civilian Employees</u>	<u>Lowndes County (total)</u>
1 unit	109	313	8,835
2 to 4 units	1	4	1,213
5 or more units	397	79	1,732
Mobile home or trailer	<u>485</u>	<u>21</u>	<u>5,543</u>
Total	992	417	17,323

Source: TAB A-1, Environmental Narrative, Columbus AFB (AFERN 4.2.5.1.3).

TABLE 11

BUSINESSES ANTICIPATED TO BE HEAVILY IMPACTED BY
CLOSING COLUMBUS AFB

Dill & Norris Company
P.O. Box 2099
Columbus, Mississippi 39701

Hardin Bakeries
P.O. Box 2027
Columbus, Mississippi 39701

Pepsi, Dr. Pepper, 7-Up Bottling
Company
P.O. Box 1248
Columbus, Mississippi 39701

Sears Roebuck & Company
1404 Old Aberdeen Road
Columbus, Mississippi 39701

Coca Cola Bottling Company
125 Bois Avenue
Columbus, Mississippi 39701

National Construction Company
P.O. Box 495
Aberdeen, Mississippi 39730

Long's Laundry
130 East Main Street
Tupelo, Mississippi 38801

Dixie Van Lines, Inc. DBA
Columbus Warehouse & Storage
P.O. Box 988
Columbus, Mississippi 39701

New Home Building Stores
Main Street
Columbus, Mississippi 39701

Russell Company
P.O. Box 871
Columbus, Mississippi 39701

Puckett McGee Company
P.O. Box 751
Columbus, Mississippi 39701

Southern Pipe & Supply
P.O. Box 2324
Columbus, Mississippi 39701

Columbus Business Machines
Box 2127
Columbus, Mississippi 39701

Young's Radiator & Welding Supply
Company
215 North 23rd Street
Columbus, Mississippi 39701

Action Locksmith
1722 South Green Street
Tupelo, Mississippi 38801

O. G. Carter Upholstery Shop
Route 2
Amory, Mississippi 38821

Source: DEPV/DE letter, April 2, 1976, updating to TAB A-1 Narrative.

TABLE 12

FIRMS HAVING A SIGNIFICANT PROCUREMENT WITH
COLUMBUS AFB

Industrial Maintenance Service, Inc. P.O. Box 1551 Dothan, Alabama 36301	Warren Brothers Company Division Ashland Company P.O. Box 27 Columbus, Mississippi 39701
Treeheaven Steel Buildings P.O. Box 504 Columbus, Mississippi 39701	K.P. Food Services, Inc. P.O. Box 8708 Shreveport, Louisiana 71108
National Construction Company P.O. Box 495 Aberdeen, Mississippi 39730	Sanderson Construction Company P.O. Box 72 Amory, Mississippi 38821
H&W Paint Company P.O. Box 143 Hackleburg, Alabama 35564	RAS Sanitation P.O. Box 9803 El Paso, Texas 79988
Clean Sweep, Inc. P.O. Box 52463 New Orleans, Louisiana	Advance Enterprise, Inc. P.O. Drawer 17853 Charlotte, North Carolina 28211
Dixie Van Lines, Inc. DBA Columbus Warehouse & Storage Columbus, Mississippi 39701	National Roofing & Painting Company 812 14th Street, SW Birmingham, Alabama 35221
Alabama Oxygen Company P.O. Box 309 Bessemer, Alabama	Armon & Company P.O. Box 2540 Jackson, Mississippi
Air Products & Chemical, Inc. 821 President Street Tupelo, Mississippi	Bryan Packaging Company P.O. Box 1177 West Point, Mississippi 39773
Phillips Contracting Company P. O. Box 2069 Columbus, Mississippi 39701	Russell Company P.O. Box 871 Columbus, Mississippi 39701
Hunt Oil Company P.O. Box 1880 Tuscaloosa, Alabama	Puckett McGee Elect P.O. Box 751 Columbus, Mississippi 39701

Source: DEPV/DE letter, April 2, 1976, updating to TAB A-1 Narrative.

It is estimated that \$15.8 million in military and civilian direct disposable income, \$2 million in local procurement and \$4 million in military construction would be lost to the region. Columbus AFB-generated direct disposable income comprises approximately 9 percent of the region's total.^{1/}

The areas expected to experience the greatest adverse effects as a result of base closure are business and professional services, wholesaling, retailing, real estate and financing. Some smaller enterprises may be forced to cease operations. In addition, future construction of both residential and commercial units will be cut back due to anticipated increases in vacancy rates until the short-term effects have been neutralized.

Land Ownership and Value (AFERN 4.4.3.2)

The impact of the alternative action on land ownership and value is expected to be significant in the region of influence. Where residential ownership has been fairly stable in the past and values have been increasing faster than the inflation rate, the significant movement of families out of the region will disrupt ownership patterns and suppress values, at least in the short run. The areas nearest the base, particularly along state highways 50 and 373, are expected to experience the greatest fluctuations.

Future Land Use (AFERN 4.4.3.3)

Impacts on land use associated with the Columbus AFB action will be offset by changes in the future economy. In the future, the Tennessee-Tombigbee Waterway will have considerable effect on the land use patterns and economy in the area. Consequently, sizable growth is predicted for the region (see Table 13).

Besides the Tennessee-Tombigbee project, there are a considerable number of construction projects, including new highways and public facilities, either planned or underway in Columbus, Mississippi (see Table 14).

Anticipated Encroachment (AFERN 4.4.3.4)

The alternative action will eliminate any encroachment problem which may exist at the present time near Columbus AFB.

^{1/} Ibid.

TABLE 13

POPULATION GROWTH AND PROJECTION
COLUMBUS AND LOWNDES COUNTY 1950-1990

<u>Year</u>	<u>Columbus</u>	<u>Lowndes County</u>
1950	17,172	37,852
1960	24,771	46,639
1970	25,295	49,700
1980	36,500	70,000
1990	49,000	85,000

Source: TAB A-1, Environmental Narrative, Columbus AFB, Columbus, Mississippi, 15 December 1975 (AFERN 4.4.3.3.1).

TABLE 14

CURRENT STATUS OF LOCAL AND REGIONAL PROJECTS UNDER
CONSTRUCTION OR IN PLANNING STAGE

REGIONAL, STATE

Access Road to Weyerhaeuser Company plant from Highway 45 South--\$1,734,613 approximately.

Corps of Engineers Lock and Dam at Columbus for Tennessee-Tombigbee Waterway Project--\$47,000,000 approximately. (State and local will spend over \$100,000,000 to replace 10 highway bridges.)

U.S. Highway 45 North in Columbus--widening curb and gutter and paving--\$2,960,000 approximately.

U.S. Highway 82 By-pass in Columbus by Mississippi State Highway Department--\$8,300,000 approximately.

CITY (COLUMBUS) PLANNING

Water plant addition--\$1,500,000

Sewage Treatment plant--\$14,700,000

More than \$2.5 million in construction projects are underway or in bidding.

Source: DEPV/DE letter, April 2, 1976, updating of TAB A-1 Narrative and Columbus, Mississippi, Chamber of Commerce, November 1976.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

Future use of the Columbus AFB acreage is unresolved.

4. Laughlin AFB Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact of the alternative action to close Laughlin AFB on the local units of government in Val Verde County will be significant. Impacts related to local government funding of various community services will be felt particularly in Del Rio. Other communities to be affected include Brackettville in Kinney County and Quemado in Maverick County.

Governmental services in Del Rio will be needed to help the civilian personnel employed at Laughlin AFB who will need new jobs or will move from the area. It is estimated that about 62 percent of the DAF civilian personnel would relocate as a result of the alternative action. In addition, the military personnel living in Del Rio will create the need for additional government services as they prepare to move from the area.

Both financial and manpower resources of governmental operations will be strained in Del Rio during the adjustment period. Some changes in the emphasis of governmental operations are anticipated with agencies involved in long-range planning, economic development, unemployment, welfare, taxes and city utility services requiring a more active role. The additional unemployment will increase the size of welfare and unemployment roles in Del Rio, where unemployment in October 1976 was 12.3 percent.

The role of the mayor-council and the City Manager of Del Rio will assume greater importance as the changeover progresses and greater community guidance is required.

Some committees, such as the Laughlin AFB-Del Rio Community Council and the Air Force Association, set up to achieve harmony and understanding between the local community and the Air

Force Base will be terminated. Other associations and organizations in the Del Rio community will feel the impact of the alternative action by losses in membership and leadership since Laughlin AFB personnel play an active role in these groups.

Various events, sponsored or supported by the government and held in Del Rio during the year, will feel the impact of base closure since Laughlin AFB personnel participate in a modest but enthusiastic manner as spectators, promoters and participants. These events include The Fiesta de Amistad, Cinco de Mayo, Diez y Seis de Septiembre, Dia de la Raza, Red-White-Blue Review, Black Heritage Week and Spanish Heritage Week.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the alternative action on off-base transportation will vary by mode of transportation. It is estimated that 50 percent of the 3,600 commercial passengers annually using Del Rio International Airport and Amistad Airlines, the only airline serving Del Rio, is Laughlin AFB related.^{1/} A reduction in passenger traffic could deter airport improvement projects for the immediate future. However, following a period of adjustment, the anticipated recreational and industrial developments will provide impetus to airport development. Thus, the long-range plan of land acquisition, runway extension and improvements to radio and navigational aids at Del Rio International Airport should continue on schedule. These proposed actions will accommodate twin-jet aircraft by 1995.^{2/}

The Southern Pacific Railroad operates through Del Rio with an average of 16 freight runs daily. It is estimated that less than 5 percent of the rail freight received in Del Rio is directly associated with Laughlin AFB. However, an estimated 50 to 60 percent of the total rail freight received in Del Rio is indirectly related to the existence of Laughlin AFB.^{3/}

^{1/} Clark, Harry, Amistad Airlines.

^{2/} Memo: Environmental Impact (10 items requested by Telecon)
Laughlin AFB, April 12, 1976.

^{3/} Hobson, J. Y., Southern Pacific Railroad.

Del Rio is a regularly scheduled stop for AMTRAK trains traveling between New Orleans and Los Angeles. It is estimated that Laughlin AFB personnel account for less than 10 percent of the rail passenger volume in Del Rio.

Painter Bus Service provides three departures daily between Del Rio and San Antonio. The estimated volume of passengers generated by Laughlin AFB personnel is less than 10 percent of the total volume.

The impact on highway transportation will be a reduction of congestion on the existing roads near Laughlin AFB during peak hour flow. School bus requirements will be reduced and the use of some buses may be eliminated.

Highway traffic in the region will be reduced with the loss of a significant proportion of the approximately 1,000 vehicles registered at Laughlin AFB and the 900 vehicles parked on base by employees not living on base.

Proposed highway improvements in the area of Laughlin AFB, Del Rio and Amistad Reservoir will not be affected by the action since road improvements are in response to recreation and industrial developments taking place or anticipated in the Amistad Reservoir area. Improvements include widening of the U.S. 90 from Del Rio to the reservoir, making it a four-lane divided highway for approximately 12 miles and improvements on U.S. 90 and U.S. 277 north and south of Del Rio, i.e., widening of shoulders.^{1/}

Revenue losses by Del Rio's seven major transfer and storage companies would range from 75 to 90 percent of their total business. These losses are conservatively estimated at \$700,000 per year for transfer business and an additional \$400,000 for storage. The magnitude of these losses, coupled with a shrinking market, would probably cause five of the seven firms to go out of business.^{2/}

1/ Environmental Impact (10 items requested by Telecon) Laughlin AFB, April 12, 1976.

2/ Larson, Frank H., Amistad Freight and Storage Company and E. B. Person, Del Rio Moving and Storage Company.

Motor freight firms shipping general commodities would lose approximately 50 percent of their business due to the closure of Laughlin AFB. Approximately 25 percent of the motor freight business is directly related to Laughlin AFB. An additional 25 percent of the business is derived from other businesses which serve Laughlin AFB.^{1/}

On-Base (AFERN 4.4.1.3)

The impact of the alternative action on on-base transportation would be the cessation of such operations.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The capacities of water, electricity, gas and telephone systems are adequate to meet current civilian demands in the region. Dependence on city water from San Felipe Springs and the availability of sewer systems will continue to influence development in the city and surrounding area. Capacities and demand for various utilities are shown in Table 15.

TABLE 15

UTILITIES CAPACITY AND DEMAND LAUGHLIN AFB
REGION OF INFLUENCE

<u>Utility</u>	<u>Capacity</u>	<u>On-Base Consumption</u>	<u>AFB Personnel and Civilian Personnel Off-Base Consumption</u>
Water (gal/day)	18,000,000	960,000	973,700
Gas (MCF/mo)	398,034,000 ^{a/}	9,408 ^{b/}	NA
Electricity (KWH/mo)	84,000,000	2,374,833	1,485,232
Telephones (number)	16,893	2,920	2,980

^{a/} City of Del Rio Gas Department.

^{b/} LoVaca Gas Company

Source: City of Del Rio Water Department; Central Power and Light Company; General Telephone Company of the Southwest.

^{1/} Billings, E. W., Basse Truck Lines.

Revenue losses by the City of Del Rio Water Department due to base closure would include \$16,420 per year from water used at the base as well as water usage and sewer taxes averaging \$9.60 per month per customer living in Del Rio who would move from the area. Additional revenue losses would be incurred from the decrease in the number of new connections in the area which would have been supplied by the water department.^{1/}

The LoVaca Gas Company will lose approximately \$210,000 from gas supplied to the base itself.^{2/}

Electric power is supplied in Laughlin AFB by Central Power and Light Company. AFB personnel and civilian employees at the base represent about 21 percent of the total electricity demand in the Del Rio area. Revenue losses due to base closure would include an estimated \$47,200 per month from military and civilian personnel living off-base and \$118,277 per month from electricity supplied to the base itself. There would also be revenue losses associated with a reduction in the growth of construction thus lessening the need for new electrical construction. The reduction in electrical construction could result in the loss of three employees working in construction crews.^{3/}

Laughlin AFB is served by the General Telephone Company of the Southwest. The total telephones in Del Rio and the AFB that will be affected by the closure represent about 32 percent of the total telephones in the Del Rio area. The loss of customers would reduce employment at the telephone company by 25 workers. Revenue losses by the General Telephone Company due to base closure are estimated at \$397,000 annually. This includes a \$217,000 loss on government-leased equipment at the base and a \$180,000 loss on residential and business customers in Del Rio.^{4/}

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Land use in Val Verde County is predominately rangeland. The most recent land use inventory indicates that nonirrigated rangeland (1,980,376 acres) comprised about 99 percent of the total

^{1/} Mr. Shepard, City of Del Rio Water Department.

^{2/} Phillips, Ed, LoVaca Gas Company, Houston, Texas.

^{3/} Simpton, Jerry, Manager, Central Power and Light Company, Del Rio Texas.

^{4/} Crowley, Jerry, Division Manager, General Telephone Company of the Southwest.

land area in the county. Other land uses in the influence region include urban and built-up, 13,288 acres; farms, 10,000 acres; irrigated pasture, 285 acres; and irrigated cropland, 1,015 acres (Table 16).

TABLE 16

LAND USE IN VAL VERDE COUNTY

<u>Land Use</u>	<u>Acres</u>
Total Land Area	2,015,458
Federal Noncropland	9,789
Urban and Built-Up	13,288
Small Water Areas	705
Cropland	1,015
Pasture	285
Range	1,980,376
Other Land	10,000

Source: Conservation Needs Inventory, Texas, 1970, Prepared by Texas Conservation Needs Committee.

The principal impact of the current land use in the region will be the acres comprising Laughlin AFB which is located 6 miles southeast of the City of Del Rio, Texas. Most of the land surrounding Laughlin AFB is classified as rangeland, having little or no improvements (Figure 4). The land is primarily used as grazing land for sheep, goats, cattle and horses. There exist minimal private commercial developments between Laughlin AFB and Del Rio, consisting of mobile home sales, gasoline sales, mobile home parks and other assorted secondary businesses.

The alternative action will create a substantial number of residential vacancies in Del Rio. It is estimated that about 1,500 vacant rentals and owned homes in the local area would be added to existing soft housing market.

Similar impacts may occur among commercial establishments where closure may be created by the reduction in population

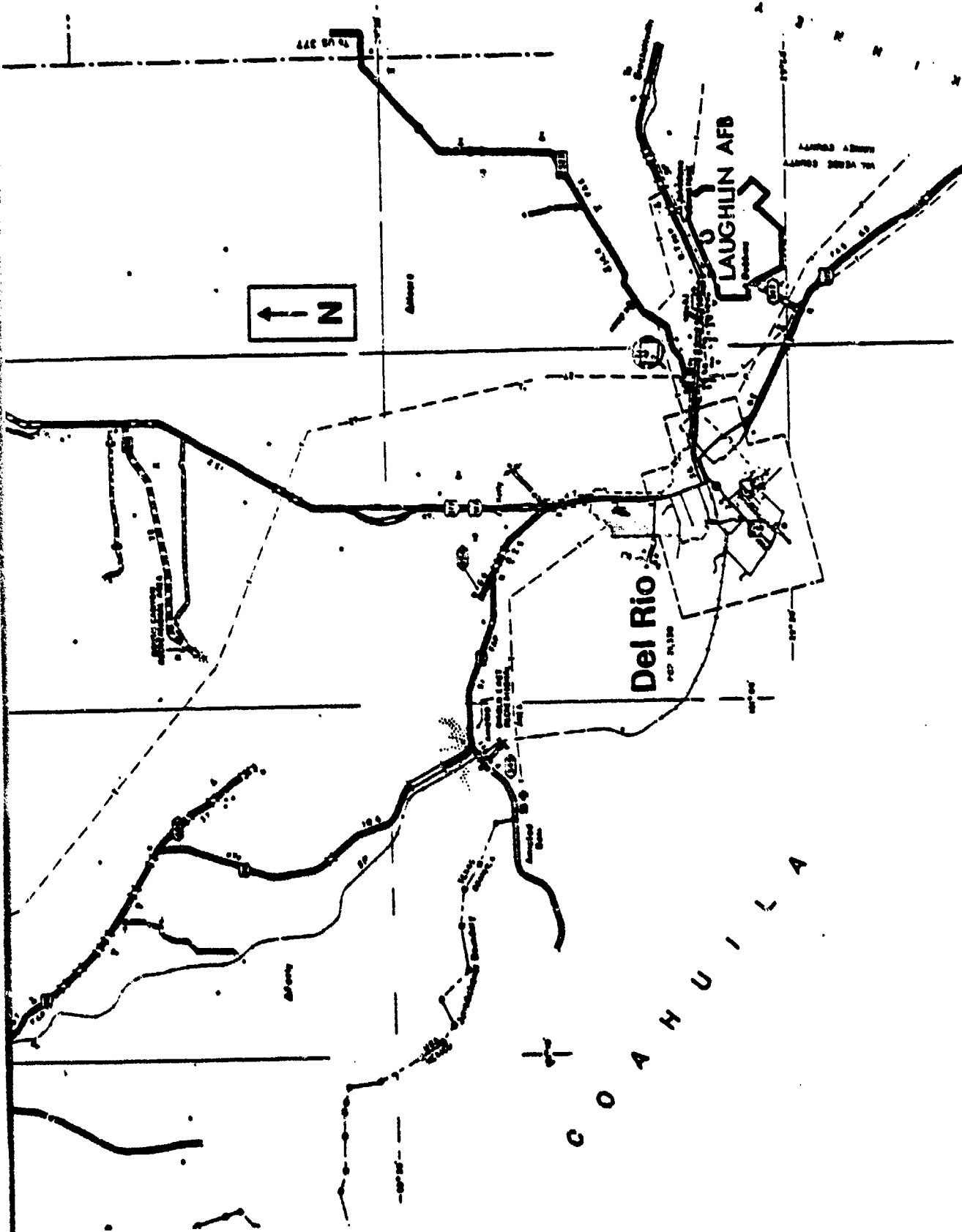


Figure 4 - Laughlin AFB and Vicinity

and spending power in the area (Table 17). In addition, future construction of both residential and commercial units will be cut back due to anticipated increases in vacancy rates until the short-term effects have been neutralized.

TABLE 17

BUSINESS ANTICIPATED TO BE HEAVILY IMPACTED AND HAVING
SIGNIFICANT PROCUREMENT WITH LAUGHLIN AFB

Firms to be Heavily Impacted:

T. J. Moore - Del Rio, Texas	Hardware
Amistad Electric - Del Rio, Texas	Electronics
Automotive Supply - Del Rio, Texas	Auto Parts
Acme Lumber - Del Rio, Texas	Hardware

Firms Having Significant Procurement:

Ace Hardware
Del Rio Glass
Capital Aggregates
Goodyear Tire and Rubber Company
Pierce Electronics
Sherwin-Williams Paint Company

Source: Memo: Updating of the TAB A Narrative, Laughlin AFB,
May 14, 1976.

Land Ownership and Value (AFERN 4.4.3.2)

Residential ownership has been fairly stable in the region and values have been increasing according to nationwide inflation rates. The movement of families out of the region will disrupt ownership patterns and suppress values, at least in the short run. Both real estate and home values will be depressed as a result of the glutted housing market.

Future Land Use (AFERN 4.4.3.3)

Impacts on land use associated with the Laughlin AFB action will be offset by changes in the economy. In the future, the economic base of the region will be influenced by the development of the internationally controlled Amistad Reservoir on the Rio Grande River, the only major surface water reservoir in the area. The Amistad National Recreational Area comprises nearly 63,000 acres of land and water possessing outstanding potential for diversified outdoor recreation. The growth of recreation at Amistad will encourage the development of other recreational potentials which exist in the region. Other land use changes will be a result of continued expansion of light industrial and manufacturing activities.^{1/}

Base closure will further reduce most development pressures along Highway 90, east of Del Rio. The city's growth pattern is north toward the Amistad Reservoir and Recreational Area. This trend should continue, but probably at a somewhat slower pace. Future land use will be concentrated in the northern part of Del Rio toward the Amistad Reservoir. Some growth is expected to the south of the city and some to the southeast within the existing city limits.^{2/} Existing zoning ordinances which are presently under revision will need to be reevaluated in view of the proposed action.

Despite the impact of the alternative action at Laughlin AFB, a future federal project which will affect the land use patterns in the area is the planned construction of hydroelectric facilities at Amistad Dam. The U.S. Army Corps of Engineers is currently preparing an environmental assessment for the proposed project.

Anticipated Encroachment (AFERN 4.4.3.4)

The alternative action will eliminate any encroachment problem which may exist at the present time near Laughlin AFB.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

Future use of Laughlin AFB acreage is unresolved.

^{1/} Water Resources Engineers, Inc., Land Use and Transportation Study, Middle Rio Grande Region, August 1973.

^{2/} Memo: Environmental Impact (10 items requested by Telecon), Laughlin AFB, April 12, 1976.

5. Reese AFB Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

Closure of Reese AFB is not expected to alter the present structure of government in the area surrounding the base. The City of Lubbock will continue to be governed by a mayor and city council. However, the local government will have to adjust to the loss of population and, therefore, to the loss of revenue caused by the base closure.

Governmental services will be needed to aid the civilian employees of Reese AFB in either finding new employment or moving from the area.

A number of Reese AFB personnel are involved in the activities of local government agencies. These groups are as follows:

1. The Base-Community Council serves as a forum for the exchange of ideas and information between top management levels of the base and local city agencies. The Wing and Base Commanders, the President of the Lubbock Chamber of Commerce, and the Lubbock County Commissioner are members of the Council.
2. The Lubbock Chamber of Commerce Armed Forces Committee promotes the maintenance of good relations between Reese Air Force Base and its personnel and the City of Lubbock and its populace.
3. The Reese Air Force Base Airport Zoning Commission was established by the Lubbock County Commissioners' Court for the purpose of reviewing zoning ordinances proposed by the base.
4. The Base Civil Engineer is a voting member of the Natural Resources Advisory Committee of the South Plains Association of Governments.
5. The Chief, Security Police Division, serves as an advisor to the Chamber of Commerce Crime Prevention Committee.
6. The Base Fire Chief is a member of the Chamber of Commerce Fire Prevention Committee.

With closure of Reese AFB, these organizations would either be reorganized or terminated.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

Air base personnel represents only a small share of the traffic generated by the Lubbock Regional Municipal Airport. Estimated level of traffic at the airport is 260,000 passengers and 2,800,000 pounds of air freight outbound annually; 260,000 passengers and 5,600,000 pounds inbound annually. Revenue losses would be incurred at various service facilities at the airport if the base closes. Currently Reese AFB conducts training flights at the airport. These flights, using FAA Nav aids and Air Traffic Control and Flight Service Station facilities, generate activity levels which classify the facility at a Level III. If the FAA staffing was reduced to Level II, it would mean the loss of 21 personnel and would affect the remaining grade levels. The result of a reduction of FAA personnel would be reduced personnel aviation activities at the airport.^{1/}

Lubbock is served by two major railroads--the Atchison, Topeka and Santa Fe Railway Company and the Burlington-Northern, Inc. However, there are no railroads serving the base itself.

The only probable use of city bus lines by base personnel and their dependents would be for transportation to the downtown shopping areas. The community has not developed any special transport systems for the base.

The major highways serving Reese AFB are State Highways 116 and 114 and Farm Road 2255. Although minimum speed limits can always be maintained, traffic is slightly congested at peak hours. Ninety-five percent of the traffic on State Highway 116 and Farm Road 2255 is generated by the base. Besides the employee traffic, there is also traffic generated by local vendors and contractors. Closure of Reese AFB would reduce congestion in the area.

^{1/} Coffee, M. W., Director of Aviation, Lubbock Regional Airport.

There are two existing projects for highway improvement in the area. One involves extending Interstate 27 north through Lubbock to Amarillo. The other improvement consists of widening the Levelland Highway to four lanes from the southeast corner of Reese AFB to the city limits of Levelland.

The Lubbock area is served by 11 regular route Motor Freight Common Carriers providing interstate and intrastate services. Household goods carriers would incur the greatest revenue losses if Reese AFB closes. Other carriers would be indirectly affected since the Lubbock retail and wholesale sales volume would be affected by the shrinking consumer market.^{1/}

On-Base (AFERN 4.4.1.3)

During peak hours approximately 950 to 1,200 vehicles enter or leave Reese AFB through the main gate causing traffic congestion. Closure of the base will reduce traffic volumes and, therefore, congestion in and around the base.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

Reese AFB uses approximately 1-1/2 percent of the total water used by the City of Lubbock. The loss in water revenues through the closure of Reese AFB would total about 6 percent of the total income generated by the water department and could result in rate increases.^{2/}

The loss of revenues from gas sales to Reese AFB will range from \$200,000 to \$250,000 per year. In addition, the Pioneer Natural Gas Company would lose service of off-base personnel and various businesses that may be forced to close. These revenue losses would be sufficient that a rate increase would be required.^{3/}

Sanitary sewage is treated on base in a Hayes Process Contract Aeration Unit. No sewage leaves the base and, therefore, the alternative action would not impact any off-base treatment system.

^{1/} Moseley, Richard, Assistant General Manager, Lubbock Chamber of Commerce.

^{2/} Wahl, Sam, Director, Lubbock Public Works Department.

^{3/} Byrne, Bill, Pioneer Natural Gas Company, Lubbock, Texas.

Electrical power is supplied to the base by Southwestern Public Service Company. The system is currently being upgraded at a cost of \$400,000 to serve a new flight simulator facility. The company would suffer a financial loss if Reese AFB closes. Lubbock Power and Light Company also serves the area. It has adequate capacity to serve its customers. The impact of the base closing would be to give the area additional electrical reserves.

The loss of revenue from telephone services to Reese AFB is estimated at \$160,000 per year. In addition, base housing revenues from telephone service is estimated at \$39,300 per year; quasi-official services on-base (BOQ) would be \$14,500 per year and long distance revenues from the BOQ was estimated at \$3,000 per year. The termination of the lease agreement on the telephone equipment by the government would cost the government approximately \$110,000. Leases for telephone service at Perry County Airport (Auxiliary) providing \$2,500 in revenue per year would be lost by the Reese closure. Off-base telephone revenues, assuming that 60 percent of the personnel left the area, would result in a loss of revenues amounting to \$33,000 to \$72,000 per year. It would also mean a loss of approximately 4 to 6 jobs performed by telephone company personnel. These revenue losses would likely create a need for a rate increase.^{1/}

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Lubbock County completely surrounds Reese AFB, with the base being located near its western border midway between the northern and southern borders (see Figure 5). Of the 571,328 acres of land in the county, 488,954 acres (85.6 percent) are undeveloped (see Table 18). Land use in the area surrounding the base is predominately agricultural. Almost all of Lubbock County's residential, commercial and industrial land is within the City of Lubbock which is located 10.5 miles east of the base. Other incorporated municipalities within the county include Shallowater, Slaton, Idalou, New Deal, Wolfforth and Abernathy. The only significant evolving pattern of land use in Lubbock County is the continued urban development of Lubbock in the north and southwest of the city proper.

^{1/} Mr. Brown, Liaison for General Telephone Company, Reese AFB.

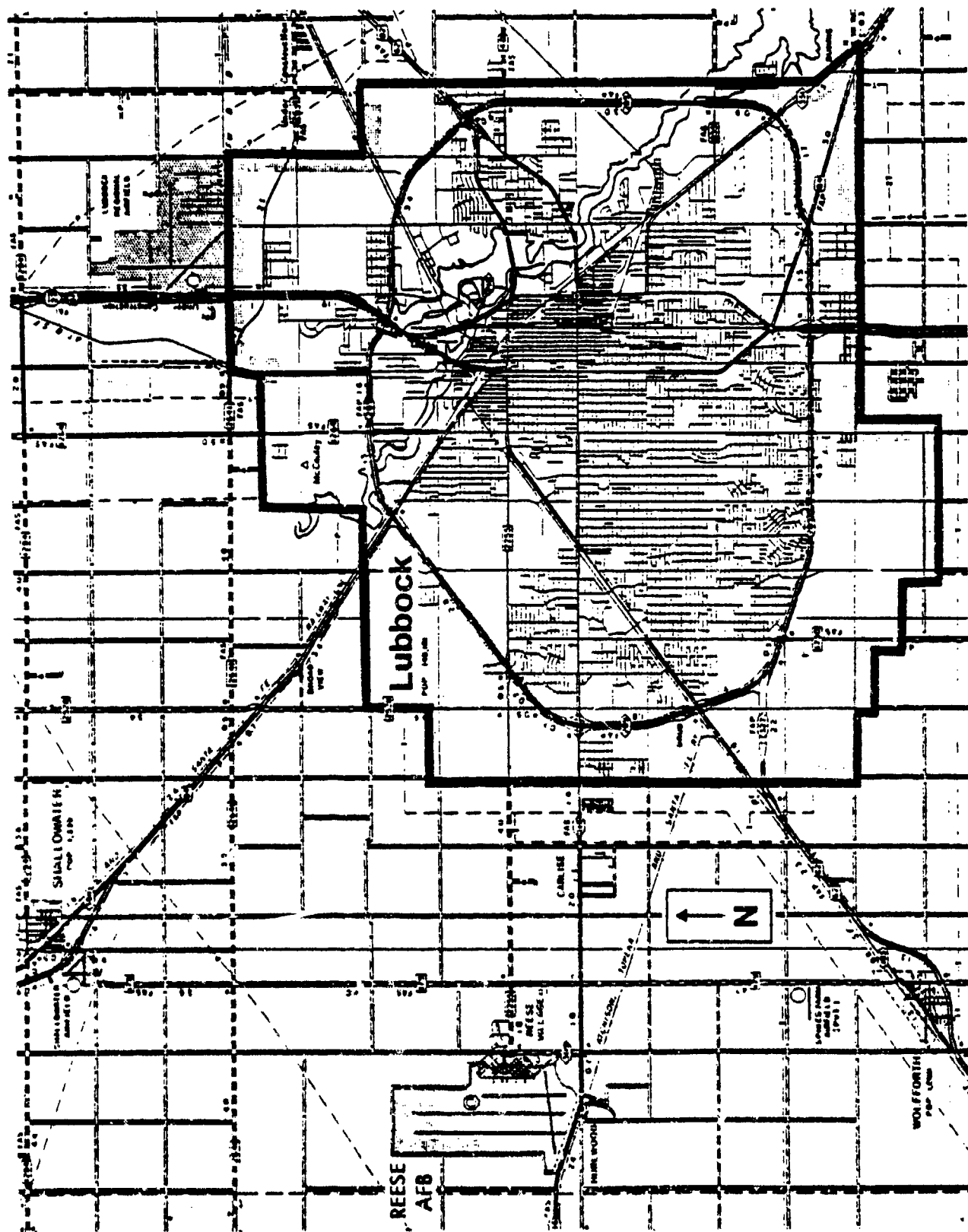


Figure 5 - Reese AFB and Vicinity

TABLE 18

EXISTING LAND USE IN LUBBOCK COUNTY, 1973

<u>Land Use Category</u>	<u>Number of Acres</u>	<u>Percent of Total Developed Acres</u>
Developed Acreage		
Urban	72,962	88.57
Rural	9,412	11.43
Industrial	1,904	2.31
Commercial	1,142	1.39
Public and Semi-Public	6,000	7.28
Residential	366	0.45
Total Developed	82,374	
Undeveloped Acreage		
Water Areas	--	
Irrigated Cropland	310,024	
Nonirrigated	159,392	
Range and Pasture	16,071	
Other	3,467	
Total Undeveloped	488,954	
Total Land	571,328	

Source: Comprehensive Water and Sewer Plan 1973-1993, published by South Plains Association of Governments.

Closure of Reese AFB will create a substantial number of housing vacancies in the Lubbock Area. Over 1,800 persons either military or civilian base personnel, reside in housing off-base (see Table 19). Over 400 military personnel own homes off-base. The exact number of civilians that own homes is not available, but it is estimated that more than 60 percent are homeowners. Approximately 1,400 homes or rental units would be vacated if Reese AFB closes.

Land Ownership and Value (AFERN 4.4.3.2)

Land ownership and value have been relatively stable in the area near Reese AFB. Almost all land parcels in the area are owned by farmers or used for agricultural or grazing purposes. Undeveloped land within 1 mile of Reese AFB is presently selling for around \$1,500 per acre. Land fronting on major roads is presently selling for around \$1,500 per acre. Land fronting on major roads is somewhat more expensive; land at some distance from roads sells for about \$600 per acre. Closure of Reese AFB would increase the supply of available housing and would undoubtedly cause a reduction in property values. No estimates are available on the anticipated losses of land value, but ownership and land values will change, particularly in the immediate vicinity of the base.

Future Land Use (AFERN 4.4.3.3)

Yellowhouse Canyon influences the direction of growth within the City of Lubbock. The Canyon Lakes project is located in this canyon where it runs through the city and is expected to encourage development there. In recent years there has also been considerable development southeast of the city along this canyon near Buffalo Springs Lake. Within the city limits almost all growth has been to the west (toward Reese AFB), northwest, and southwest. Most planning efforts are directed toward improvements to existing facilities within the city limits.

From 1973 to 1978 a general expansion of the small urbanized areas found in association with Reese AFB and with the public school facilities at Woodrow and Roosevelt are expected to account for the majority of the rural population growth of Lubbock County. The projected rural population increase is 650 persons in the area between the base and Lubbock along Fourth and 19th Streets.

TABLE 19

HOUSING OF REESE AIR FORCE BASE PERSONNEL

		<u>Housed On-Base</u>	<u>Housed Off-Base</u>
Military Families	1,376	419	957
Military Bachelors	712	507	205
Civilians	<u>679</u>	<u>--</u>	<u>679</u>
Total	2,767	926	1,841

Source: Unpublished reports from ATC Headquarters, San Antonio, Texas, May 11, 1976.

Within the next 20 years, however, the majority of the rural population growth is forecast to occur in association with the programmed recreational developments in and along Yellowhouse Canyon to the southeast of the present city limits of Lubbock. It is anticipated that these areas will possess stronger residential marketability than will other portions of the county.

The region's prime economic base is agriculture. Some light industry has moved into the area in recent years. Commercial and low density residential development exists in the area between Reese AFB and Lubbock. Table 20 shows the projected land use for the City of Lubbock for the year 1990.

Anticipated Encroachment (AFERN 4.4.3.4)

Closure of Reese AFB would eliminate any future problems of encroachment.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

Future usage of the land and facilities presently occupied by Reese AFB is unresolved.

TABLE 20
PROJECTED LAND USE-CITY OF LUBBOCK 1990^{a/}

	<u>Area In Acres</u>	<u>Percent of Developed Area</u>	<u>Percent of Total City Area</u>	<u>Acres Per 100 Persons</u>
Residential	11,979	30.86	19.83	5.80
Low density	10,637	27.40	17.61	5.15
Medium/high density	1,342	3.46	2.22	0.65
Commercial (retail, services, wholesale and warehousing)	3,288	8.47	5.44	1.59
Industrial	2,124	5.47	3.52	1.03
Transportation and Utilities	3,874	9.98	6.41	1.88
Public Use	3,748	9.65	6.20	1.81
Parks, recreation and open space	2,657	6.84	4.40	1.29
Right-of-way	11,153	28.73	18.46	5.40
Total developed area	38,823	100.00	64.27	18.80
Vacant	21,582		35.73	10.45
Total city limit area	60,405		100.00	29.25

Source: City of Lubbock Planning Department, July 1974.

a/ Based on an estimated 1990 population of 206,542.

6. Vance AFB Closure

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The City of Enid and, to a lesser extent, Garfield County governments will be faced with some institutional adjustments due to the loss of military and civilian personnel of Vance AFB as well as their dependents. Such adjustments will need to reflect the decrease in area economic activity, state income tax, state and local sales tax, tangible personal property tax, and federal funds to the Enid Independent School District No. 57.

Governmental services at the local level will be needed to aid the civilian personnel in either finding new employment or relocating. In addition to the civilians actually employed by Vance AFB, civilians of Northrop Worldwide Aircraft Services, Inc. serve as contractors to the base. Northrop provides services such as aircraft maintenance, base supply and procurement, base civil engineering, food services and base communication. Since essentially all of the civilian employees reside in Enid, this community will receive the primary impact. The unemployment rate of 5.1 percent (February 1976) in Enid will increase substantially.

Closure of Vance AFB would result in vacancies in local housing. During the period of adjustment, the City of Enid must insure the preservation of housing quality.

The Enid Metropolitan Area Planning Commission acts as a planning agency to make recommendations to the City of Enid and Garfield County on planning and zoning ordinances. Residential areas have expanded toward the base, but the land adjacent to the base is agricultural. Closure of Vance AFB will likely affect future zoning in the area.

A number of civilian organizations have base personnel in leadership roles. These include the Greater Enid Chamber of Commerce, the United Way of Enid, Northern Oklahoma Development Association, Tri-State Music Festival, Air Force Sergeant's Association, Sunrise Lion's Club, and Martin Luther King Memorial Scholarship-Phillips University. These agencies will be reorganized with closure of Vance AFB. In addition, special government groups would be reorganized or disbanded if Vance AFB closes. These groups are as follows:

Air Force Association: This organization promotes the general good of the Air Force. Members are 60 percent from the community of Enid and 40 percent from Vance.

Chamber of Commerce, Military Affairs Committee: This committee is a link between the Enid business community and Vance. They annually sponsor "Enlisted Appreciation Night"--a fun night for all enlisted personnel on the base.

Enid - Vance Community Relations Council: This group meets quarterly to discuss problems and further the cooperation between Enid and Vance.

Enid - Area Safety Council: Meets once a month to discuss safety problems affecting the base and local area.

Garfield County Bar Association: The base Judge Advocate is a member of this organization and is able to present and discuss legal problems affecting the base and local area.

Enid Ministerial Alliance: The Base Chaplain is a member of this organization which meets regularly with ministers in the community of Enid.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

Enid Airport (Woodring) is serviced by Frontier Airlines with daily service in a generally north-south direction. Vance AFB accounts for 5 percent of the annual passenger travel. The potential loss in revenues is estimated at \$7,600 if Vance AFB closes. A total of \$137,868 in airport services provided to Vance AFB related personnel would be lost as a result of the closure. In addition to passenger service, Frontier Airlines is also used for cargo. However, less than 1 ton of cargo is shipped by the base by air annually.^{1/}

Passenger service by rail is not readily available in the area. The base has a spur line, but it is inactive.

^{1/} Report of Vance Advancement Council Transportation Committee, November 11, 1976.

The area is served by three major bus companies: the MK&O, Midcontinent, and Continental Transport. These companies carry very few base personnel--approximately 10 per month or 120 out-going passengers per year. This amounts to about 3 percent of their total passenger service. Therefore, closure of Vance AFB will have only a minimal effect on the bus services in the area.

No rapid transit system exists in the area. Without substantial growth such a system will not be feasible.

The major east-west highways in the vicinity of Vance AFB are U.S. 60 and U.S. 64; the major north-south is U.S. 81. Approximately 1,300 vehicles converge on Vance AFB via two main roadways. Congestion is minimal and these vehicles have very little impact on the overall traffic condition. Vehicular movement from on-base into the community is unimpaired. The City of Enid has planned expansion of the highways in the area, but base closure should not alter these plans.

Based on 1975 data, revenue losses by members of the Enid Moving Council due to the closure of Vance AFB would amount to approximately \$393,400 on outbound movement of household goods from Vance AFB and \$37,930 on freight cargo shipments from the base. Loss of revenue from inbound shipments of household goods and personal property to Vance AFB would amount to \$106,000 and \$237,980, respectively, for freight cargo shipments. In addition, the revenues lost by local transport companies hauling JP-4 jet fuel from the Champlin Refinery would amount to \$134,750 per year. The loss of transporting jet fuel to Vance AFB will have a definite impact on three transport firms who are engaged in this business, since the base represents a large proportion of their revenues.^{1/}

On-Base (AFERN 4.4.1.3)

Closure of Vance AFB would reduce the traffic volume in the area surrounding the base.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The source of base water is the municipal system of Enid, Oklahoma. The base uses an average of 100 million gallons of water

^{1/} Wicker, Harold, Enid Moving Council.

annually, which is 3.5 percent of the total demand of 2,831,000 gallons. No data are available on the exact usage of water by base personnel residing off-base.

The closure of Vance AFB would represent an annual loss of \$47,000 in direct water sales. The loss of revenues from potential housing units that could be vacated is estimated at \$638,400. This in turn represents a first year potential loss of revenue of \$689,000 in city collections. If this was extended over a 10-year period, at which time it could be expected that these units would be served again, the yearly average would be estimated at \$287,083.

The revenue from Vance AFB, as well as the vacated housing units that are a result of employment loss at Vance, are programmed into the debt service on the bonded indebtedness of the City of Enid. The loss of this existing revenue as well as the curtailment of growth revenue would dictate an increase in water rates within the city to meet a portion of this loss in revenues.^{1/}

Vance AFB owns and controls its own waste water treatment facility. The sewage company of the City of Enid will experience a loss of revenues as a result of the loss of off-base personnel who currently use the facility.

Vance AFB pays an annual fee of \$3,600 for use of the city landfill for solid waste disposal. This revenue would be lost if the base closed.^{2/}

Electric power is purchased from the Southwestern Power Administration of Tulsa and is transmitted to the base over power lines owned and operated by the Oklahoma Gas and Electric Company (OGE) of Enid. In 1975 the base used 18 million kilowatts per hour, 3.7 percent of the total used by the community of Enid. An estimated 10,000 kilowatts per hour per year would be lost due to the housing vacated in the community, resulting in a loss of over \$1,137,000 plus all interest on equipment and facilities not in use.^{3/}

Oklahoma Gas Company supplies the natural gas in the area. In 1975, demand by on-base users was approximately 165,000 million cubic feet, or 5.7 percent of the total natural gas consumption in

^{1/} Gibson, Harold, City Engineer.

^{2/} Ibid.

^{3/} Evans, R. J., Division Manager, Oklahoma Gas and Electric Company.

Enid. Revenue losses to the Oklahoma Natural Gas Company due to base closure would include \$200,000 from direct sales to the base and slightly more than \$600,000 from residential housing units vacated.^{1/}

Southwestern Bell Telephone Company services Enid and Reese AFB. Presently, there are 24,119 telephone pairs working out of the Enid exchange with the capability of over 40,000. On base, the telephone company has the capability of providing for a 40 percent growth in telephone pairs.^{2/}

The economic impact of the base closure on Southwestern Bell Telephone Company would include a direct annual loss of revenue in excess of \$1.5 million for telecommunication services from the Enid exchange. This includes the annual billing directly related to the base telecommunication services as well as revenue lost from vacating housing units. From an investment standpoint, Southwestern Bell could lose over \$340,000 in switching equipment in the central office on-base, telephone equipment connected with RAPCON facilities and on-base feeder and distribution cables that would not be salvaged for reuse in other locations.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Land use in Garfield County is predominantly agricultural with cropland representing 66.1 percent of the total land area (see Table 21). Rangeland and urban land, including Vance AFB, comprise 23.1 percent and 5.6 percent, respectively. Wheat is the principal crop in the county and beef cattle is the principal livestock product.

^{1/} Proskovec, A. L., Enid District Vice President, Oklahoma Natural Gas Company.

^{2/} Leach, R. C., District Manager, Southwestern Bell Telephone Company, Enid, Oklahoma.

TABLE 21

LAND USE IN GARFIELD COUNTY

	<u>Acres</u>	<u>Percent of Total</u>
Total Land Area	678,599	100.0
Urban	37,844	5.6
Water	4,084	0.6
Cropland	448,483	66.1
Pasture	5,096	0.7
Rangeland	156,854	23.1
Forest	11,646	1.7
All Other Uses	14,592	2.2

Source: U.S. Department of Agriculture, Soil Conservation Service, Oklahoma Conservation Needs Inventory (March 1970).

The Enid area has a solid and dispersed industrial/agricultural base. For the past 15 years, Enid has shown steady growth in retail sales and in the number of industrial firms. In the mid 1960's, Vance AFB became an integral part of the Enid economy instead of its principal contributor.

The principal impact on the current land use in the region will be the approximately 1,811 acres comprising Vance AFB, which is located 5 miles south of downtown Enid, Oklahoma. Most of the land surrounding Vance AFB is classified as agricultural. Residential areas have expanded southwest toward the base, but an open rural area of 1.5 square miles acts as a buffer between the City of Enid and the base. There exists only minimal private commercial development, such as auto repair and gasoline sales in the buffer zone around the base (Figure 6).

Land uses in Enid and vicinity will be impacted by the base closure. The alternative action will create a substantial number of residential vacancies in Enid where the bulk of the military and civilian AFB personnel and contractors living off-base reside. The exact number of personnel residing off-base that own homes is not available, however, it is estimated that very few military and approximately 65 percent of the civilian employees

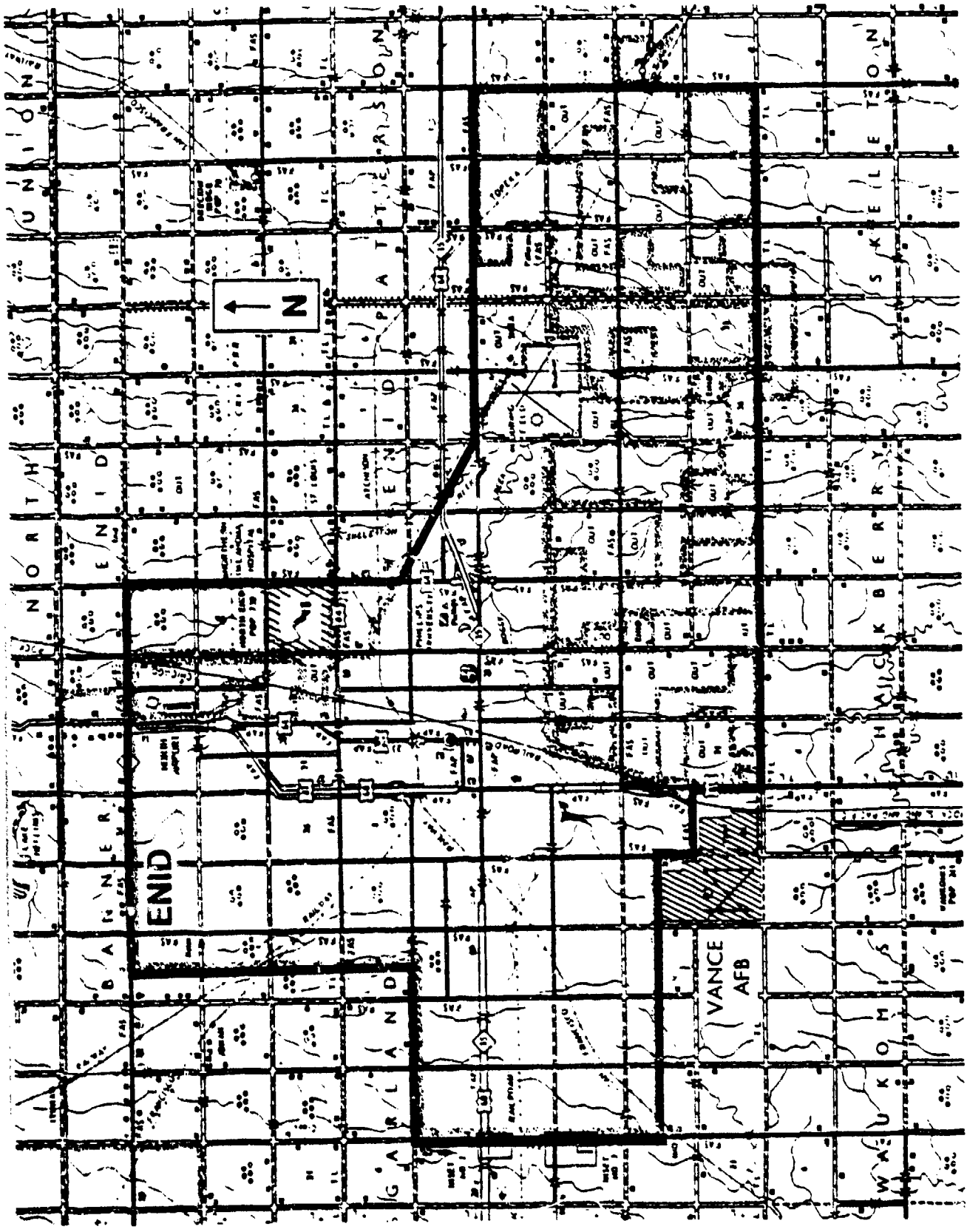


Figure 6 - Vance AFB and Vicinity

are homeowners. When the base is closed, approximately 40 percent of the government civilian employees and all of the military personnel would depart the area. Only a few of the contractor personnel would depart the area. If this alternative action is taken.

Although the housing industry in Enid is not dependent on the military, it is estimated that about 550 to 600 vacancies in local housing would be added to the existing housing market in the region.

Similar impacts, to a lesser degree, may occur among commercial establishments where closure may be created by the reduction in population and spending power in the area. There are few individual commercial businesses which depend on Vance AFB for a major portion of their trade.

Land Ownership and Value (AFERN 4.4.3.2)

Land ownership near Vance AFB and in the county has been stable with a low turnover rate. More than 50 percent of the land is still owned by relatives and/or descendants of the original homesteaders. For the last 8 years, land values in Garfield County have increased at a rate of about 6 percent per year. Land near Enid which can be used for residential developments has increased at a rate of about 10 to 12 percent per year. The noise factor has had little or no effect on land values because land near the base and in the noise zones of aircraft has apparently increased in value the same as other lands in the county.

Future Land Use (AFERN 4.4.3.3)

Impacts on land use associated with the alternative action to close Vance AFB will be minimal. Closure may severely affect the operation of several small businesses and service activities whose locations and services rendered depend upon the base. However, most trade establishments in Enid do not rely on Vance AFB personnel for their existence.

The pattern of residential land use could change with a surplus of housing, and base closure could restrict the development of new housing near the base in the immediate future. Future land use surrounding Vance AFB is not expected to change significantly from existing conditions and should remain predominantly agricultural. However, zoning ordinances enacted by the City of

Enid and other communities in the vicinity for the promotion of public health, safety, comfort and general welfare and for the restriction of development around Vance AFB will need to be reviewed. These ordinances include Zoning Ordinance No. 72-10, City of Enid, Oklahoma, enacted 21 March 1972, the City-County Planning Agreement signed 27 October 1957, and an ordinance enacted by the Town of Waukomis on 7 March 1973. These ordinances forbid subdivision and commercial developments in the area near Vance AFB.

Despite the impact of the alternative action at Vance AFB, there are federal projects which will affect the land use patterns in the area and offset to some degree the closure of Vance. These projects include:^{1/}

1. Department of Economic and Community Affairs (DECA): An application to the U.S. Department of Housing and Urban Development for a grant of \$743,500 to be matched with \$167,150 state funds and \$204,600 local funds. DECA is applying for a grant for the continuation of the development of statewide, non-metropolitan areawide and local comprehensive planning and for the continuation of the coordination of state, regional and local planning efforts through the state clearinghouse operations.

2. Office of the Governor: An application to the U.S. Department of Labor for a grant of \$2,116,226. The project is to place economically disadvantaged, unemployed individuals in training and subsidized employment.

3. Office of the Governor: An application to the U.S. Department of Labor for a grant of \$574,892. The project is to provide training and supportive services to the underemployed, economically disadvantaged, and unemployed of the State of Oklahoma.

4. Northern Oklahoma Development Association: An application to the Economic Development Administration for a grant of \$35,000 to be matched with \$11,670 local funds. This project is to develop multicounty (NODA District and redevelopment area) planning capability and thereby assure effective utilization of resources in creating full-time permanent jobs for the unemployed and underemployed within the District.

^{1/} Unpublished data: ATC Command, Randolph AFB, Texas, May 11, 1976.

Anticipated Encroachment (AFERN 4.4.3.4)

The alternative action would eliminate any encroachment problems which may exist at the present time near Vance AFB.

On-Base Land and Facilities (AFERNS 4.4.3.5 and 4.4.3.6)

The use of Vance AFB acreage after the alternative action is completed is unresolved.

Candidates for Expansion: The following analyses provide an identification and description of impacts on governmental structure and functions, transportation facilities and patterns, civilian community utilities and land use associated with the redistribution of flying training activities and associated resources to selected flying training bases after two "best candidates" UPT bases have been closed. Bases to receive additional Air Force and civilian personnel as a result of the proposed or alternative actions could include any of the following bases: Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, Vance AFB or Williams AFB.

7. Craig AFB Expansion

As a result of the alternative actions, Craig AFB will receive approximately 250 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below:^{1/}

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact on local governmental structure and functions in the Craig AFB influence region as a result of the proposed expansion are expected to be minimal. Those local agencies which might be affected by the action are those which deal with zoning regulations and public schooling.

A sizable proportion of the current Air Force personnel reside off-base in the Selmont area. This unincorporated settlement lies in the flood plain of the Alabama River, and is subject to inundation. Due to its topography, soil conditions, and flooding potential, the area has been designated in regional land use plans as one in which future growth should be limited. While zoning restrictions are not currently in existence, it is possible that an influx of Air Force personnel might necessitate the drafting and enforcement of such restrictions. In addition, it is possible that regulations concerning the expansion of trailer parks in the Selmont region might be formulated.

It is likely that the additional dependents could have an impact upon the Selma or Dallas County school systems. It is possible that due to residential preferences of the additional personnel, a substantial number of school-age dependents could be assigned to the same school. In that instance, supplementary teaching staff and equipment might be necessary. Generally, however, the public school systems are considered capable of assimilating such an increase.

It is unlikely that the additional personnel would have a substantial impact upon those agencies dealing with housing. New homes are currently being constructed in the police jurisdiction of Selma, and much undeveloped land suitable for subdivisions exists.

^{1/} Based on average manpower distribution designated by HQ ATC.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed expansion upon off-base transportation systems is not expected to be significant. However, certain forms of transportation may be influenced more greatly than others.

A bus transit system was recently initiated in the Selma area. This system is operated under a franchise granted by the City of Selma to the Selma-Dallas Economic Opportunity Board (EOB). According to the director of the Selma Transit System (STS), approximately 650 to 750 base personnel and dependents use the system weekly. The route between Craig AFB and the City of Selma is the most heavily travelled, and was developed specifically for the convenience of Craig personnel. An increase in base personnel may necessitate an increase in the number of vehicles servicing the Craig-Selma route, and may lend critical support to the financial stability of the new transit system.

Nearly all household goods and other freight are transported via highway and handled by local transportation agents or freight lines with terminals in Selma. The process of expansion would provide these local agents with substantial short-term business activity.

The civilian airport in Dallas County, Selfield, receives no commercial air carriers and is rarely used by base personnel. Expansion of the base staff would have almost no direct effect upon current airport operations. A plan for a "short stop" airline service has been proposed, however, which would provide flights from Selfield to Montgomery, Birmingham and Atlanta. Approximately 30 percent of their business is expected to be comprised of Craig personnel. If base expansion was to occur, this plan may be implemented.

Base personnel utilize Dannelly Field, Montgomery, Alabama, for TDY, PCS and other transportation requirements. Base expansion would have minimal effect upon Dannelly operations.

Rail service is available from Selma via three major rail carriers: Southern Railway, Louisville and Nashville Railroad, and Western Railway of Alabama. Base expansion is expected to have no impact upon railroad operations, except indirectly as shipping is affected by Selma area commercial activity.

Base expansion should have no significant direct impact upon either existing or proposed highway development.

On-Base (AFERN 4.4.1.3)

Traffic is heavy but well-spaced, and offers little or no obstacle to smooth traffic flow. Base expansion might increase the probability of traffic congestion during peak traffic periods; however, the highway system surrounding the base is considered adequate to accommodate an increased vehicle volume.

A personnel increase of approximately 300 might result in an increase in base traffic of 200 to 420 vehicles. There are presently no traffic problems on-base, and parking space is sufficient to accommodate all demand; however, available data are insufficient to assess the expansion capacity of base parking facilities.^{1/}

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the expansion on civilian community utilities would be minimal throughout most of the region of influence. Within the City of Selma, the capacity for electricity, water, gas, and sewerage and solid waste disposal are adequate to meet current and projected civilian demand. The area most likely to feel the impact of base personnel increases, however, lies south and east of the city in the Alabama River floodplain. Water is provided to the area by a Dallas County system. If base personnel continue the trend to locate in the unincorporated Selmont area, provision of utilities may pose a problem for local authorities and agencies.

Water for Craig AFB is provided from three deep on-base wells, and is treated and stored on base. The present system provides adequate water supply. The present capacity is more than adequate to serve the proposed incoming personnel. The existing water treatment facility at the base could accommodate the demand generated by an additional equivalent population of approximately 760.^{2/} Electricity and natural gas are provided by civilian utility companies which can accommodate any increased on-base demand. An increase in solid waste generated on base, which is removed by contractor to county landfill, can also be readily accommodated.

^{1/} TAB A-1, Environmental Narrative, Craig AFB (AFERN 4.4.1.3.2).

^{2/} Information provided by U.S. Air Force, Department of Defense.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Impacts related to an increase in base personnel are not expected to significantly affect land use in Dallas County and the City of Selma.

It is possible that increased demand for residential units may result in the expansion of large trailer parks constructed to the northeast of Craig along Highway 80. The majority of families would have to be housed off-base in rental housing (largely one and two bedroom apartments, and two and three bedroom trailers) or purchase a house or mobile home. The Selma housing market is growing, particularly due to an increase in single family units in new subdivisions. Expansion may cause additional housing units to be constructed within the City of Selma or elsewhere in Dallas County.

Land Ownership and Value (AFERN 4.4.3.2)

The influx of additional Craig AFB personnel could have a sizable short-term impact upon local realty activity. The increased demand for off-base housing accommodations could also result in a marked increase in property values and rents, particularly since higher quality housing and larger rental units are in short supply.

Future Land Use (AFERN 4.4.3.3)

The impact of an increase of base personnel upon future land use is anticipated to be minimal. The proportion of land devoted to residential uses due to base personnel increases will increase; however, the total number of additional personnel and their dependents amounts to only about 3 percent of current Selma population, and less than 2 percent of Dallas County population, and would be expected to have relatively little impact upon the region as a whole. If this population increase is concentrated in a specific off-base area, however, such as the unincorporated area of Salmont, the impact could be more severe. For a variety of reasons, the planned future development in this area has been limited; an influx of more Air Force personnel, particularly in the large trailer parks located in the area, could force local officials to reassess their position. Likewise, it could result in regulations or zoning restrictions for the area.

Any impact upon agricultural, commercial, or industrial land use as a result of base expansion is expected to be minimal.

Anticipated Encroachment (AFERN 4.4.3.4)

Only minor encroachment exists at Craig AFB at this time. Much of the land surrounding the base is undeveloped or used for agricultural purposes; an exception is the land to the northeast of the base, particularly along Highway 80, which is largely commercial and residential. To the immediate north of Craig lies a public housing project and several large mobile home parks.

While only minor encroachment exists, Craig AFB officials and Selma/Dallas County representatives have discussed adoption of a zoning ordinance which would prevent future incompatible uses of nongovernment owned land surrounding the base. While the area south of the Alabama River, where Craig is located, is not one of the fastest growing areas of Selma or Dallas County, it is possible that an influx of population in the area might necessitate the passage of the above mentioned ordinance.

8. Webb AFB Expansion

As a result of the alternative actions, Webb AFB will receive approximately 250 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below:^{1/}

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3.1)

Government (AFERN 4.3.1)

The proposed action is not expected to significantly alter the structure or functions of local governing bodies. A County Judge and four commissioners will continue to provide the leadership for Howard County. The Council-Manager form of government, consisting of four council members and a mayor, will remain in the City of Big Spring. The addition of military and civilian personnel at Webb AFB may increase the demand for services placed upon local government. The fact that the economy in Big Spring is dominated by government, which cannot be directly taxed, creates problems in raising revenue for local government services.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The addition of personnel at Webb AFB is not expected to significantly affect air travel in the area.

The majority of transportation is by highway. The communities and counties have not conducted any recent traffic surveys, but since there is no public transit available, the automobile is the major mode of transportation. The effect on the highways of additional base personnel is unknown. However, plans for improving Highway 87 are pending and, if adopted, these plans should prevent any traffic hazards due to the increased volume.

On-Base (AFERN 4.4.1.3)

Little congestion results from current on-base circulation patterns. Parking spaces adequately serve current demand.

^{1/} Based on average manpower distribution designated by HQ ATC.

The impact of increased vehicle flow upon current circulation patterns is not certain.^{1/} However, the addition of personnel at Webb AFB is not expected to significantly affect the traffic traveling to and from the base on a daily basis.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The area's water supply is adequate to supply the increased demand for water on-base and off-base due to base expansion.

Webb AFB has been allotted 21 percent of the city's sewage plant capacity and thus could increase its demand for sewage treatment considerably before its allotment is fully utilized.

Electric power is supplied to the base by the Texas Electric Service Company. The average daily regional demand is adequately served by the electric company's generating capacity and additional service can be negotiated with the company.

Natural gas is supplied to the base by Pioneer Natural Gas Company. It is estimated that the gas company has the capacity to meet demands generated by regional growth and base expansion is not expected to place a strain on the company.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Both off-base and on-base housing will be affected by the addition of personnel at Webb AFB. Military housing off-base comprises approximately 8 percent of the community total. Together with civilian employees, population associated with Webb AFB utilizes 15 percent of the housing stock including mobile homes. The available housing stock in Big Spring is declining due to a number of factors, including the lack of experienced house-building craftsmen, the rising cost of financing and construction, and deterioration of housing in the inner city. Although the housing vacancy rate in Big Spring is 5 percent, it is important to note that the number of vacant units is below the standard normally occupied by military personnel or base civilian employees. As a result, there is a shortage of adequate housing in Big Spring. The supply of adequate rental or privately owned housing units has not kept pace with demand. The number of additional personnel moving into Big Spring is approximately 250.

^{1/} TAB A-1 Environmental Narrative, Webb AFB (AFERN 4.4.1.3.2).

If the existing pattern of 60 percent of the military population living off-base is assumed to be true for this additional personnel, Big Spring may face a shortage of housing. While the availability of suitable off-base housing is lacking, new rental construction is underway. Additionally, the construction of 230 apartment units and a 90-unit mobile home park is being considered. These developments should improve the housing situation.^{1/}

Land Ownership and Value (AFERN 4.4.3.2)

Military and civilian employees of the base own 17 percent of the homes in Big Spring. They own homes of greater value than those of homeowners in the civilian community--a median housing value of between \$15,000 and \$19,999 as compared to a value of \$10,000 to \$14,999 for the community. In addition, base employees rent 20 percent of the available units and generally pay higher rent than does the civilian community. The median value of rent for base associated employees is \$100 to \$149, while the corresponding rent for the remainder of the community is in the \$60 to \$99 range. It is expected that these same trends will continue with the addition of personnel at Webb Air Force Base.

With a decision made to add personnel at Webb AFB, housing values in the area should stabilize. Realtors who have been holding their homes off the market due to the existing unstable conditions will put them back on the market. In addition to stability in the residential market, commercial establishments should also be favorably affected by the addition of personnel at Webb AFB.

Future Land Use (AFERN 4.4.3.3)

No significant changes in land use are anticipated in the area surrounding Webb Air Force Base. Plans have been made for a pharmacy, shopping center, and apartment complex but current status of these projects is unknown. However, there will be some participation by base personnel when the shopping center is complete. The addition of personnel to the base will strengthen the support of these new developments.

^{1/} Data provided by USAF.

The subcommittee on housing in Big Spring concluded that Big Spring needs at least 50 new houses. New apartment construction reveals that 35 new apartments will be available soon; one apartment complex has seriously considered the addition of 80 new units. The addition of personnel to Webb AFB will likely aid realtors in their decisions for future expansion.

Anticipated Encroachment (AFERN 4.4.3,4)

Due to the location of Webb AFB with respect to future growth patterns of the city and a low population growth rate, no significant increase in urban encroachment is anticipated.

9. Columbus AFB Expansion

As a result of the proposed or alternative actions, Columbus AFB will receive approximately 292 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below:

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact on governmental structure and functions in the Columbus AFB influence region as a result of the proposed action will be minimal.

The additional base personnel may cause some adjustment to normal governmental services such as housing, planning, and zoning. All bachelor personnel could be housed on-base. However, family housing on-base is fully occupied, and additional families would have to seek off-base accommodations. The intensity of the impact would be determined by the type of housing sought by the new personnel.

During the period of adjustment, other governmental units in the city and county and surrounding area should be geared to the increase in personnel at Columbus AFB, and the Military Affairs Commission and the Community Council will need to function actively.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed or alternative actions on off-base transportation operations and facilities will be insignificant.

The Golden Triangle Regional Airport, Columbus, Mississippi, could handle the additional traffic generated by the increase in base personnel.

The impact of rail service will be negligible. Rail cargo shipments to the Air Force are insignificant and are expected to remain restricted to the movement of some large or bulky items and some large vehicles.

The impact on bus passenger travel will be minimal if existing trends are characteristic of future travel behavior.

Highways will experience some increased congestion with the additional personnel. However, with the base located outside the city, there should be little perceptible change. The current plans for widening U.S. 45 near the base will relieve some peak hour congestion, depending on the location of housing and mode of travel chosen by the new personnel.

On-Base (AFERN 4.4.1.3)

The proposed increase in employment at Columbus AFB should cause little impact. There is good access at the gates and there is sufficient parking.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the proposed or alternative actions will be minimal on civilian utilities. The capacity and demand for electricity, water, gas, sewerage and solid waste disposal are adequate to meet current demand and are sufficient for the increased demand generated by the alternative action.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

There could be a minor upsurge in new residential housing depending on the type of housing required by the new personnel. Currently, there is a shortage in residential units, but a good supply of apartments. The shortage of houses could result in some vacant land being converted to single family housing units, or in an increase in the amount of land used for mobile home parks.

Land Ownership and Value (AFERN 4.4.3.2)

Depending on the type of housing needed, land values in the Columbus AFB region could experience an increase in value. Since a single family housing shortage exists, an increase in demand would cause values to fluctuate upwards. However, the ownership of residential property has been fairly stable with values increasing faster than the inflation rate.

Future Land Use (AFERN 4.4.3.3)

The future land use of the area promises considerable change due to the opening of the Tennessee-Tombigbee Waterway. While the base presently is characterized as the largest business in northern Mississippi, it is probable that the waterway and its related business will assume that role in the future. The impact of the additional personnel should have little impact on this area, which is expected to see major population growth in the next 15 years.

Anticipated Encroachment (AFERN 4.4.3.4)

Existing zoning laws have been effective in restricting building and certain activities within the glide slope and air space surrounding Columbus AFB. A further guard against encroachment would be to modify the existing ordinance to include the AICUZ. If the ordinance is not modified, it might allow certain types of uncontrolled growth, i.e., trailer parks, to build up around the base. This could be especially true if the housing shortage continued to exist as the new base personnel seek housing.

The future growth pattern in the area should not be in the direction of the base. With the opening of the waterway, most of the growth will be pulled towards the west. Considerable residential and commercial development is also taking place in the direction of the base, particularly in the vicinity of Highway 80 near the Columbus city limits.

10. Laughlin AFB Expansion

As a result of the proposed or alternative actions, Laughlin AFB will receive approximately 131 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The small number of military and civilian personnel to be relocated should not cause any major impact on the existing governmental system and structure. During the period of adjustment, governmental units will be alerted to the increase in personnel at Laughlin AFB, and the Laughlin AFB-Del Rio Community Council will need to participate actively in the adjustment process.

The governmental agencies dealing with housing and education should have little difficulty in assimilating the additional inhabitants because the community has housing available at reasonable rents and the capacity of the school system can sustain increased enrollments.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed or alternative actions on off-base transportation operations and facilities will be insignificant. The additional personnel and their dependents can be easily accommodated by the local transportation system.

All roads in the Laughlin AFB influence region can handle additional traffic even at peak hours. Traffic generated by the base does not have any major effect on the traffic patterns in the outlying areas.

On-Base (AFERN 4.4.1.3)

There are presently 1,900 cars on base in an average day--1,000 by personnel living on-base and another 900 by off-base personnel. The additional manpower should not create any major impact other than increasing the need for more off-street parking.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the proposed or alternative actions on civilian utilities will be minimal. The capacity for electricity, water, gas, sewerage and solid waste disposal facilities is adequate to meet current civilian demand in the region, and capacity increases during the next 10 years for each utility will be more than sufficient for the additional requirements generated by the increased number of AFB personnel derived by the action. Civilian utilities used by the base include water, electricity and gas. Increased on-base needs for these utilities can be adequately met.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

Land uses in Del Rio will not be greatly influenced by the proposed or alternative actions. Because of the tight on-base housing accommodations, families and bachelor-officer personnel will be required to live off-base. Most of the personnel should be able to locate suitable housing; however, some may have to accept lesser quality housing than desired or pay a premium housing cost. The housing vacancy rate in Del Rio is such that it can easily absorb the transferred personnel. Commercial establishments also appear to be sufficient to handle the increase.

Land Ownership and Value (AFERN 4.4.3.2)

Because of the relatively small number of transferred personnel, the value of land and its ownership pattern should remain stable. At present, land ownership near the base and on the county has been stable. Land values have been increasing according to the nationwide inflation rate.^{1/}

Future Land Use (AFERN 4.4.3.3)

Present growth patterns in Del Rio are to the northwest towards Amistad Reservoir and generally away from the base. The proposed or alternative actions should not change this existing pattern.

^{1/} Memo: Environmental Impact (10 items requested by Telecon), Laughlin AFB, April 12, 1976.

It is foreseeable that sometime in the future, growth could start gravitating along U.S. 90 towards the base since it is the principal artery. The city and county are presently revising their zoning ordinances. It is advisable that they consider an ordinance creating some type of buffer zone around the base for its future protection.

Anticipated Encroachment (AFERN 4.4.3.4)

The proposed or alternative actions will not affect any encroachment problem anticipated in the future because the base is located in a relatively remote area.

11. Reese AFB Expansion

As a result of the proposed or alternative actions, Reese AFB will receive approximately 356 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact on government structures and functions in the Reese AFB influence region as a result of the proposed or alternative action will be minimal. Any changes in the personnel structure at Reese AFB will be easily assimilated by various local governmental agencies by the direct guidance of Reese AFB personnel who are actively involved in the activities of local government.

It is anticipated that during the period of adjustment, governmental units in Lubbock County will be alerted of the proposed action and will respond actively. The agencies dealing with housing, education and unemployment should have little difficulty in providing the necessary help needed during this adjustment period. In the six cities that lie within a 20-mile radius of the base, adequate housing and recreation areas are available. School capacities in the Lubbock Independent School District appear to be sufficient to accept additional students.

The job market for dependents is good in Lubbock County where there are shortages of personnel to fill professional, technical and skilled as well as unskilled positions. The average unemployment rate in May 1975 was 4.4 percent, well below the national average.^{1/}

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed or alternative actions on off-base transportation operation and facilities will be insignificant. The addition of air base personnel and dependents will not affect the

^{1/} Revised pages to Reese AFB TAB A-1 in Support of Environmental Analysis Process in response to DEPV letter dated April 13, 1976.

operation of off-base transportation systems which are designed to adequately serve more than 200,000 inhabitants of the Lubbock County area.

The highway system serving Reese can accommodate a significant increase in traffic volume.

On-Base (AFERN 4.4.1.3)

The proposed increase in base personnel at Reese AFB will intensify the need for modification of the Main Gate which presently is congested in the afternoon with traffic backing up at the five-road intersection for several blocks. The proposed or alternative actions will add to the existing vehicular problems at Reese which include:

1. Lack of parking in the vicinity of the Base Supply Facility, Building 250.
2. Need for easier emergency vehicle access to Reese Village.
3. The congestion at the Main Gate with commercial vehicle traffic.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

Impact of the proposed or alternative actions on civilian utilities will be minimal. The capacity and demand for electricity, water, gas, sewerage, and solid waste disposal facilities are adequate to meet current civilian demand in the region, and capacity increases in the near future will be more than sufficient for additional requirements generated by the additional number of base personnel derived by the action.

Currently the maximum water supply available to Reese AFB is 3 million gallons per day; however, the Air Force is neither required to use this amount nor restricted to it. Thus, the anticipated increase of base personnel and their dependents will have only a slight impact on the water supply.

The sanitary sewage plant has a capacity for expansion of 130,000 gallons per day which can support up to 1,065 additional persons.

The Lubbock Power and Light Company plans to add 44,000 kilowatts to its capacity in 1978. Similarly, Southwestern Public Service Company is switching to coal-fired plants and will add 356 megawatts in 1976, 356 megawatts in 1978, and 356 to 500 megawatts in 1980.

Natural gas, supplied by Pioneer Natural Gas Company, has partially unlimited capacity to serve present and future customers.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

The impact of the proposed or alternative actions will be insignificant on the existing land uses, which are predominantly agricultural. Land uses within communities surrounding the base will not be strongly influenced by the proposed action. Housing vacancies exist in the communities in sufficient numbers to supply the necessary housing required by the proposed action. There is a constant building program in the Lubbock Standard Metropolitan Statistical Area. Most of the \$103 million building program in 1975 was residential, and almost 100 percent of the construction is located south and west of the city in the general direction of the base.

Land Ownership and Value (AFERN 4.4.3.2)

The impact of the proposed or alternative actions on land ownership will be insignificant when viewed in the context of the Lubbock SMSA but could represent a more sizable impact on residential neighborhoods where vacancies presently exist.

Land values will not be greatly affected by the proposed or alternative actions because residential land and housing values are based more upon the existing general economy of the individual community than on the anticipated small increase in population. The relative stability of ownership and values near the base should not be greatly altered.

Future Land Use (AFERN 4.4.3.3)

The impact of the proposed or alternative actions on the future land use in the Reese AFB influence region will be minimal. Changes in land uses in the vicinity of the base will be insignificant. In the communities surrounding the base, evolving patterns of land use will be predominantly urban expansion and will be related to future regional economic trends rather than the relatively small increase in base personnel.

Anticipated Encroachment (AFERN 4.4.3.4)

The proposed or alternative actions will not significantly affect encroachment at Reese AFB. Housing is readily available in the local area and there is no known or expected encroachment of housing development in the Reese AICUZ, except for one mobile home park. There are no known expansion plans for Shallowater Airport.

12. Vance AFB Expansion

As a result of the proposed or alternative actions, Vance AFB will receive approximately 112 officers, enlisted civilian and student personnel. Impacts associated with this action are identified below

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact of an increase in base personnel at Vance AFB should be minimal. Since the area is already experiencing growth, the local government services should already be able to handle this increase in population.

During this period of adjustment, governmental units will be alerted to the increase in personnel at Vance AFB and the following special governmental groups will need to cooperate in the adjustment process: Air Force Association, Chamber of Commerce-Military Affairs Committee, Enid-Vance Community Relations Council, and Enid-Vance Area Safety Committee.

The governmental agencies dealing with housing and education should have little difficulty in assimilating the transferred personnel since housing is available at reasonable rates and the Enid school system can sustain increased enrollments.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed or alternative actions of off-base transportation operations and facilities will be insignificant.

The airlines and bus service in the area should adequately handle the increased population. Commercial transportation into the area is served by rail and motor freight carriers that can accommodate the increased activity.

Roadways in the area are currently well planned. Because of this intensive effort, minor transportation problems exist and the alternative action is not expected to disturb the situation in the future.

On-Base (AFERN 4.4.1.3)

No major problems of traffic flow exist on the major arterials leading to the base. There is currently adequate parking and traffic flow. The alternative action should have an insignificant impact on the on-base transportation network.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the proposed or alternative base realignments upon civilian community utilities is not expected to be significant. Current capacities for water, gas, sewage and solid waste disposal are sufficient for the increased demand generated by base expansion. The base electric distribution system may require expansion to meet additional needs, but the Oklahoma Gas and Power Company has the capacity to support such expansion.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

The impact of the proposed or alternative actions will be insignificant on existing land use. There will be some demand generated for new housing to meet the needs for rental or owner-occupied housing.

Land Ownership and Value (AFERN 4.4.3.2)

Since the City of Enid is currently trying to meet existing growth demands, the impact of additional new residents should not impact land values differently than current trends. However, land values could increase in specific residential areas that are perceived as meeting certain economic and social needs where current vacancies are minimal.

Future Land Use (AFERN 4.4.3.3)

The impact of the proposed or alternative actions on future land use in the Vance Air Force Base area will be minimal. The area has been planning for increased growth in both land use and transportation for some time and the increased population due to the alternative action should be easily absorbed. Current location of off-base personnel in Enid is widely dispersed. Because of the balanced distribution, the new residents of Enid should conform to existing and future

growth patterns rather than causing an in-balance to any one area of the city.

Anticipated Encroachment (AFERN 4.4.3.4)

The proposed or alternative actions will not significantly affect any encroachment problem anticipated in the future. The air base is currently isolated in the southwest portion of the city. The zoning laws instituted in 1972 and 1973 should effectively control any encroachment for the foreseeable future.

13. Williams AFB Expansion

As a result of the proposed or alternative actions, Williams AFB will receive approximately 358 officers, enlisted, civilian and student personnel. Impacts associated with this action are identified below

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

Government (AFERN 4.3.1)

The impact on governmental structure and functions in the Williams AFB influence region as a result of the proposed or alternative actions will be minimal.

Williams AFB is located in Maricopa County, Arizona, and is situated in the fast-growing Phoenix, Standard Metropolitan Statistical Area (SMSA), 9 miles east of Chandler, 16 miles southeast of Mesa, and approximately 35 miles southeast of Phoenix. These communities around Williams AFB have the tools and have demonstrated the capability to guide development in an orderly fashion through the use of zoning and building codes. Likewise, these three communities totaling about 900,000 inhabitants have the governmental facilities to easily assimilate 358 additional air base personnel and their families.

During the period of adjustment, governmental units in each of these communities will be alerted to the increase in personnel at Williams AFB, and the Military Affairs Committee at each of the Chambers of Commerce in Chandler, Gilbert, Mesa and Phoenix will need to function actively.

The governmental agencies dealing with housing and education should have little difficulty in assimilating the additional inhabitants because these communities have housing available at reasonable rents, and the capacity of the school system in Mesa, Chandler and at the base can sustain increased enrollments.

TRANSPORTATION (AFERN 4.4.1)

Off-Base (AFERN 4.4.1.2)

The impact of the proposed or alternative actions on off-base transportation operations and facilities will be insignificant.

The addition of approximately 358 air base personnel and dependents will be easily assimilated by the off-base transportation systems designed to serve more than 1 million inhabitants in the Phoenix SMSA.

All roads in the Williams AFB influence region can handle additional traffic under ideal conditions at peak hours. Traffic generated by the base does not have any major effect on the traffic patterns in the outlying areas. There are no public transportation bus lines servicing Williams AFB.

On-Base (AFERN 4.4.1.3)

The proposed increase in employment at Williams AFB will intensify the need for increased parking at various base facilities, particularly the Commissary. Presently the large number of retirees cause severe traffic congestion during peak shopping hours.

CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

The impact of the proposed or alternative actions on civilian utilities will be minimal. The capacity and demand for electricity, water, gas sewerage and solid waste disposal facilities are adequate to meet current civilian demand in the region, and capacity increases during the next 10 years for each utility will be more than sufficient for the additional requirements generated by the increased number of Air Base personnel derived by the action. Civilian utilities used by the Air Force Base include electricity and gas from the Arizona Public Service Company. Increased on-base needs for these utilities can be adequately met by Arizona Public Service Company.

LAND USE (AFERN 4.4.3)

Existing Land Use (AFERN 4.4.3.1)

The impact of the proposed or alternative actions will be insignificant on the existing land use. The base is bounded on the north and east by desert rangeland and on the west and south, in the most part, by highly cultivated and irrigated farmland. There is a residential development of about 840 acres to the south within Noise Zone No. 2 and one small area, approximately 25 acres, of multi-residential and commercially zoned property on the west, just outside the Main Gate.

Land uses within communities surrounding Williams AFB will not be influenced by the proposed or alternative actions. Housing vacancies exist in residential areas to provide sufficient housing at various price ranges, and existing commercial establishments will absorb the anticipated increase in business in most cases without expanding their facilities.

Land Ownership and Value (AFERN 4.4.3.2)

The impact of the proposed or alternative actions on land ownership will be insignificant when viewed in the context of the Phoenix SMSA but will represent a more sizable impact on residential neighborhoods where vacancies presently exist.

Land values will not be greatly affected by the proposed or alternative actions as residential land and housing values are based more upon the existing general economy of the individual communities and the Phoenix SMSA as a whole, rather than the anticipated small increase in population.

Future Land Use (AFERN 4.4.3.3)

The impact of the proposed or alternative actions on the future land use in the Williams AFB influence region will be minimal. The personnel at the base will be widely distributed through the Williams AFB influence region. Future land uses near the base will depend upon the effective control of intensive urban development. It is anticipated that the future land use within the AICUZ will continue to be agricultural with a sprinkling of residential. Future land use changes in the area beyond the AICUZ zone will be related to the regional economy rather than the relatively small increase in base personnel as envisioned in the alternative action. An airfield zoning ordinance has been enacted by the Maricopa County Board of Supervisors, based on AFR-86-11. This ordinance protects the base from creation of flight hazards and the encroachment of nonconforming land uses.^{1/}

Anticipated Encroachment (AFERN 4.4.3.4)

The proposed or alternative actions will not significantly alter existing encroachment problems. Officials of nearby communities are supportive of AICUZ. However, an attempt in 1973 and 1974 failed to enact legislation to provide for land use planning as it related to airports or aircraft noise-accident hazards or both.

^{1/} TAB A-1 (AFERN 4.4.3.3.1)

One sizable proposed development just east of Williams, and within Noise Zone No. 2 and partly in Zone No. 3 was rejected by the Maricopa County Board of Commissioners in 1973. This land (about 1,400 acres) was subsequently acquired by the General Motors Proving Grounds located just north. Indications are that General Motors will expand their proving grounds operations in the area, maintaining compatibility with Williams AFB.

III. IMPACT SUMMARIZATION AND UNRESOLVED ISSUES

A. Irreversible and Irretrievable Commitments of Resources

Candidates for Closure: On the basis of available data there appear to be no resources pertaining directly to governmental structure, transportation, civilian community utilities, or land use which would be irreversibly committed to any purpose should any of the six Air Force Bases (Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, or Vance AFB) be selected as the candidate action. The closure will result in short-term commitments of labor, material and energy resources devoted to relocation effort which are considered to be irretrievable.

Candidates for Expansion: On the basis of available data there appears to be no resources pertaining directly to governmental structure, transportation, civilian community utilities, or land use which would be irreversibly committed to any purpose with the expansion of any of the seven candidate bases (Williams AFB, Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, or Vance AFB). However, conditions may exist where some land uses presently committed to agricultural and other uses could be irretrievably committed to residential and other developments. The proposed expansion at any of the bases will result, at a minimum level, in the consignment of labor and materials devoted to the relocation effort which are considered to be irretrievable. Included in the commitment are construction, alteration and rehabilitation of facilities to support the relocating units.

B. Unavoidable Adverse Effects and Mitigation Possibilities

Candidates for Closure

1. Craig AFB, Alabama: Local government units in the communities surrounding Craig AFB will suffer reductions in revenues and manpower as a result of the population loss. Governments will need to address the alleviation of possible social and economic difficulties attributable to base closure. The functioning of local governmental units in the Selma/Dallas County area, however, would not be expected to experience severe adverse effects.

The primary effect on off-base transportation facilities will be a severe reduction in patronage for the newly created Selma Transit System, which may result in financial difficulties for the company. Local household goods and freight transport agents may be forced to cease or reduce operations. Such adverse effects may be mitigated by anticipated long-range growth in the Selma area unrelated to Craig AFB actions.

Primary adverse effect on the supply of utility services to civilian communities will be losses in revenues to the utility companies.

Residential and commercial disruptions created by reductions in population and area income are considered the primary possible adverse impacts on land use. Area growth will be slowed by base closure. These impacts may be mitigated by maintenance of physical structure quality, and by development of policies to stimulate commercial and industrial growth. The following federal programs may offer possibilities for mitigation:

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources. Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus Defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

^{1/} Executive Office of the President, Office of Management and Budget, "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

SMALL BUSINESS ADMINISTRATION

Displaced Business Loans: This program aims to assist small businesses which have experienced substantial economic injury as a result of displacement by, or location in or near a federally aided project.

Base Closing Economic Injury Loans: The objective of this program is to assist small business concerns subject to economic injury as the result of closing by the federal government of a major military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

COMMUNITY SERVICES ADMINISTRATION

Community Action: The objectives of this program are to mobilize and channel public and private resources into antipoverty action; to increase the participation of the poor in such programs; and to strengthen the planning and coordination of such programs. They are primarily implemented by a Community Action Agency, which is state-designated. A wide variety of projects are financed with CAA funding. The chief beneficiaries are low income families and individuals in urban and rural areas.

Community Economic Development (Special Impact): The objectives of this program are to promote community based economic development through the partnership of established business with locally controlled community organizations. Eligible areas are rural or urban regions having concentrations or substantial numbers of low income persons.

DEPARTMENT OF COMMERCE

Economic Development Administration

Grants and Loans for Public Works and Development Facilities: The objective of this program is to assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated geographic areas where economic growth is lagging behind the rest of the nation. Grants are for public facilities. Proposed projects must be consistent with the currently approved overall economic development program for the area. Beneficiaries must be unemployed or underemployed persons and/or members of low-income families.

Business Development Assistance: The objective of this program is to encourage industrial and commercial expansion in designated areas by providing financial assistance for projects that cannot be financed through private lending institutions. Funds may be used for most kinds of new industrial or commercial facilities or to expand one already in existence.

Technical Assistance (Economic Development): The aim of this program is to solve problems of economic growth in EDA-designated geographic areas through project grants, feasibility studies, management and operation assistance, and other studies. Most technical assistance applicants are private nonprofit groups or municipal or county governments or entities thereof, located in economically depressed areas of the country.

Public Works Impact Projects: The objective of this program is to provide immediate useful work to unemployed and underemployed persons in designated project areas. This work is restricted to the construction of public facilities.

State and Local Economic Development Planning: This program aims to develop the capability of state and local governments to undertake an economic development planning process that is comprehensive in scope, with particular emphasis on reducing unemployment and increasing incomes. Grants are used for planning, staff salaries and related administrative expenses.

Special Economic Development and Adjustment Assistance Program
The intent of this program is to provide aid to state and local areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

In addition, the Regional Commissions have at least three programs available to member states which may be useful in mitigating adverse impacts; these are described as follows:

Appalachian Regional Commission - Regional Economic Development Programs: These programs provide project grants to improve opportunities for employment, average level of income, or the economic and social development of a given area.

Appalachian Regional Commission - Technical and Planning Assistance Programs: Project grants and contracts are awarded to assist regions in evaluating needs and potentialities for economic growth through research planning, and demonstration projects and training programs.

Appalachian Regional Commission - Supplements to Federal Grant-In-Aid Programs: Grant-in-aid supplements are available to provide a portion of the local share of federal grant-in-aid programs for the construction or equipping of facilities or the acquisition of land when a community, because of its economic situation, cannot supply the matching share.

2. Webb AFB, Texas: The immediate effect of the base closure on the local governmental units would be a reduction in the actual tax base created by the relocation of air base personnel. Area governments in Howard County will need to work together in attracting new businesses to the area, to replace the Air Force as a major employer.

Local household goods and freight transport agents may be forced to cease or reduce operations.

Businesses supplying automobile services would be adversely affected as the number of automobiles in the region will be sharply reduced.

Utilities may have to restructure rates which could increase the costs of utility services to customers in the region. The initial effect of base closure on utility companies would be a reduction in demand, and reduced revenues.

Land values in the area probably would be depressed as an immediate reaction to base closure. Residential and commercial property values would decline because of the excess supply and lack of business. These impacts could be mitigated by the passage of time as well as by some or all of the following actions:

- Development of various regional and community programs to generate new employment and additional employment for the Air Force Base personnel who will remain in the area.
- Utilization of available codes (housing, commercial, zoning, etc.) to maintain physical quality of residential and commercial structures during the period of adjustment.

- The implementation of available Federal economic and housing assistance programs.

The following federal programs may offer possibilities for mitigation:

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources. Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

SMALL BUSINESS ADMINISTRATION

Displaced Business Loans: This program aims to assist small businesses which have experienced substantial economic injury as a result of displacement by, or location in or near a federally aided project.

Base Closing Economic Injury Loans: The objective of this program is to assist small business concerns subject to economic injury as the result of closing by the federal government of a major military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

COMMUNITY SERVICES ADMINISTRATION

Community Action: The objectives of this program are to mobilize and channel public and private resources into antipoverty action;

^{1/} Executive Office of the President, Office of Management and Budget, "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

to increase the participation of the poor in such programs; and to strengthen the planning and coordination of such programs. They are primarily implemented by a Community Action Agency, which is state-designated. A wide variety of projects are financed with CAA funding. The chief beneficiaries are low income families and individuals in urban and rural areas.

Community Economic Development (Special Impact): The objectives of this program are to promote community based economic development through the partnership of established business with locally controlled community organizations. Eligible areas are rural or urban regions having concentrations or substantial numbers of low income persons.

DEPARTMENT OF COMMERCE

Economic Development Administration

Grants and Loans for Public Works and Development Facilities: The objective of this program is to assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated geographic areas where economic growth is lagging behind the rest of the nation. Grants are for public facilities. Proposed projects must be consistent with the currently approved overall economic development program for the area. Beneficiaries must be unemployed or underemployed persons and/or members of low-income families.

Business Development Assistance: The objective of this program is to encourage industrial and commercial expansion in designated areas by providing financial assistance for projects that cannot be financed through private lending institutions. Funds may be used for most kinds of new industrial or commercial facilities or to expand one already in existence.

Technical Assistance (Economic Development): The aim of this program is to solve problems of economic growth in EDA-designated geographic areas through project grants, feasibility studies, management and operation assistance, and other studies. Most technical assistance applicants are private nonprofit groups or municipal or county governments or entities thereof, located in economically depressed areas of the country.

Public Works Impact Projects: The objective of this program is to provide immediate useful work to unemployed and underemployed persons in designated project areas. This work is restricted to the construction of public facilities.

State and Local Economic Development Planning: This program aims to develop the capability of state and local governments to undertake an economic development planning process that is comprehensive in scope, with particular emphasis on reducing unemployment and increasing incomes. Grants are used for planning, staff salaries and related administrative expenses.

Special Economic Development and Adjustment Assistance Program: The intent of this program is to provide aid to state and local areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

3. Columbus AFB, Mississippi: There should be no severe adverse effects on the function of units of government in the Columbus AFB influence region. There will be a need for local and regional units of government to reassess their goals and direction reflected in past decisionmaking and future planning processes to adequately address the task of overcoming adversities created by the alternative action at Columbus AFB.

The primary adverse impact of the alternative action on off-base transportation will be the substantial loss of air passenger traffic at the Golden Triangle Regional Airport at Columbus, Mississippi, and loss of storage, moving and freight business associated with the air base. Revenues to airlines through ticket sales and the reduction of sales to businesses at the airport facility including food and sundry services and taxi and limousine services will be reduced until the short-term effects have been neutralized. General revenue losses by storage, moving and freight businesses would be more than \$700,000.

These impacts will be partially mitigated by the passage of time as well as by the following types of policies and actions:

1. Development of employment opportunities to offset the loss of jobs and revenues generated by the operation of Columbus AFB.

2. Continued development of the Tennessee-Tombigbee Waterway Project to greatly expand the local economy and population in the region.

There will be no severe adverse effects on the supply of utilities services to the civilian community because of the Columbus AFB action.

The primary adverse impact of the alternative action on the land use in the Columbus AFB influence region will be the residential and commercial vacancies and the associated land ownership turnover and land value fluctuations created by the reduction in population and spending power in the region. In addition, potential new housing development will be cut back due to the high vacancy rate until the short-term effects have been neutralized.

The impacts will be mitigated by the passage of time as well as by the following kinds of actions:

1. Development of various regional and community construction projects to generate employment opportunities for Air Force Base employees who will remain in the area and additional opportunities to provide jobs for people migrating to the area from outside the Columbus Air Force Base influence region. These projects will include various federal and state funded highway projects, the Tennessee-Tombigbee Waterway project and the sewage treatment plant project.

2. Utilization of available codes (housing, commercial, zoning, etc.) to maintain physical quality of structures during the period of adjustment.

3. Available federal economic and housing assistance programs. Descriptions of many of these are indicated below.

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources. Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus Defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

SMALL BUSINESS ADMINISTRATION

Displaced Business Loans: This program aims to assist small businesses which have experienced substantial economic injury as a result of displacement by, or location in or near a federally aided project.

Base Closing Economic Injury Loans: The objective of this program is to assist small business concerns subject to economic injury as the result of closing by the federal government of a major military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

COMMUNITY SERVICES ADMINISTRATION

Community Action: The objectives of this program are to mobilize and channel public and private resources into antipoverty action; to increase the participation of the poor in such programs; and to strengthen the planning and coordination of such programs. They are primarily implemented by a Community Action Agency, which is state-designated. A wide variety of projects are financed with CAA funding. The chief beneficiaries are low income families and individuals in urban and rural areas.

^{1/} Executive Office of the President, Office of Management and Budget, "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

Community Economic Development (Special Impact): The objectives of this program are to promote community based economic development through the partnership of established business with locally controlled community organizations. Eligible areas are rural or urban regions having concentrations or substantial numbers of low income persons.

DEPARTMENT OF COMMERCE

Economic Development Administration

Grants and Loans for Public Works and Development Facilities:

The objective of this program is to assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated geographic areas where economic growth is lagging behind the rest of the nation. Grants are for public facilities. Proposed projects must be consistent with the currently approved overall economic development program for the area. Beneficiaries must be unemployed or underemployed persons and/or members of low-income families.

Business Development Assistance: The objective of this program is to encourage industrial and commercial expansion in designated areas by providing financial assistance for projects that cannot be financed through private lending institutions. Funds may be used for most kinds of new industrial or commercial facilities or to expand one already in existence.

Technical Assistance (Economic Development): The aim of this program is to solve problems of economic growth in EDA-designated geographic areas through project grants, feasibility studies, management and operation assistance, and other studies. Most technical assistance applicants are private nonprofit groups or municipal or county governments or entities thereof, located in economically depressed areas of the country.

Public Works Impact Projects: The objective of this program is to provide immediate useful work to unemployed and underemployed persons in designated project areas. This work is restricted to the construction of public facilities.

State and Local Economic Development Planning: This program aims to develop the capability of state and local governments to undertake an economic development planning process that is comprehensive in scope, with particular emphasis on reducing unemployment and increasing incomes. Grants are used for planning, staff salaries and related administrative expenses.

Special Economic Development and Adjustment Assistance Program: The intent of this program is to provide aid to state and local areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

In addition, the Regional Commissions have at least three programs available to member states which may be useful in mitigating adverse impacts; these are described as follows:

Appalachian Regional Commission - Regional Economic Development Programs: These programs provide project grants to improve opportunities for employment, average level of income, or the economic and social development of a given area.

Appalachian Regional Commission - Technical and Planning Assistance Programs: Project grants and contracts are awarded to assist regions in evaluating needs and potentialities for economic growth through research planning, demonstration projects and training programs.

Appalachian Regional Commission - Supplements to Federal Grant-In-Aid Programs: Grant-in-aid supplements are available to provide a portion of the local share of federal grant-in-aid programs for the construction or equipping of facilities or the acquisition of land when a community, because of its economic situation, cannot supply the matching share.

4. Laughlin AFB, Texas: Local government units in Del Rio, Texas, will experience severe adverse effects because of the alternative action. They will incur reduction in tax revenues as a result of population loss and will need to address the alleviation of possible social and economic difficulties attributable to base closure. The city government will need to intensify its efforts in attracting new business to the area, to replace the Air Force as a major employer and consumer market and redirect past decisionmaking and future planning processes to include the anticipated adversities created by the proposed action.

The primary adverse impact of the alternative action on off-base transportation will be the immediate revenue loss to Amistad Airlines who depends upon Laughlin AFB personnel to supply about 50 percent

of its ticketed passengers and the revenue loss to Del Rio's transfer and storage companies who depend upon the air base personnel for 70 to 90 percent of their business. This loss will be partially mitigated by the passage of time as well as anticipated regional recreation and industrial developments in the future which will increase the demand for airline and moving and storage services.

The primary adverse effects on the civilian community utilities will be a substantial loss in revenues created by population losses and base closure. Laughlin AFB personnel represents a substantial segment of the total utility demand in the region. These losses will be partially mitigated by the passage of time and through the additional customers (commercial, residential and industrial) which are anticipated to increase with the recreational and industrial developments projected for the region in the more distant future.

The primary adverse impact of the alternative action on land use will be the residential and commercial vacancies and associated land ownership turnover and land value fluctuations created by the reduction in population and spending power in the region. In addition, potential new housing development will be cut back due to the high vacancy rates until the short-term effects have been neutralized.

The impacts will be mitigated by the passage of time as well as by the following kinds of actions:

1. The planned hydroelectric facilities at Amistad Dam.
2. Available federal economic and housing assistance programs. Descriptions of many of these are indicated below:

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources.

^{1/} Executive Office of the President, Office of Management and Budget, "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus Defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

SMALL BUSINESS ADMINISTRATION

Displaced Business Loans: This program aims to assist small businesses which have experienced substantial economic injury as a result of displacement by, or location in or near a federally aided project.

Base Closing Economic Injury Loans: The objective of this program is to assist small business concerns subject to economic injury as the result of closing by the federal government of a major military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

COMMUNITY SERVICES ADMINISTRATION

Community Action: The objectives of this program are to mobilize and channel public and private resources into antipoverty action; to increase the participation of the poor in such programs; and to strengthen the planning and coordination of such programs. They are primarily implemented by a Community Action Agency, which is state-designated. A wide variety of projects are financed with CAA funding. The chief beneficiaries are low income families and individuals in urban and rural areas.

Community Economic Development (Special Impact): The objectives of this program are to promote community based economic development through the partnership of established business with locally controlled community organizations. Eligible areas are rural or urban regions having concentrations or substantial numbers of low income persons.

DEPARTMENT OF COMMERCE

Economic Development Administration

Grants and Loans for Public Works and Development Facilities:

The objective of this program is to assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated geographic areas where economic growth is lagging behind the rest of the nation. Grants are for public facilities. Proposed projects must be consistent with the currently approved overall economic development program for the area. Beneficiaries must be unemployed or underemployed persons and/or members of low-income families.

Business Development Assistance: The objective of this program is to encourage industrial and commercial expansion in designated areas by providing financial assistance for projects that cannot be financed through private lending institutions. Funds may be used for most kinds of new industrial or commercial facilities or to expand one already in existence.

Technical Assistance (Economic Development): The aim of this program is to solve problems of economic growth in EDA-designated geographic areas through project grants, feasibility studies, management and operation assistance, and other studies. Most technical assistance applicants are private nonprofit groups or municipal or county governments or entities thereof, located in economically depressed areas of the country.

Public Works Impact Projects: The objective of this program is to provide immediate useful work to unemployed and underemployed persons in designated project areas. This work is restricted to the construction of public facilities.

State and Local Economic Development Planning: This program aims to develop the capability of state and local governments to undertake an economic development planning process that is comprehensive in scope, with particular emphasis on reducing unemployment and increasing incomes. Grants are used for planning, staff salaries and related administrative expenses.

Special Economic Development and Adjustment Assistance Program: The intent of this program is to provide aid to state and local

areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

5. Reese AFB, Texas: The area surrounding Reese AFB, particularly the City of Lubbock, will suffer losses in population and, therefore, revenue as a result of the alternative action. Governmental agencies will be required to direct their efforts to relieving the social and economic problems, such as increased unemployment, caused by base closure.

A relatively minor reduction in air and city bus traffic would occur as a result of the closure of Reese AFB. A plan to widen Levelland Highway to four lanes from the southeast corner of Reese AFB to the city limits of Levelland will need to be reevaluated on the basis of the alternative action. Storage, transfer and freight businesses would sustain sizable revenue losses.

Base closure would also have only a minor impact on the civilian community utilities in the area. Southwestern Public Service Company, which supplies electrical power to the area, may lose its \$400,000 investment in upgrading its system to serve a new flight simulator facility.

Closure of Reese AFB would create a substantial number of housing vacancies in the Lubbock area. It is estimated that 1,400 homes or rental units would be vacated. Since over 400 military personnel and an undetermined number of civilian base personnel are homeowners, property values would likely decline in the area due to excess supply. The projected rural population increase in the area surrounding the base would be reduced. Commercial developments in the western area of Lubbock may be slowed by base closure.

These impacts would be mitigated by the passage of time as well as the following kinds of actions:

- Development of various regional and community programs to generate new employment and additional employment for the Air Force Base personnel who will remain in the area.

- Utilization of available codes (housing, commercial, zoning, etc.) to maintain physical quality of residential and commercial structures during the period of adjustment.
- The implementation of available federal economic and housing assistance programs.

The following federal programs may offer possibilities for mitigation:

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources. Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus Defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

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^{1/} Executive Office of the President, Office of Management and Budget, "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

COMMUNITY SERVICES ADMINISTRATION

Community Action: The objectives of this program are to mobilize and channel public and private resources into antipoverty action; to increase the participation of the poor in such programs; and to strengthen the planning and coordination of such programs. They are primarily implemented by a Community Action Agency, which is state-designated. A wide variety of projects are financed with CAA funding. The chief beneficiaries are low income families and individuals in urban and rural areas.

Community Economic Development (Special Impact): The objectives of this program are to promote community based economic development through the partnership of established business with locally controlled community organizations. Eligible areas are rural or urban regions having concentrations or substantial numbers of low income persons.

DEPARTMENT OF COMMERCE

Economic Development Administration

Grants and Loans for Public Works and Development Facilities: The objective of this program is to assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated geographic areas where economic growth is lagging behind the rest of the nation. Grants are for public facilities. Proposed projects must be consistent with the currently approved overall economic development program for the area. Beneficiaries must be unemployed or underemployed persons and/or members of low-income families.

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Special Economic Development and Adjustment Assistance Program: The intent of this program is to provide aid to state and local areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

6. Vance AFB, Oklahoma: There would be no severe adverse effects on the structure of governmental units in either the City of Enid or Garfield County as a result of the proposed or alternative actions. The tax base in the area would be reduced as a result of the relocation of base personnel. Local governing agencies would need to address the problems of increased unemployment and housing vacancies attributable to the closure of Vance AFB. Future planning and zoning ordinances would undergo reevaluation in the area.

Revenue losses by moving, storage and truck freight businesses and local transport companies hauling JP-4 jet fuel would be sizable. The three major bus companies in the area--The MK&O, Midcontinent and Continental Transport--would lose approximately 3 percent of their total passenger service.

The civilian community utility companies would suffer sizable losses in revenue due to the base closure.

A substantial number of housing units and commercial establishments would be vacated as a result of the loss of population and spending power in the area. Base closure could restrict the development of new housing in the immediate future. Zoning ordinances enacted by the City of Enid and other communities would need to be reviewed.

The following federal programs may offer possibilities for mitigation.

Mitigation Measures - Federal Assistance Programs^{1/}

DEPARTMENT OF DEFENSE

Office of the Assistant Secretary

Community Economic Adjustment: This program aims to assist communities to overcome adverse economic impacts resulting from program changes of the Department of Defense through a concerted utilization of existing federal, state, local and private sector resources. Assistance ranges from advice and technical analyses to a coordinated application of appropriate federal programs involving grants and loans. The program includes guidance in the conversion of surplus Defense installations to productive civilian use and direct technical assistance to communities in developing strategies for economic growth.

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^{1/} Executive Office of the President, Office of Management and Budget "Catalog of Federal Assistance" (Washington, D.C.: U.S. Government Printing Office, 1975).

military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

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Special Economic Development and Adjustment Assistance Program: The intent of this program is to provide aid to state and local areas attempting to meet special needs arising from unemployment and from severe changes in economic conditions. Grants may be made to develop or carry out plans for a variety of projects, including the following: public facilities, public services, business development, relocation of individuals, rent supplements, or other appropriate assistance.

Candidates for Expansion

There appears to be no major adverse effects created by the proposed or alternative actions on off-base transportation operations and facilities.

The proposed or alternative action would increase the already existing need for more on-base parking at various base facilities, particularly the Commissary. At base housing areas, increased traffic may require the upgrading of streets. These adverse effects would be mitigated in part by the establishment of car pools and bike paths to encourage the reduction of automobile traffic.

There would be no major adverse effects created by the proposed action on the operation of civilian utilities.

There would be no significant adverse effect on land use surrounding the Williams AFB or on-base as a result of the proposed or alternative actions.

7. Craig AFB, Alabama: There may be a need for local government units to draft zoning regulations for the unincorporated area of Selmont southeast of the City of Selma if this area experiences an influx of new residents due to base expansion. No severe adverse effects upon government operations are anticipated.

No adverse effects upon air, rail, or bus transport in the region of influence are foreseen. A need for increased parking facilities on-base may be experienced. Greater control of traffic flow into and out of the base may be required during peak traffic hours.

There are no major adverse effects on the operation of civilian community utilities foreseen as a result of base expansion.

No significant adverse effect upon land use in the Craig AFB influence region is expected as a result of base expansion. It is possible that an expansion of residential land use in the unincorporated Selmont area may occur, placing a strain upon water provision and sanitary facilities. This effect may be mitigated by prompt drafting of zoning regulations by local governmental bodies.

8. Webb AFB, Texas: Governmental structure should not be affected by the addition of personnel at Webb AFB. An increase in the number of school-aged children in Big Spring may burden the property owners with increased taxes since the school district already faces financial problems.

Since there is only minor use of the air and rail facilities by base personnel, the expansion would have no adverse effects on their operation. The addition of personnel at Webb Air Force Base is not expected to significantly affect traffic on the highways.

There will be no unavoidable adverse effects on the supply of utilities services to the civilian community due to the addition of personnel at Webb Air Force Base.

Providing adequate housing for the additional personnel who will reside both on-base and off-base is a problem facing the community. However, the construction of additional units for enlisted personnel and new mobile home spaces on base as well as plans for additional apartments in Big Spring may alleviate the housing problem to a degree.

9. Columbus AFB, Mississippi: An analysis of the impacts associated with the proposed expansion at Columbus AFB, indicates that there will be no major adverse effects on governmental units and functions, transportation facilities, civilian community utilities, or existing land use in the influence region.

10. Laughlin AFB, Texas: A review of the impact associated with the proposed expansion at Laughlin AFB, indicates that there will be no major adverse effects on governmental units and functions, transportation facilities, civilian community utilities, or existing land use in the influence region.

11. Reese AFB, Texas: There would be no major adverse effects created by the proposed or alternative actions on the function of units of government, transportation facilities, civilian community utilities, or existing land use because of the proposed or alternative actions.

12. Vance AFB, Oklahoma: A review of the impacts associated with the proposed expansion at Vance AFB, indicates that there will be no major adverse effects on governmental units and functions, transportation facilities, civilian community utilities, or on existing land use in the influence region.

13. Williams AFB, Arizona: There will be no major adverse effects created by the proposed or alternative actions on the function of units of government in the Williams Air Force Base influence region.

C. Relationship Between Local Short-Term Use of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

Candidates for Closure: As a result of the proposed or alternative actions there would likely be a short-term reduction of human activities in each of closure candidates' influence regions. Although there may be a localized reduction in economic activity, tax revenues, use of schools and other social services, along with housing vacancy increases and corresponding decreases in value, when considered on a regional basis, these effects will be minimized over the long term in each of the influence regions.

No major change in land use or in the physical character of the larger communities is anticipated as a result of the proposed or

alternative actions. Residential and commercial vacancies will occur, but should be reabsorbed over time. The effect of the proposed or alternative actions in each of the six Air Force Bases' influence region will be to temporarily slow the projected growth.

Future land use plans in the Craig AFB influence region, as indicated in the Selma Accord, are tied to the continued operation of the air base and will need to be reevaluated as a result of the proposed action.

Future land use plans in the Columbus AFB influence region are not based to any significant degree on increased activity at Columbus AFB but rather reflect a balanced growth policy of expanding the Tennessee-Tombigbee Waterway, industrial expansion, and expansion of numerous service-oriented operations.

Candidates for Expansion: As a result of the proposed expansion in operations and personnel at any of the seven AFB bases (Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, Vance AFB, or Williams AFB), there will likely be a short-term increase in human activities in each influence region. Governmental and private agencies concerned with providing housing, schools, utilities, and other social services will be actively involved during the adjustment period. Over the long-term, the additional population will provide an increase in economic activity and add to the general productivity in each of the seven influence regions.

D. Details of Unresolved Issues

Candidates for Closure: For each of the six candidates for closure (Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, and Vance AFB), the long-term use of the lands and facilities of the base are presently unresolved. The effects of the proposed or alternative actions on value and ownership of specific parcels of land cannot be determined until closure actually takes place. This also applies to future plans of utility companies and transportation authorities.

Candidates for Expansion: For each of the seven candidates for expansion (Williams AFB, Craig AFB, Webb AFB, Columbus AFB, Laughlin AFB, Reese AFB, or Vance AFB), there appear to be no unresolved issues as a result of the proposed or alternative actions.

IV. INDIVIDUALS/AGENCIES CONTACTED AND REFERENCES

CRAIG AFB, SELMA, ALABAMA

Individuals/Agencies Contacted

Alabama Development Office, Office of State Planning, Bill Matthews.
Alabama Highway Department, Tom Espy, Jr., Office Engineer.
Alabama Gas Company, Mr. Etherage, District Manager,
Alabama Power Company, Mr. R. E. Ledyard, Jr., Alabama Power Company.
Alabama-Tombigbee Rivers Regional Planning and Development Commission,
Richard Roberts, Transportation Planner.
South Central Bell Telephone Company, Mr. Hester, District Manager.
South Central Alabama Development Commission, Bill Curtis.
Dallas County Water and Fire Protection Authority, Pauline Bryant, Plant
Manager and Operator, Selmont Water System.
Selma Water Department, Mr. Phillips.
Carter and Smith Real Estate, Mr. James Carter.
Selma-Dallas County Economic Opportunity Board, Donal Cunningham, Executive
Director Dallas County Probate Court, Judge Bernard A. Reynolds.
Central Alabama Regional Planning and Development Council, Bob Grasser,
Executive Director.

References

Transcript of Hearings on USAF Draft Environmental Impact Statement, Craig
AFB, Alabama, November 15-16, 1976.
Alabama-Tombigbee Rivers Regional Planning and Development Commission,
Land Use (1973)
Alabama-Tombigbee Rivers Regional Planning and Development Commission,
Regional Water and Sewer Plan, June 1973.
Selma and Dallas County Chamber of Commerce, Selma, Alabama, September 1972.
JHK and Associates and OCTOBER, Selma-Dallas Transit Development Project,
December 1975.
TAB A-1 Environmental Narrative, Craig AFB, Selma, Alabama, April 12, 1976.
The RMBR Planning/Design Group, Selma Accord - "Strategy for Change; A
Plan for Selma, Alabama," December 1973.

WEBB AFB, BIG SPRING, TEXAS

Individuals/Agencies Contacted

City Manager, Harry Nagel, Big Spring, Texas.
Morehead Transfer and Storage Company, Jimmy Morehead
Pioneer Natural Gas Company, D. D. Pitman, Manager
Texas Electric Company, Jack Redding, Manager
Southwestern Bell Telephone Company, Dave LeGalley, Midland, Texas
Trans Regional Airlines, Bob McClure, Manager
Skipper Travel Agency, Bill Ragsdale
Midland-Odessa Airport, Wilson H. Banks, Director
Permian Basin Regional Commission, Jerry Tschauner, Director of Planning
State of Texas, Division of Planning and Coordination, Natural Resources
Department, Ray Spiess, Transportation Planner; Ward Goessling, Land Use
Planner

References

Transcript of Hearings on USAF Draft Environmental Impact Statement, Webb
AFB, Texas, November 4-5, 1976.
TAB A-1 Environmental Narrative, Webb AFB, Big Spring, Texas, December 15,
1975.
Big Spring, Crossroads of the West (Big Spring: Big Spring Industrial
Growth and Development).
Subcommittee on Government, on Economy, on Housing (Big Spring, Chamber of
Commerce), Goals for Progress Committee, April 15, 1975.

COLUMBUS AFB, COLUMBUS, MISSISSIPPI

Individuals/Agencies Contacted

Columbus-Lowndes Chamber of Commerce, Roderick B. Adams, Assistant Director
Columbus Light and Water Department, Mr. Bob Grondin
Lowndes County Engineer, Mr. Oliver Mitchell
South Central Bell Telephone, Mr. Billy Moss, Manager
Mississippi Valley Gas Company, Mr. Vaughn Grisham, District Manager
Columbus Air Force Base, Associate Civil Engineer, Mr. W. E. Buchanan
Golden Triangle Regional Airport, Mr. Bud Roley
Columbus Air Force Base, Col. Howard McKenzie, Deputy Commander for Resource
Management
Columbus Air Force Base, Mr. Joe Johnson, Traffic Manager

Mississippi Office of Federal and State Programs, Joe McNair, Director;
Lucien Bourgeois, Planner
Mississippi Research and Development Center, James F. Wise, Regional
Planner
Mississippi Highway Department

References

Public Hearing on USAF Draft Environmental Impact Statement, Columbus AFB, Mississippi, October 18, 1976.
TAB A-1 Environmental Narrative, Columbus AFB, Columbus, Mississippi, December 15, 1975.
TAB A-1 Environmental Narrative, Columbus AFB, Columbus, Mississippi, (revised pages), April 2, 1976.

LAUGHLIN AFB, DEL RIO, TEXAS

Individuals/Agencies Contacted

Basse Truck Lines, E. W. Billings, Terminal Manager
Amistad Air Lines, Harry Clark, President
Amistad Transfer and Storage Company, Frank H. Larson, President
Del Rio Moving and Storage Company, E. B. Parsons
South Pacific Railroad Company, J. Y. Hobson
General Telephone Company of the Southwest, Jerry Crowley, Division Manager
Central Power and Light Company, Jerry Simpton, Manager
LoVaca Gas Company, Mr. Ed Phillips, Houston, Texas
Del Rio Gas Company, Mr. Kease
Del Rio Water Department, Mr. Shepard
City of Del Rio City Manager, James A. Hester
Middle Rio Grande Development Council, Steve Hahn

References

Laughlin Air Force Base Public Hearing held at the Civic Center, Del Rio, Texas, October 27, 1976.
Middle Rio Grande Development Council, Land Use and Transportation Study, Del Rio, Texas (Austin, Water Resources Engineers, Inc.), August 1973.
TAB A-1 Environmental Narrative, Laughlin Air Force Base, Del Rio, Texas, December 15, 1976.
Middle Rio Grande Development Council (Corpus Christi, Urban Engineering) Comprehensive Plan for Municipal Water Facilities, June 30, 1972.

Middle Rio Grande Development Council, Comprehensive Plan for Sanitary Sewerage and Storm Drainage Facilities (Corpus Christi, Urban Engineering) June 30, 1972.

REESE AFB, LUBBOCK, TEXAS

Individuals/Agencies Contacted

Lubbock Chamber of Commerce, Mr. Dick Moseley, Assistant General Manager,
Department of Public Works, Mr. Sam Wahl, Director
Lubbock City Planning Department, Mr. Jim Bertram
Pioneer Natural Gas Company, Mr. Bill Byrne
Lubbock Regional Airport, Mr. Marvin Coffee, Director of Aviation
Santa Fe Freight Office, Mr. Huttchinson
General Telephone Company, Mr. Brown, Liaison to Reese AFB
Atchison, Topeka and Santa Fe Railroad Company, Mr. Cooknell
South Plains Association of Governments, Mr. Loper

References

Transcript of Hearing and Inputs Concerning Draft Environmental Impact Statement, Reese AFB, Texas, November 8, 1976.
TAB A-1 Environmental Narrative, Reese AFB, Lubbock, Texas, December 15, 1975.
TAB A-1 Environmental Narrative, Reese AFB, Lubbock, Texas (revised pages), April 9, 1975.

VANCE AFB, KNID, OKLAHOMA

Individuals/Agencies Contacted

Oklahoma State Planning Coordination Office, Mike Frew
North Oklahoma Development Association, Dick Jackson, Planner
Oklahoma Department of Highways, Jerry Chambers, Assistant Planning Engineer
Oklahoma Water Resources Board, Mike Melton, Chief, Planning Division

References

Vance Advancement Council Committee Report, November 11, 1976.
Public Hearing on USAF Draft Environmental Impact Statement Regarding Vance AFB Oklahoma, November 11, 1976.
Oklahoma Community Data - Garfield - Town End, Reprint August 1975.

TAB A-1 Environmental Narrative, Vance Air Force Base, Enid, Oklahoma, December 15, 1975.

A. M. Voorhees and Associates and Hudgins, Thompson, Ballard Associates, Enid Metropolitan Area Transportation Study, Recommended Plan and Implementation Program (August 1968); Volume I, Data Collection, Analysis and Forecasting, July 1968.

State of Oklahoma, Department of Highways, Enid Metropolitan Area Transportation Study, Continuing Phase Annual Report (1972)

State of Oklahoma, Department of Highways, Enid, Oklahoma, Origin and Destination Study, 1972; (1972)

WILLIAMS AFB, ARIZONA

Individuals/Agencies Contacted

City of Phoenix, Michael Urie

References

TAB A-1 Environmental Narrative, Williams AFB, Chandler, Arizona, December 15, 1975.

TAB A-1 Environmental Narrative, Williams AFB, Chandler, Arizona (revised pages), April 9, 1976.

Williams AFB, Air Installation Compatible Use Zone (AICUZ), Williams Air Force Base, Arizona (A Report to the Governments and Citizens of the Williams Air Force Base Environs), January 1976.